Financial statements

In this section

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 to:

- 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 2018, comprising principal statements and supporting notes, are set out in the 'Financial statements' on pages 140 to 218 of this report. The parent company financial statements for the year ended 31 December 2018, comprising the balance sheet for the year ended 31 December 2018 and supporting notes, are set out on pages 219 to 222.

The responsibilities of the auditor in relation to the financial statements are set out in the Independent Auditor's report on pages 128 to 139.

The financial statements for the year ended 31 December 2018 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 2018 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.

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 38 to 64 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 42 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.

Directors' statement of responsibilities continued

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 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 65 to 94. 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 2018, 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

Philip Hampton
Chairman

11 March 2019

Independent Auditor's report to the members of GlaxoSmithKline plc

Report on the audit of the financial statements

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 2018 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 2018;
- 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 2018;
- statement of changes in equity for the year then ended; and
- notes A to N 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).

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 non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the Parent company. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Summary of our audit approach

First year audit transaction

This is the first year we have been appointed as auditors to the Group. We undertook a number of transitional procedures to prepare for the audit. Before we commenced our audit we had to establish our independence of the Group which involved ceasing a number of commercial relationships. We used the time prior to commencing our audit to meet with key members of management to gain an understanding of the business, its issues and the environment in which it operates.

We became independent of the Group and commenced our audit planning on 4 July 2017. From this date we attended all Audit & Risk Committee meetings, initially in an observer capacity. We worked alongside the former auditor and reviewed their working papers to gain an understanding of the Group's processes, their audit risk assessment, the controls on which they relied for the purposes of issuing their audit opinion, as well as understanding the evidence they obtained on the key complex or significant judgements which they made.

In September 2017, we held a two day meeting of audit partners and senior staff who would be responsible for undertaking the audits in the most significant locations in the Group. The main purpose of this meeting was to outline our central audit approach including the use of our data analytics tools, discuss possible significant audit risks and brief our teams on the Group's key processes, systems and structure. A subsequent strategic planning meeting was held in September 2018 with the same participants to take into account any current period updates that impacted our audit approach.

During these meetings, we also heard directly from Group management on the changes impacting the business to inform our audit planning and risk assessment.

Key audit matters

The key audit matters that we identified in the current year were:

- valuation of acquisition-related liabilities;
- valuation of US Returns and Rebates (RAR) accruals;
- valuation of intangible assets;
- valuation of uncertain tax positions, including transfer pricing and updates to the impacts of the US Tax Reform; and
- IT systems which impact financial reporting.

Key audit matters considered by the Group's auditor in the prior year were broadly aligned with the items identified above, but also included consideration of litigations and investigations into the Group's commercial operations, which are less significant in the current year.

Materiality

The materiality that we used for the Group financial statements was £270 million, which was determined on the basis of a composite benchmarking approach. This approach considers profit before tax, adjusted profit before tax, revenue and net cash flows from operations.

Risk assessment at group level

We applied a top-down risk assessment methodology which considers the enterprise, industry and financial risks in the context of the financial statements

Report on the audit of the financial statements continued

As part of this process, we spent time understanding the key financial and business processes of the Group and how they are implemented across the organisation. We used our audit analytics tools to analyse client data and the flow of business transactions to inform our fact-based risk assessment.

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. It can be summarised into the following areas which 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 the audit more centrally. In addition to appointing partners for each of 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 team allowed us to understand their work, to review their reports and to enhance our risk assessment.
– **Audit work performed at global shared service centres.** A significant amount of the Group's operational processes which 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 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; France; Germany; Italy; Japan; Spain; Switzerland; United Kingdom and United States. The Group audit team was in active dialogue throughout the year 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, the Group audit team 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 at Group and on the 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.

The coverage obtained from this strategy is summarised as follows:

Benchmark	Revenue	Profit before tax	Total assets
Covered by market - specific procedures	66%	73%	83%
Covered by review at Group level	34%	27%	17%

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 the aggregate do not present a reasonable possibility of risk of material misstatement.

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 Company's ability to continue to do so over a period of at least 12 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 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 34 to 36 that describe the principal risks and explain how they are being managed or mitigated;
– the directors' confirmation on page 87 that they have carried out a robust assessment of the principal risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity; or
– the directors' explanation on page 44 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.

Independent Auditor's report continued

Report on the audit of the financial statements continued

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 acquisition-related liabilities
In recent years the Group has completed a number of significant transactions which resulted in the recognition of material and judgemental acquisition-related liabilities. The most significant of these liabilities were:

– 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 2018, the liability was valued at £5,937 million (2017 – £5,542 million); and

– Pfizer put option: The Group granted Pfizer a put option in 2009, enabling Pfizer to put its non-controlling interest in ViiV Healthcare back to the Group in the future. As at 31 December 2018, the liability was valued at £1,240 million (2017 – £1,304 million).

In the prior year, the acquisition-related liabilities also included the Consumer Healthcare joint venture put option. The liability represented the present value of the expected redemption price of a put option over Novartis' non-controlling interest in Consumer Healthcare joint venture. On 3 May 2018, the Consumer healthcare joint venture put option was de-recognised following approval by shareholders of the acquisition of Novartis' non-controlling interest in the Consumer healthcare joint venture and therefore this liability did not exist at the year end.

The valuations of the liabilities are sensitive to changes in exchange rates, discount rates and sales forecasts, which are based upon management's assessment of the probability of success of pipeline products, expected launch dates, subsequent sales volumes and pricing.

The key risks in the valuation of the acquisition-related liabilities, specifically the sales forecast used to value the ViiV CCL and particularly the dolutegravir-based regimens as, in our view, these give rise to the most material source of estimation uncertainty.

The acquisition related liabilities are disclosed as a key accounting judgement and estimate in note 3 of the Group financial statement with further disclosures provided in notes 27, 38, 39 and 42. 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 where relevant:

– made enquiries of key individuals from the senior leadership team, commercial strategy team and key personnel involved in the budgeting and forecasting process, to discuss, challenge and evaluate management's evidence to support key inputs and assumptions;

– challenged the business assumptions applied by management in estimating sales forecasts, including benchmarking of sales forecasts to external data. This included analysis of the results of demand studies conducted by third parties on new drug launches. We assessed the results of clinical studies and the target medicine profile of new drugs to understand their relative position in the market and to assess any sources of contradictory evidence;

– assessed the historical accuracy of management's forecasts including estimates of the probability of success of pipeline products;

– benchmarked sales forecasts against analyst expectations to, both assess the estimations made by management and, for consideration of any contradictory evidence available;

– assessed the reasonableness of valuation-specific assumptions used by management, including exchange rates, discount rate, valuation multiples and whether these assumptions were consistent with how a well-informed independent third party would value these liabilities;

– assessed the appropriateness of the accounting for acquisition-related liabilities; and

– evaluated the disclosures in respect to these liabilities included in the notes to the financial statements to determine whether they were compliant with the requirements of the relevant accounting standards.

Internal controls over financial reporting
We tested the design, implementation and operating effectiveness of key controls identified over the valuation of the acquisition-related liabilities, such as the review and approval of both the long-range forecast and the valuation models.

Key observations communicated to the Audit & Risk Committee

Whilst there are significant commercial risks to the forecasts for the future sales of dolutegravir-based regimens and related products, we are satisfied that the valuations of associated liabilities are within an acceptable range of values.

The approach to valuing the acquisition-related liabilities was consistent with prior periods and we are satisfied that the valuations of the acquisition-related liabilities are reasonable and consistent with IFRS.

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 products. As such, revenue recognition reflects gross-to-net sales adjustments which involve significant estimation and judgement. These adjustments are known as the Returns and Rebates ('RAR') accruals and are a source of estimation and uncertainty which could have a material impact on reported revenue. The three most significant payer channels within the RAR accrual are managed healthcare organisations, Medicaid and Medicare Part D.

The two main causes of significant estimation uncertainty are:

– the utilisation rates (the portion of total sales which 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 as such a greater level of estimation uncertainty.

The level of estimation uncertainty is also impacted by significant shifts in channel mix driven by changes in the competitive landscape.

In the US Pharmaceuticals business in 2018, £10,774 million of RAR deductions were made to gross revenue of £18,227 million, resulting in net revenue of £7,453 million. The balance sheet accrual at 31 December 2018 accrual for the combined Pharmaceuticals and Vaccines businesses amounted to £4,356 million.

Returns and rebates are disclosed as a key accounting judgement and estimate in note 3 of the Group financial statement with further disclosures provided in note 27. 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:

– assessed the historical accuracy of management's estimates against actual outcomes to evaluate the impact and inform our assessment of the current year accrual;

– developed an expectation of the accrual balance for each of the key channels, 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 used this expectation to consider 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;

– substantively tested individual utilisation rates on a sample basis;

– evaluated, through monitoring of news events and industry developments, the appropriateness of period end adjustments to the liability made as part of the ongoing review of the estimated accrual;

– evaluated and benchmarked the methodology applied by management in estimating the accrual against industry practice; and

– monitored the market for any significant events in the period, giving a particular focus to any potential generic competition in respect to *Advair*, one of the Group's most significant products. A generic *Advair* competitor product was not approved by the US Food and Drug Administration ('FDA') until the end of January 2019, and therefore there was no additional risk associated with market events in determining the 2018 *Advair* RAR liability.

Internal controls over financial reporting
We tested the design, implementation and operating effectiveness of key controls over the estimation of RAR accruals including the review of forecasts and monthly accruals.

Key observations communicated to the Audit & Risk Committee

Based on our assessment of the accuracy of historical estimates made by management by comparing them to actual rebates claimed, we determined that the estimates have been accurate in the past giving further assurance over the strength of management's process for estimating the liability at the reporting date.

We are satisfied with the appropriateness of the RAR accruals at the period end, and that management's estimated liability is reasonable.

Independent Auditor's report continued

Report on the audit of the financial statements continued

Key audit matter description	How the scope of our audit responded to the key audit matter
Valuation of intangible assets As at 31 December 2018, the Group held £16,156 million of intangible assets (including licences, patents, trademarks and brand names, but excluding goodwill and computer software). The recoverable value of these intangible assets relies on certain assumptions and estimates of future trading performance which impact the valuation. The assumptions applied by management in determining the recoverable value include the discount rate, future sales growth rate, the impact of the expiry of patents on the product and potential product obsolescence. Changes in these assumptions could lead to an impairment to the carrying value of the intangible assets. The assets most at risk of material impairment were identified using sensitivity analysis on key assumptions and a review of potential triggering events that could be indicative of an impairment in the carrying value of associated assets. The disclosures relating to other intangible assets are included in note 19 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.	**Audit procedures performed** We assessed the appropriateness of the carrying value of the intangible assets by performing the following audit procedures: – assessed the valuation methodology used by management, with involvement of our valuation specialists, and tested the mechanical accuracy of the impairment models; – evaluated the reasonableness of the valuation assumptions, such as discount rates, used by management through reference to external market data; – reviewed analyst reports and other external sources of information to identify any contradictory evidence which could indicate an impairment is required; – challenged the appropriateness of the business assumptions used by management, such as sales growth and the probability of success of products in development by assessing externally available reference data to look for contradictory evidence, evaluate past performances where relevant and assessing historical accuracy of the forecast produced by management; – enquired of and challenged management on the commercial strategy associated with the products to ensure that it was consistent with the assumptions used in estimating future cash flows; and – considered whether events or transactions that occurred after the balance sheet date but before the reporting date affect the conclusions reached on the carrying values of the assets and associated disclosures. **Internal controls over financial reporting** We tested the design, implementation and operating effectiveness of key controls over the impairment review process including the review and approval of forecasts and review of valuation models. **Key observations communicated to the Audit & Risk Committee** Our audit procedures did not identify any additional impairments. We are satisfied that management's intangible impairments estimates are reasonable and in accordance with IFRS.

Report on the audit of the financial statements continued

Key audit matter description	How the scope of our audit responded to the key audit matter
Valuation of uncertain tax positions, including transfer pricing and updates to the impacts of the US Tax Reform The Group operates in numerous jurisdictions and there are open tax and transfer pricing issues and exposures with UK and overseas tax authorities that give rise to uncertain tax positions. The range of possible outcomes for provisions and contingencies can be wide and management is required to make certain judgements in respect of estimates of tax exposures and contingencies in order to assess the adequacy of tax provisions. At 31 December 2018, the Group has recorded provisions of £1,082 million in respect of uncertain tax positions (2017 – £1,175 million). On 22 December 2017, the US Tax Cuts and Jobs Act was enacted. There was limited guidance provided by the US Treasury on how to apply the principles of the reform in practice and, as such, judgement was required as at 2017 year end. Management continued to monitor the impact of the reform on the US business and the associated accounting records. Given the complexity and uncertainty relating to US tax reform, management is required to make judgements, assumptions and interpretations of the tax law. Following additional guidance released by the Internal Revenue Service during 2018, the Group reduced its estimate of the 2017 impact of US tax reform by £125 million. Valuation of uncertain tax positions is disclosed as a key accounting judgement and estimate 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.	**Audit procedures performed** With the support of tax specialists, we assessed the appropriateness of the uncertain tax provisions by performing the following audit procedures: – 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; – 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 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 of previous outturns, recent and current tax authority audits and enquiries, third party tax advice where obtained and our tax specialists own knowledge of market practice in relevant jurisdictions; and – involved Deloitte US Tax specialists to determine the reasonableness of the judgements in respect of the US Tax Reform. **Internal controls over financial reporting** We tested the design, implementation and operating effectiveness of key controls over preparation of tax packs and tax consolidation. **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's judgements were prudent, consistent with prior periods, within an acceptable range and continue to be appropriately recorded.

Independent Auditor's report continued

Report on the audit of the financial statements continued

Key audit matter description	How the scope of our audit responded to the key audit matter
IT systems which impact financial reporting In our audit plan we set out to place a significant level of reliance on the IT systems, underpinned by our ability to rely on effective IT controls. 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. The purpose of such controls is to prevent inappropriate changes being made to IT systems in relation to application functionality, transactional processing and direct changes to underlying data. GSK place significant reliance on their IT systems and the associated controls.	**Audit procedures performed over IT systems** We performed the following risk assessment and audit procedures to test IT controls over the in scope IT systems, which are those systems that we considered key for financial reporting purposes: – identified the IT risks for each IT system based on our understanding of the flows of transactions and the IT environment; – determined whether each general IT control, individually or in combination with other controls, is appropriately designed to address the associated IT risk; and – tested the design, implementation and operating effectiveness of the relevant general IT controls. IT control deficiencies were noted around user access management for certain in scope IT systems and the associated infrastructure. The existence of these deficiencies in the year resulted in a heightened risk that data, reports and automated system functionality (e.g. calculations) from the affected systems might not be reliable. We assessesed the impact of the deficiencies noted around user access management on all account balances to determine the specific impact on our audit plan. **Key observations communicated to the Audit & Risk Committee** During the year, the Group implemented a remediation plan to address the user access deficiencies. This primarily involved the removal of inappropriate access together with the implementation of appropriate privileged access management processes and controls which is planned to be fully complete in 2019. The Group has layers of business process controls at many levels which help to mitigate this IT risk. An additional programme to identify and validate these controls, as well as some enhancement to these controls was completed during 2018. The IT deficiencies were reported to the Audit & Risk Committee throughout the year and have been disclosed in the Audit & Risk Committee section of the Annual Report. The matter is also discussed in the Audit & Risk Committee report within the Corporate Governance section of the Annual Report. We were satisfied that the mitigating business process controls addressed the risks of material misstatement.

Report on the audit of the financial statements continued

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	£270 million	£67 million
Basic for determining materiality	In determining our benchmark for materiality we considered the metrics used by investors and other readers of the financial statements. In particular, we considered: Statutory profit before tax, Adjusted profit before tax, Revenue and Net cash flows from operations. However, given the importance of all these metrics, we concluded that a composite approach was most appropriate, based on the range of materiality we determined using the benchmarks listed above. Using professional judgement we have determined preliminary materiality to be £270 million to apply conservatism to our determination given that this is the first year of our audit. Metric — % Statutory profit before tax — 5.6 Adjusted profit before tax* — 3.3 Revenue — 0.9 Net cash inflow from operating activities — 3.2 * A reconciliation between the Statutory profit before tax and Adjusted profit before tax is detailed in the Adjusting Items section of the Strategic Report. The materiality used by the former auditor in the audit of the prior year's Group financial statements was £290 million.	Materiality was determined using the total assets benchmark. The materiality used by the former auditor in the audit of the prior year's Parent company financial statements was £70 million.
Rationale for the benchmark applied	We calculated the range for each of the relevant benchmarks and used these ranges in exercising our professional judgement to determine materiality. Our chosen materiality of £270 million was deemed to be appropriate taking into account various metrics used by investors and other readers of the financial statements. The component materiality allocated to the in-scope components ranged between £67 million and £189 million. The range of materiality allocated across components by the former auditor in the audit of the prior year's Group financial statements was between £15 million and £154 million.	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 primary concern for the Parent company is the payment of dividends. Using a benchmark of total assets is therefore most appropriate.

We agreed with the Audit & Risk Committee that we would report to the Committee all audit differences in excess of £10 million (2017 – £10 million was used by the previous auditor) as well as differences below that threshold that, 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.

Independent Auditor's report continued

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 materially 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.
Viability statement Review the confirmation and description in the light of the knowledge gathered during the audit, including making enquiries and considering the directors' processes used to support the statements made. Consider if the statements are aligned with the relevant provisions of the UK Corporate Governance Code (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.
Strategic report and Directors' report Report whether they are consistent with the audited financial statements and are prepared in accordance with applicable legal requirements. Report if we have identified any material misstatements in either report 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.	As set out in the section 'Opinions on other matters prescribed by the Companies Act 2006', in our opinion, based on the work undertaken in the course of the audit, the information in these reports is consistent with the audited financial statements and has been prepared in accordance with applicable legal requirements.

Other information 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.	Based on the work undertaken in the course of the audit, in our opinion: – the use, calculation and disclosure of APMs is consistent with the Group's published definitions and policies; – 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.
Approach to Brexit Consider whether the Brexit risks have been appropriately reflected. The Group's approach to Brexit is outlined in the Strategic report (page 36).	Based on the work undertaken in the course of the audit, in our opinion, the risks in relation to Brexit have been appropriately reflected.
Dividends and distribution policy Consider whether the dividends policy is transparent and the dividends paid are consistent with the policy.	Based on the work undertaken in the course of the audit, in our opinion, the dividends policy is appropriately disclosed and dividends paid are consistent with the policy.

Independent Auditor's report continued

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.

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.

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, our procedures included the following:

- 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;
  - 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 relevant laws and regulations discussed above;
- 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 and reviewing internal audit reports.

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.

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

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.

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.

Other matters

Auditor tenure
Following the recommendation of the Audit & Risk Committee, we were appointed by the Company at its annual general meeting on 3 May 2018 to audit the financial statements of GlaxoSmithKline plc for the year ending 31 December 2018 and subsequent financial periods. The period of uninterrupted engagement including previous renewals and reappointments of the firm is accordingly one year.

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).

Use of our report

This report is made solely to the 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 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 Company and the 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 that the senior statutory auditor's name should not be stated.

Deloitte LLP
Statutory Auditor
London, United Kingdom
11 March 2019

Consolidated income statement
for the year ended 31 December 2018

	Notes	2018 £m	2017 £m	2016 £m
Turnover	6	**30,821**	30,186	27,889
Cost of sales		**(10,241)**	(10,342)	(9,290)
Gross profit		**20,580**	19,844	18,599
Selling, general and administration		**(9,915)**	(9,672)	(9,366)
Research and development		**(3,893)**	(4,476)	(3,628)
Royalty income		**299**	356	398
Other operating income/(expense)	7	**(1,588)**	(1,965)	(3,405)
Operating profit	8	**5,483**	**4,087**	**2,598**
Finance income	11	**81**	65	72
Finance expense	12	**(798)**	(734)	(736)
Profit on disposal of interest in associates		**3**	94	–
Share of after tax profits of associates and joint ventures	13	**31**	13	5
Profit before taxation		**4,800**	**3,525**	**1,939**
Taxation	14	**(754)**	(1,356)	(877)
Profit after taxation for the year		**4,046**	**2,169**	**1,062**
Profit attributable to non-controlling interests		**423**	637	150
Profit attributable to shareholders		**3,623**	1,532	912
		4,046	**2,169**	**1,062**
Basic earnings per share (pence)	15	**73.7p**	**31.4p**	**18.8p**
Diluted earnings per share (pence)	15	**72.9p**	**31.0p**	**18.6p**

Consolidated statement of comprehensive income
for the year ended 31 December 2018

	Notes	2018 £m	2017 £m	2016 £m
Profit for the year		**4,046**	2,169	1,062
Items that may be subsequently reclassified to income statement:				
Exchange movements on overseas net assets and net investment hedges	34	**(480)**	462	646
Reclassification of exchange on liquidation or disposal of overseas subsidiaries	34	**–**	109	–
Fair value movements on equity investments			(14)	251
Deferred tax on fair value movements on equity investments			47	–
Reclassification of fair value movements on equity investments		**–**	(42)	(245)
Deferred tax reversed on reclassification of equity investments		**–**	(18)	51
Fair value movements on cash flow hedges		**140**	(10)	2
Deferred tax on fair value movements on cash flow hedges		**(22)**	–	2
Reclassification of cash flow hedges to income statement		**(175)**	–	1
Deferred tax reversed on reclassification of cash flow hedges		**20**	–	–
		(517)	**534**	**708**
Items that will not be reclassified to income statement:				
Exchange movements on overseas net assets of non-controlling interests	34	**(1)**	(149)	603
Fair value movements on equity investments		**180**		
Deferred tax on fair value movements on equity investments		**10**		
Remeasurement gains/(losses) on defined benefit plans		**728**	549	(475)
Tax on remeasurement of defined benefit plans		**(146)**	(221)	126
		771	**179**	**254**
Other comprehensive income for the year	34	**254**	**713**	**962**
Total comprehensive income for the year		**4,300**	**2,882**	**2,024**
Total comprehensive income for the year attributable to:				
Shareholders		**3,878**	2,394	1,271
Non-controlling interests		**422**	488	753
Total comprehensive income for the year		**4,300**	**2,882**	**2,024**

Consolidated balance sheet
as at 31 December 2018

	Notes	2018 £m	2017 £m
Non-current assets			
Property, plant and equipment	17	**11,058**	10,860
Goodwill	18	**5,789**	5,734
Other intangible assets	19	**17,202**	17,562
Investments in associates and joint ventures	20	**236**	183
Other investments	21	**1,322**	918
Deferred tax assets	14	**3,887**	3,796
Derivative financial instruments	42	**69**	8
Other non-current assets	22	**1,576**	1,413
Total non-current assets		**41,139**	**40,474**
Current assets			
Inventories	23	**5,476**	5,557
Current tax recoverable	14	**229**	258
Trade and other receivables	24	**6,423**	6,000
Derivative financial instruments	42	**188**	68
Liquid investments	31	**84**	78
Cash and cash equivalents	25	**3,874**	3,833
Assets held for sale	26	**653**	113
Total current assets		**16,927**	**15,907**
Total assets		**58,066**	**56,381**
Current liabilities			
Short-term borrowings	31	**(5,793)**	(2,825)
Contingent consideration liabilities	39	**(837)**	(1,076)
Trade and other payables	27	**(14,037)**	(20,970)
Derivative financial instruments	42	**(127)**	(74)
Current tax payable	14	**(965)**	(995)
Short-term provisions	29	**(732)**	(629)
Total current liabilities		**(22,491)**	**(26,569)**
Non-current liabilities			
Long-term borrowings	31	**(20,271)**	(14,264)
Corporation tax payable	14	**(272)**	(411)
Deferred tax liabilities	14	**(1,156)**	(1,396)
Pensions and other post-employment benefits	28	**(3,125)**	(3,539)
Other provisions	29	**(691)**	(636)
Derivative financial instruments	42	**(1)**	–
Contingent consideration liabilities	39	**(5,449)**	(5,096)
Other non-current liabilities	30	**(938)**	(981)
Total non-current liabilities		**(31,903)**	**(26,323)**
Total liabilities		**(54,394)**	**(52,892)**
Net assets		**3,672**	**3,489**
Equity			
Share capital	33	**1,345**	1,343
Share premium account	33	**3,091**	3,019
Retained earnings	34	**(2,137)**	(6,477)
Other reserves	34	**2,061**	2,047
Shareholders' equity		**4,360**	**(68)**
Non-controlling interests		**(688)**	**3,557**
Total equity		**3,672**	**3,489**

The financial statements on pages 140 to 218 were approved by the Board on 11 March 2019 and signed on its behalf by

Philip Hampton
Chairman

Consolidated statement of changes in equity
for the year ended 31 December 2018

	Shareholders' equity						
	Share capital £m	Share premium £m	Retained earnings £m	Other reserves £m	Total £m	Non-controlling interests £m	**Total equity £m**
At 1 January 2016	1,340	2,831	(1,397)	2,340	5,114	3,764	**8,878**
Profit for the year	–	–	912	–	912	150	**1,062**
Other comprehensive income for the year	–	–	284	75	359	603	**962**
Total comprehensive income for the year	**–**	**–**	**1,196**	**75**	**1,271**	**753**	**2,024**
Distributions to non-controlling interests	–	–	–	–	–	(534)	**(534)**
Dividends to shareholders	–	–	(4,850)	–	(4,850)	–	**(4,850)**
Recognition of liabilities with non-controlling interests	–	–	(2,013)	–	(2,013)	(159)	**(2,172)**
Derecognition of liabilities with non-controlling interests	–	–	1,244	–	1,244	–	**1,244**
Changes in non-controlling interests	–	–	17	–	17	15	**32**
Shares issued	2	87	–	–	89	–	**89**
Shares acquired by ESOP Trusts	–	36	466	(576)	(74)	–	**(74)**
Write-down of shares held by ESOP Trusts	–	–	(381)	381	–	–	**–**
Share-based incentive plans	–	–	319	–	319	–	**319**
Tax on share-based incentive plans	–	–	7	–	7	–	**7**
At 31 December 2016	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)	–	**(3,927)**
Realised profits on disposal of equity investments	–	–	56	(56)	–	–	**–**
Share of associates and joint ventures realised profits 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	**1,345**	**3,091**	**(2,137)**	**2,061**	**4,360**	**(688)**	**3,672**

Consolidated cash flow statement
for the year ended 31 December 2018

	Notes	2018 £m	2017 £m	2016 £m
Cash flow from operating activities				
Profit after taxation for the year		4,046	2,169	1,062
Adjustments reconciling profit after tax to operating cash flows	36	5,701	6,089	7,044
Cash generated from operations		9,747	8,258	8,106
Taxation paid		(1,326)	(1,340)	(1,609)
Net cash inflow from operating activities		**8,421**	**6,918**	**6,497**
Cash flow from investing activities				
Purchase of property, plant and equipment		(1,344)	(1,545)	(1,543)
Proceeds from sale of property, plant and equipment		168	281	98
Purchase of intangible assets		(452)	(657)	(809)
Proceeds from sale of intangible assets		256	48	283
Purchase of equity investments		(309)	(80)	(96)
Proceeds from sale of equity investments		151	64	683
Contingent consideration paid		(153)	(91)	(73)
Purchase of businesses, net of cash acquired	38	–	–	17
Disposal of businesses	38	26	282	72
Investments in associates and joint ventures	20	(10)	(15)	(11)
Proceeds from disposal of interests in associates	38	3	196	–
Decrease in liquid investments		–	4	–
Interest received		72	64	68
Dividends from associates, joint ventures and equity investments		39	6	42
Net cash outflow from investing activities		**(1,553)**	**(1,443)**	**(1,269)**
Cash flow from financing activities				
Shares acquired by ESOP Trusts		–	(65)	(74)
Issue of share capital	33	74	56	89
Purchase of non-controlling interests		(9,320)	(29)	–
Increase in long-term loans		10,138	2,233	–
Repayment of short-term Notes		(2,067)	(2,636)	(865)
Increase in/(repayment of) other short-term loans		81	(564)	1,013
Net repayment of obligations under finance leases		(28)	(23)	(18)
Interest paid		(766)	(781)	(732)
Dividends paid to shareholders		(3,927)	(3,906)	(4,850)
Distributions to non-controlling interests		(570)	(779)	(534)
Contributions from non-controlling interests		21	21	–
Other financing cash flows		(25)	93	(421)
Net cash outflow from financing activities		**(6,389)**	**(6,380)**	**(6,392)**
Increase/(decrease) in cash and bank overdrafts	37	**479**	**(905)**	**(1,164)**
Cash and bank overdrafts at beginning of year		3,600	4,605	5,486
Exchange adjustments		8	(100)	283
Increase/(decrease) in cash and bank overdrafts		479	(905)	(1,164)
Cash and bank overdrafts at end of year		**4,087**	**3,600**	**4,605**
Cash and bank overdrafts at end of year comprise:				
Cash and cash equivalents		3,874	3,833	4,897
Cash and cash equivalents reported in assets held for sale		485	–	–
		4,359	3,833	4,897
Overdrafts		(272)	(233)	(292)
		4,087	**3,600**	**4,605**

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, 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 44, 'Principal Group companies'.

Financial period

These financial statements cover the financial year from 1 January to 31 December 2018, with comparative figures for the financial years from 1 January to 31 December 2017 and, where appropriate, from 1 January to 31 December 2016.

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.

Implementation of IFRS 9 'Financial instruments'

The Group has applied IFRS 9 'Financial instruments' with effect from 1 January 2018. IFRS 9 introduces new requirements for the classification and measurement of financial assets and financial liabilities, impairments for financial assets and general hedge accounting.

Details of these new requirements as well as their impact on the Group's consolidated financial statements are described below. The Group has adopted IFRS 9 retrospectively but with certain permitted exceptions as detailed below.

Classification and measurement of financial assets

The date of initial application was 1 January 2018. The Group has not applied the requirements of IFRS 9 to instruments that were derecognised prior to 1 January 2018 and has not restated prior years. Any difference between the previous carrying amount and the revised carrying amount at 1 January 2018 has been recognised as an adjustment to opening retained earnings at 1 January 2018.

All financial assets that are within the scope of IFRS 9 are required to be measured at amortised cost or fair value, with movements through other comprehensive income or the income statement on the basis of GSK's business model for managing the financial assets and the contractual cash flow characteristics of the financial assets.

IFRS 9 had the following impact on the Group's assets:

- The Group has elected to recognise movements in the fair value of equity investments in other comprehensive income under IFRS 9. Investments in equity instruments that were previously classified as available-for-sale financial assets measured at fair value have been designated as measured at fair value through other comprehensive income (FVTOCI) under IFRS 9. As a result, fair value movements are now recorded in other comprehensive income along with gains or losses on disposal of the investments.
- The Group's investments in limited life funds included in Other investments that were previously classified as available-for-sale financial assets under IAS 39 and measured at fair value have been classified as measured at fair value through profit or loss (FVTPL) under IFRS 9 as the contractual cash flows are not solely payments of principal and interest on the principal amount outstanding.
- Liquid investments that were classified as available-for-sale financial assets measured at fair value under IAS 39 have been classified as measured at amortised cost under IFRS 9 as they are held within a business model, the objective of which is to collect the contractual cash flows.
- Investments in money market funds included in Cash and cash equivalents that were classified as amortised cost financial assets under IAS 39 have been classified as FVTPL under IFRS 9 as the contractual cash flows are not solely payments of principal and interest on the principal amount outstanding.
- The Group's trade receivables were all classified as financial assets measured at amortised cost under IAS 39. Under IFRS 9, the business model under which each portfolio of trade receivables held has been assessed. The Group has portfolios in each of the three business models under IFRS 9: 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).

1. Presentation of the financial statements continued

– Amounts receivable under insurance contracts included in Other non-current assets were held at FVTPL or amortised cost under IAS 39. Under IFRS 9, as the contractual cash flows are not solely payments of principal and interest on the principal amount outstanding, the amounts receivable are classified as measured at FVTPL.

There were no material changes in carrying value of financial assets as a result of these changes in measurement basis.

Impairment of financial assets
IFRS 9 requires an expected credit loss (ECL) model to be applied to financial assets rather than the incurred credit loss model required under IAS 39. The expected credit loss model requires the Group to account for expected losses as a result of credit risk on initial recognition of financial assets and to recognise changes in those expected credit losses at each reporting date.

12-month ECLs are applied to all financial assets not measured at FVTPL except for net trade receivables which are measured reflecting lifetime ECLs using the simplified approach. An additional ECL allowance of £15 million for trade receivables was recognised on transition to IFRS 9. There were no other transition adjustments arising from the change in impairment basis.

The additional ECL allowance of £15 million at 1 January 2018 has been recognised against opening retained earnings, together with a related deferred tax impact of £3 million.

General hedge accounting
The new general hedge accounting requirements retain the three types of hedge accounting which were available under IAS 39: fair value hedges, cash flow hedges and net investment hedges. However, the effectiveness testing requirements have been simplified.

The Group has applied the IFRS 9 hedge accounting requirements prospectively from the date of initial application of 1 January 2018. All existing hedging relationships are eligible, and continued to be effective, under IFRS 9.

Implementation of IFRS 15 ‘Revenue from contracts with customers’

The Group has applied IFRS 15 ‘Revenue from contracts with customers’ with effect from 1 January 2018. IFRS 15 provides a single, principles-based approach to the recognition of revenue from all contracts with customers. It focuses on the identification of performance obligations in a contract and requires revenue to be recognised when or as those performance obligations are satisfied.

GSK adopted IFRS 15 applying the modified retrospective approach. IFRS 15 did not have a material impact on the amount or timing of recognition of reported revenue. At 1 January 2018, a cumulative adjustment to decrease retained earnings of £4 million was recognised. In accordance with the requirements of IFRS 15 where the modified retrospective approach is adopted, prior year results have not been restated.

Impact of new standards on each financial statement line item

The table below shows the amount of adjustment for each financial statement line item affected by the application of IFRS 9 and IFRS 15 at 1 January 2018.

	As previously reported £m	IFRS 9 adjustments £m	IFRS 15 adjustments £m	As restated £m
Trade and other receivables	6,000	(15)	–	5,985
Liquid investments	78	1	–	79
Other payables - returns and rebates	(3,463)	–	(29)	(3,492)
Other payables - deferred income	(240)	–	27	(213)
Deferred tax assets	3,796	3	(2)	3,797
Total effect on net assets	3,489	(11)	(4)	3,474
Fair value reserve	329	(288)	–	41
Retained earnings	(6,477)	277	(4)	(6,204)
Total effect on equity	3,489	(11)	(4)	3,474

The £288 million transfer between retained earnings and the fair value reserve resulted from the reclassification of previous impairment losses on equity investments now designated as measured at FVTOCI under IFRS 9 from retained earnings to the fair value reserve.

The application of IFRS 9 and IFRS 15 has had no impact on the consolidated cash flows of the Group.

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 219 and the accounting policies are given on page 220.

Notes to the financial statements continued

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 non-controlling 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 re-assessed 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 non-controlling interest, exceeds the fair value of the net assets, liabilities and contingent liabilities acquired, the excess is recorded as goodwill. The costs of 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.

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.

2. Accounting principles and policies continued

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 addition, provision is made for legal or other expenses arising from claims received or other disputes. 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. In certain cases, an incurred but not reported (IBNR) actuarial technique is used to determine this estimate.

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.

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.

Notes to the financial statements continued

2. Accounting principles and policies continued

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

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.

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.

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.

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.

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.

2. Accounting principles and policies continued

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.

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.

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: 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.

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 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.

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. 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.

Notes to the financial statements continued

2. Accounting principles and policies continued

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.

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-for-sale 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.

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 2018 was £30,821 million (2017 – £30,186 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.

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 affect the future results of the Group.

Taxation

The tax charge for the year was £754 million (2017 – £1,356 million). At December 2018, current tax payable was £965 million (2017 – £995 million), non-current corporation tax payable was £272 million (2017 – £411 million) and current tax recoverable was £229 million (2017 – £258 million).

Judgement

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.

Estimates

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 2018, the Group had recognised provisions of £1,082 million in respect of uncertain tax positions (2017 – £1,175 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 £117 million (2017 – £166 million). At 31 December 2018 provisions for legal and other disputes amounted to £219 million (2017 – £186 million).

Judgement

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 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.

Estimates

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 45, 'Legal proceedings'.

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, 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.

Notes to the financial statements continued

3. Key accounting judgements and estimates continued

Contingent consideration and put option liabilities

The 2018 income statement charge for contingent consideration and put option liabilities was £1,851 million (2017 – £2,134 million).

At 31 December 2018, the liability for contingent consideration amounted to £6,286 million (2017 – £6,172 million). Of this amount, £5,937 million (2017 – £5,542 million) related to the acquisition of the former Shionogi-ViiV Healthcare joint venture in 2012 and £296 million (2017 – £584 million) related to the acquisition of the Vaccines business from Novartis in 2015.

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 39, 'Contingent consideration liabilities'.

In June 2018, GSK acquired Novartis' shareholding in the Consumer Healthcare Joint Venture for $13 billion. This resulted in a net charge in the period of £658 million to remeasure the Consumer Healthcare Joint Venture put option to the agreed valuation.

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 liability for the Pfizer put option, which is derived from an internal valuation of the ViiV Healthcare business, utilising both discounted forecast future cash flow and multiples-based methodologies amounted to £1,240 million at 31 December 2018 (2017 – £1,304 million). Sensitivity analysis is given in Note 27, 'Trade and other payables'.

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. Four UK schemes are in surplus, with a combined surplus of £711 million at 31 December 2018 (2017 – £470 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 28, '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 28, 'Pensions and other post-employment benefits', but a 0.25% reduction in the discount rate would lead to an increase in the net pension deficit of approximately £707 million and an increase in the annual pension cost of approximately £28 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.

IFRS 16 'Leases' was issued in January 2016 and will be implemented by the Group from 1 January 2019. The Standard will replace IAS 17 'Leases' and will require lease liabilities and 'right of use' assets to be recognised on the balance sheet for almost all leases. This is expected to result in a significant increase in both assets and liabilities recognised. The costs of operating leases currently included within operating costs will be split and the financing element of the charge will be reported within finance expense. The overall impact on earnings is not expected to be material. Finance lease obligations at 31 December 2018 are set out in Note 31, 'Net debt' and the undiscounted commitments under non-cancellable operating leases are set out in Note 41, 'Commitments'.

GSK will implement IFRS 16 applying the modified retrospective approach. For larger leases, the right of use asset at 1 January 2019 will be calculated based on the original lease inception date and for smaller leases the right of use asset will be set equal to the lease liability, adjusted for any prepaid or accrued lease payments, onerous lease provisions and business combination fair value adjustments. On the transition date of 1 January 2019, the Group expects to recognise right of use assets of £1.1 billion and a lease liability of £1.3 billion, including existing finance leases. The implementation is expected to reduce net assets and total equity by £0.1 billion.

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:

	2018	2017	2016
Average rates:			
US$/£	**1.33**	1.30	1.36
Euro/£	**1.13**	1.15	1.23
Yen/£	**147**	145	149

	2018	2017	2016
Period end rates:			
US$/£	**1.27**	1.35	1.24
Euro/£	**1.11**	1.13	1.17
Yen/£	**140**	152	144

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 costs included the costs of corporate functions.

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

Turnover by segment	2018 £m	2017 £m	2016 £m
Pharmaceuticals	**17,269**	17,276	16,104
Vaccines	**5,894**	5,160	4,592
Consumer Healthcare	**7,658**	7,750	7,193
	30,821	30,186	27,889

Pharmaceuticals turnover by therapeutic area	2018 £m	2017 £m	2016 £m
Respiratory	**6,928**	6,991	6,510
HIV	**4,722**	4,350	3,556
Immuno-inflammation	**472**	377	340
Established Pharmaceuticals	**5,147**	5,558	5,698
	17,269	17,276	16,104

Vaccines turnover by category	2018 £m	2017 £m	2016 £m
Meningitis	**881**	890	662
Influenza	**523**	488	414
Shingles	**784**	22	–
Established Vaccines	**3,706**	3,760	3,516
	5,894	5,160	4,592

During 2018, the US operations of the Pharmaceuticals and Vaccines businesses made sales to three wholesalers of approximately £2,709 million (2017 – £2,449 million; 2016 – £2,139 million), £2,962 million (2017 – £3,043 million; 2016 – £2,691 million) and £2,656 million (2017 – £2,356 million; 2016 – £2,129 million) respectively, after allocating final-customer discounts to the wholesalers.

Consumer Healthcare turnover by category	2018 £m	2017 £m	2016 £m
Wellness	**3,940**	4,001	3,726
Oral care	**2,496**	2,466	2,223
Nutrition	**643**	680	674
Skin health	**579**	603	570
	7,658	7,750	7,193

Notes to the financial statements continued

6. Turnover and segment information continued

Segment profit	2018 £m	2017 £m	2016 £m
Pharmaceuticals	8,420	8,667	7,976
Pharmaceuticals R&D	(2,676)	(2,740)	(2,488)
Pharmaceuticals, including R&D	5,744	5,927	5,488
Vaccines	1,943	1,644	1,429
Consumer Healthcare	1,517	1,373	1,116
Segment profit	9,204	8,944	8,033
Corporate and other unallocated costs	(459)	(376)	(362)
Other reconciling items between segment profit and operating profit	(3,262)	(4,481)	(5,073)
Operating profit	5,483	4,087	2,598
Finance income	81	65	72
Finance costs	(798)	(734)	(736)
Profit on disposal of interest in associates	3	94	–
Share of after tax profits of associates and joint ventures	31	13	5
Profit before taxation	4,800	3,525	1,939
Taxation	(754)	(1,356)	(877)
Profit after taxation for the year	4,046	2,169	1,062

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	2018 £m	2017 £m	2016 £m
Pharmaceuticals	506	551	440
Pharmaceuticals R&D	123	96	211
Pharmaceuticals, including R&D	629	647	651
Vaccines	395	405	315
Consumer Healthcare	146	135	126
Segment depreciation and amortisation	1,170	1,187	1,092
Corporate and other unallocated depreciation and amortisation	106	144	94
Other reconciling items between segment depreciation and amortisation and total depreciation and amortisation	580	591	588
Total depreciation and amortisation	1,856	1,922	1,774

6. Turnover and segment information continued

PP&E, intangible asset and goodwill impairment by segment	2018 £m	2017 £m	2016 £m
Pharmaceuticals	51	38	29
Pharmaceuticals R&D	15	10	88
Pharmaceuticals, including R&D	66	48	117
Vaccines	5	13	34
Consumer Healthcare	4	10	46
Segment impairment	75	71	197
Corporate and other unallocated impairment	14	3	24
Other reconciling items between segment impairment and total impairment	261	995	68
Total impairment	350	1,069	289

PP&E and intangible asset impairment reversals by segment			
Pharmaceuticals	(4)	(13)	(15)
Pharmaceuticals R&D	(1)	(2)	(10)
Pharmaceuticals, including R&D	(5)	(15)	(25)
Vaccines	–	–	(19)
Consumer Healthcare	–	(1)	(8)
Segment impairment reversals	(5)	(16)	(52)
Corporate and other unallocated impairment reversals	–	–	(26)
Other reconciling items between segment impairment reversals and total impairment reversals	(8)	(36)	(9)
Total impairment reversals	(13)	(52)	(87)

Net assets by segment	2018 £m	2017 £m
Pharmaceuticals	869	2,017
Pharmaceuticals R&D	502	522
Pharmaceuticals, including R&D	1,371	2,539
Vaccines	9,966	9,707
Consumer Healthcare	10,559	2,003
Segment net operating assets	21,896	14,249
Corporate and other unallocated net operating assets	1,141	868
Net operating assets	23,037	15,117
Net debt	(21,621)	(13,178)
Investments in associates and joint ventures	236	183
Derivative financial instruments	129	2
Current and deferred taxation	1,723	1,252
Assets held for sale (excluding cash and cash equivalents)	168	113
Net assets	3,672	3,489

The Pharmaceuticals segment includes the Shionogi-ViiV Healthcare contingent consideration liability of £5,937 million (2017 – £5,542 million) and the Pfizer put option of £1,240 million (2017 – £1,304 million). The put option liability (2017 – £8,606 million) related to the Consumer Healthcare segment was extinguished during 2018.

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.

Turnover by location of customer	2018 £m	2017 £m	2016 £m
UK	923	940	1,056
US	11,982	11,263	10,197
Rest of World	17,916	17,983	16,636
External turnover	30,821	30,186	27,889

Non-current assets by location of subsidiary	2018 £m	2017 £m
UK	6,118	6,824
US	7,540	6,841
Rest of World	20,768	20,901
Non-current assets	34,426	34,566

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)

	2018 £m	2017 £m	2016 £m
Fair value remeasurements of equity investments under IFRS 9	16		
Disposal of businesses and assets	258	195	283
Fair value remeasurements on contingent consideration recognised in business combinations	(1,252)	(1,012)	(2,205)
Remeasurement of ViiV Healthcare put option liabilities and preferential dividends	58	13	(577)
Remeasurement of Consumer Healthcare put option liability	(658)	(1,186)	(1,133)
Fair value adjustments on derivative financial instruments	(3)	9	(3)
Other (expense)/income	(7)	9	23
Impairment of available-for-sale equity investments under IAS 39		(30)	(47)
Disposal of available-for-sale equity investments under IAS 39		37	254
	(1,588)	(1,965)	(3,405)

Disposal of businesses and assets in 2018 included a profit of £119 million on the disposal of tapinarof to Dermavant Sciences, a profit of £33 million on the disposal of Consumer Healthcare tail brands in the US 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, which is expected to complete by the end of 2019, net of disposal costs.

Fair value remeasurements on contingent consideration recognised in business combinations included £1,188 million related to the acquisition of the former Shionogi-ViiV Healthcare joint venture and £56 million payable to Novartis related to the Vaccines acquisition and fair value movements on derivatives hedging foreign exchange exposure.

8. Operating profit

The following items have been included in operating profit:	2018 £m	2017 £m	2016 £m
Employee costs (Note 9)	**9,440**	9,122	8,212
Advertising	**1,376**	1,351	1,265
Distribution costs	**389**	405	395
Depreciation of property, plant and equipment	**954**	988	978
Impairment of property, plant and equipment, net of reversals	**203**	327	180
Amortisation of intangible assets	**902**	934	796
Impairment of intangible assets, net of reversals	**134**	690	22
Net foreign exchange losses	**81**	215	53
Inventories:			
Cost of inventories included in cost of sales	**8,713**	8,526	8,093
Write-down of inventories	**695**	701	533
Reversal of prior year write-down of inventories	**(302)**	(352)	(145)
Operating lease rentals:			
Minimum lease payments	**188**	110	91
Contingent rents	**12**	4	4
Sub-lease payments	**5**	5	4
Fees payable to the company's auditor and its associates in relation to the Group (see below)	**29.8**	29.2	29.7

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 losses include a net loss of £nil (2017 – £109 million; 2016 – £nil) of exchange arising on the reclassification of exchange on liquidation or disposal of overseas subsidiaries.

Included within operating profit are major restructuring charges of £809 million (2017 – £1,056 million; 2016 – £970 million), see Note 10, 'Major restructuring costs'.

Fees payable to the company's auditor and its associates:	2018 £m	2017 £m	2016 £m
Audit of parent company and consolidated financial statements	**6.7**	7.0	5.8
Audit of the company's subsidiaries	**12.9**	16.2	16.4
Attestation under s.404 of Sarbanes-Oxley Act 2002	**6.6**	4.5	4.4
Audit and audit-related services	**26.2**	27.7	26.6
Taxation compliance	**0.1**	0.2	0.2
Taxation advice	**–**	0.1	1.8
Other assurance services	**3.0**	1.0	0.3
All other services	**0.5**	0.2	0.8
	29.8	29.2	29.7

The other assurance services provided by the auditor relate 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 2018.

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

	2018 £m	2017 £m	2016 £m
Audit	**0.3**	0.3	0.4
Other services	**–**	0.1	–

Notes to the financial statements continued

9. Employee costs

	2018 £m	2017 £m	2016 £m
Wages and salaries	7,203	7,116	6,391
Social security costs	795	802	733
Pension and other post-employment costs, including augmentations (Note 28)	586	616	541
Cost of share-based incentive plans	393	347	338
Severance and other costs from integration and restructuring activities	463	241	209
	9,440	9,122	8,212

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:

	2018 £m	2017 £m	2016 £m
Share Value Plan	304	276	271
Performance Share Plan	49	47	39
Share option plans	4	4	4
Cash settled and other plans	36	20	24
	393	347	338

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

	2018 Number	2017 Number	2016 Number
Manufacturing	37,296	38,632	38,611
Selling, general and administration	47,887	49,141	49,961
Research and development	11,668	11,576	11,255
	96,851	99,349	99,827

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 231. The monthly average number of persons employed by GlaxoSmithKline plc in 2018 was nil (2017 – nil).

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

	2018 £m	2017 £m	2016 £m
Wages and salaries	29	26	25
Social security costs	3	4	4
Pension and other post-employment costs	3	3	2
Cost of share-based incentive plans	20	22	15
	55	55	46

Further information on the remuneration of the Directors is given in the Remuneration report on pages 96 to 124.

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. In July 2018, the Board approved a new Major restructuring programme, which is 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.

10. Major restructuring costs continued

The total restructuring costs of £809 million in 2018 were incurred in a number of areas, including the following:

- Restructuring of the commercial operating model, including staff reductions in the US, Europe and International Pharmaceutical commercial operations and the US Respiratory field sales force
- Manufacturing site restructuring, including the GSK steriles manufacturing facility at Ulverston, United Kingdom
- Vaccines transformation and remediation
- Restructuring of the Pharmaceutical and Consumer Healthcare supply chains leading to simplification of the operating model and improved resource allocation
- 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:

	2018 £m	2017 £m	2016 £m
Increase in provision for Major restructuring programmes (see Note 29)	**450**	259	163
Amount of provision reversed unused (see Note 29)	**(99)**	(43)	(140)
Impairment losses recognised	**130**	278	158
Other non-cash charges	**72**	247	108
Other cash costs	**256**	315	681
	809	1,056	970

Asset impairments and other non-cash charges principally comprise fixed asset write-downs across support function, 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 and consultancy and project management fees.

The analysis of Major restructuring charges by income statement line was as follows:

	2018 £m	2017 £m	2016 £m
Cost of sales	**443**	545	297
Selling, general and administration	**315**	248	514
Research and development	**49**	263	159
Other operating income/(expense)	**2**	–	–
	809	1,056	970

11. Finance income

	2018 £m	2017 £m	2016 £m
Year to 31 December 2018 under IFRS 9			
Finance income arising from:			
Financial assets measured at amortised cost	**73**		
Financial assets measured at fair value through profit or loss	**1**		
Net gains arising from hedge ineffectiveness on net investment hedges	**7**		
Years to 31 December 2017 and 31 December 2016 under IAS 39			
Interest income arising from:			
Cash and cash equivalents		60	67
Available-for-sale investments		2	1
Loans and receivables		1	2
Fair value adjustments on derivatives at fair value through profit or loss		2	2
	81	65	72

Interest income arising from financial assets measured at amortised cost in 2018 includes interest income arising from assets which would have been classified as available-for-sale investments and loans and receivables in prior years under IAS 39. This also includes interest income arising from certain cash and cash equivalents. Interest income arising from financial assets measured at fair value through profit or loss in 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 and 2016. All derivatives accounted for at fair value through profit or loss other than designated and effective hedging instruments (see Note 42, ‘Financial instruments and related disclosures’) are classified as held-for-trading financial instruments.

Notes to the financial statements continued

12. Finance expense

	2018 £m	2017 £m	2016 £m
Finance expense arising on:			
Financial liabilities at amortised cost	**(677)**	(698)	(671)
Derivatives at fair value through profit or loss	**(38)**	(22)	(30)
Net losses arising from:			
Financial instruments mandatorily measured at fair value through profit or loss	**3**	(4)	(3)
Reclassification of hedges from other comprehensive income	**(2)**	–	(1)
Unwinding of discounts on provisions	**(15)**	(16)	(16)
Other finance expense	**(69)**	6	(15)
	(798)	(734)	(736)

All derivatives accounted for at fair value through profit or loss, other than designated and effective hedging instruments (see Note 42, 'Financial instruments and related disclosures'), are classified as held-for-trading financial instruments. Interest expense arising on derivatives at fair value through profit or loss relates to swap interest expense. Other finance expense in 2018 includes a £39 million charge (2017 – £24 million credit) 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:

	2018 £m	2017 £m	2016 £m
Share of after tax profits of associates	**28**	16	9
Share of after tax profits/(losses) of joint ventures	**3**	(3)	(4)
	31	13	5

At 31 December 2018, the Group held one significant associate, Innoviva, Inc.

Summarised income statement information in respect of Innoviva is set out below for the periods in which the Group accounted for its investment in Innoviva as an associate. The Group's 2018 share of after tax profits of associates and other comprehensive income includes a profit of £33 million and other comprehensive income of £nil in respect of Innoviva.

	2018 £m	2017 £m	2016 £m
Turnover	**183**	165	98
Profit after taxation	**134**	103	44
Other comprehensive income	**–**	–	–
Total comprehensive income	**134**	103	44

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

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

	2018 £m	2017 £m	2016 £m
Share of turnover	**242**	252	133
Share of after tax (losses)/profits	**(2)**	(5)	(1)
Share of other comprehensive income	**–**	–	–
Share of total comprehensive (expense)/income	**(2)**	(5)	(1)

The Group's sales to associates and joint ventures were £43 million in 2018 (2017 – £41 million; 2016 – £43 million).

14. Taxation

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

Taxation charge based on profits for the year	2018 £m	2017 £m	2016 £m
UK current year charge	234	199	241
Rest of World current year charge	1,426	1,928	1,326
Credit in respect of prior periods	(492)	(508)	(149)
Total current taxation	1,168	1,619	1,418
Total deferred taxation	(414)	(263)	(541)
Total tax	754	1,356	877

In 2018, GSK made payments of £113 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 2018 reflected the origination of current year tax losses, where offset against taxable profits in future periods is probable, as well as 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. In 2016, the net deferred tax credit was impacted to a greater extent by remeasurement of the contingent consideration in relation to the former Shionogi-ViiV Healthcare Joint Venture.

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.

Reconciliation of taxation on Group profits	2018 £m	2018 %	2017 £m	2017 %	2016 £m	2016 %
Profit before tax	4,800		3,525		1,939	
UK statutory rate of taxation	912	19.0	679	19.25	388	20.0
Differences in overseas taxation rates	675	14.1	635	18.0	593	30.6
Benefit of intellectual property incentives	(522)	(10.9)	(458)	(13.0)	(321)	(16.5)
R&D credits	(73)	(1.5)	(75)	(2.1)	(93)	(4.8)
FV remeasurement of non-taxable put options	221	4.6	227	6.4	340	17.5
Tax losses where no benefit is recognised	24	0.5	28	0.8	(15)	(0.8)
Permanent differences on disposals and acquisitions	(7)	(0.1)	4	0.1	(21)	(1.1)
Other permanent differences	85	1.7	196	5.6	122	6.3
Re-assessments of prior year estimates	(436)	(9.1)	(475)	(13.5)	(116)	(6.0)
US and Swiss Tax Reform	(125)	(2.6)	595	16.9		
Tax charge/tax rate	754	15.7	1,356	38.5	877	45.2

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 2018 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.

The Group's 2018 tax rate of 15.7% has been influenced by the reassessment of open issues with tax authorities in various jurisdictions, together with the £125 million credit related to a reduced estimate of the 2017 impact of US Tax Reform following additional guidance being released by the US tax authorities and the transaction related charges arising on the Group's put option liabilities to ViiV Healthcare and the former Consumer Healthcare Joint Venture with Novartis.

Future tax charges, and therefore the Group's effective tax rate, may be affected by factors such as acquisitions, disposals, restructuring, the location of research and development activity, tax regime reforms and resolution of open matters as tax affairs are brought up to date around the world.

Notes to the financial statements continued

14. Taxation continued

Tax on items charged to equity and statement of comprehensive income	2018 £m	2017 £m	2016 £m
Current taxation			
Share-based payments	–	–	7
Defined benefit plans	(2)	26	32
	(2)	26	39
Deferred taxation			
Share-based payments	2	(4)	–
Defined benefit plans	(144)	(247)	94
Fair value movements on cash flow hedges	(2)	–	2
Fair value movements on equity investments	10	29	51
	(134)	(222)	147
Total (charge)/credit to equity and statement of comprehensive income	(136)	(196)	186

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 GSK bases its 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 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 whose 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 2018 the Group had recognised provisions of £1,082 million in respect of such uncertain tax positions (2017 – £1,175 million). The decrease in recognised provisions during 2018 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. GSK does not currently anticipate any material changes to the amounts provided for transfer pricing or tax contingencies during the next 12 months.

A provision for deferred tax liabilities of £185 million as at 31 December 2018 (2017 – £209 million) has been made in respect of withholding 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 £18 billion (2017 – £17 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 £231 million (2017 – £nil) 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

	Accelerated capital allowances £m	Intangible assets £m	Contingent consideration £m	Intra-Group profit £m	Pensions & other post employment benefits £m	Tax losses £m	Share option and award schemes £m	Other net temporary differences £m	Total £m
At 1 January 2017	(377)	(2,324)	1,138	1,054	1,262	227	110	1,350	2,440
Exchange adjustments	(7)	75	–	(58)	(48)	(5)	(4)	(18)	(65)
Credit/(charge) to income statement	62	330	(52)	256	3	59	(1)	(88)	569
Credit/(charge) to income statement associated with US tax reform	5	116	(218)	(235)	(210)	(20)	(27)	(216)	(805)
Credit to income statement associated with Swiss tax reform	–	483	–	–	–	–	–	–	483
(Charge)/credit to statement of comprehensive income and equity	–	–	–	–	(247)	–	(4)	29	(222)
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

The net credit to the income statement of £396 million included an £18 million charge related to R&D incentives recognised within Operating profit (and not the taxation charge) in the income statement.

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.

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 £447 million (2017 – £261 million) related to trading losses. Other net temporary differences included accrued expenses for which a tax deduction is only available on a paid basis, such as for pensions.

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

	2018 £m	2017 £m
Deferred tax assets	**3,887**	3,796
Deferred tax liabilities	**(1,156)**	(1,396)
	2,731	2,400

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 £114 million at 31 December 2018 (2017 – £151 million).

	2018		2017	
Unrecognised tax losses	**Tax losses £m**	**Unrecognised deferred tax asset £m**	Tax losses £m	Unrecognised deferred tax asset £m
Trading losses expiring:				
Within 10 years	**678**	**148**	802	187
More than 10 years	**957**	**93**	872	99
Available indefinitely	**89**	**15**	86	14
At 31 December	**1,724**	**256**	1,760	300
Capital losses expiring:				
Available indefinitely	**2,042**	**399**	1,924	372
At 31 December	**2,042**	**399**	1,924	372

Deferred tax assets are only recognised where it is probable that future taxable profit will be available to utilise losses.

Notes to the financial statements continued

15. Earnings per share

	2018 pence	2017 pence	2016 pence
Basic earnings per share	**73.7**	31.4	18.8
Diluted earnings per share	**72.9**	31.0	18.6

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	2018 millions	2017 millions	2016 millions
Basic	**4,914**	4,886	4,860
Dilution for share options and awards	**57**	55	49
Diluted	**4,971**	4,941	4,909

16. Dividends

	2018			2017			2016		
	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	**12 July 2018**	**19**	**934**	13 July 2017	19	928	14 July 2016	19	923
Second interim	**11 October 2018**	**19**	**934**	12 October 2017	19	929	13 October 2016	19	925
Third interim	**10 January 2019**	**19**	**935**	11 January 2018	19	929	12 January 2017	19	925
Fourth interim	**11 April 2019**	**23**	**1,132**	12 April 2018	23	1,130	13 April 2017	23	1,124
Total		**80**	**3,935**		80	3,916		80	3,897

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 2018 financial statements recognise those dividends paid in 2018, namely the third and fourth interim dividends for 2017, and the first and second interim dividends for 2018.

The amounts recognised in each year were as follows:

	2018 £m	2017 £m	2016 £m
Dividends to shareholders	**3,927**	3,906	4,850

17. Property, plant and equipment

	Land and buildings £m	Plant, equipment and vehicles £m	Assets in construction £m	Total £m
Cost at 1 January 2017	7,761	11,235	3,168	**22,164**
Exchange adjustments	(127)	(62)	(45)	**(234)**
Other additions	69	296	1,219	**1,584**
Capitalised borrowing costs	–	–	30	**30**
Disposals and write-offs	(376)	(685)	(31)	**(1,092)**
Reclassifications	602	1,186	(1,826)	**(38)**
Transfer to assets held for sale	(462)	(219)	(14)	**(695)**
Cost at 31 December 2017	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**
Depreciation at 1 January 2017	(3,259)	(7,410)	–	**(10,669)**
Exchange adjustments	50	110	–	**160**
Charge for the year	(299)	(689)	–	**(988)**
Disposals and write-offs	158	539	–	**697**
Transfer to assets held for sale	314	190	–	**504**
Depreciation at 31 December 2017	(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)**
Impairment at 1 January 2017	(279)	(344)	(64)	**(687)**
Exchange adjustments	8	2	(2)	**8**
Disposals and write-offs	210	104	28	**342**
Impairment losses	(194)	(138)	(17)	**(349)**
Reversal of impairments	7	9	1	**17**
Transfer to assets held for sale	87	8	11	**106**
Impairment at 31 December 2017	(161)	(359)	(43)	**(563)**
Exchange adjustments	(8)	(4)	(1)	**(13)**
Disposals and write-offs	10	59	22	**91**
Impairment losses	(16)	(143)	(46)	**(205)**
Reversal of impairments	1	6	–	**7**
Transfer to assets held for sale	–	20	–	**20**
Impairment at 31 December 2018	(174)	(421)	(68)	**(663)**
Total depreciation and impairment at 31 December 2017	(3,197)	(7,619)	(43)	**(10,859)**
Total depreciation and impairment at 31 December 2018	(3,407)	(7,955)	(68)	**(11,430)**
Net book value at 1 January 2017	4,223	3,481	3,104	**10,808**
Net book value at 31 December 2017	4,270	4,132	2,458	**10,860**
Net book value at 31 December 2018	4,404	4,582	2,072	**11,058**

The weighted average interest rate for capitalised borrowing costs in the year was 3% (2017 – 4%). 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.

Notes to the financial statements continued

17. Property, plant and equipment continued

The net book value at 31 December 2018 of the Group's land and buildings included £24 million (2017 – £27 million) held under finance leases. In addition, the net book value of plant, equipment and vehicles held under finance lease at 31 December 2018 was £59 million (2017 – £55 million).

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, 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 £142 million (2017 – £198 million), R&D £9 million (2017 – £93 million) and SG&A £54 million (2017 – £36 million), and included £138 million (2017 – £278 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.

The carrying value at 31 December 2018 of assets for which impairments have been charged or reversed in the year was £95 million (2017 – £33 million).

During 2018, £67 million (2017 – £38 million) of computer software was reclassified from assets in construction to intangible assets on becoming ready for use.

18. Goodwill

	2018 £m	2017 £m
Cost at 1 January	5,734	5,965
Exchange adjustments	199	(228)
Transfer to assets held for sale	(144)	(3)
Cost at 31 December	5,789	5,734
Net book value at 1 January	5,734	5,965
Net book value at 31 December	5,789	5,734

Goodwill is allocated to the Group's segments as follows:

	2018 £m	2017 £m
Pharmaceuticals	3,273	3,172
Vaccines	1,342	1,302
Consumer Healthcare	1,174	1,260
Net book value at 31 December	5,789	5,734

18. Goodwill continued

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	Growth rates are internal forecasts based on both internal and external market information. Margins reflect past experience, adjusted for expected changes. Terminal growth rates based on management's estimate of future long-term average growth rates. Discount rates based on Group WACC, adjusted where appropriate. Taxation rates based on appropriate rates for each region.		
Period of specific projected cash flows	Five years		
Terminal growth rate and discount rate		Terminal growth rate	Discount rate
	Pharmaceuticals	1% p.a.	7.5%
	Vaccines	1% p.a.	7.5%
	Consumer Healthcare	2% p.a.	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.

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. Goodwill is monitored at the segmental level.

The Pharmaceuticals cash generating unit comprises a collection of smaller cash generating units including assets with indefinite lives with a carrying value of £236 million (2017 – £228 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 £8.5 billion (2017 – £8.5 billion).

Details of indefinite life brands are given in Note 19, 'Other intangible assets'.

Notes to the financial statements continued

19. Other intangible assets

	Computer software £m	Licences, patents, etc. £m	Amortised brands £m	Indefinite life brands £m	Total £m
Cost at 1 January 2017	2,156	15,143	427	9,375	**27,101**
Exchange adjustments	(37)	(215)	(4)	(272)	**(528)**
Capitalised development costs	–	251	–	–	**251**
Capitalised borrowing costs	2	3	–	–	**5**
Other additions	233	221	–	–	**454**
Disposals and asset write-offs	(217)	(38)	–	–	**(255)**
Transfer to assets held for sale	(1)	(90)	–	(44)	**(135)**
Reclassifications	38	–	66	(66)	**38**
Cost at 31 December 2017	2,174	15,275	489	8,993	**26,931**
Exchange adjustments	32	235	29	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)	(81)	(9)	–	**(92)**
Reclassifications	67	–	–	–	**67**
Cost at 31 December 2018	2,365	15,657	509	9,056	**27,587**
Amortisation at 1 January 2017	(1,184)	(4,983)	(224)	–	**(6,391)**
Exchange adjustments	25	141	–	–	**166**
Charge for the year	(163)	(761)	(10)	–	**(934)**
Disposals and asset write-offs	210	25	–	–	**235**
Transfer to assets held for sale	1	25	–	–	**26**
Amortisation at 31 December 2017	(1,111)	(5,553)	(234)	–	**(6,898)**
Exchange adjustments	(24)	(104)	(3)	–	**(131)**
Charge for the year	(240)	(645)	(17)	–	**(902)**
Disposals and asset write-offs	67	124	–	–	**191**
Transfer to assets held for sale	1	18	1	–	**20**
Amortisation at 31 December 2018	(1,307)	(6,160)	(253)	–	**(7,720)**
Impairment at 1 January 2017	(9)	(1,652)	(143)	(130)	**(1,934)**
Exchange adjustments	–	110	–	3	**113**
Impairment losses	(2)	(546)	–	(132)	**(680)**
Disposals and asset write-offs	2	5	–	–	**7**
Transfer to assets held for sale	–	19	–	4	**23**
Impairment at 31 December 2017	(9)	(2,064)	(143)	(255)	**(2,471)**
Exchange adjustments	–	(69)	(20)	–	**(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)	(2,166)	(163)	(324)	**(2,665)**
Total amortisation and impairment at 31 December 2017	(1,120)	(7,617)	(377)	(255)	**(9,369)**
Total amortisation and impairment at 31 December 2018	(1,319)	(8,326)	(416)	(324)	**(10,385)**
Net book value at 1 January 2017	963	8,508	60	9,245	**18,776**
Net book value at 31 December 2017	1,054	7,658	112	8,738	**17,562**
Net book value at 31 December 2018	1,046	7,331	93	8,732	**17,202**

The weighted average interest rate for capitalised borrowing costs in the year was 3% (2017 – 4%).

The net book value of computer software included £578 million (2017 – £669 million) of internally generated costs.

The carrying value at 31 December 2018 of intangible assets, for which impairments have been charged or reversed in the year, following those impairments or reversals, was £73 million (2017 – £300 million).

The patent expiry dates of the Group's most significant assets, where relevant, are set out on pages 238 and 239.

19. Other intangible assets continued

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

	Amortisation		Net impairment losses	
	2018 £m	2017 £m	2018 £m	2017 £m
Cost of sales	593	578	69	400
Selling, general and administration	178	116	19	2
Research and development	131	240	46	278
	902	934	134	680

Licences, patents, 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 38, 'Acquisitions and disposals' gives details of additions through business combinations in the year. The book values of the largest individual items are as follows:

	2018 £m	2017 £m
Meningitis portfolio	2,363	2,450
Dolutegravir	1,319	1,389
Benlysta	905	965
Fluarix/FluLaval	274	321
HIV assets acquired from BMS	277	277
Selzentry	136	162
Okairos technology platform	205	202
Others	1,852	1,892
	7,331	7,658

The Meningitis portfolio includes *Menveo*, *Bexsero*, Men ABCWY and *Menjugate*.

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 and the Novartis Consumer Healthcare business in 2015, together with a number of pharmaceutical brands from the acquisition of Stiefel Laboratories, Inc. in 2009. The book values of the major brands are as follows:

	2018 £m	2017 £m
Voltaren	2,735	2,716
Otrivin	1,385	1,380
Fenistil	651	648
Theraflu	449	441
Panadol	388	386
Sensodyne	265	265
Lamisil	293	289
Breathe Right	262	236
Stiefel trade name	236	228
Excedrin	193	185
Physiogel	150	166
Polident	112	112
Others	1,613	1,686
	8,732	8,738

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 nil% 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.

Notes to the financial statements continued

20. Investments in associates and joint ventures

	Joint ventures £m	Associates £m	2018 Total £m	Joint ventures £m	Associates £m	2017 Total £m
At 1 January	13	170	**183**	19	244	263
Exchange adjustments	1	11	**12**	(2)	(10)	(12)
Additions	1	9	**10**	–	15	15
Disposals	–	–	**–**	–	(92)	(92)
Distributions received	–	(40)	**(40)**	(1)	(1)	(2)
Other movements	1	39	**40**	–	(2)	(2)
Profit/(loss) after tax recognised in the consolidated income statement	3	28	**31**	(3)	16	13
At 31 December	19	217	**236**	13	170	183

The Group held one significant associate at 31 December 2018, Innoviva, Inc. At 31 December 2018, the Group owned 32 million shares or 31.7% 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 17.4% of the common stock. The investment in Innoviva had a market value of £440 million at 31 December 2018 (2017 – £336 million).

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

	At 31 December 2018 £m	At 31 December 2017 £m
Non-current assets	**275**	124
Current assets	**157**	148
Current liabilities	**(4)**	(26)
Non-current liabilities	**(302)**	(426)
Net assets/(liabilities)	**126**	(180)

	2018 £m	2017 £m
Interest in associated undertaking	**40**	(57)
Goodwill	**91**	86
Fair value and other adjustments	**58**	118
Carrying value at 31 December	**189**	147

21. Other investments

	Investments designated as measured at FVTOCI £m	Investments measured at FVTPL £m	2018 £m	2017 £m
At 1 January	869	49	**918**	985
Exchange adjustments	48	4	**52**	(64)
Additions	363	9	**372**	80
Net fair value movements through Other comprehensive income	118	–	**118**	11
Net fair value movements through profit or loss	–	16	**16**	–
Impairment losses	–	–	**–**	(30)
Disposals and settlements	(89)	(6)	**(95)**	(64)
Transfers to Assets held for sale	(59)	–	**(59)**	–
At 31 December	1,250	72	**1,322**	918

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 and discounted cash flows of the underlying net assets. Other investments include listed investments of £656 million (2017 – £535 million).

21. Other investments continued

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 2018 were in Theravance Biopharma, Inc. in which the Group holds 17.4% of the common stock, Orchard in which the group holds 14.5% and 23andMe in which the Group holds 14.5%. These investments had a fair value at 31 December 2018 of £194 million (2017 – £199 million), £154 million and £229 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. Information on dividends received from investments measured at FVTOCI is provided in Note 7 'Other operating income/(expense)'.

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 £148 million were disposed of during the year. The cumulative gain on these investments after tax was £56 million.

Certain other investments, such as investments in funds with limited lives, are measured at fair value through profit or loss (FVTPL). The cumulative gain/loss on investments measured at FVTPL which were disposed of during the year was £nil. The fair value of these investments on derecognition was £nil.

In 2017, prior to the Group's implementation of IFRS 9, the cumulative fair value movements, based on average cost for shares acquired at different times, for all other investments disposed of during the period were reclassified from the fair value reserve to the income statement.

The impairment losses recorded above for the prior year were recognised in the income statement within Other operating income, together with amounts reclassified from the fair value reserve on recognition of the impairments. These impairments resulted from prolonged or significant declines in the fair value of the equity investments below acquisition cost.

The carrying value at 31 December 2017 of Other investments which had been impaired was as follows:

	2017 £m
Original cost	475
Cumulative impairments recognised in the income statement	(283)
Subsequent fair value increases	210
Carrying value at 31 December 2017	402

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.

22. Other non-current assets

	2018 £m	2017 £m
Amounts receivable under insurance contracts	675	648
Pension schemes in surplus	760	538
Other receivables	141	227
	1,576	1,413

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

In regards to the other receivables of £141 million, £89 million is classified as financial assets of which £41 million is classified as fair value through profit or loss. Of the remaining balance of £48 million, the expected credit loss allowance was immaterial at 31 December 2018.

23. Inventories

	2018 £m	2017 £m
Raw materials and consumables	1,122	1,193
Work in progress	2,286	2,381
Finished goods	2,068	1,983
	5,476	5,557

Notes to the financial statements continued

24. Trade and other receivables

	2018 £m	2017 £m
Trade receivables, net of loss allowance	**5,176**	4,672
Accrued income	**9**	21
Other prepayments	**330**	308
Interest receivable	**4**	10
Employee loans and advances	**14**	19
Other receivables	**890**	970
	6,423	6,000

Trade receivables included £15 million (2017 – £11 million) due from associates and joint ventures. Other receivables included £nil (2017 – £7 million) due from associates and joint ventures.

Loss allowance	2018 £m	2017 £m
At 1 January	**140**	207
Implementation of IFRS 9	**15**	–
At 1 January, as adjusted	**155**	–
Exchange adjustments	**–**	(4)
Charge for the year	**7**	31
Subsequent recoveries of amounts provided for	**(30)**	(79)
Utilised	**(4)**	(15)
At 31 December	**128**	140

Of the total trade receivables balance, £71 million was considered credit impaired, against which a £7 million expected credit loss allowance has been applied. No amount was purchased or originated credit impaired.

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

For more discussion on credit risk practices, please refer to Note 42.

25. Cash and cash equivalents

	2018 £m	2017 £m
Cash at bank and in hand	**569**	826
Short-term deposits	**3,305**	3,007
	3,874	3,833

In addition, £485 million of cash and cash equivalents has been reported in Assets held for sale, see Note 26, 'Assets held for sale'.

Cash and cash equivalents included £0.2 billion (2017 – £0.8 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.

26. Assets held for sale

	2018 £m	2017 £m
Property, plant and equipment	109	57
Goodwill	144	–
Other intangibles	1	49
Inventory	50	7
Cash and cash equivalents	485	–
Other	(136)	–
	653	113

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 disposal group arising from GSK's agreement to divest *Horlicks* and other Consumer Healthcare nutritional brands to Unilever plc announced in December 2018, and which is expected to complete by the end of 2019. See Note 38, 'Acquisitions and disposals'.

Included within assets held for sale are assets which were written down to fair value less costs to sell of £51 million (2017 – £63 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.

27. Trade and other payables

	2018 £m	2017 £m
Trade payables	3,645	3,528
Wages and salaries	1,355	1,228
Social security	139	166
Consumer Healthcare put option	–	8,606
ViiV Healthcare put option	1,240	1,304
Other payables	401	363
Deferred income	216	240
Customer return and rebate accruals	5,064	3,463
Other accruals	1,977	2,072
	14,037	20,970

Trade and other payables included £64 million (2017 – £53 million) due to associates and joint ventures. The Group provides limited supplier financing arrangements to certain customers. The amounts involved at 31 December 2018 were not material.

Revenue recognised in the year that was included in deferred income at 1 January 2018 was £66 million. Of the remaining balance, £64 million related to proceeds from a site disposal in India, which was expected to complete in 2018, but is now expected to complete in 2019.

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 £4,356 million (2017 – £2,837 million) in respect of US Pharmaceuticals and Vaccines, as more fully described in the Group financial review on page 63. 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. The amount of the liability recognised is derived from several valuation methodologies, including reference to market multiples of comparable companies. 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.

Increase/(decrease) in financial liability and loss/(gain) in Income statement	2018 £m
10% increase in sales forecasts	140
10% decrease in sales forecasts	(140)
10 cent appreciation of US Dollar	75
10 cent depreciation of US Dollar	(64)
10 cent appreciation of Euro	44
10 cent depreciation of Euro	(37)

An explanation of the accounting for ViiV Healthcare is set out on page 41.

Notes to the financial statements continued

28. Pensions and other post-employment benefits

Pension and other post-employment costs	2018 £m	2017 £m	2016 £m
UK pension schemes	**246**	198	205
US pension schemes	**100**	113	106
Other overseas pension schemes	**190**	218	140
Unfunded post-retirement healthcare schemes	**50**	87	90
	586	616	541
Analysed as:			
Funded defined benefit/hybrid pension schemes	**369**	335	304
Unfunded defined benefit pension schemes	**43**	55	43
Unfunded post-retirement healthcare schemes	**50**	87	90
Defined benefit schemes	**462**	477	437
Defined contribution pension schemes	**124**	139	104
	586	616	541

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

	2018 £m	2017 £m	2016 £m
Cost of sales	**160**	162	135
Selling, general and administration	**228**	238	221
Research and development	**74**	77	81
	462	477	437

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 2017 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.

28. 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 2038 for an individual then at the age of 60 is as follows:

	UK		US	
	Male Years	Female Years	Male Years	Female Years
Current	27.5	29.1	27.0	28.7
Projected for 2038	29.0	30.6	28.7	30.3

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 remains unchanged, with 55% in return-seeking assets and 45% in liability-matching assets. The remaining plan has materially de-risked given its relative higher maturity as well as improved funding position. The asset allocation of the US plans is currently set at 55% return-seeking assets and 45% 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			Rest of World		
	2018 % pa	2017 % pa	2016 % pa	**2018 % pa**	2017 % pa	2016 % pa	**2018 % pa**	2017 % pa	2016 % pa
Rate of increase of future earnings	**2.00**	2.00	2.00	**4.00**	4.00	4.00	**2.70**	2.80	2.70
Discount rate	**2.90**	2.50	2.70	**4.20**	3.60	3.90	**1.80**	1.60	1.60
Expected pension increases	**3.20**	3.20	3.20	**n/a**	n/a	n/a	**2.10**	2.20	2.10
Cash balance credit/conversion rate	**n/a**	n/a	n/a	**3.20**	2.90	3.20	**0.40**	0.30	0.30
Inflation rate	**3.20**	3.20	3.20	**2.25**	2.25	2.25	**1.50**	1.70	1.50

Sensitivity analysis detailing the effect of changes in assumptions is provided on page 182. The analysis provided reflects the assumption changes which have the most material impact on the results of the Group.

Notes to the financial statements continued

28. 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 2018 in relation to the defined benefit pension and post-retirement healthcare schemes were as follows:

2018	UK £m	US £m	Rest of World £m	Pensions Group £m	Post-retirement benefits Group £m
Amounts charged to operating profit					
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**

2017	UK £m	US £m	Rest of World £m	Pensions Group £m	Post-retirement benefits Group £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

2016	UK £m	US £m	Rest of World £m	Pensions Group £m	Post-retirement benefits Group £m
Amounts charged to operating profit					
Current service cost	70	66	110	246	31
Past service cost	52	1	1	54	3
Net interest cost	9	27	20	56	56
Gains from settlements	–	–	(28)	(28)	–
Expenses	7	12	–	19	–
	138	106	103	347	90
Remeasurement losses recorded in the statement of comprehensive income	(165)	(27)	(224)	(416)	(59)

The amounts included within past service costs in the UK include a charge of £40 million in relation to the estimated impact of GMP equalisation and £43 million (2017 – £37 million; 2016 – £52 million) of augmentation costs of which £21 million is arising from major restructuring programmes (see Note 29, 'Other provisions').

28. 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:

	2018 £m	2017 £m	2016 £m
Recognised in Other non-current assets:			
Pension schemes in surplus	760	538	313
Recognised in Assets held for sale:			
Post-retirement benefits	(9)	–	–
Recognised in Pensions and other post-employment benefits:			
Pension schemes in deficit	(1,755)	(2,043)	(2,397)
Post-retirement benefits	(1,370)	(1,496)	(1,693)
	(3,125)	(3,539)	(4,090)

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 2018		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 scheme 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 and other post-employment benefits		(217)	(666)	(872)	(1,755)
		494	(666)	(823)	(995)
Actual return on plan assets		(88)	(123)	55	(156)

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.

In previous years, index-linked gilts held as part of a UK repo programme were included in government bonds. The related loan was included within 'Other assets' at a value of £(773) million at 31 December 2017 (2016 – £(1,686) million). This programme was cancelled during 2018.

Notes to the financial statements continued

28. Pensions and other post-employment benefits continued

At 31 December 2017		UK £m	US £m	Rest of World £m	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
	– unlisted	326	–	20	346
Government bonds:	– listed	5,127	239	762	6,128
Insurance contracts		849	–	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 scheme obligations		(13,101)	(3,445)	(3,239)	(19,785)
Net surplus/(obligation)		53	(571)	(987)	(1,505)
Included in Other non-current assets		470	–	68	538
Included in Pensions and other post-employment benefits		(417)	(571)	(1,055)	(2,043)
		53	(571)	(987)	(1,505)
Actual return on plan assets		893	394	82	1,369

At 31 December 2016		UK £m	US £m	Rest of World £m	Group £m
Equities:	– listed	5,357	1,358	486	7,201
	– unlisted	–	–	14	14
Multi-asset funds		1,545	–	–	1,545
Property:	– unlisted	314	216	28	558
Corporate bonds:	– listed	292	213	96	601
	– unlisted	321	–	24	345
Government bonds:	– listed	6,165	815	739	7,719
Insurance contracts		856	–	637	1,493
Other assets		(2,267)	288	73	(1,906)
Fair value of assets		12,583	2,890	2,097	17,570
Present value of scheme obligations		(12,884)	(3,752)	(3,018)	(19,654)
Net obligation		(301)	(862)	(921)	(2,084)
Included in Other non-current assets		276	–	37	313
Included in Pensions and other post-employment benefits		(577)	(862)	(958)	(2,397)
		(301)	(862)	(921)	(2,084)
Actual return on plan assets		2,473	153	99	2,725

28. Pensions and other post-employment benefits continued

Movements in fair values of assets	UK £m	US £m	Rest of World £m	Pensions Group £m	Post-retirement benefits Group £m
Assets at 1 January 2016	10,284	2,501	1,750	**14,535**	**–**
Exchange adjustments	–	459	305	**764**	**–**
Interest income	385	108	37	**530**	**–**
Expenses	(7)	(12)	–	**(19)**	**–**
Settlements and curtailments	–	–	(110)	**(110)**	**–**
Remeasurement	2,088	45	62	**2,195**	**–**
Employer contributions	319	31	131	**481**	**91**
Scheme participants' contributions	4	–	14	**18**	**17**
Benefits paid	(490)	(242)	(92)	**(824)**	**(108)**
Assets at 31 December 2016	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**	**–**

During 2018, the Group made no special funding contributions to the UK pension schemes (2017 – £136 million; 2016 – £191 million) but £125 million (2017 – £78 million; 2016 – £nil) to the US scheme. 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 2019. Further payments have been agreed for the years 2020 to 2022 and these are included within Note 41, 'Commitments' on page 197. 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 2019, including special funding contributions, are estimated to be approximately £420 million in respect of defined benefit pension schemes and £100 million in respect of post-retirement benefits.

Notes to the financial statements continued

28. Pensions and other post-employment benefits continued

Movements in defined benefit obligations	UK £m	US £m	Rest of World £m	Pensions Group £m	Post-retirement benefits Group £m
Obligations at 1 January 2016	(10,601)	(3,134)	(2,384)	**(16,119)**	**(1,387)**
Exchange adjustments	–	(586)	(396)	**(982)**	**(248)**
Service cost	(70)	(66)	(110)	**(246)**	**(31)**
Past service cost	(52)	(1)	(1)	**(54)**	**(3)**
Interest cost	(394)	(135)	(57)	**(586)**	**(56)**
Settlements and curtailments	–	–	138	**138**	**–**
Remeasurement	(2,253)	(72)	(286)	**(2,611)**	**(59)**
Scheme participants' contributions	(4)	–	(14)	**(18)**	**(17)**
Benefits paid	490	242	92	**824**	**108**
Obligations at 31 December 2016	(12,884)	(3,752)	(3,018)	**(19,654)**	**(1,693)**
Exchange adjustments	–	305	(45)	**260**	**119**
Service cost	(79)	(70)	(131)	**(280)**	**(30)**
Past service cost/(credit)	(37)	–	–	**(37)**	**2**
Interest cost	(340)	(135)	(49)	**(524)**	**(59)**
Settlements and curtailments	–	–	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	(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)**

The defined benefit pension obligation is analysed as follows:

	2018 £m	2017 £m	2016 £m
Funded	**(18,025)**	(19,052)	(18,974)
Unfunded	**(749)**	(733)	(680)
	(18,774)	(19,785)	(19,654)

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 6.50% (2017 – 6.75%), grading down to 5.0% in 2025 and thereafter. At 31 December 2018, the US post-retirement healthcare scheme obligation was £1,179 million (2017 – £1,254 million; 2016 – £1,463 million). Post-retirement benefits are unfunded.

28. Pensions and other post-employment benefits continued

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

	2018 £m	2017 £m	2016 £m
At 1 January	(1,505)	(2,084)	(1,584)
Exchange adjustments	(47)	40	(218)
Service cost	(281)	(280)	(246)
Past service cost	(94)	(37)	(54)
Interest cost	(36)	(54)	(56)
Settlements and curtailments	14	–	28
Remeasurements:			
Return on plan assets, excluding amounts included in interest	(610)	899	2,195
Gain from change in demographic assumptions	131	209	85
Gain/(loss) from change in financial assumptions	1,149	(555)	(2,770)
Experience (losses)/gains	(87)	(68)	74
Employer contributions	386	444	481
Expenses	(15)	(19)	(19)
At 31 December	(995)	(1,505)	(2,084)

The remeasurements included within post-retirement benefits are detailed below:

	2018 £m	2017 £m	2016 £m
Gain from change in demographic assumptions	6	47	–
Gain/(loss) from change in financial assumptions	100	(1)	(81)
Experience gains	39	18	22
	145	64	(59)

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28. Pensions and other post-employment benefits continued

The defined benefit pension obligation analysed by membership category is as follows:

	2018 £m	2017 £m	2016 £m
Active	**4,427**	4,611	4,576
Retired	**9,542**	9,805	9,574
Deferred	**4,805**	5,369	5,504
	18,774	19,785	19,654

The post-retirement benefit obligation analysed by membership category is as follows:

	2018 £m	2017 £m	2016 £m
Active	**499**	514	594
Retired	**879**	981	1,099
Deferred	**1**	1	–
	1,379	1,496	1,693

The weighted average duration of the defined benefit obligation is as follows:

	2018 years	2017 years	2016 years
Pension benefits	**15**	16	16
Post-retirement benefits	**11**	11	12

Sensitivity analysis

The effect of changes in assumptions used on the benefit obligations and on the 2019 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	28
Decrease in annual post-retirement benefits cost	(1)
Increase in pension obligation	707
Increase in post-retirement benefits obligation	34
A one-year increase in life expectancy would have the following approximate effect:	
Increase in annual pension cost	21
Increase in annual post-retirement benefits cost	2
Increase in pension obligation	592
Increase in post-retirement benefits obligation	33
A 1% increase in the rate of future healthcare inflation would have the following approximate effect:	
Increase in annual post-retirement benefits cost	1
Increase in post-retirement benefits obligation	38
A 0.25% increase in inflation would have the following approximate effect:	
Increase in annual pension cost	18
Increase in pension obligation	447

29. Other provisions

	Legal and other disputes £m	Major restructuring programmes £m	Employee -related provisions £m	Other provisions £m	Total £m
At 1 January 2018	186	504	304	271	1,265
Exchange adjustments	13	17	9	5	44
Charge for the year	119	450	105	50	724
Reversed unused	(2)	(99)	(25)	(46)	(172)
Unwinding of discount	2	4	–	9	15
Utilised	(98)	(226)	(41)	(79)	(444)
Reclassifications and other movements	(1)	12	(2)	3	12
Transfer to Pension obligations	–	(21)	–	–	(21)
At 31 December 2018	219	641	350	213	1,423
To be settled within one year	156	362	145	69	732
To be settled after one year	63	279	205	144	691
At 31 December 2018	219	641	350	213	1,423

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 45 'Legal proceedings'. Provisions for legal and other disputes include amounts relating to product liability, anti-trust, government investigations, contract terminations, self insurance and environmental clean-up.

The charge for the year of £117 million (net of 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 £2 million in 2018 (2017 – 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, 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 recognise 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 £156 million of the amount provided at 31 December 2018 will be settled within one year. At 31 December 2018, it was expected that £37 million (2017 – £nil) of the provision made for legal and other disputes will be reimbursed by third parties. For a discussion of legal issues, see Note 45, 'Legal proceedings'.

Major restructuring programmes
The Group is undertaking two major restructuring programmes: the Combined restructuring and integration programme and the 2018 major restructuring programme. The programmes are focused primarily on simplifying supply chain processes, rationalising the Group's manufacturing network and restructuring the Pharmaceuticals commercial operations.

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 £21 million (2017 – £18 million) have been charged during the year and then transferred to the pension obligations provision as shown in Note 28, '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.

Employee-related provisions
Employee related provisions include obligations for certain medical benefits to disabled employees and their spouses in the US. At 31 December 2018, the provision for these benefits amounted to £87 million (2017 – £108 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 £7 million (2017 – £6 million), onerous property lease provisions of £6 million (2017 – £38 million) and a number of other provisions including vehicle insurance and regulatory matters.

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30. Other non-current liabilities

	2018 £m	2017 £m
Accruals	71	82
Deferred Income	19	22
Other payables	848	877
	938	981

Other payables includes acquisition accounting market value lease adjustments and a number of employee-related liabilities.

31. Net debt

	Listing exchange	2018 £m	2017 £m
Current assets:			
Liquid investments		84	78
Cash and cash equivalents		3,874	3,833
Cash and cash equivalents reported in Assets held for sale		485	–
		4,443	3,911
Short-term borrowings:			
Commercial paper		(630)	(529)
Bank loans and overdrafts		(290)	(236)
Obligations under finance leases		(24)	(23)
Drawn bank facility		(3,500)	–
5.650% US$ US Medium Term Note 2018	New York Stock Exchange	–	(2,037)
0.625% € European Medium Term Note 2019	London Stock Exchange	(1,349)	–
		(5,793)	(2,825)
Long-term borrowings:			
0.625% € European Medium Term Note 2019	London Stock Exchange	–	(1,324)
EURIBOR +0.20% € European Medium Term Note 2020	London Stock Exchange	(677)	–
0.000% € European Medium Term Note 2020	London Stock Exchange	(1,079)	(1,060)
3.125% US$ US Medium Term Note 2021	New York Stock Exchange	(980)	–
LIBOR +0.35% US$ US Medium Term Note 2021	New York Stock Exchange	(589)	–
2.850% US$ US Medium Term Note 2022	New York Stock Exchange	(1,568)	(1,474)
2.800% US$ US Medium Term Note 2023	New York Stock Exchange	(978)	(919)
3.375% US$ US Medium Term Note 2023	New York Stock Exchange	(977)	–
1.375% € European Medium Term Note 2024	London Stock Exchange	(893)	(876)
4.000% € European Medium Term Note 2025	London Stock Exchange	(670)	(659)
3.625% US$ US Medium Term Note 2025	New York Stock Exchange	(780)	–
1.000% € European Medium Term Note 2026	London Stock Exchange	(629)	(617)
1.250% € European Medium Term Note 2026	London Stock Exchange	(897)	–
3.375% £ European Medium Term Note 2027	London Stock Exchange	(593)	(593)
3.875% US$ US Medium Term Note 2028	New York Stock Exchange	(1,372)	–
1.375% € European Medium Term Note 2029	London Stock Exchange	(447)	(439)
1.750% € European Medium Term Note 2030	London Stock Exchange	(673)	–
5.250% £ European Medium Term Note 2033	London Stock Exchange	(982)	(986)
5.375% US$ US Medium Term Note 2034	New York Stock Exchange	(390)	(368)
6.375% US$ US Medium Term Note 2038	New York Stock Exchange	(2,143)	(2,021)
6.375% £ European Medium Term Note 2039	London Stock Exchange	(694)	(695)
5.250% £ European Medium Term Note 2042	London Stock Exchange	(986)	(989)
4.200% US$ US Medium Term Note 2043	New York Stock Exchange	(386)	(363)
4.250% £ European Medium Term Note 2045	London Stock Exchange	(788)	(789)
Obligations under finance leases		(44)	(43)
Other long-term borrowings		(56)	(49)
		(20,271)	(14,264)
Net debt		(21,621)	(13,178)

31. Net debt continued

Current assets

Liquid investments are classified as financial assets at amortised cost (previously available-for-sale investments in prior years). At 31 December 2018, they included US Treasury Notes and other government bonds. The effective interest rate on liquid investments at 31 December 2018 was approximately 1.0% (2017 – approximately 1.0%). Liquid investment balances at 31 December 2018 earning interest at floating rates amount to £84 million (2017 – £78 million). Liquid investment balances at 31 December 2018 earning interest at fixed rates amount to £nil (2017 – £nil).

The effective interest rate on cash and cash equivalents at 31 December 2018 was approximately 1.9% (2017 – approximately 1.3%). Cash and cash equivalents at 31 December 2018 earning interest at floating and fixed rates amount to £4,094 million and £2 million respectively (2017 – £3,832 million and £1 million) and non-interest bearing holdings amount to £263 million.

GSK's policy regarding the credit quality of cash and cash equivalents is referred to in Note 42, 'Financial instruments and related disclosures'.

Short-term borrowings

GSK has a $10 billion (£7.9 billion) US commercial paper programme, of which $0.8 billion (£0.6 billion) was in issue at 31 December 2018 (2017 – $0.7 billion (£0.5 billion)). GSK has a £1.9 billion five-year committed facility and $2.5 billion (£2.0 billion) under a 364 day committed facility. The five-year committed facility was agreed in September 2015 and extended by one year to 2021 in September 2016. The 364 day committed facility was agreed in September 2018. Additional bank facilities were agreed in 2018 to support transactions and two remained active at 31 December 2018. In June 2018, £3.5 billion was drawn to support the acquisition from Novartis of the remaining stake in the Consumer Healthcare Joint Venture. In addition, a $5.0 billion bank facility was agreed in December 2018 to support the acquisition of Tesaro and was undrawn at 31 December 2018. Liquid investments, cash and cash equivalents were as shown in the table on page 184.

The weighted average interest rate on commercial paper borrowings at 31 December 2018 was 2.5% (2017 – 1.5%).

The weighted average interest rate on current bank loans and overdrafts at 31 December 2018 was 12.0% (2017 – 4.7%). At 31 December 2018, short-term loan rates of 60% in Argentina had a disproportionate effect on the weighted average interest rate. Excluding this impact the weighted average interest rate on current bank loans and overdrafts stands at 4.4%.

The average effective pre-swap interest rate of notes classified as short term at 31 December 2018 was 0.8% (2017 – 5.9%). The material decrease in the rate largely reflects the maturity of a 5.65% coupon note in May 2018 and the upcoming maturity of a 0.625% coupon note in December 2019.

Long-term borrowings

At the year-end, GSK had long-term borrowings of £20.3 billion (2017 – £14.3 billion), of which £13.3 billion (2017 – £10.3 billion) falls due in more than five years. The average effective pre-swap interest rate of all notes in issue at 31 December 2018 was approximately 4.4% (2017 – approximately 3.6%).

Long-term borrowings repayable after five years carry interest at effective rates between 1.1% and 6.4%, with repayment dates ranging from 2024 to 2045.

Pledged assets

The Group held pledged investments in US Treasury Notes with a par value of $50 million (£39 million), (2017 – $105 million (£78 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 29, 'Other provisions'. In addition, in 2017, £20 million of assets included in Note 22, 'Other non-current assets', which do not form part of Net debt, were pledged as collateral against future rental payments under operating lease arrangements which were previously entered into by Human Genome Sciences, Inc. prior to its acquisition by the Group, and terminated in 2018.

Finance lease obligations

	2018 £m	2017 £m
Rental payments due within one year	29	25
Rental payments due between one and two years	20	29
Rental payments due between two and three years	13	9
Rental payments due between three and four years	7	3
Rental payments due between four and five years	4	2
Rental payments due after five years	11	10
Total future rental payments	84	78
Future finance charges	(16)	(12)
Total finance lease obligations	68	66

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32. Contingent liabilities

At 31 December 2018, contingent liabilities, comprising guarantees, discounted bills and other items arising in the normal course of business, amounted to £93 million (2017 – £434 million). At 31 December 2018, £nil (2017 – £2 million) 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 2018, 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 45, 'Legal proceedings'.

33. Share capital and share premium account

	Ordinary Shares of 25p each		Share premium
	Number	£m	£m
Share capital authorised			
At 31 December 2016	10,000,000,000	2,500	
At 31 December 2017	10,000,000,000	2,500	
At 31 December 2018	10,000,000,000	2,500	
Share capital issued and fully paid			
At 1 January 2016	5,361,307,647	1,340	2,831
Issued under employee share schemes	7,008,415	2	87
Ordinary shares acquired by ESOP Trusts	–	–	36
At 31 December 2016	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

	31 December 2018 000	31 December 2017 000
Number of shares issuable under employee share schemes	**56,723**	38,647
Number of unissued shares not under option	**4,564,209**	4,588,799

At 31 December 2018, of the issued share capital, 41,530,909 shares were held in the ESOP Trusts, 414,605,950 shares were held as Treasury shares and 4,922,930,765 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 43, 'Employee share schemes'.

34. Movements in equity

Retained losses and other reserves amounted to £76 million at 31 December 2018 (2017 – £4,430 million loss; 2016 – £3,172 million loss) of which £337 million (2017 – £334 million; 2016 – £329 million) relates to joint ventures and associated undertakings. The cumulative translation exchange in equity is as follows:

	Net translation exchange included in:			
	Retained earnings £m	Fair value reserve £m	Non-controlling interests £m	**Total translation exchange £m**
At 1 January 2016	(761)	10	(109)	**(860)**
Exchange movements on overseas net assets	633	13	603	**1,249**
At 31 December 2016	(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	(15)	1	344	**330**

The analysis of other comprehensive income by equity category is as follows:

2018	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	(458)	(22)	–	**(480)**
Fair value movements on cash flow hedges	–	140	–	**140**
Reclassification of cash flow hedges on income and expense	–	(175)	–	**(175)**
Deferred tax on fair value movements on cash flow hedges	–	(22)	–	**(22)**
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)	–	–	**(146)**
Other comprehensive income/(expense) for the year	124	131	(1)	**254**

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

Notes to the financial statements continued

34. Movements in equity continued

2016	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	633	13	–	646
Fair value movements on available-for-sale investments	–	251	–	251
Reclassification of fair value movements on available-for-sale investments	–	(245)	–	(245)
Deferred tax reversed on reclassification of available-for-sale investments	–	51	–	51
Reclassification of cash flow hedges to income statement	–	1	–	1
Fair value movements on cash flow hedges	–	2	–	2
Deferred tax on fair value movements on cash flow hedges	–	2	–	2
Items that will not be reclassified to income statement:				
Exchange movements on overseas net assets of non-controlling interests	–	–	603	603
Remeasurement losses on defined benefit plans	(475)	–	–	(475)
Tax on remeasurement losses in defined benefit plans	126	–	–	126
Other comprehensive income for the year	284	75	603	962

The analysis of other reserves is as follows:

	ESOP Trust shares £m	Fair value reserve £m	Cash flow hedge reserve £m	Other reserves £m	Total £m
At 1 January 2016	(75)	295	(9)	2,129	**2,340**
Exchange adjustments	(16)	–	–	–	**(16)**
Transferred to income and expense in the year on disposals	–	(268)	–	–	**(268)**
Transferred to income and expense in the year on impairments	–	23	–	–	**23**
Net fair value movement in the year	–	330	6	–	**336**
Ordinary shares acquired by ESOP Trusts	(576)	–	–	–	**(576)**
Write-down of shares held by ESOP Trusts	381	–	–	–	**381**
At 31 December 2016	(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**

Other reserves include various non-distributable merger and pre-merger reserves amounting to £1,849 million at 31 December 2018 (2017 – £1,849 million; 2016 – £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 2018 (2017 – £280 million; 2016 – £280 million).

35. Related party transactions

At 31 December 2018, GSK owned 32 million shares or 31.7% 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 £209 million (2017 – £173 million). At 31 December 2018, the balance payable by GSK to Innoviva was £64 million (2017 – £53 million).

At 31 December 2018, 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 is primarily responsible for the development and marketing of certain prophylactic vaccines in Japan. During 2018, GSK sold £43 million (2017 – £41 million) of its vaccine products into the joint venture. At 31 December 2018, the trading balance due to GSK from JVC was £15 million (2017 – £11 million) and the balance payable by GSK to JVC was £nil (2017 – £nil).

Loans of £5 million to Medicxi Ventures I LP and £6 million to Index Ventures Life VI (Jersey) LP remained due to GSK at 31 December 2018. In 2018, GSK increased the equity investment in Kurma Biofund II, FCPR by £3 million, Apollo Therapeutics LLP by £2 million and Longwood Founders Fund LP by £0.2 million, and reduced a liability with Qura Therapeutics LLC by £3 million. As at 31 December 2018, the outstanding liability to Qura was £4 million.

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

36. Adjustments reconciling profit after tax to operating cash flows

	2018 £m	2017 £m	2016 £m
Profit after tax	**4,046**	2,169	1,062
Tax on profits	**754**	1,356	877
Share of after tax profits of associates and joint ventures	**(31)**	(13)	(5)
Finance expense net of finance income	**717**	669	664
Depreciation	**954**	988	978
Amortisation of intangible assets	**902**	934	796
Impairment and assets written off	**350**	1,061	226
Profit on sale of businesses	**(63)**	(157)	(5)
Profit on sale of intangible assets	**(201)**	(46)	(178)
Profit on sale of investments in associates	**(3)**	(94)	–
Profit on sale of equity investments	**(4)**	(37)	(254)
Gain on Consumer Healthcare Joint Venture put hedging	**(513)**	–	–
Business acquisition costs	**47**	–	–
Changes in working capital:			
Decrease/(increase) in inventories	**51**	(461)	70
Increase in trade receivables	**(429)**	(287)	(188)
Increase in trade payables	**131**	11	96
Decrease in other receivables	**18**	74	381
Contingent consideration paid (see Note •)	**(984)**	(594)	(358)
Other non-cash increase in contingent consideration liabilities	**1,250**	961	2,281
Increase in other payables	**2,362**	1,741	1,989
Increase/(decrease) in pension and other provisions	**102**	(255)	(621)
Share-based incentive plans	**360**	333	319
Fair value adjustments	**(7)**	–	(3)
Other	**(62)**	(95)	(21)
	5,701	6,089	7,044
Cash generated from operations	**9,747**	8,258	8,106

Notes to the financial statements continued

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

	2018 £m	2017 £m	2016 £m
Net debt at beginning of year	**(13,178)**	(13,804)	(10,727)
Increase/(decrease) in cash and bank overdrafts	**479**	(905)	(1,164)
Decrease in liquid investments	**–**	(4)	–
Net increase in long-term loans	**(10,138)**	(2,233)	–
Repayment of short-term Notes	**2,067**	2,636	865
(Increase in)/repayment of other short-term loans	**(81)**	564	(1,013)
Net repayment of obligations under finance leases	**28**	23	18
Exchange adjustments	**(776)**	585	(1,781)
Other non-cash movements	**(22)**	(40)	(2)
Movement in net debt	**(8,443)**	626	(3,077)
Net debt at end of year	**(21,621)**	(13,178)	(13,804)

Analysis of changes in net debt	At 1 January 2018 £m	Exchange £m	Other £m	Profit and loss £m	Reclass-ifications £m	Cash flow £m	At 31 December 2018 £m
Liquid investments	78	5	1	–	–	–	**84**
Cash and cash equivalents	3,833	4	–	–	(485)	522	**3,874**
Cash and cash equivalents – AHFS	–				485		**485**
Overdrafts	(233)	4	–	–	–	(43)	**(272)**
	3,600	8	–	–	–	479	**4,087**
Debt due within one year:							
Commercial paper	(529)	(36)	–	–	–	(65)	**(630)**
European/US Medium Term Notes and bank facilities	(2,037)	(55)	–	–	(4,824)	2,067	**(4,849)**
Other	(26)	(1)	(11)	–	(16)	12	**(42)**
	(2,592)	(92)	(11)	–	(4,840)	2,014	**(5,521)**
Debt due after one year:							
European/US Medium Term Notes and bank facilities	(14,221)	(696)	–	4	4,824	(10,138)	**(20,227)**
Other	(43)	(1)	(16)	–	16	–	**(44)**
	(14,264)	(697)	(16)	4	4,840	(10,138)	**(20,271)**
Net debt	(13,178)	(776)	(26)	4	–	(7,645)	**(21,621)**

Analysis of changes in liabilities from financing activities							
Debt due within one year	(2,592)	(92)	(11)	–	(4,840)	2,014	**(5,521)**
Debt due after one year	(14,264)	(697)	(16)	4	4,840	(10,138)	**(20,271)**
Hedge of borrowings:							
Derivative financial instruments	2	1	130	(10)	–	6	**129**
Other financing items	–	(19)	–	–	–	19	**–**
Interest payable	(203)	(2)	2	(802)	–	766	**(239)**
Total liabilities from financing activities	(17,057)	(809)	105	(808)	–	(7,333)	**(25,902)**

For further information on significant changes in net debt see Note 31, 'Net debt'.

38. Acquisitions and disposals

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

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 and cash equivalents divested	–	–	–
Cash inflow	26	(10)	3

Transactions signed but not yet completed

In December 2018, GSK agreed to divest *Horlicks* and other Consumer Healthcare nutrition brands to Unilever plc and to merge GSK Consumer Healthcare Limited with Hindustan Unilever Limited for a total consideration valued at approximately £3.1 billion. GSK Consumer Healthcare Limited is a public company listed on the National Stock Exchange (NSE) and Bombay Stock Exchange (BSE) in India, in which GSK holds a 72.5% stake. Hindustan Unilever Limited is a public company listed on the NSE and BSE. Following the merger, GSK will own approximately 5.7% of Hindustan Unilever Limited. The transaction is expected to complete by the end of 2019, subject to the fulfilment of certain conditions including the approval of the merger by the shareholders of GSK Consumer Healthcare Limited and Hindustan Unilever Limited.

The Group has entered into forward foreign exchange contracts which have been designated as a cash flow hedge of part of the foreign exchange exposure arising on the transaction. 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 £100 million at 31 December 2018.

In December 2018, GSK agreed to acquire 100% of Tesaro, Inc., an oncology-focused biopharmaceutical company, for $5.1 billion (£4.0 billion) in cash. This transaction completed on 22nd January 2019. The exercise to determine the acquisition fair values of assets and liabilities is not yet complete. Initial transaction costs were recognised in December 2018.

In December 2018, GSK agreed to form a new Consumer Healthcare Joint Venture by acquiring Pfizer's consumer health business in an all-share transaction. Pfizer will hold 32% of the combined business which will be controlled by GSK. The new Consumer Healthcare Joint Venture is expected to be formed in the second half of 2019, subject to approvals. Initial transaction costs were recognised in December 2018.

Notes to the financial statements continued

38. Acquisitions and disposals continued

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:

	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

Investment in 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	Associates and joint venture investments £m	Associates 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	282	(15)	196

38. Acquisitions and disposals continued

2016

Business acquisitions

GSK completed two small business acquisitions during 2016.

Cash consideration of £24 million was paid in the year to acquire the HIV R&D preclinical and discovery stage portfolio from Bristol Myers Squibb. Further consideration, contingent on commercial milestones and future sales performance, may be due, and an initial estimate of £40 million was recognised for this contingent consideration. Intangible assets acquired were valued at £57 million and goodwill of £7 million was recognised.

GSK formed Galvani Bioelectronics Limited during the year and acquired intangible assets of £45 million and cash and cash equivalents of £41 million from Verily Life Sciences LLC in return for a 45% shareholding in Galvani Bioelectronics. The fair value of this shareholding was £47 million, and GSK also recognised a credit of £39 million in non-controlling interests representing Verily's share of the net assets it contributed.

Business disposals

GSK also made a number of small business disposals in the year for net cash consideration of £72 million. In addition, deferred consideration receivable of £43 million was recognised.

Cash flows

	Business acquisitions £m	Business disposals £m
Cash consideration (paid)/received after purchase adjustments	(24)	72
Cash and cash equivalents acquired	41	–
Cash inflow	17	72

In addition, GSK made cash investments of £11 million into associates and joint ventures.

Notes to the financial statements continued

39. 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 2016	3,409	405	41	**3,855**
Additions through business combinations	154	–	40	**194**
Remeasurement through income statement	2,162	152	(33)	**2,281**
Cash payments: operating cash flows	(351)	(5)	(2)	**(358)**
Cash payments: investing activities	(66)	(7)	–	**(73)**
Other movements	(4)	–	1	**(3)**
At 31 December 2016	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**

Of the contingent consideration payable at 31 December 2018, £837 million (2017 – £1,076 million) is expected to be paid within one year. The contingent consideration payable in respect of the Novartis Vaccines business included a sales milestone of $450 million which was settled in January 2018.

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 partly at 8% and partly at 9%.

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.

Increase/(decrease) in financial liability and loss/(gain) in Income statement	Shionogi-ViiV Healthcare £m	Novartis Vaccines £m
10% increase in sales forecasts	569	62
10% decrease in sales forecasts	(569)	(62)
1% increase in discount rate	(238)	(22)
1% decrease in discount rate	256	26
5% increase in probability of milestone success		7
5% decrease in probability of milestone success		(7)
10 cent appreciation of US Dollar	367	(13)
10 cent depreciation of US Dollar	(313)	11
10 cent appreciation of Euro	114	29
10 cent depreciation of Euro	(95)	(25)

An explanation of the accounting for ViiV Healthcare is set out on page 41.

40. Non-controlling interests

ViiV Healthcare

The ViiV Healthcare subgroup has a material non-controlling interest. Summarised financial information in respect of the ViiV Healthcare group is as follows:

	2018 £m	2017 £m	2016 £m
Turnover	4,665	4,269	3,527
Profit/(loss) after taxation	560	825	(1,249)
Other comprehensive income	19	20	36
Total comprehensive income/(expense)	579	845	(1,213)

	2018 £m	2017 £m
Non-current assets	2,787	2,736
Current assets	2,643	2,533
Total assets	5,430	5,269
Current liabilities	(2,638)	(2,409)
Non-current liabilities	(8,895)	(8,011)
Total liabilities	(11,533)	(10,420)
Net liabilities	(6,103)	(5,151)

	2018 £m	2017 £m	2016 £m
Net cash inflow from operating activities	2,212	2,132	1,750
Net cash outflow from investing activities	(237)	(207)	(326)
Net cash outflow from financing activities	(1,982)	(1,820)	(1,023)
(Decrease)/increase in cash and bank overdrafts in the year	(7)	105	401

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 £560 million (2017 – profit after taxation of £825 million; 2016 – loss after taxation of £1,249 million) is stated after charging preferential dividends payable to GSK, Shionogi and Pfizer and after a charge of £1,194 million (2017 – £909 million; 2016 – £2,186 million) for remeasurement of the contingent consideration payable for the acquisition of the former Shionogi-ViiV Healthcare joint venture. 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 Consolidated statement of comprehensive income, Consolidated statement of changes in equity and Consolidated balance sheet:

	2018 £m	2017 £m	2016 £m
Total comprehensive income/(expense) for the year attributable to non-controlling interests	254	187	(83)
Dividends paid to non-controlling interests	332	316	152
Non-controlling interests in the Consolidated balance sheet	(543)	(476)	

Notes to the financial statements continued

40. Non-controlling interests continued

Consumer Healthcare Joint Venture

During 2018, the Group acquired Novartis' interest in the Consumer Healthcare Joint Venture to obtain 100% ownership. The acquisition became unconditional on 3 May 2018 and completed on 1 June 2018. Summarised financial information in respect of the Consumer Healthcare Joint Venture is as follows:

	Period ended 3 May 2018 £m	2017 £m	2016 £m
Turnover	2,306	7,003	6,530
Profit after taxation	7	1,211	660
Other comprehensive (expense)/income	(79)	(387)	1,640
Total comprehensive (expense)/income	(72)	824	2,300

	2017 £m
Non-current assets	12,771
Current assets	3,282
Total assets	16,053
Current liabilities	(2,675)
Non-current liabilities	(1,537)
Total liabilities	(4,212)
Net assets	11,841

	Period ended 3 May 2018 £m	2017 £m	2016 £m
Net cash inflow from operating activities	65	883	1,496
Net cash inflow/(outflow) from investing activities	442	270	(537)
Net cash outflow from financing activities	(504)	(1,194)	(980)
Increase/(decrease) in cash and bank overdrafts in the year	3	(41)	(21)

The above financial information relates to the Consumer Healthcare Joint Venture on a stand-alone basis, before the impact of Group-related adjustments but after major restructuring charges.

The following amounts attributable to the Consumer Healthcare Joint Venture are included in GSK's Consolidated statement of comprehensive income, Consolidated statement of changes in equity and Consolidated balance sheet:

	2018 £m	2017 £m	2016 £m
Total comprehensive income for the year attributable to non-controlling interests	111	296	730
Dividends paid to non-controlling interests	183	420	346
Non-controlling interests in the Consolidated balance sheet	–	3,631	

41. Commitments

Contractual obligations and commitments	2018 £m	2017 £m
Contracted for but not provided in the financial statements:		
Intangible assets	4,762	5,254
Property, plant and equipment	665	584
Investments	82	107
Purchase commitments	561	346
Pensions	238	738
Other commitments	–	38
Interest on loans	9,418	8,510
Finance lease charges	16	12
	15,742	15,589

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 decrease in intangible commitments in 2018 is mainly attributable to the reduction in commitments to third parties such as Nkarta, Inc.

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 both 2019 and 2020 and a payment of £44 million is 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.

Commitments under non-cancellable operating leases are disclosed below. £161 million (2017 – £117 million) is provided against these commitments on the Group's balance sheet.

Commitments under non-cancellable operating leases	2018 £m	2017 £m
Rental payments due within one year	223	186
Rental payments due between one and two years	173	149
Rental payments due between two and three years	143	122
Rental payments due between three and four years	123	107
Rental payments due between four and five years	105	94
Rental payments due after five years	371	387
Total commitments under non-cancellable operating leases	1,138	1,045

Notes to the financial statements continued

42. Financial instruments and related disclosures

The objective of our 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 £21.6 billion (see Note 31, 'Net debt') and total equity, including items related to non-controlling interests, of £3.7 billion (see 'Consolidated statement of changes in equity' on page 142). Total capital, including that provided by non-controlling interests, is £25.3 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 2018, GSK had £5.8 billion of borrowings repayable within one year and held £4.5 billion of cash and cash equivalents and liquid investments of which £2.9 billion was held centrally. GSK has access to short-term finance under a $10.0 billion (£7.9 billion) US commercial paper programme; $0.8 billion (£0.6 billion) was in issue at 31 December 2018 (2017 – $0.7 billion). GSK has a £1.9 billion five-year committed facility and a $2.5 billion (£2.0 billion) 364-day committed facility. The five-year committed facility was agreed in September 2015 and was extended by one year to 2021 in September 2016. The 364-day committed facility was agreed in September 2018. These facilities were undrawn at 31 December 2018. 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 two remain active at 31 December 2018. In June 2018, £3.5 billion was drawn to support the acquisition from Novartis of the remaining stake in the Consumer Healthcare Joint Venture. This facility, which is due to mature in December 2019 includes one extension option through to June 2020.

In addition a $5.0 billion bank facility was agreed in December 2018 to support the acquisition of Tesaro and was undrawn at 31 December 2018. This 12-month facility includes two six-month extension options.

GSK has a £20.0 billion European Medium Term Note programme and at 31 December 2018, £11.4 billion of notes were in issue under this programme. The Group also had $12.9 billion (£10.2 billion) of notes in issue at 31 December 2018 under a US shelf registration. GSK's borrowings mature at dates between 2019 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.

Foreign exchange risk management

Foreign currency transaction exposures arising on external trade flows are not normally hedged. Foreign currency transaction exposures arising on internal trade flows are selectively hedged. 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. GSK's internal trading transactions are matched centrally and inter-company payment terms are managed to reduce foreign currency risk. Foreign currency cash flows can be hedged selectively including hedges of the foreign exchange risk arising from acquisitions and disposals of assets. 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).

42. Financial instruments and related disclosures continued

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, 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 2018 to be £11,080 million (31 December 2017 – £9,988 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 201 for details on the Group's total financial assets. At 31 December 2018, GSK's greatest concentration of credit risk was £0.7 billion with Citibank (A+/A1) (2017 – £0.5 billion with Citibank (A/A1) and £0.5 billion with one US wholesaler (BBB+/Baa2)).

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 current 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 208 sets out the Group's financial assets and liabilities on an offset basis.

At 31 December 2018, £20 million of cash is categorised as held with unrated or sub-investment grade rated counterparties (lower than BBB-/Baa3) of which £1 million is cash in transit. The remaining exposure is concentrated in overseas banks used for local cash management or investment purposes, including £6 million in Nigeria held with United Bank for Africa, Zenith Bank, Stanbic IBTC Bank and First Bank of Nigeria, £3 million with BTV in Austria, £2 million with Nacion Argentina bank, and £2 million with Banco de la Republica in Uruguay. Of the £381 million of bank balances and deposits held with BBB/Baa rated counterparties, £22 million was held with BBB-/Baa3 rated counterparties, including balances or deposits of £20 million with HDFC Bank in India and £1 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 2018.

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**

2017	AAA/Aaa £m	AA/Aa £m	A/A £m	BBB/Baa £m	BB+/Ba1 and below /unrated £m	Total £m
Bank balances and deposits	–	423	1,167	80	45	1,715
US Treasury and Treasury repo only money market funds	1,715	–	–	–	–	1,715
Liquidity funds	403	–	–	–	–	403
Government securities	–	77	–	1	–	78
3rd party financial derivatives	–	26	42	–	–	68
Total	2,118	526	1,209	81	45	3,979

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.

Notes to the financial statements continued

42. Financial instruments and related disclosures continued

GSK's centrally managed cash reserves amounted to £2.9 billion at 31 December 2018, all available within three months. This includes £1.7 billion of cash managed by the Group for ViiV Healthcare, a 78.3% 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 82% of the sales of the US Pharmaceuticals and Vaccines businesses in 2018. At 31 December 2018, the Group had trade receivables due from these three wholesalers totalling £2,134 million (2017 – £1,265 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 involves 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 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 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 24, 'Trade and other receivables').

Credit enhancements
The Group uses credit enhancements including factoring and credit insurance to minimise credit risk of the trade receivables in the Group. During 2018, a new Global Insurance Programme was launched in order to consolidate all locally negotiated programmes and to expand the use of credit insurance to new markets. At 31 December 2018, £240 million of GSK trade receivables were insured protecting GSK's account 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 pages 201 and 202 presents the carrying amounts and the fair values of the Group's financial assets and liabilities at 31 December 2018 and 31 December 2017.

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 were used to estimate the fair values:

- Cash and cash equivalents – approximates to the carrying amount
- Liquid investments – approximates to the carrying amount
- 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 or by reference to the discounted cash flows of the underlying net assets
- Short-term loans, overdrafts and commercial paper – approximates to the carrying amount because of the short maturity of these instruments
- 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
- Contingent consideration for business acquisitions – based on present values of expected future cash flows
- 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
- Receivables and payables, including put options – approximates to the carrying amount
- Company-owned life insurance policies – based on cash surrender value, and
- Lease obligations – approximates to the carrying amount.

42. Financial instruments and related disclosures continued

	Notes	2018 Carrying value £m	2018 Fair value £m
Financial assets measured at fair value through other comprehensive income (FVTOCI):			
Other investments designated at FVTOCI	a	1,250	1,250
Trade and other receivables	a,b	1,687	1,687
Financial assets measured at amortised cost:			
Other non-current assets	b	49	49
Trade and other receivables	b	3,761	3,761
Liquid investments		84	84
Cash and cash equivalents		2,338	2,338
Other items in Assets held for sale	b	47	47
Financial assets mandatorily measured at fair value through profit or loss (FVTPL):			
Other investments	a	72	72
Other non-current assets	a,b	716	716
Trade and other receiveables	a,b	120	120
Derivatives designated and effective as hedging instruments	a,d,e	69	69
Held for trading derivatives that are not in a designated and effective hedging relationship	a,d,e	188	188
Cash and cash equivalents	a	2,021	2,021
Total financial assets		12,402	12,402
Financial liabilities measured at amortised cost:			
Borrowings excluding obligations under finance leases:			
– bonds in a designated hedging relationship	d	(8,213)	(8,279)
– other bonds		(13,307)	(15,475)
– bank loans and overdrafts		(290)	(290)
– commercial paper		(630)	(630)
– other borrowings		(3,556)	(3,556)
Total borrowings excluding obligations under finance leases	f	(25,996)	(28,230)
Obligations under finance leases		(68)	(68)
Total borrowings		(26,064)	(28,298)
Trade and other payables	c	(13,338)	(13,338)
Other provisions	c	(58)	(58)
Other non-current liabilities	c	(149)	(149)
Other items in Assets held for sale	c	(167)	(167)
Financial liabilities mandatorily at fair value through profit or loss (FVTPL):			
Contingent consideration liabilities	a,c	(6,286)	(6,286)
Derivatives designated and effective as hedging instruments	a,d,e	(105)	(105)
Held for trading derivatives that are not in a designated and effective hedging relationship	a,d,e	(23)	(23)
Total financial liabilities		(46,190)	(48,424)
Net financial assets and financial liabilities		(33,788)	(36,022)

The valuation methodology used to measure fair value in the above table and the table on page 202 is described and categorised on page 200.

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 204 and 205.

Cash and cash equivalents in the table above include £485 million reported in Assets held for sale (see Note 26, 'Assets held for sale').

Notes to the financial statements continued

42. Financial instruments and related disclosures continued

	Notes	2017 Carrying value £m	2017 Fair value £m
Available-for-sale investments:			
Liquid investments (Government bonds)	a	78	78
Other investments	a	918	918
Loans and receivables:			
Cash and cash equivalents		3,833	3,833
Trade and other receivables and Other non-current assets in scope of IAS 39	b	5,495	5,495
Financial assets at fair value through profit or loss:			
Trade and other receivables and Other non-current assets in scope of IAS 39	a,b	506	506
Derivatives designated as at fair value through profit or loss	a,d,e	5	5
Derivatives classified as held for trading under IAS 39	a,d,e	71	71
Total financial assets		10,906	10,906
Financial liabilities measured at amortised cost:			
Borrowings excluding obligations under finance leases:			
– bonds in a designated hedging relationship	d	(4,315)	(4,405)
– other bonds		(11,894)	(14,743)
– bank loans and overdrafts		(236)	(236)
– commercial paper		(529)	(529)
– other borrowings		(49)	(49)
Total borrowings excluding obligations under finance leases	f	(17,023)	(19,962)
Obligations under finance leases		(66)	(66)
Total borrowings		(17,089)	(20,028)
Trade and other payables, Other provisions and certain Other non-current liabilities in scope of IAS 39	c	(20,325)	(20,325)
Financial liabilities at fair value through profit or loss:			
Contingent consideration liabilities	a,c	(6,172)	(6,172)
Derivatives designated as at fair value through profit or loss	a,d,e	(26)	(26)
Derivatives classified as held for trading under IAS 39	a,d,e	(48)	(48)
Total financial liabilities		(43,660)	(46,599)
Net financial assets and financial liabilities		(32,754)	(35,693)

Fair value of investments in GSK shares

At 31 December 2018, the Employee Share Ownership Plan (ESOP) Trusts held GSK shares with a carrying value of £161 million (2017 – £400 million) and a market value of £619 million (2017 – £882 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 2018, 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 2018, GSK held Treasury shares at a cost of £5,800 million (2017 – £5,800 million) which has been deducted from retained earnings.

42. Financial instruments and related disclosures continued

(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 2018	Level 1 £m	Level 2 £m	Level 3 £m	**Total £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**
Derivatives designated and effective as hedging instruments	–	69	–	**69**
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**
	2,677	2,692	754	**6,123**
Financial liabilities at fair value				
Financial liabilities mandatorily at fair value through profit or loss (FVTPL):				
Contingent consideration liabilities	–	–	(6,286)	**(6,286)**
Derivatives designated and effective as hedging instruments	–	(105)	–	**(105)**
Held for trading derivatives that are not in a designated and effective hedging relationship	–	(23)	–	**(23)**
	–	(128)	(6,286)	**(6,414)**

At 31 December 2017	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Financial assets at fair value				
Available-for-sale financial assets:				
Liquid investments	77	1	–	78
Other investments	535	–	383	918
Other non-current assets	–	–	38	38
Financial assets at fair value through profit or loss:				
Other non-current assets	–	382	44	426
Trade and other receivables	–	–	42	42
Derivatives designated as at fair value through profit or loss	–	5	–	5
Derivatives classified as held for trading under IAS 39	–	62	9	71
	612	450	516	1,578
Financial liabilities at fair value				
Financial liabilities at fair value through profit or loss:				
Contingent consideration liabilities	–	–	(6,172)	(6,172)
Derivatives designated as at fair value through profit or loss	–	(26)	–	(26)
Derivatives classified as held for trading under IAS 39	–	(47)	(1)	(48)
	–	(73)	(6,173)	(6,246)

Notes to the financial statements continued

42. Financial instruments and related disclosures continued

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

	2018 £m	2017 £m
At 1 January	(5,657)	(5,486)
Net losses recognised in the income statement	(1,233)	(970)
Net gains recognised in other comprehensive income	123	22
Contingent consideration for businesses divested/acquired during the year	–	80
Payment of contingent consideration liabilities	1,095	685
Additions	381	117
Disposals and settlements	(27)	(52)
Transfers from Level 3	(241)	(24)
Exchange adjustments	27	(29)
At 31 December	(5,532)	(5,657)

The net losses of £1,233 million (2017 – £970 million) attributable to Level 3 financial instruments which were recognised in the income statement were all attributable to financial instruments which were held at the end of the year. Losses of £1,233 million were reported in Other operating income (2017 – £971 million losses in Other operating income and £1 million income in Finance income). £1,188 million (2017 – £909 million) arose from remeasurement of the contingent consideration payable for the acquisition of the former Shionogi-ViiV Healthcare joint venture and £56 million (2017 – £53 million) arose from remeasurement of the contingent consideration payable for the acquisition of the Novartis Vaccines business. Net gains of £123 million (2017 – £22 million) attributable to Level 3 financial instruments reported in Other comprehensive income as Fair value movements on equity investments included net gains of £117 million (2017 – net losses of £6 million) in respect of financial instruments held at the end of the year, of which net gains of £98 million (2017 – net losses of £6 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.

Financial liabilities measured using Level 3 valuation methods at 31 December included £5,937 million (2017 – £5,542 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 £296 million (2017 – £584 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 39, '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 (2017 – IAS 39)

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 (2017 - IAS 39) 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 (2017 – IAS 39).

	2018						2017				
	At FVTPL £m	At FVTOCI £m	Amortised cost £m	Financial instruments £m	Non-financial instruments £m	Total £m	At FVTPL £m	Loans and receivables £m	Financial instruments £m	Non-financial instruments £m	Total £m
Trade and other receivables (Note 24)	120	1,687	3,761	5,568	855	6,423	42	5,148	5,190	810	6,000
Other non-current assets (Note 22)	716	–	49	765	811	1,576	464	347	811	602	1,413
Other items in Assets held for sale (Note 26)	–	–	47	47	37	84	–	–	–	–	–
	836	1,687	3,857	6,380	1,703	8,083	506	5,495	6,001	1,412	7,413

The Group applied IFRS 9 'Financial Instruments' with effect from 1 January 2018 and therefore now accounts for expected credit losses on initial recognition of financial assets. The following table shows the ageing of financial assets which were past due at 31 December 2017 and for which no provision for bad or doubtful debts had been made at that date under IAS 39:

	2017 £m
Past due by 1–30 days	142
Past due by 31–90 days	70
Past due by 91–180 days	64
Past due by 181–365 days	27
Past due by more than 365 days	108
	411

42. 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 (2017 - IAS 39)

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/IAS 39 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 includes 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/IAS 39.

					2018					2017
	At FVTPL £m	Amortised cost £m	**Financial instruments £m**	**Non-financial instruments £m**	**Total £m**	At FVTPL £m	Amortised cost £m	Financial instruments £m	Non-financial instruments £m	Total £m
Trade and other payables (Note 27)	–	(13,338)	**(13,338)**	**(699)**	**(14,037)**	–	(20,129)	(20,129)	(841)	(20,970)
Other provisions (Note 29)	–	(58)	**(58)**	**(1,365)**	**(1,423)**	–	(117)	(117)	(1,148)	(1,265)
Other non-current liabilities (Note 30)	–	(149)	**(149)**	**(789)**	**(938)**	–	(79)	(79)	(902)	(981)
Contingent consideration liabilities (Note 39)	(6,286)	–	**(6,286)**	**–**	**(6,286)**	(6,172)	–	(6,172)	–	(6,172)
Other items in Assets held for sale (Note 26)	–	(167)	**(167)**	**(53)**	**(220)**	–	–	–	–	–
	(6,286)	(13,712)	**(19,998)**	**(2,906)**	**(22,904)**	(6,172)	(20,325)	(26,497)	(2,891)	(29,388)

(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:

		2018 Fair value		2017 Fair value
	Assets £m	**Liabilities £m**	Assets £m	Liabilities £m
Non-current				
Cash flow hedges – Interest rate swap contracts (principal amount – £1,266 million (2017 – £nil))	**–**	**(1)**	–	–
Net investment hedges – Cross currency swaps (principal amount – £1,575 million (2017 – £nil))	**64**	**–**	–	–
Current				
Cash flow hedges – Foreign exchange contracts (principal amount – £1,809 million (2017 – £38 million))	**1**	**(56)**	–	(1)
Net investment hedges – Foreign exchange contracts (principal amount – £7,316 million (2017 – £6,333 million))	**4**	**(48)**	5	(25)
Derivatives designated and effective as hedging instruments	**69**	**(105)**	5	(26)
Non-current				
Embedded and other derivatives	**4**	**–**	8	–
Current				
Foreign exchange contracts (principal amount – £18,537 million (2017 – £14,449 million))	**82**	**(23)**	62	(47)
Embedded and other derivatives	**102**	**–**	1	(1)
Derivatives classified as held for trading	**188**	**(23)**	71	(48)
Total derivative instruments	**257**	**(128)**	76	(74)

Fair value hedges

At 31 December 2018, the Group had no designated fair value hedges.

Net investment hedges

During the year, 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) foreign operations as shown in the table above.

The carrying value of bonds on page 201 includes £8,213 million (2017 – £4,315 million) that are designated as hedging instruments in net investment hedges.

Notes to the financial statements continued

42. Financial instruments and related disclosures continued

Cash flow hedges

During 2018, 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 and on the planned divestment of *Horlicks* and other nutrition brands in 2019.

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. The balance is reclassified to finance costs over the life of these bonds.

Foreign exchange forward contracts and swaps

In the current year, the Group has designated certain foreign exchange forward contracts and swaps as cash flow and net investment hedges. 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. 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 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. No other sources of ineffectiveness emerged from these hedging relationships. Consequently, there was no ineffectiveness to be recorded from cash flow hedges and net investments in foreign entity hedges.

				2018
Hedging instruments	Average exchange rate	Foreign currency	Notional value £m	Fair value £m
Cash flow hedges				
Foreign exchange contracts				
Buy foreign currency:				
Less than 3 months	–	–	–	–
3 to 6 months	1.13	Euro	26	1
Over 6 months	–	–	–	–
Sell foreign currency:				
Less than 3 months	–	–	–	–
3 to 6 months	–	–	–	–
Over 6 months	96.40	Indian Rupee	1,783	(56)
			1,809	(55)
Net investment hedges				
Foreign exchange contracts				
Sell foreign currency:				
Less than 3 months	1.11	Euro	6,933	(40)
3 to 6 months	–	–	–	–
Over 6 months	1.11	Euro	383	(4)
			7,316	(44)

		2018
Hedged items	Change in value for calculating hedge ineffectiveness £m	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		
Investment in European foreign operations	50	286

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

42. 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:

	2018					
				Amount reclassified 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 £m	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	7	Finance income/ (expense)	–	–	Finance income/ (expense)

Interest rate swap contracts

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 currency basis risk and the counterparty's and 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 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.

	2018			
Hedging instruments	Average contracted fixed rate %	Notional principal value £m	Change in fair value for recognising hedge ineffectiveness £m	Fair value assets/ (liabilities) £m
Less than 1 year	–	–	–	–
1 to 2 years	0.11	676	–	(1)
2 to 5 years	0.16	591	–	23
Over 5 years	–	–	–	–

	2018	
Hedged items	Change in value used for calculating hedge ineffectiveness £m	Balance in cash flow hedge reserve for continuing hedges £m
Variable rate borrowings	3	(3)

Notes to the financial statements continued

42. 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:

	2018					
				Amount reclassified 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 £m	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 2018 and 31 December 2017. The column 'Net amount' shows the impact on the Group's balance sheet if all offset rights were exercised.

At 31 December 2018	Gross financial assets/ (liabilities) £m	Financial (liabilities)/ assets offset £m	**Net financial assets/ (liabilities) £m**	Related amounts not offset £m	Net amount £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)

At 31 December 2017	Gross financial assets/ (liabilities) £m	Financial (liabilities)/ assets offset £m	Net financial assets/ (liabilities) £m	Related amounts not offset £m	Net balance £m
Financial assets					
Trade and other receivables	5,191	(1)	5,190	(31)	5,159
Derivative financial instruments	76	–	76	(64)	12
Financial liabilities					
Trade and other payables	(20,130)	1	(20,129)	31	(20,098)
Derivative financial instruments	(74)	–	(74)	64	(10)

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.

42. Financial instruments and related disclosures continued

(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 obligations under finance leases.

	2018	2017
	Total debt £m	Total £m
Floating and fixed rate debt less than one year	**(5,769)**	(2,802)
Between one and two years	**(1,757)**	(1,340)
Between two and three years	**(1,570)**	(1,076)
Between three and four years	**(1,568)**	(16)
Between four and five years	**(2,010)**	(1,475)
Between five and ten years	**(5,833)**	(3,664)
Greater than ten years	**(7,489)**	(6,650)
Total	**(25,996)**	(17,023)
Original issuance profile:		
Fixed rate interest	**(20,322)**	(16,209)
Floating rate interest	**(5,635)**	(765)
Total interest bearing	**(25,957)**	(16,974)
Non-interest bearing	**(39)**	(49)
	(25,996)	(17,023)

(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.

	2018	2017
Income statement impact of non-functional currency foreign exchange exposures	**Increase/(decrease) in income £m**	Increase/(decrease) in income £m
10 cent appreciation of the US Dollar	**36**	76
10 cent appreciation of the Euro	**(7)**	(5)
10 yen appreciation of the Yen	**15**	9

	2018	2017
Income statement impact of non-functional currency foreign exchange exposures	**Increase/(decrease) in income £m**	Increase/(decrease) in income £m
10 cent depreciation of the US Dollar	**(30)**	(66)
10 cent depreciation of the Euro	**6**	4
10 yen depreciation of the Yen	**(13)**	(8)

Notes to the financial statements continued

42. Financial instruments and related disclosures continued

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.

Equity impact of non-functional currency foreign exchange exposures	2018 Increase/(decrease) in equity £m	2017 Increase/(decrease) in equity £m
10 cent appreciation of the US Dollar	–	1
10 cent appreciation of the Euro	(1,307)	(1,028)

Equity impact of non-functional currency foreign exchange exposures	2018 Increase/(decrease) in equity £m	2017 Increase/(decrease) in equity £m
10 cent depreciation of the US Dollar	–	(1)
10 cent depreciation of the Euro	1,091	861

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 31 adjusted for the effects of foreign exchange derivatives that are not part of net debt but affect future foreign currency cash flows.

Impact of foreign exchange movements on net debt	2018 (Increase)/decrease in net debt £m	2017 (Increase)/decrease in net debt £m
10 cent appreciation of the US Dollar	(714)	(637)
10 cent appreciation of the Euro	(60)	197
10 yen appreciation of the Yen	15	(4)

Impact of foreign exchange movements on net debt	2018 (Increase)/decrease in net debt £m	2017 (Increase)/decrease in net debt £m
10 cent depreciation of the US Dollar	610	549
10 cent depreciation of the Euro	50	(165)
10 yen depreciation of the Yen	(13)	4

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 2018 would have decreased by approximately £13 million (2017 – £5 million increase). A 1% (100 basis points) movement in interest rates is not deemed to have a material effect on equity.

Income statement impact of interest rate movements	2018 Increase/(decrease) in income £m	2017 Increase/(decrease) in income £m
1% (100 basis points) increase in Sterling interest rates	(2)	24
1% (100 basis points) increase in US Dollar interest rates	1	(24)
1% (100 basis points) increase in Euro interest rates	(12)	5

42. 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 obligations under finance leases. 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. Contractual cash flows in respect of operating lease vacant space provisions are excluded from the table below as they are included in the Commitments under non-cancellable operating leases table in Note 41, 'Commitments'.

At 31 December 2018	Debt £m	Interest on debt £m	Obligations under finance leases £m	Finance charge on obligations under finance leases £m	Trade payables 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)**

At 31 December 2017	Debt £m	Interest on debt £m	Obligations under finance leases £m	Finance charge on obligations under finance leases £m	Trade payables and other liabilities not in net debt £m	Total £m
Due in less than one year	(2,802)	(555)	(23)	(2)	(21,521)	(24,903)
Between one and two years	(1,344)	(497)	(27)	(2)	(853)	(2,723)
Between two and three years	(1,078)	(488)	(8)	(1)	(813)	(2,388)
Between three and four years	(16)	(488)	(2)	(1)	(784)	(1,291)
Between four and five years	(1,483)	(468)	(1)	(1)	(752)	(2,705)
Between five and ten years	(3,694)	(2,018)	(5)	(5)	(3,609)	(9,331)
Greater than ten years	(6,720)	(3,996)	–	–	(1,471)	(12,187)
Gross contractual cash flows	(17,137)	(8,510)	(66)	(12)	(29,803)	(55,528)

Anticipated contractual cash flows for the repayment of debt and debt interest have increased by £9.9 billion over the year due to funding of the buyout of Novartis' 36.5% stake in the Consumer Healthcare Joint Venture, an increase in the issuance of commercial paper and unfavourable exchange impacts from the translation of non-Sterling denominated debt.

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.

	2018				2017			
	Receivables		**Payables**		Receivables		Payables	
	Interest rate swaps £m	**Foreign exchange forward contracts and swaps £m**	**Interest rate swaps £m**	**Foreign exchange forward contracts and swaps £m**	Interest rate swaps £m	Foreign exchange forward contracts and swaps £m	Interest rate swaps £m	Foreign exchange forward contracts and swaps £m
Due in less than one year	**49**	**26,680**	**(3)**	**(26,802)**	–	20,319	–	(20,326)
Between one and two years	**48**	**1,575**	**(3)**	**(1,513)**	–	–	–	–
Between two and three years	**24**	**–**	**(2)**	**–**	–	–	–	–
Gross contractual cash flows	**121**	**28,255**	**(8)**	**(28,315)**	–	20,319	–	(20,326)

The amounts receivable and payable in less than one year have increased compared with 31 December 2017 predominantly from hedging of the buyout of Novartis' 36.5% stake in the Consumer Healthcare Joint Venture and the divestment of *Horlicks* and other nutrition brands to Unilever.

Notes to the financial statements continued

43. 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 2018 was £393 million (2017 – £347 million; 2016 – £338 million). Of this amount, £304 million (2017 – £276 million; 2016 – £271 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 4.8% (2017 – 4.8%; 2016 – 4.5%) 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 2016	32,577		17,520	
Awards granted	12,983	£14.97	6,589	$39.18
Awards exercised	(11,198)		(6,214)	
Awards cancelled	(1,507)		(812)	
At 31 December 2016	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	

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 2018, awards were made of 4.7 million shares at a weighted fair value of £10.46 and 1.3 million ADS at a weighted fair value of $29.43. At 31 December 2018, there were outstanding awards over 13.1 million shares and 3.4 million ADS.

43. 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:

	2018 Grant	2017 Grant	2016 Grant
Risk-free interest rate	0.76%	0.54%	0.32%
Dividend yield	5.3%	5.9%	4.9%
Volatility	21%	23%	23%
Expected life	3 years	3 years	3 years
Savings-related options grant price (including 20% discount)	£12.09	£10.86	£12.95

Options outstanding	Share option schemes – shares		Share option schemes – ADS		Savings-related share option schemes	
	Number 000	Weighted exercise price	Number 000	Weighted exercise price	Number 000	Weighted exercise price
At 31 December 2018	1,796	£11.96	1,216	$36.19	5,929	£11.70
Range of exercise prices on options outstanding at year end	£11.60 –	£12.21	$33.42 –	$38.14	£10.13 –	£12.95
Weighted average market price on exercise during year		£14.43		$39.77		£15.13
Weighted average remaining contractual life		0.9 years		0.9 years		2.6 years

Options over 2.9 million shares were granted during the year under the savings-related share option scheme at a weighted average fair value of £2.40. At 31 December 2018, 5.5 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	2018	2017
Number of shares (000)	41,391	66,558

	£m	£m
Nominal value	10	17
Carrying value	160	399
Market value	617	880

Shares held for share option schemes	2018	2017
Number of shares (000)	139	139

	£m	£m
Nominal value	–	–
Carrying value	1	1
Market value	2	2

Notes to the financial statements continued

44. Principal Group companies

The following represent the principal subsidiaries and their countries of incorporation of the Group at 31 December 2018. 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

Glaxo Group Limited
Glaxo Operations UK Limited
GlaxoSmithKline Capital plc
GlaxoSmithKline Consumer Healthcare Holdings Limited
GlaxoSmithKline Consumer Healthcare (UK) Trading Limited
GlaxoSmithKline Consumer Trading Services Limited
GlaxoSmithKline Export Limited
GlaxoSmithKline Finance plc
GlaxoSmithKline Holdings Limited *
GlaxoSmithKline Research & Development Limited
GlaxoSmithKline Services Unlimited *
GlaxoSmithKline UK Limited
Setfirst Limited
SmithKline Beecham Limited
ViiV Healthcare Limited (78.3%)
ViiV Healthcare UK Limited (78.3%)

US

Block Drug Company, Inc.
Corixa Corporation
GlaxoSmithKline Capital Inc.
GlaxoSmithKline Consumer Healthcare Holdings (US) LLC
GlaxoSmithKline Consumer Healthcare, L.P. (88%)
GlaxoSmithKline Holdings (Americas) Inc.
GlaxoSmithKline LLC
Human Genome Sciences, Inc.
GSK Consumer Health, Inc. (formerly Novartis Consumer Health, Inc.)
S.R. One, Limited
Stiefel Laboratories, Inc.
ViiV Healthcare Company (78.3%)

Europe

GlaxoSmithKline Biologicals SA (Belgium)
GlaxoSmithKline Pharmaceuticals SA (Belgium)
GlaxoSmithKline Biologicals S.A.S. (France)
GlaxoSmithKline Sante Grand Public SAS (France)
Laboratoire GlaxoSmithKline (France)
ViiV Healthcare SAS (France) (78.3%)
GlaxoSmithKline Consumer Healthcare GmbH & Co. KG (Germany)
GlaxoSmithKline GmbH & Co. KG (Germany)
GSK Vaccines GmbH (Germany)
GlaxoSmithKline Consumer Healthcare S.p.A. (Italy)
GlaxoSmithKline S.p.A. (Italy)
GSK Vaccines S.r.l. (Italy)
GlaxoSmithKline B.V. (Netherlands)
GlaxoSmithKline Consumer Healthcare Sp.z.o.o. (Poland)
GSK Services Sp z o.o. (Poland)
GlaxoSmithKline Trading Services Limited (Republic of Ireland) (i)
GlaxoSmithKline Healthcare AO (Russia)
GlaxoSmithKline S.A. (Spain)
Laboratorios ViiV Healthcare, S.L. (Spain) (78.3%)
GSK Consumer Healthcare S.A. (Switzerland)

Others

GlaxoSmithKline Argentina S.A. (Argentina)
GlaxoSmithKline Australia Pty Ltd (Australia)
GlaxoSmithKline Consumer Healthcare Australia Pty Ltd (Australia)
GlaxoSmithKline Brasil Limitada (Brazil)
GlaxoSmithKline Consumer Healthcare Inc. (Canada)
GlaxoSmithKline Inc. (Canada)
ID Biomedical Corporation of Quebec (Canada)
GlaxoSmithKline Limited (China (Hong Kong))
GlaxoSmithKline (Tianjin) Co. Ltd (China) (90%)
Sino-American Tianjin Smith Kline & French Laboratories Ltd (China) (55%)
GlaxoSmithKline Consumer Healthcare Limited (India) (72.5%)
GlaxoSmithKline Pharmaceuticals Limited (India) (75%)
GlaxoSmithKline Consumer Healthcare Japan K.K. (Japan)
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 260 to 270, 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 260 to 270 for a complete list of subsidiary undertakings, associates and joint ventures, which form part of these financial statements.

45. Legal proceedings

The Group is involved in significant legal and administrative proceedings, principally product liability, intellectual property, tax, anti-trust and governmental investigations, as well as related private litigation. 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 29, '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 2018, the Group's aggregate provision for legal and other disputes (not including tax matters described in Note 14, 'Taxation') was £219 million. However, this provision is offset by a related £37 million receivable which means the net exposure to the Group is £182 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*

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 *Triumeq* and *Tivicay*, and from Lupin and Mylan for *Triumeq* and from Sandoz for *Tivicay*. ViiV Healthcare lists two patents for dolutegravir, the active ingredient in *Tivicay* and one of the active ingredients in *Triumeq*, in the FDA Orange Book. One patent, covering the molecule dolutegravir, expires on 5 October 2027. A second patent, claiming a certain crystal forms of dolutegravir, expires on 8 December 2029. All the letters challenged only the patent for the crystal form. Some generic companies alleged that the crystal form patent is not valid. Others challenged validity and asserted that their proposed product would not infringe the crystal form patent.

On 7 February 2017, ViiV Healthcare filed patent infringement suits against all the generic companies in the US District Court for the District of Delaware. Additionally, ViiV Healthcare also filed suit against certain of the generic companies in the US District Court for the District of New Jersey, and the US District Court for the District of West Virginia. The case against Mylan is now proceeding in the Northern District of West Virginia. The court has set the case against Mylan for trial in June 2020. The cases against the other defendants are proceeding in the District of Delaware. The District of Delaware has not yet set a trial date for the cases.

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 alleges 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 seeks financial redress rather than injunctive relief. The District of Delaware case is set for trial in September 2020. The Canadian court has not set a trial date for the Canadian action.

Kivexa

In 2018, ViiV Healthcare reached confidential agreements with each of DOC Generici, Farmoz and Kyowa Pharmaceuticals to settle various challenges to the validity of the Supplementary Protection Certificate ('SPC') for the patent covering the combination of lamivudine and abacavir for *Kivexa* and certain counterclaims brought by ViiV Healthcare for infringement of that SPC. These settlements brought an end to litigation and arbitration proceedings between ViiV Healthcare and DOC Generici in Italy, between ViiV Healthcare and Farmoz in Portugal, and between ViiV Healthcare and Kyowa Pharmaceuticals in Japan.

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*. No trial date has been set for this action.

Notes to the financial statements continued

45. Legal proceedings continued

Product liability

Pre-clinical and clinical trials are conducted during the development of potential products to determine the safety and efficacy of products for use by humans following approval by regulatory bodies.

Notwithstanding these efforts, when drugs and vaccines are introduced into the marketplace, unanticipated safety issues may become, or be claimed by some to be, evident. The Group is currently a defendant in a number of product liability lawsuits related to the Group's Pharmaceutical, Vaccine 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 29, 'Other provisions.'

Avandia

The Group has been named in product liability lawsuits on behalf of individuals asserting personal injury claims arising out of the use of *Avandia*. Economic loss actions have also been filed seeking restitution and penalties under consumer protection and other laws.

As of February 2019, there are seven remaining US cases. Four are personal injury actions subject to a settlement agreement and will be dismissed once the settlement has been finalised. 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, and are on appeal from summary judgements granted in favour of the Group. In the last of the seven, the Santa Clara County (California) Action, summary judgement was granted in favour of the Group on all issues except for the civil penalty claims under California's False Advertising Act.

Additionally, there are 13 class actions pending in Canada, but the Group has reached an agreement, subject to court approval, to settle all of them.

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 February 2019, but 11 lawsuits related to use during pregnancy are still pending in various courts in the US.

The Singh action in Alberta, Canada, a proposed national class action, seeks to certify a class relating to birth defects generally. The court, after hearing argument in January 2019, has plaintiffs' class certification motion under consideration.

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 February 2019, 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. Plaintiff has filed a petition for writ of certiorari asking the US Supreme Court to review the case. The remaining US cases are largely dormant.

In the one pending Canadian action, Carmichael, the Group has filed a motion for summary judgement based on the statute of limitations.

– 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 is scheduled to commence in April 2019.

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 February 2019, the Group is a defendant in 430 personal injury lawsuits. All but two of the lawsuits are part of a multi-district litigation proceeding ("MDL") in the US District Court for the District of Massachusetts.

In the MDL, the parties are in the process of completing case-specific discovery and selecting cases for potential trials. While the court recently denied the Group's motion for summary judgment based on a federal preemption argument, the Group continues to seek the dismissal of individual cases on other grounds as appropriate.

GSK is also a defendant in four proposed class actions in Canada. There has been no significant activity in these four matters; however, the parties have recently agreed to a schedule for class certification proceedings in the matter pending in Ontario.

45. Legal proceedings continued

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 29, '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'), which resulted in a ruling in 2014 that, according to Chinese law, GSK China Investment Co. Ltd. ('GSKCI') had offered money or property to non-government personnel in order to obtain improper commercial gains and GSKCI being found guilty of bribing non-government personnel.

On 30 September 2016, the Group reached a global resolution with the US Securities and Exchange Commission (SEC) regarding the SEC's investigation under the US Foreign Corrupt Practices Act (FCPA) into the Group's commercial practices in countries outside of the US, including China. As part of the resolution, the Group agreed to pay a civil penalty of $20 million to the US Government. The US Department of Justice (DOJ) confirmed that it had concluded its investigation into the Group's commercial practices and would take no action against the Group. As part of the resolution with the SEC, the Group agreed to certain undertakings, including a period of self-monitoring and reporting. The Group's obligations under that resolution continued through 30 September 2018 and have now concluded.

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 following the Group's reporting of the SFO's inquiries. The Group is co-operating and responding to these requests. On 22 February 2019, the SFO announced that it would be closing its investigation and confirmed that it would be taking no further action against the Group. The SEC and DOJ investigations into these issues continue.

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

US Vaccines subpoena

On 25 February 2016, the Group received a subpoena from the US Attorney's Office for the Southern District of New York requesting documents relating to the Group's Vaccines business. The Group responded to the subpoena and was informed by the government in 2018 that the government would be closing the matter without further action.

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 alleges 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 has sought recovery on behalf of itself as payer and on behalf of in-state patients as consumers. The case is ongoing, and no trial date has yet been set as to the Group.

Cidra third-party payer litigation

On 25 July 2013, a number of major US healthcare insurers filed suit against the Group in the Philadelphia, Pennsylvania County Court of Common Pleas seeking compensation for reimbursements they made for medicines manufactured at the Group's former Cidra plant in Puerto Rico. These insurers claim that the Group knowingly and illegally 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. The suit alleges both US federal and various state law causes of action. Discovery is complete, and the Group has filed a motion for summary judgement, which likely will be heard in spring 2019. No trial date has yet been set.

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 29, '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 and two other pharmaceutical companies for infringement of the Competition Act. The CMA imposed a fine of £37.6 million on the Group, as well as fines totaling £7.4 million against the other companies. This relates to agreements to settle patent disputes between the Group and potential suppliers of generic paroxetine formulations, entered into between 2001 and 2003. The Group terminated the agreements at issue in 2004. The Group believes it has strong grounds for its appeal of the CMA's finding to the Competition Appeal Tribunal (CAT) in order to overturn the fine or substantially reduce it. The appeal concluded in April 2017. The CAT delivered its initial judgement on the appeal on 8 March 2018, referring all the principle points at issue to the Court of Justice of the EU for a preliminary ruling. The matter will then return to the CAT for final judgement. No provision has been made for this matter.

Notes to the financial statements continued

45. Legal proceedings continued

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.

Commercial and corporate

The Group is a defendant in certain cases which allege violation 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 29, '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. The case was stayed while several private actions brought by former Stiefel employees proceeded through the courts but was returned to active status in early summer 2015. It is unclear when the case ultimately will be scheduled for trial.

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.

Environmental matters

The Group has been notified of its potential responsibility relating to past operations and its past waste disposal practices at certain sites, primarily in the US. Some of these matters are the subject of litigation, including proceedings initiated by the US federal or state governments for waste disposal, site remediation costs and tort actions brought by private parties.

The Group has been advised that it may be a responsible party at approximately 16 sites, of which nine appear on the National Priority List created by the Comprehensive Environmental Response Compensation and Liability Act (Superfund). These proceedings seek to require the operators of hazardous waste facilities, transporters of waste to the sites and generators of hazardous waste disposed of at the sites to clean up the sites or to reimburse the US Government for cleanup costs. In most instances, the Group is involved as an alleged generator of hazardous waste.

Although Superfund provides that the defendants are jointly and severally liable for cleanup costs, these proceedings are frequently resolved on the basis of the nature and quantity of waste disposed of by the generator at the site. The Group's proportionate liability for cleanup costs has been substantially determined for 18 of the sites referred to above.

The Group's potential liability varies greatly from site to site. The cost of investigation, study and remediation at such sites could, over time, be significant. The Group has made a provision for these matters, as noted in Note 29, 'Other provisions'.

46. Post balance sheet events

The agreement to acquire Tesaro, Inc. for $5.1 billion in cash, which was signed in December 2018, completed on 22 January 2019.

On 31 January 2019, Mylan N.V. announced that the US Food and Drug Administration had approved their therapeutically equivalent generic of *Advair Diskus* for certain patients with asthma or chronic obstructive pulmonary disease.

Company balance sheet – UK GAAP

(including FRS 101 'Reduced Disclosure Framework') as at 31 December 2018

	Notes	2018 £m	2018 £m	2017 £m	2017 £m
Fixed assets – investments	F		19,987		20,275
Current assets:					
Trade and other receivables	G		8,394		8,715
Cash at bank			12		15
Total current assets			8,406		8,730
Bank overdrafts			(12)		(15)
Short term borrowings	H		(3,500)		–
Trade and other payables	I		(610)		(837)
Total current liabilities			(4,122)		(852)
Net current assets			4,284		7,878
Total assets less current liabilities			24,271		28,153
Provisions for liabilities	J		(16)		(27)
Other non-current liabilities	K		(282)		(238)
Net assets			23,973		27,888
Capital and reserves					
Share capital	L		1,345		1,343
Share premium account	L		3,091		3,019
Other reserves			1,420		1,420
Retained earnings:					
At 1 January		22,106		15,538	
(Loss)/profit for the year		(62)		9,893	
Other changes in retained earnings		(3,927)		(3,325)	
	M		18,117		22,106
Equity shareholders' funds			23,973		27,888

The financial statements on pages 219 to 222 were approved by the Board on 11 March 2019 and signed on its behalf by

Philip Hampton
Chairman
GlaxoSmithKline plc
Registered number: 3888792

Company statement of changes in equity

for the year ended 31 December 2018

	Share capital £m	Share premium account £m	Other reserves £m	Retained earnings £m	Total equity £m
At 1 January 2017	1,342	2,954	1,420	15,538	21,254
Profit and Total comprehensive income attributable to shareholders	–	–	–	9,893	9,893
Dividends to shareholders	–	–	–	(3,906)	(3,906)
Shares issued under employee share schemes	1	55	–	–	56
Treasury shares transferred to the ESOP Trust	–	10	–	581	591
At 31 December 2017	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

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 2018, with comparative figures as at 31 December 2017.

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.

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.

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) Key accounting judgements and estimates

Legal and other disputes

The company provides for anticipated settlement costs where management makes a judgement that an outflow of resources is probable and a reliable estimate can be made of the likely outcome of the dispute and legal and other expenses arising from claims against the company. 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.

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. At 31 December 2018, provisions for legal and other disputes amounted to £16 million (2017 – £27 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 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 company's financial statements by a material amount.

D) Operating profit

A fee of £12,000 (2017 – £12,053) relating to the audit of the company has been charged in operating profit.

E) Dividends

The directors declared four interim dividends resulting in a dividend for the year of 80 pence, in line with the dividend for 2017. For further details, see Note 16 to the Group financial statements, 'Dividends'.

F) Fixed assets – investments

	2018 £m	2017 £m
Shares in GlaxoSmithKline Services Unlimited	613	613
Shares in GlaxoSmithKline Holdings (One) Limited	18	18
Shares in GlaxoSmithKline Holdings Limited	17,888	17,888
Shares in GlaxoSmithKline Mercury Limited	33	33
	18,552	18,552
Capital contribution relating to share-based payments	1,139	1,139
Contribution relating to contingent consideration	296	584
	19,987	20,275

G) Trade and other receivables

	2018 £m	2017 £m
Amounts due within one year:		
UK Corporation tax recoverable	10	31
Other receivables	–	1
Amounts owed by Group undertakings	7,889	8,299
	7,899	8,331
Amounts due after more than one year:		
Amounts owed by Group undertakings	495	384
	8,394	8,715

H) Short-term borrowings

The £3.5 billion borrowing relates to 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 facility has a maturity date of 1 December 2019.

I) Trade and other payables

	2018 £m	2017 £m
Amounts due within one year:		
Other creditors	567	438
Contingent consideration payable	14	346
Amounts owed to Group undertakings	29	53
	610	837

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 £22.2 billion of debt instruments (2017 – £16.7 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 G).

Notes to the company balance sheet – UK GAAP (including FRS 101 'Reduced Disclosure Framework') continued

J) Provisions for liabilities

	2018 £m	2017 £m
At 1 January	27	23
Exchange adjustments	2	(3)
Charge for the year	16	52
Utilised	(29)	(45)
At 31 December	16	27

The provisions relate to a number of legal and other disputes in which the company is currently involved.

K) Other non-current liabilities

	2018 £m	2017 £m
Contingent consideration payable	282	238
	282	238

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'.

L) Share capital and share premium account

	Ordinary Shares of 25p each		Share premium account
	Number	£m	£m
Share capital authorised			
At 31 December 2017	10,000,000,000	2,500	
At 31 December 2018	10,000,000,000	2,500	
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
Treasury shares transferred to the ESOP Trust	–	–	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

	31 December 2018 000	31 December 2017 000
Number of shares issuable under employee share schemes	56,723	38,647
Number of unissued shares not under option	4,564,209	4,588,799

At 31 December 2018, of the issued share capital, 41,530,909 shares were held in the ESOP Trusts, 414,605,950 shares were held as Treasury shares and 4,922,930,765 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 43, 'Employee share schemes'.

M) Retained earnings

The loss of GlaxoSmithKline plc for the year was £62 million (2017 – £9,893 million profit), which after dividends of £3,927 million (2017 – £3,906 million), gave a retained loss of £3,989 million (2017 – profit of £5,987 milion). After the effect of £nil Treasury shares transferred to a subsidiary company (2017 – £581 million), retained earnings at 31 December 2018 stood at £18,117 million (2017 – £22,106 million), of which £4,096 million was unrealised (2017 – £4,096 million).

N) Group companies

See pages 260 to 270 for a complete list of subsidiaries, associates and joint ventures, which forms part of these financial statements.