Financial statements

In this section

Directors' statement of responsibilities

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

UK company law requires the Directors to prepare financial statements for each financial year. Under that law 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). Under company law the Directors must not approve the Group 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 those 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; and
- prepare the financial statements on a going concern basis unless it is inappropriate to presume that the Group 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 2016, comprising principal statements and supporting notes, are set out in 'Financial statements' on pages 158 to 231 of this report. The responsibilities of the auditors in relation to the Group financial statements are set out in the Independent Auditors' report on pages 149 to 157.

The Group financial statements for the year ended 31 December 2016 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 2016 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 Group, together with a description of the principal risks and uncertainties that it faces.

Disclosure of information to auditors

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 auditors are 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 auditors are 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 53 to 78 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.

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 80 to 110. 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 auditors have 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 2016, 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

13 March 2017

Independent Auditors' report
to the members of GlaxoSmithKline plc

Report on the Group financial statements

Our opinion
In our opinion, GlaxoSmithKline plc's Group financial statements:

- give a true and fair view of the state of the Group's affairs at 31 December 2016 and of its profit and cash flows for the year then ended;
- have been properly prepared in accordance with International Financial Reporting Standards ('IFRSs') as adopted by the European Union; and
- have been prepared in accordance with the requirements of the Companies Act 2006 and Article 4 of the IAS Regulation.

Separate opinion in relation to IFRSs as issued by the IASB
As explained in note 1 to the Group financial statements, the Group, in addition to applying IFRSs as adopted by the European Union, has also applied IFRSs as issued by the International Accounting Standards Board (IASB).

In our opinion, the Group financial statements comply with IFRSs as issued by the IASB.

What we have audited
The Group financial statements, included within the Annual Report, comprise:

- the consolidated balance sheet at 31 December 2016;
- the consolidated income statement and consolidated statement of comprehensive income for the year then ended;
- the consolidated cash flow statement for the year then ended;
- the consolidated statement of changes in equity for the year then ended; and
- the notes to the Group financial statements, which include a summary of significant accounting policies and other explanatory information.

Certain required disclosures have been presented elsewhere in the Annual Report, rather than in the notes to the financial statements. These are cross-referenced from the financial statements and are identified as audited.

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 and applicable law.

Our audit approach
Context
The context of our audit is set by the Group's activities in 2016. Having reduced the extent of finance transformation in 2015 because of the completion of the three-part transaction with Novartis, the Group increased the pace of change in 2016, with a number of markets migrating onto the Group's common enterprise-wide resource planning platforms ('ERP') or moving financial transaction processing and accounting services to business process outsourcing locations ('BPO') and to in-house business service centres ('BSC') as well as establishing two new BPOs in Europe and one in Asia. The Group also migrated to a new consolidation platform (BISON) and implemented a new system for tracking intercompany inventory transfers and calculating intra-group unrealised profit in inventory (IPT). As a result, transformation of the Group's finance processes is included as an area of focus in our 2016 report.

In addition, the Group has made certain changes in 2016 to its agreements with Pfizer and Shionogi in respect of the non-controlling interest each holds in ViiV Healthcare. These changes, together with remeasurements to ViiV and other acquisition-related liabilities, had a significant impact on the corresponding accounting and valuation judgements and have therefore also been included as an area of focus.

Our other areas of focus have been refined to reflect developments in the Group's business including continued competitive pricing pressure and discounting in the US and the resolution of the investigation into the Group's commercial practices by the SEC-DoJ.

Overview
Materiality
- Overall group materiality: £260 million which represents 4% of profit before tax adding back certain items ('adjusted profit before tax') (2015 – £200 million).

Audit scope
- Our audit included full scope audits of 15 reporting components with specific audit procedures performed at a further 45 reporting components.
- Taken together, the components at which audit work was performed accounted for 71% of consolidated revenue, 71% of consolidated profit before tax and 73% of adjusted profit before tax and covered all components that individually contributed more than 2% of revenue, profit before tax and adjusted profit before tax.

Areas of focus
- Rebates, discounts, allowances and returns in the US Pharmaceuticals and Vaccines business
- Carrying value of goodwill and intangible assets
- Acquisition-related liabilities
- Uncertain tax positions
- Litigation
- Finance transformation
- Investigations into the Group's commercial practices

The scope of our audit and our areas of focus
We conducted our audit in accordance with International Standards on Auditing (UK and Ireland) ('ISAs (UK & Ireland)').

We designed our audit by determining materiality and assessing the risks of material misstatement in the financial statements. In particular, we looked at where the directors made subjective judgements, for example in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including evaluating whether there was evidence of bias by the directors that represented a risk of material misstatement due to fraud, and the risk of fraud in revenue recognition. Procedures designed and executed to address these risks included use of data enabled auditing techniques to test journal entries and post-close adjustments, testing and evaluating management's key accounting estimates for reasonableness and consistency, undertaking cut-off procedures to verify proper cut-off of revenue and expenses and testing the existence and accuracy of revenue transactions. In addition, we incorporate an element of unpredictability into our audit work each year.

The risks of material misstatement that had the greatest effect on our audit, including the allocation of our resources and effort, are identified as areas of focus in the table below. We have also set out how we tailored our audit to address these specific areas in order to provide an opinion on the financial statements as a whole and any comments we make on the results of our procedures should be read in this context. This is not a complete list of all risks identified by our audit.

Independent Auditors' report continued

Report on the Group financial statements continued

Area of focus	How our audit addressed the area of focus
Rebates, discounts, allowances and returns in the US Pharmaceuticals and Vaccines business **Refer to notes 3 and 27 in the Group financial statements.** The Group makes sales to various customers in the US that fall under certain commercial and government mandated contracts and reimbursement arrangements, of which the most significant are Medicaid and Medicare. The Group also provides a right of return to its customers for certain products. These arrangements result in deductions to gross sales in arriving at turnover and give rise to obligations for the Group to provide customers with rebates, discounts, allowances and the right of return, which for unsettled amounts are recognised as an accrual. We focused on this area because rebates, discounts, allowances and returns arrangements are complex and because establishing an appropriate accrual requires significant judgement and estimation by the directors. This judgement is particularly complex in a US healthcare environment in which competitive pricing pressure and product discounting are growing trends. The directors have determined an accrual of £2,218 million to be necessary at 31 December 2016 (31 December 2015 – £1,671 million). The increase in the accrual in 2016 is primarily due to foreign exchange rate impacts. Two other factors driving the increased accrual were higher sales, as well as greater discounts due to competitive pressures, particularly in relation to *Advair*.	We obtained management's calculations for accruals under applicable schemes and validated the assumptions used by reference to the Group's stated commercial policies, the terms of the applicable contracts, third party data related to patient enrolment in US government funded benefit schemes and historical levels of product returns. We compared the assumptions to contracted prices, historical rebates, discounts, allowances and returns levels (where relevant) and to current payment trends. We also considered the historical accuracy of the Group's estimates in previous years, and the impact of competitive pricing pressures and greater discounting in the US market more generally. We formed an independent expectation of the largest elements of the accrual at 31 December 2016 using third party data and compared this expectation to the actual accrual recognised by the Group. Based on the procedures performed, we did not identify any material differences between our independent expectations and the accrual.
Carrying value of goodwill and intangible assets **Refer to notes 3, 18 and 19 in the Group financial statements.** The Group has £17.8 billion of intangible assets (31 December 2015 – £16.0 billion), comprising significant licences, patents and acquired trademarks (and excluding computer software). In addition, the Group has £6.0 billion of goodwill at 31 December 2016 (31 December 2015 – £5.2 billion). The carrying values of goodwill and intangible assets are contingent on future cash flows and there is a risk that the assets will be impaired if these cash flows do not meet the Group's expectations. The impairment reviews performed by the Group contained a number of significant judgements and estimates including revenue growth, the success of new product launches, genericisation of existing products following patent expiry, profit margins, cash conversion, terminal values and discount rate. Changes in these assumptions could lead to an impairment to the carrying value of intangible assets and goodwill. During the year, the Group changed its basis of aggregating individual cash generating units ('CGUs') for goodwill impairment testing purposes now comprising Global Pharmaceuticals, Consumer Healthcare and Vaccines. This exercise was undertaken to align to the Group's operating segments, which resulted in the aggregation of Pharmaceuticals and ViiV Healthcare. We focused on intangible assets acquired through historical acquisitions, as these are the most significant individually and in aggregate, and a number have indefinite lives, including the most significant of the intangible assets acquired from Novartis in 2015. The Group has also recognised goodwill from a number of its acquisitions, including the three-part transaction with Novartis.	Deploying our valuations specialists, we obtained the Group's impairment analyses and tested the reasonableness of key assumptions, including profit and cash flow growth or decline, terminal values, the impact of the expiry of patents, potential product obsolescence and the selection of discount rates. We challenged management to substantiate its assumptions, including comparing relevant assumptions to industry and economic forecasts. We interrogated the integrity of supporting calculations and we corroborated certain information with third party sources, including expectations of performance of certain assets and components of the business. We obtained and evaluated management's sensitivity analyses to ascertain the impact of reasonably possible changes in key assumptions and we performed our own independent sensitivity calculations to quantify the downside changes to management's models required to result in impairment. As a result of our work, we determined that the impairment charge of £22 million recorded for intangible assets was appropriate. For those intangible assets, including goodwill, where management determined that no impairment was required, we found that these judgements were supported by reasonable assumptions which would require unreasonable downside changes before any additional material impairment was necessary. In respect of the aggregation of CGUs, we confirmed that this is the lowest level at which management monitors goodwill for internal purposes and that it is consistent with the way in which the Group's results are reported to the Board and the Corporate Executive Team.

Report on the Group financial statements continued

Area of focus	How our audit addressed the area of focus

Acquisition-related liabilities

Refer to notes 3, 27, 30, 38, 39 and 42 in the Group financial statements.

In recent years, the Group has completed a number of significant transactions, including:

- The three-part transaction with Novartis in 2015;
- The establishment of ViiV Healthcare in 2009; and
- The acquisition by ViiV Healthcare of the remaining 50% interest in the Shionogi-ViiV Healthcare in 2012.

Each of these transactions resulted in the recognition and measurement of material acquisition-related liabilities, which necessitate significant management judgement at each balance sheet date.

In addition, during February 2016 the Group waived certain rights it had in respect of non-controlling interests held by Pfizer and Shionogi in ViiV Healthcare and the terms of the arrangement with Shionogi were amended again in December 2016.

The most significant of the acquisition-related liabilities are outlined below:

- Consumer Healthcare put option: The Group recorded a liability for the present value of the expected redemption price of a written put option over Novartis' non-controlling interest in Consumer Healthcare. At 31 December 2016, this liability had a carrying value of £7,420 million (2015 – £6,287 million);
- ViiV Healthcare contingent consideration: On acquisition of the remaining 50% interest in the Shionogi-ViiV Healthcare joint venture in 2012, £659 million was recorded as contingent consideration. This represented the fair value of expected payments to be made to Shionogi, contingent on future sales of dolutegravir products. This liability is required to be re-measured to its fair value at each reporting date. Since initial recognition, it has been increased in response to actual and future sales significantly exceeding original expectations including the impact of changes in foreign exchange rates. At 31 December 2016, the liability was £5,304 million (2015 – £3,409 million); and
- ViiV Healthcare put options: In 2009 and 2012, both Pfizer and Shionogi were granted written put options by the Group that enabled each to put its non-controlling interest back to the Group in the future. Up to and including 31 December 2015, no financial liabilities were recorded for these two options as each arrangement contained clauses that enabled the Group to avoid acquiring these interests if certain conditions were met. In February 2016, the Group unilaterally waived certain of its rights. As a result, liabilities with an aggregate value of £2,172 million were recognised. In December 2016, agreement was reached with Shionogi, whereby it agreed to forego its rights to exercise its written put option. As a result, the Group's associated liability of £1,244 million was de recognised during December 2016. At 31 December 2016, the liability in respect of Pfizer's written put option had a carrying value of £1,319 million.

In addition to these liabilities, the Group has recorded certain other acquisition-related liabilities at 31 December 2016, including £545 million in relation to contingent consideration payable on the acquisition of Novartis' Vaccines business in 2015.

We focused on this area as the carrying value of each of the financial liabilities is material and is determined by management judgements and estimates, including projections of future sales of products, the potential impact of competitor products and the delivery of anticipated synergies. In addition, each valuation is sensitive to changes in other assumptions, including discount rates and tax rates.

We deployed our valuations specialists in evaluating certain key assumptions, including growth projections and discount rate as well as the integrity and mechanical accuracy of each of management's valuation models. We considered whether reasonably possible changes would have a significant impact on the value recorded. Certain procedures are specific to individual liabilities and included the following:

- Consumer Healthcare put option: The redemption price will contractually be based on a multiple (to be agreed between GSK and Novartis) of Consumer Healthcare's revenue and profit. We compared the earnings forecast approved by the Consumer Healthcare board of directors and used by management in its model to the actual earnings in 2016 and understood the reasons for changes. We also considered the appropriateness of earnings multiples applied to this forecast and the assumption about option exercise date;
- ViiV Healthcare contingent consideration: We compared the projections for the Group's dolutegravir products to third party expectations of growth and considered the potential upside and downside impact of products launched and expected to be launched by the Group's competitors; and
- ViiV Healthcare put options: We obtained and reviewed the written agreements between the Group and each of Pfizer and Shionogi. Certain assumptions related to forecast revenue from dolutegravir products used in the valuation of these liabilities are consistent with the ViiV Healthcare contingent consideration. For other components of the valuation, we considered the appropriateness of the assumptions made about forecast growth rates and margins by reference to historical performance and to Board approved budgets and third party forecast data.

Each of these three acquisition-related liabilities is subject to significant estimation uncertainty and the range of possible outcomes is very broad. However, we are comfortable that the value of each liability at 31 December 2016 is reasonable and reflects management's best estimates at this time.

We reviewed the disclosures about each acquisition-related liability, including management's commentary about estimation uncertainty and the range of alternative outcomes. We are satisfied that these disclosures are appropriate.

Independent Auditors' report continued

Report on the Group financial statements continued

Area of focus	How our audit addressed the area of focus
Uncertain tax positions **Refer to Notes 3 and 14 in the Group financial statements.** The Group operates in a complex multinational tax environment and there are open tax and transfer pricing matters with UK and overseas tax authorities. In addition, from time to time the Group enters into transactions with complicated accounting and tax consequences, including the three-part transaction with Novartis in 2015. Judgement is required in assessing the level of provisions required in respect of uncertain tax positions. At 31 December 2016, the Group has recorded provisions of £1,892 million in respect of uncertain tax positions (2015 – £1,687 million).	In conjunction with our UK, US, international tax and transfer pricing specialists, we evaluated and challenged management's judgements in respect of estimates of tax exposures and contingencies in order to assess the adequacy of the Group's tax provisions. This included obtaining and evaluating certain third party tax opinions that the Group has obtained to assess the appropriateness of any assumptions used. In understanding and evaluating management's judgements, we considered the status of recent and current tax authority audits and enquiries, the outturn of previous claims, judgemental positions taken in tax returns and current year estimates and developments in the tax environment. We noted that the assumptions and judgements that are required to formulate the provisions mean that the range of possible outcomes is broad. However, based on the evidence obtained we considered the level of provisioning to be acceptable in the context of the Group financial statements taken as a whole. We considered management's disclosures in this regard and we agree with management's view that a material change to the Group's estimates of tax exposures is not expected within the next 12 months.
Litigation **Refer to Notes 3, 29 and 46 in the Group financial statements.** The pharmaceuticals industry is heavily regulated which increases inherent litigation risk. The Group is engaged in a number of legal actions, including product liability, anti-trust and related private litigation, of which the most significant are disclosed in Notes 29 and 46. We focused on this area as the eventual outcome of claims is uncertain and the positions taken by the directors are based on the application of material judgement and estimation. Accordingly, unexpected adverse outcomes could significantly impact the Group's reported profit and balance sheet position. At 31 December 2016, the Group held provisions of £344 million in respect of legal actions (31 December 2015 – £352 million).	We discussed the status of significant known actual and potential litigation with in-house legal counsel. We obtained and substantively tested evidence to support the decisions and rationale for provisions held or the decisions not to record provisions, including correspondence with legal counsel. We also monitored and considered external information sources to identify potential legal actions. We developed an independent expectation of the litigation provisions based on product litigation history and other available evidence to challenge the valuation and completeness of the provisions recognised by the Group. We obtained confirmations from external legal counsel to confirm our understanding of settled and outstanding litigation and asserted claims. We evaluated significant adjustments to legal provisions recorded during the year to determine if they were indicative of management bias. As disclosed in Notes 29 and 46 to the Group financial statements, the eventual outcome of legal proceedings is dependent on the outcome of future events and the position taken by the Group is inherently judgemental. We found in the context of the Group financial statements taken as a whole that the judgements made by management were reasonable and the disclosures made in respect of these provisions and contingent liabilities were appropriate.

Report on the Group financial statements continued

Area of focus	How our audit addressed the area of focus
Finance transformation The Group continues to rationalise and simplify its finance processes including the roll-out of an enterprise-wide resource planning system (ERP) and migrations of accounting services to in-house business service centres (BSCs) and to third party business process outsourcing locations (BPOs). In addition, the Group migrated onto new platforms for consolidation and for tracking intercompany inventory transfers and calculating intra-group unrealised profit in inventory in 2016. These changes represent a financial reporting risk while migrations are happening as controls and processes that have been established and embedded over a number of years are updated and migrated into a new environment. There is an increased risk of breakdown in internal financial controls during the transition and an increased risk of inaccurate or incomplete migration of financial data, which would in turn increase risk of material misstatements to the Group financial statements.	We centrally managed the work performed by component audit teams at BPOs and BSCs, which consisted of controls and substantive testing, and we conducted oversight visits to key BSC and BPO sites in Group audit scope (namely India, Malaysia, Romania, the US and the UK) to direct the work performed. We evaluated the design and tested the operating effectiveness of key automated and manual controls both before and after the migration to the centralised processing environment, including IT general controls and controls in respect of data migration between ERP systems. We also substantively tested the accuracy and completeness of data migration into the new ERP along with the controls over this process and we did not note any significant exceptions. Similar procedures were performed for the migrations onto the consolidation and intercompany profit tracking systems. In respect of the latter, because of the significance of the inter-company profit in inventory adjustment we performed detailed testing of the calculation at a component and Group level, supported by validation of key manual controls over this process. We did not note any significant or unresolved exceptions in our testing.
Investigations into the Group's commercial practices **Refer to Notes 3, 29 and 46 in the Group financial statements.** The SEC-DoJ investigation into the Group's commercial practices was concluded in September 2016, resulting in the Group paying a penalty of $20 million. The Group remains subject to an ongoing investigation by the SFO in the UK. At 31 December 2016, the Group concluded that it does not have sufficient clarity on the likely timing of the completion of this investigation nor is it able to make a sufficiently reliable estimate of any fine or penalty that the SFO might impose on the Group on completion of its investigation. As a result, the Group has stated in Note 46 that it is unable to recognise a provision for its estimate of the eventual outcome. In addition, the Group continues to carry out its own investigations in a number markets to ascertain whether inappropriate commercial practices may have taken place. We focused on the following risks, which might have a material impact on the Group's financial statements: – That a fine and penalty might be forthcoming in respect of ongoing investigation into the Group's commercial practices by the SFO, which could give rise to the need for a material provision; and – That inappropriate activities have occurred, which could also give rise to material fines or penalties or result in asset impairment.	We met with the directors, management and in-house legal counsel and spoke with the Group's external advisors to assess the risk of occurrence of inappropriate activities, the status of ongoing investigations and the potential for further fines and penalties. This included understanding and evaluating the Group's internal investigations processes, which assess risks and allegations reported through various channels including whistle-blowing hotlines. We also evaluated the ongoing enhancements and changes that have been made to other control processes and business practices in recent years. Deploying our forensic specialists, we assessed the scope and findings of the investigative work performed by the Group as well as the risk assessment exercise that management has performed into third party interaction and engagement more broadly. We used the output of this assessment to instruct ten component teams (including certain markets not otherwise included in Group audit scope) to undertake risk-focused audit procedures to address the audit risk that the Group financial statements might be materially misstated due to the potential financial implications of alleged illegal acts. In respect of the SEC-DoJ investigation, we verified the settlement agreement and payment. In respect of the SFO investigation, we independently circularised external legal counsel engaged by the Group to obtain its views about the status of the investigation and to ascertain the reasonableness of management's assertions in respect of the likely outcome. Based on these procedures, we were satisfied with the Group's provisioning decisions at 31 December 2016 and with the adequacy of the disclosures given the status of investigations.

Independent Auditors' report continued

Report on the Group financial statements continued

How we tailored the audit scope

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account the geographic structure of the Group, the accounting processes and controls and the industry in which the Group operates.

The Group financial statements are a consolidation of over 500 reporting components. We identified 15 reporting components that, in our view, required an audit of their complete financial information due to their size or risk characteristics. This excludes 13 central adjustment entities audited at a Group level. Specific audit procedures over significant balances and transactions were performed at a further 45 reporting components to give appropriate coverage of all material balances. Where these reporting components are supported by shared financial service centres, these centres were also included in Group audit scope. None of the reporting components not included in our Group audit scope individually contributed more than 2% to consolidated revenue, profit before tax or adjusted profit before tax.

Where the work was performed by component auditors, we determined the level of involvement we needed to have in the audit work at those reporting component units. As a result, 19 overseas components were visited by senior members of the Group audit team, including each of the Group's financially significant components in the US (which are visited at least annually) as well as Belgium, Japan, China, Switzerland, Germany, Ireland and Italy. In addition, we visited four of the overseas shared service centres supporting reporting components in Group audit scope. For those components in Group audit scope where a site visit was not undertaken, our involvement included regular dialogue with our component teams, review of component auditor work papers and participation in certain component audit clearance meetings.

Further specific audit procedures over central functions, the Group consolidation and areas of significant judgement (including taxation, goodwill, intangible assets, treasury, post-retirement benefits and the elimination of unrealised intercompany profit in inventory) were directly led by the Group audit team.

Taken together, the territories and functions where we performed our audit work accounted for 71% of consolidated revenue, 71% of consolidated profit before tax and 73% of adjusted profit before tax. This was before considering the contribution to our audit evidence from performing audit work at the divisional and Group levels, including testing of monitoring controls and disaggregated analytical review procedures, which covers a significant portion of the Group's smaller and lower risk components that were not directly included in our Group audit scope. In addition, we obtained indirect audit evidence over certain out-of-scope components through the procedures we undertook at the Group's shared service centres, encompassing BPOs and BSCs, and over centralised IT infrastructure where these processes are standardised.

Report on the Group financial statements continued

Materiality

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and in evaluating the effect of misstatements, both individually and on the financial statements as a whole.

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

Overall group materiality	£260 million (2015 – £200 million).
How we determined it	4% of profit before tax adding back certain items, including the remeasurement charges for Shionogi-ViiV Healthcare contingent consideration (£2,162 million) and Vaccines contingent consideration (£64 million), the re-measurement charges for the Consumer Healthcare (£1,133 million) and ViiV Healthcare (£567 million) put options, major restructuring costs (£974 million), legal costs (£162 million) and impairment of intangible assets (£22 million) and deducting net income relating to the gain on disposal of assets (£525 million).
Rationale for benchmark applied	The Group's principal measure of earnings comprises core results, which adds back to statutory results a number of items of income and expenditure including those detailed above. Management uses this measure as it believes that it eliminates the volatility inherent in one-off items. We took this measure into account in determining our materiality, except that we did not adjust profit before tax to add back amortisation of intangible assets and certain other smaller non-core items as in our view these are recurring items which do not introduce volatility to the Group's earnings.

We agreed with the Audit & Risk Committee that we would report to it misstatements identified during our audit above £10 million (2015 – £10 million) as well as misstatements below that amount that, in our view, warranted reporting for qualitative reasons.

Going concern

Under the Listing Rules, we are required to review the directors' statement, set out on page 148, in relation to going concern. We have nothing to report having performed our review.

Under ISAs (UK & Ireland), we are also required to report to you if we have anything material to add or to draw attention to in relation to the directors' statement about whether they considered it appropriate to adopt the going concern basis in preparing the Group financial statements. We have nothing material to add or to draw attention to.

As noted in the directors' statement, the directors have concluded that it is appropriate to adopt the going concern basis in preparing the Group financial statements. The going concern basis presumes that the Group has adequate resources to remain in operation, and that the directors intend it to do so, for at least one year from the date the Group financial statements were signed. As part of our audit, we have concluded that the directors' use of the going concern basis is appropriate.

However, because not all future events or conditions can be predicted, these statements are not a guarantee as to the Group's ability to continue as a going concern.

Independent Auditors' report continued

Other required reporting

Consistency of other information and compliance with applicable requirements

Companies Act 2006 reporting

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 addition, in light of the knowledge and understanding of the Group and its environment obtained in the course of the audit, we are required to report if we have identified any material misstatements in the Strategic Report and the Directors' Report. We have nothing to report in this respect.

ISAs (UK & Ireland) reporting

Under ISAs (UK & Ireland), we are required to report to you if, in our opinion:

– information in the Annual Report is: – materially inconsistent with the information in the audited Group financial statements; or – apparently materially incorrect based on, or materially inconsistent with, our knowledge of the Group acquired in the course of performing our audit; or – otherwise misleading.	We have no exceptions to report.
– the statement given by the directors on page 148, in accordance with provision C.1.1 of the UK Corporate Governance Code (the 'Code'), that they consider the Annual Report taken as a whole to be fair, balanced and understandable and provides the information necessary for members to assess the Group's position and performance, business model and strategy is materially inconsistent with our knowledge of the Group acquired in the course of performing our audit.	We have no exceptions to report.
– the section of the Annual Report on page 97, as required by provision C.3.8 of the Code, describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee.	We have no exceptions to report.

The directors' assessment of the prospects of the Group and of the principal risks that would threaten the solvency or liquidity of the Group

Under ISAs (UK & Ireland) we are required to report to you if we have anything material to add or to draw attention to in relation to:

– the directors' confirmation on page 106 of the Annual Report, in accordance with provision C.2.1 of the Code, 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.	We have nothing material to add or to draw attention to.
– the disclosures in the Annual Report that describe those risks and explain how they are being managed or mitigated.	We have nothing material to add or to draw attention to.
– the directors' explanation on page 56 of the Annual Report, in accordance with provision C.2.2 of the Code, 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 have nothing material to add or to draw attention to.

Under the Listing Rules, we are required to review the directors' statement that they have carried out a robust assessment of the principal risks facing the Group and the directors' statement in relation to the longer-term viability of the Group. Our review was substantially less in scope than an audit and only consisted of making enquiries and considering the directors' process supporting their statements; checking that the statements are in alignment with the relevant provisions of the Code; and considering whether the statements are consistent with the knowledge acquired by us in the course of performing our audit. We have nothing to report having performed our review.

Adequacy of information and explanations received

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. We have no exceptions to report arising from this responsibility.

Directors' remuneration

Under the Companies Act 2006, we are required to report to you if, in our opinion, certain disclosures of directors' remuneration specified by law are not made. We have no exceptions to report arising from this responsibility.

Corporate governance statement

Under the Listing Rules, we are required to review the part of the Corporate Governance Statement relating to ten further provisions of the UK Corporate Governance Code. We have nothing to report having performed our review.

Responsibilities for the financial statements and the audit

Our responsibilities and those of the directors

As explained more fully in the directors' statement of responsibilities set out on page 148, the directors are responsible for the preparation of the Group financial statements and for being satisfied that they give a true and fair view.

Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and ISAs (UK & Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

This report, including the opinions, has been prepared for and only for the Company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

What an audit of financial statements involves

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of:

- whether the accounting policies are appropriate to the Group's circumstances and have been consistently applied and adequately disclosed;
- the reasonableness of significant accounting estimates made by the directors; and
- the overall presentation of the financial statements.

We primarily focus our work in these areas by assessing the directors' judgements against available evidence, forming our own judgements, and evaluating the disclosures in the financial statements.

We test and examine information, using sampling and other auditing techniques, to the extent we consider necessary to provide a reasonable basis for us to draw conclusions. We obtain audit evidence through testing the effectiveness of controls, substantive procedures or a combination of both.

In addition, we read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies, we consider the implications for our report. With respect to the Strategic Report and Directors' Report, we consider whether those reports include the disclosures required by applicable legal requirements.

Other matters

We have reported separately on the parent company financial statements of GlaxoSmithKline plc for the year ended 31 December 2016.

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

PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
London

13 March 2017

Notes:

(a) The maintenance and integrity of the GlaxoSmithKline plc website is the responsibility of the directors; the work carried out by the auditors does not involve consideration of these matters and, accordingly, the auditors accept no responsibility for any changes that may have occurred to the financial statements since they were initially presented on the website.

(b) Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Consolidated income statement
for the year ended 31 December 2016

	Notes	2016 £m	2015 £m	2014 £m
Turnover	6	27,889	23,923	23,006
Cost of sales		(9,290)	(8,853)	(7,323)
Gross profit		18,599	15,070	15,683
Selling, general and administration		(9,366)	(9,232)	(8,246)
Research and development		(3,628)	(3,560)	(3,450)
Royalty income		398	329	310
Other operating income/(expense)	7	(3,405)	7,715	(700)
Operating profit	8	**2,598**	**10,322**	**3,597**
Finance income	11	72	104	68
Finance expense	12	(736)	(757)	(727)
Profit on disposal of interest in associates		–	843	–
Share of after tax profits of associates and joint ventures	13	5	14	30
Profit before taxation		**1,939**	**10,526**	**2,968**
Taxation	14	(877)	(2,154)	(137)
Profit after taxation for the year		**1,062**	**8,372**	**2,831**
Profit/(loss) attributable to non-controlling interests		150	(50)	75
Profit attributable to shareholders		912	8,422	2,756
		1,062	**8,372**	**2,831**
Basic earnings per share (pence)	15	**18.8p**	**174.3p**	**57.3p**
Diluted earnings per share (pence)	15	**18.6p**	**172.3p**	**56.7p**

Consolidated statement of comprehensive income
for the year ended 31 December 2016

		2016 £m	2015 £m	2014 £m
Profit for the year		1,062	8,372	2,831
Items that may be subsequently reclassified to income statement:				
Exchange movements on overseas net assets and net investment hedges	34	646	(618)	(497)
Reclassification of exchange on liquidation or disposal of overseas subsidiaries	34	–	–	(219)
Deferred tax on exchange movements		–	–	(2)
Fair value movements on available-for-sale investments		251	416	29
Deferred tax on fair value movements on available-for-sale investments		–	(91)	(78)
Reclassification of fair value movements on available-for-sale investments		(245)	(346)	(155)
Deferred tax reversed on reclassification of available-for-sale investments		51	36	58
Fair value movements on cash flow hedges		2	2	5
Deferred tax on fair value movements on cash flow hedges		2	–	(1)
Reclassification of cash flow hedges to income statement		1	2	(5)
Share of other comprehensive (expense)/income of associates and joint ventures		–	(77)	18
		708	**(676)**	**(847)**
Items that will not be reclassified to income statement:				
Exchange movements on overseas net assets of non-controlling interests		603	8	16
Remeasurement (losses)/gains on defined benefit plans		(475)	261	(1,181)
Tax on remeasurement of defined benefit plans		126	(80)	262
		254	**189**	**(903)**
Other comprehensive income/(expense) for the year	34	**962**	**(487)**	**(1,750)**
Total comprehensive income for the year		**2,024**	**7,885**	**1,081**
Total comprehensive income for the year attributable to:				
Shareholders		1,271	7,927	990
Non-controlling interests		753	(42)	91
Total comprehensive income for the year		**2,024**	**7,885**	**1,081**

Consolidated balance sheet
as at 31 December 2016

	Notes	2016 £m	2015 £m
Non-current assets			
Property, plant and equipment	17	10,808	9,668
Goodwill	18	5,965	5,162
Other intangible assets	19	18,776	16,672
Investments in associates and joint ventures	20	263	207
Other investments	21	985	1,255
Deferred tax assets	14	4,374	2,905
Other non-current assets	22	1,199	990
Total non-current assets		**42,370**	**36,859**
Current assets			
Inventories	23	5,102	4,716
Current tax recoverable	14	226	180
Trade and other receivables	24	6,026	5,615
Derivative financial instruments	42	156	125
Liquid investments	31	89	75
Cash and cash equivalents	25	4,897	5,830
Assets held for sale	26	215	46
Total current assets		**16,711**	**16,587**
Total assets		**59,081**	**53,446**
Current liabilities			
Short-term borrowings	31	(4,129)	(1,308)
Contingent consideration liabilities	39	(561)	(306)
Trade and other payables	27	(11,964)	(8,885)
Derivative financial instruments	42	(194)	(153)
Current tax payable	14	(1,305)	(1,421)
Short-term provisions	29	(848)	(1,344)
Total current liabilities		**(19,001)**	**(13,417)**
Non-current liabilities			
Long-term borrowings	31	(14,661)	(15,324)
Deferred tax liabilities	14	(1,934)	(1,522)
Pensions and other post-employment benefits	28	(4,090)	(3,229)
Other provisions	29	(652)	(420)
Contingent consideration liabilities	39	(5,335)	(3,549)
Other non-current liabilities	30	(8,445)	(7,107)
Total non-current liabilities		**(35,117)**	**(31,151)**
Total liabilities		**(54,118)**	**(44,568)**
Net assets		**4,963**	**8,878**
Equity			
Share capital	33	1,342	1,340
Share premium account	33	2,954	2,831
Retained earnings	34	(5,392)	(1,397)
Other reserves	34	2,220	2,340
Shareholders' equity		**1,124**	**5,114**
Non-controlling interests		**3,839**	**3,764**
Total equity		**4,963**	**8,878**

The financial statements on pages 158 to 231 were approved by the Board on 13 March 2017 and signed on its behalf by

Philip Hampton
Chairman

Consolidated statement of changes in equity
for the year ended 31 December 2016

	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 2014	1,336	2,595	913	2,153	6,997	815	7,812
Profit for the year	–	–	2,756	–	2,756	75	2,831
Other comprehensive (expense)/income for the year	–	–	(1,626)	(140)	(1,766)	16	(1,750)
Total comprehensive income/(expense) for the year	**–**	**–**	**1,130**	**(140)**	**990**	**91**	**1,081**
Distributions to non-controlling interests	–	–	–	–	–	(205)	(205)
Dividends to shareholders	–	–	(3,843)	–	(3,843)	–	(3,843)
Changes in non-controlling interests	–	–	(58)	–	(58)	(28)	(86)
Forward contract relating to non-controlling interest	–	–	–	21	21	–	21
Ordinary Shares issued	3	164	–	–	167	–	167
Ordinary Shares purchased and cancelled or held as Treasury shares	–	–	(238)	–	(238)	–	(238)
Ordinary Shares acquired by ESOP Trusts	–	–	150	(245)	(95)	–	(95)
Write-down of shares held by ESOP Trusts	–	–	(450)	450	–	–	–
Share-based incentive plans	–	–	326	–	326	–	326
Tax on share-based incentive plans	–	–	(4)	–	(4)	–	(4)
At 31 December 2014	1,339	2,759	(2,074)	2,239	4,263	673	4,936
Profit/(loss) for the year	–	–	8,422	–	8,422	(50)	8,372
Other comprehensive (expense)/income for the year	–	–	(520)	25	(495)	8	(487)
Total comprehensive income/(expense) for the year	**–**	**–**	**7,902**	**25**	**7,927**	**(42)**	**7,885**
Distributions to non-controlling interests	–	–	–	–	–	(237)	(237)
Dividends to shareholders	–	–	(3,874)	–	(3,874)	–	(3,874)
Gains on transfer of net assets into Consumer Healthcare Joint Venture	–	–	2,891	–	2,891	–	2,891
Consumer Healthcare Joint Venture put option	–	–	(6,204)	–	(6,204)	–	(6,204)
Changes in non-controlling interests	–	–	–	–	–	3,370	3,370
Loss on transfer of equity investment to investment in associate	–	–	(229)	–	(229)	–	(229)
Ordinary Shares issued	1	72	–	–	73	–	73
Ordinary Shares acquired by ESOP Trusts	–	–	–	(99)	(99)	–	(99)
Write-down of shares held by ESOP Trusts	–	–	(175)	175	–	–	–
Share-based incentive plans	–	–	356	–	356	–	356
Tax on share-based incentive plans	–	–	10	–	10	–	10
At 31 December 2015	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)
De-recognition of liabilities with non-controlling interests	–	–	1,244	–	1,244	–	1,244
Changes in non-controlling interests	–	–	17	–	17	15	32
Ordinary Shares issued	2	87	–	–	89	–	89
Ordinary 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**

Consolidated cash flow statement
for the year ended 31 December 2016

	Notes	2016 £m	2015 £m	2014 £m
Cash flow from operating activities				
Profit after taxation for the year		1,062	8,372	2,831
Adjustments reconciling profit after tax to operating cash flows	36	7,044	(3,741)	3,453
Cash generated from operations		8,106	4,631	6,284
Taxation paid		(1,609)	(2,062)	(1,108)
Net cash inflow from operating activities		**6,497**	**2,569**	**5,176**
Cash flow from investing activities				
Purchase of property, plant and equipment		(1,543)	(1,380)	(1,188)
Proceeds from sale of property, plant and equipment		98	72	39
Purchase of intangible assets		(809)	(521)	(563)
Proceeds from sale of intangible assets		283	236	330
Purchase of equity investments		(96)	(82)	(83)
Proceeds from sale of equity investments		683	357	205
Contingent consideration paid		(73)	(338)	(3)
Purchase of businesses, net of cash acquired	38	17	(3,203)	(101)
Disposal of businesses	38	72	10,246	225
Investments in associates and joint ventures	20	(11)	(16)	(9)
Proceeds from disposal of subsidiary and interest in associate		–	564	1
(Increase)/decrease in liquid investments		–	(2)	1
Interest received		68	99	63
Dividends from associates, joint ventures and equity investments		42	5	5
Net cash (outflow)/inflow from investing activities		**(1,269)**	**6,037**	**(1,078)**
Cash flow from financing activities				
Shares acquired by ESOP Trusts		(74)	(99)	(95)
Issue of share capital	33	89	73	167
Purchase of own shares for cancellation or to be held as Treasury shares		–	–	(238)
Purchase of non-controlling interests		–	–	(679)
Increase in long-term loans		–	–	1,960
Increase in short-term loans		1,067	–	–
Repayment of short-term loans		(919)	(2,412)	(1,709)
Net repayment of obligations under finance leases		(18)	(25)	(23)
Interest paid		(732)	(762)	(707)
Dividends paid to shareholders		(4,850)	(3,874)	(3,843)
Distributions to non-controlling interests		(534)	(237)	(205)
Other financing cash flows		(421)	233	(13)
Net cash outflow from financing activities		**(6,392)**	**(7,103)**	**(5,385)**
(Decrease)/increase in cash and bank overdrafts	37	**(1,164)**	**1,503**	**(1,287)**
Cash and bank overdrafts at beginning of year		5,486	4,028	5,231
Exchange adjustments		283	(45)	84
(Decrease)/increase in cash and bank overdrafts		(1,164)	1,503	(1,287)
Cash and bank overdrafts at end of year		**4,605**	**5,486**	**4,028**
Cash and bank overdrafts at end of year comprise:				
Cash and cash equivalents*		4,897	5,830	4,719
Overdrafts*		(292)	(344)	(691)
		4,605	**5,486**	**4,028**

* Comparative figures for 2014 have been restated, see page 162 for further details.

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 including vaccines, over-the-counter (OTC) medicines and health-related consumer products. GSK's principal pharmaceutical products include medicines in the following therapeutic areas: respiratory, anti-virals, central nervous system, cardiovascular and urogenital, metabolic, anti-bacterials, dermatology, rare diseases, immuno-inflammation, vaccines and HIV.

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 Accounting Standards (IAS) 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 subsidiary and associated undertakings which, in the opinion of the Directors, principally affected the amount of profit or the net assets of the Group is given in Note 45, 'Principal Group companies'.

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 new accounting standards
Following an agenda decision by the IFRS Interpretations Committee regarding offsetting and cash pooling arrangements, the Group has revised its disclosure of its cash pooling arrangements. There is no change to the results or cash flows for the year to 31 December 2015 and there was no impact on the balance sheet at 31 December 2015. The impact at 1 January 2015 was to increase both cash and cash equivalents and short-term borrowings by £381 million.

The amendment to IFRS 11 'Joint arrangements' has been implemented from 1 January 2016. This revision has not had a material impact on the results or financial position of the Group.

Financial period
These financial statements cover the financial year from 1 January to 31 December 2016, with comparative figures for the financial years from 1 January to 31 December 2015 and, where appropriate, from 1 January to 31 December 2014.

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 235 and the accounting policies are given on page 236.

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.

2. Accounting principles and policies continued

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.

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.

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. 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.

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

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. Pharmaceutical turnover includes co-promotion revenue of £9 million (2015 – £14 million; 2014 – £22 million). 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. Milestone income of £nil is included in turnover (2015 – £nil; 2014 – £57 million).

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

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.

Notes to the financial statements continued

2. Accounting principles and policies continued

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.

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.

2. Accounting principles and policies continued

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

Licences, patents, know-how and marketing rights separately acquired or acquired as part of a business combination are amortised over their estimated useful lives, generally not exceeding 20 years, using the straight-line basis, from the time they are available for use. The estimated useful lives for determining the amortisation charge take into account patent lives, where applicable, as well as the value obtained from periods of non-exclusivity. Asset lives are reviewed, and where appropriate adjusted, annually. Contingent milestone payments are recognised at the point that the contingent event becomes probable. Any development costs incurred by the Group and associated with acquired licences, patents, know-how or marketing rights are written off to the income statement when incurred, unless the criteria for recognition of an internally generated intangible asset are met, usually when a regulatory filing has been made in a major market and approval is considered highly probable.

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

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

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

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

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

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.

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.

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.

Notes to the financial statements continued

2. Accounting principles and policies continued

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

Deferred tax is provided in full, 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.

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.

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.

3. Key accounting judgements and estimates

In preparing the financial statements, management is required to make 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 key accounting judgements and estimates made.

Turnover
Group turnover for 2016 was £27,889 million (2015 – £23,923 million).

Revenue is recognised when 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.

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.

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 £877 million (2015 – £2,154 million). At December 2016, current tax payable was £1,305 million (2015 – £1,421 million), current tax recoverable was £226 million (2015 – £180 million), deferred tax liabilities were £1,934 million (2015 – £1,522 million) and deferred tax assets were £4,374 million (2015 – £2,905 million).

Current tax is provided at the amounts expected to be paid, and deferred tax is provided on temporary differences between the tax bases of assets and liabilities and their carrying amounts, at the rates that have been enacted or substantively enacted by the balance sheet date.

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, based on management's assumptions relating to the amounts and timing of future taxable profits. Factors affecting the tax charge in future years are set out in Note 14, 'Taxation'. A 1% change in the Group's effective tax rate in 2016 would have changed the total tax charge for the year by approximately £19 million.

The Group has open tax issues with a number of revenue authorities. Where an outflow of funds is believed to be probable and a reliable estimate of the outcome of the dispute can be made, management provides for its best estimate of the liability. In calculating 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, are inherently judgemental and could change substantially over time as new facts emerge and each dispute progresses.

3. Key accounting judgements and estimates continued

GSK continues to believe that it has made adequate provision for the liabilities likely to arise from open assessments. At 31 December 2016, the group had recognised provisions of £1,892 million in respect of uncertain tax positions (2015 – £1,687 million) 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 £162 million (2015 – £221 million). At 31 December 2016 provisions for legal and other disputes amounted to £344 million (2015 – £352 million).

The Group provides for anticipated settlement costs where an outflow of resources is considered probable and a reliable estimate may be made of the likely outcome of the dispute and legal and other expenses arising from claims against the Group. 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 new facts emerge and each dispute progresses. Details of the status and various uncertainties involved in the significant unresolved disputes are set out in Note 46, '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 will result from ultimate resolution of the proceedings. In these cases, appropriate disclosure about such cases would be included, 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.

Goodwill and other intangible asset impairments

At 31 December 2016, goodwill was £5,965 million (2015 – £5,162 million) and other intangible assets were £18,776 million (2015 – £16,672 million).

Goodwill is deemed to have an indefinite life and so is not amortised. Annual impairment tests of the cash generating units to which goodwill is allocated are performed. Impairment tests are based on established market multiples or risk-adjusted future cash flows discounted using appropriate discount rates. The assumptions used in these impairment tests are set out in Note 18, 'Goodwill'.

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 the related goodwill.

Impairment tests on other intangible assets are undertaken if events occur which call into question the carrying values of the assets. Where brands and other intangible assets which are not yet available for use are not amortised, they are subject to annual impairment tests. Valuations for impairment tests are based on established market multiples or risk-adjusted future cash flows over the estimated useful life of the asset, where limited, discounted using appropriate discount rates as set out in Note 19, 'Other intangible assets'.

The assumptions relating to future cash flows, estimated useful lives and discount rates are based on business forecasts and are therefore inherently judgemental. Future events could cause the assumptions used in these impairment tests to change with a consequent adverse effect on the future results of the Group.

Contingent consideration and put option liabilities

The 2016 income statement charge for contingent consideration and put option liabilities was £3,991 million (2015 – £2,069 million).

At 31 December 2016, the liability for contingent consideration amounted to £5,896 million (2015 – £3,855 million). Of this amount, £5,304 million (2015 – £3,409 million) relates to the acquisition of the former Shionogi-ViiV Healthcare joint venture in 2012 and £545 million (2015 – £405 million) relates to the acquisition of the Vaccines business from Novartis in 2015.

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'.

During 2015, the Group granted a put option to Novartis in respect of Novartis' shareholding in the Consumer Healthcare Joint Venture. In certain circumstances, Novartis has the right to require GSK to acquire its 36.5% shareholding in the Consumer Healthcare Joint Venture at a market-based valuation. This right is exercisable in certain windows from 2018 to 2035 and may be exercised either in respect of Novartis' entire shareholding or in up to four instalments. GSK has recognised a financial liability of £7,420 million in Other non-current liabilities at 31 December 2016 (2015 – £6,287 million). This represents the present value of the estimated redemption value by GSK in the event of full exercise of the right by Novartis and is calculated by applying relevant public company multiples, with no premium or discount, to forecast future profits in accordance with the shareholder agreements. Sensitivity analysis is given in Note 30, 'Other non-current liabilities'.

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. A liability for the put option was recognised on the Group's balance sheet during 2016 at an initial value of £1,070 million. GSK also recognised liabilities for the future preferential dividends anticipated to become payable to Pfizer and Shionogi on the Group's balance sheet during 2016. The liability for the Pfizer put option of £1,319 million at 31 December 2016 was recognised in Trade and other payables. Sensitivity analysis is also given in Note 27 'Trade and other payables'.

Shionogi also held a put option over its shareholding in ViiV Healthcare and during 2016, GSK recognised the liability for the put option on the Group's balance sheet at an initial value of £926 million. In Q4 2016, Shionogi irrevocably agreed to waive its put option and as a result GSK de-recognised the liability for this put option on the Group's balance sheet directly to equity. The value of the liability was £1,244 million when it was de-recognised. See 'Non-controlling interests in ViiV Healthcare' on page 58 for full details on these put options.

The assumptions relating to future cash flows and discount rates are based on business forecasts and are therefore inherently judgemental. Future events could cause the assumptions underlying these projections or the market-based multiples, which are used to value the liabilities for contingent consideration and the put options, to change with a consequent adverse effect on the future results of the Group.

Notes to the financial statements continued

3. Key accounting judgements and estimates continued

Pensions and other post-employment benefits

The costs of providing pensions and other post-employment benefits are charged to the income statement in accordance with IAS 19 'Employee benefits' over the period during which benefit is derived from the employees' services. The costs 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'. 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.

The expected long-term rates of return on bonds are determined based on the portfolio mix of index-linked, government and corporate bonds. An equity risk premium is added to this for equities.

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 £769 million and an increase in the annual pension cost of approximately £27 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 15 'Revenue from contracts with customers' was issued in May 2014 and will be implemented by the Group from 1 January 2018. The Standard 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.

The Group is currently assessing the new IFRS and does not expect to be able to quantify the impact of any potential changes until later in 2017.

IFRS 9 'Financial instruments' was issued in its final form in July 2014 and will be implemented by the Group from 1 January 2018. The Standard will replace the majority of IAS 39 and covers the classification, measurement and de recognition of financial assets and financial liabilities, impairment of financial assets and provides a new hedge accounting model.

The Group is currently assessing the new IFRS and does not expect to be able to quantify the impact of any potential changes until later in 2017.

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.

The Group is in the early stages of assessing the potential impact of the new IFRS.

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 as follows:

	2016	2015	2014
Average rates:			
US$/£	1.36	1.53	1.65
Euro/£	1.23	1.37	1.24
Yen/£	149	185	175
Period end rates:			
US$/£	1.24	1.47	1.56
Euro/£	1.17	1.36	1.29
Yen/£	144	177	187

6. 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). The completion of the Novartis transaction on 2 March 2015 changed the balance of the Group and GSK changed its segment reporting to reflect this. With effect from 1 January 2016, GSK has reported results under four segments: Pharmaceuticals, which now includes HIV, Pharmaceuticals R&D, Vaccines and Consumer Healthcare and individual members of the CET are responsible for each segment. Comparative information has been restated accordingly.

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.

The Pharmaceuticals R&D segment is the responsibility of the President, Pharmaceuticals R&D and is reported as a separate segment.

Corporate and other unallocated turnover and costs included the results of several Vaccines and Consumer Healthcare products which were held for sale in a number of markets in order to meet anti-trust approval requirements in 2014 and 2015, together with the costs of corporate functions.

Turnover by segment	2016 £m	2015 (restated) £m	2014 (restated) £m
Pharmaceuticals	16,104	14,157	15,438
Vaccines	4,592	3,656	3,159
Consumer Healthcare	7,193	6,038	4,322
Segment turnover	27,889	23,851	22,919
Corporate and other unallocated turnover	–	72	87
	27,889	23,923	23,006

Pharmaceuticals turnover by therapeutic area	2016 £m	2015 (restated) £m	2014 (restated) £m
Respiratory	6,510	5,741	6,168
Cardiovascular, metabolic and urology	860	858	965
Immuno-inflammation	340	263	214
Other pharmaceuticals	2,297	2,445	3,582
Established Products	2,541	2,528	3,011
HIV	3,556	2,322	1,498
	16,104	14,157	15,438

During 2016, the US operations of the Pharmaceuticals and Vaccines businesses made sales to three wholesalers of approximately £2,139 million (2015 – £1,574 million; 2014 – £1,478 million), £2,691 million (2015 – £2,471 million; 2014 – £2,315 million) and £2,129 million (2015 – £1,602 million; 2014 – £1,627 million) respectively, after allocating final-customer discounts to the wholesalers.

Consumer Healthcare turnover by category	2016 £m	2015 (restated) £m	2014 (restated) £m
Wellness	3,726	2,970	1,565
Oral care	2,223	1,875	1,806
Nutrition	674	684	633
Skin health	570	509	318
	7,193	6,038	4,322

Notes to the financial statements continued

6. Segment information continued

Segment profit	2016 £m	2015 (restated) £m	2014 (restated) £m
Pharmaceuticals	7,979	6,466	7,405
Pharmaceuticals R&D	(2,488)	(2,168)	(2,326)
Pharmaceuticals, including R&D	5,491	4,298	5,079
Vaccines	1,454	964	997
Consumer Healthcare	1,116	684	496
Segment profit	8,061	5,946	6,572
Corporate and other unallocated costs	(290)	(217)	22
Other reconciling items between segment profit and operating profit	(5,173)	4,593	(2,997)
Operating profit	2,598	10,322	3,597
Finance income	72	104	68
Finance costs	(736)	(757)	(727)
Profit on disposal of interest in associates	–	843	–
Share of after tax profits of associates and joint ventures	5	14	30
Profit before taxation	1,939	10,526	2,968
Taxation	(877)	(2,154)	(137)
Profit after taxation for the year	1,062	8,372	2,831

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 charges, legal charges and expenses on the settlement of litigation and government investigations, disposals of businesses, products and associates and certain other items related to major acquisition and disposal activity.

Depreciation and amortisation by segment	2016 £m	2015 (restated) £m	2014 (restated) £m
Pharmaceuticals	440	303	302
Pharmaceuticals R&D	211	238	161
Pharmaceuticals, including R&D	651	541	463
Vaccines	315	253	224
Consumer Healthcare	126	140	105
Segment depreciation and amortisation	1,092	934	792
Corporate and other unallocated depreciation and amortisation	94	145	112
Other reconciling items between segment depreciation and amortisation and total depreciation and amortisation	588	551	580
Total depreciation and amortisation	1,774	1,630	1,484

6. Segment information continued

PP&E, intangible asset and goodwill impairment by segment	2016 £m	2015 (restated) £m	2014 (restated) £m
Pharmaceuticals	29	57	54
Pharmaceuticals R&D	88	105	24
Pharmaceuticals, including R&D	117	162	78
Vaccines	34	17	1
Consumer Healthcare	46	5	16
Segment impairment	197	184	95
Corporate and other unallocated impairment	24	18	3
Other reconciling items between segment impairment and total impairment	68	385	153
Total impairment	289	587	251

PP&E and intangible asset impairment reversals by segment	2016 £m	2015 (restated) £m	2014 (restated) £m
Pharmaceuticals	(15)	(8)	(39)
Pharmaceuticals R&D	(10)	(10)	(23)
Pharmaceuticals, including R&D	(25)	(18)	(62)
Vaccines	(19)	–	–
Consumer Healthcare	(8)	(4)	(14)
Segment impairment reversals	(52)	(22)	(76)
Corporate and other unallocated impairment reversals	(26)	(2)	–
Other reconciling items between segment impairment reversal and total impairment reversal	(9)	–	–
Total impairment reversals	(87)	(24)	(76)

Net assets by segment	2016 £m	2015 (restated) £m
Pharmaceuticals	3,225	5,721
Pharmaceuticals R&D	572	615
Pharmaceuticals, including R&D	3,797	6,336
Vaccines	9,676	8,884
Consumer Healthcare	3,721	4,154
Segment net operating assets	17,194	19,374
Corporate and other unallocated net operating assets	(228)	(136)
Net operating assets	16,966	19,238
Net debt	(13,804)	(10,727)
Investments in associates and joint ventures	263	207
Derivative financial instruments	(38)	(28)
Current and deferred taxation	1,361	142
Assets held for sale	215	46
Net assets	4,963	8,878

The Pharmaceuticals segment includes the Shionogi-ViiV Healthcare contingent consideration liability of £5,304 million (2015 – £3,409 million) and the Pfizer put option of £1,319 million (2015 – £nil). The Consumer Healthcare segment includes the put option liability of £7,420 million (2015 – £6,287 million).

Notes to the financial statements continued

6. Segment information continued

Geographical information

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

Turnover by location of customer	2016 £m	2015 (restated) £m	2014 £m
UK	1,056	1,102	1,100
US	10,197	8,222	7,409
International	16,636	14,599	14,497
External turnover	27,889	23,923	23,006

Turnover by location of subsidiary	2016 £m	2015 £m	2014 £m
UK	3,519	3,146	3,518
US	16,105	13,273	10,768
International	19,805	17,385	17,227
Turnover including inter-segment turnover	39,429	33,804	31,513
UK	2,018	1,751	1,994
US	5,990	4,934	3,432
International	3,532	3,196	3,081
Inter-segment turnover	11,540	9,881	8,507
UK	1,501	1,395	1,524
US	10,115	8,339	7,336
International	16,273	14,189	14,146
External turnover	27,889	23,923	23,006

Operating profit by location of subsidiary	2016 £m	2015 £m	2014 £m
UK	1,561	8,243	414
US	2,343	4,307	1,375
International	(1,306)	(2,228)	1,808
Total operating profit	2,598	10,322	3,597

Non-current assets by location of subsidiary	2016 £m	2015 £m
UK	7,060	6,967
US	7,802	7,524
International	21,234	17,474
Non-current assets	36,096	31,965

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)

	2016 £m	2015 £m	2014 £m
Impairment of equity investments	(47)	(263)	(25)
Disposal of equity investments	254	342	155
Disposal of businesses and assets	283	9,661	244
Fair value remeasurements on contingent consideration recognised in business combinations	(2,205)	(1,965)	(770)
Remeasurement of ViiV Healthcare put option liabilities and preferential dividends	(577)	–	–
Remeasurement of Consumer Healthcare put option liability	(1,133)	(83)	–
Fair value adjustments on derivative financial instruments	(3)	2	(313)
Other income/(expense)	23	21	9
	(3,405)	7,715	(700)

Disposal of businesses and assets in 2016 included milestone income of £152 million in relation to the divestment of ofatumumab and a number of other smaller divestments and in 2015 included the disposal of the Oncology business to Novartis for £9,228 million and an initial £200 million for the divestment of ofatumumab. Fair value remeasurements on contingent consideration recognised in business combinations comprised £2,162 million related to the acquisition of the former Shionogi-ViiV Healthcare joint venture and £152 million related to the contingent consideration, payable to Novartis related to the Vaccines acquisition, partially offset by hedging gains and other smaller items.

Fair value adjustments on derivative financial instruments arise from foreign exchange forward contracts and options taken out to hedge against foreign currency movements when sales and purchases are denominated in foreign currencies (see Note 42, 'Financial instruments and related disclosures'). In 2014 this included an unrealised loss of £299 million arising from a number of forward exchange contracts entered into following announcement of the proposed Novartis transaction to protect the Sterling value of the net US Dollar proceeds due to the Group on completion of the transaction.

8. Operating profit

The following items have been included in operating profit:	2016 £m	2015 £m	2014 £m
Employee costs (Note 9)	8,212	8,030	7,520
Advertising	1,265	1,059	671
Distribution costs	395	376	325
Depreciation of property, plant and equipment	978	892	780
Impairment of property, plant and equipment, net of reversals	180	346	18
Amortisation of intangible assets	796	738	704
Impairment of intangible assets, net of reversals	22	217	157
Net foreign exchange losses/(gains)	53	47	(18)
Inventories:			
Cost of inventories included in cost of sales	8,093	7,602	6,334
Write-down of inventories	533	488	389
Reversal of prior year write-down of inventories	(145)	(65)	(169)
Operating lease rentals:			
Minimum lease payments	91	101	133
Contingent rents	4	8	8
Sub-lease payments	4	7	5
Fees payable to the company's auditor and its associates in relation to the Group (see below)	29.7	33.1	33.7

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

Included within operating profit are major restructuring charges of £970 million (2015 – £1,891 million; 2014 – £750 million), see Note 10, 'Major restructuring costs'.

Notes to the financial statements continued

8. Operating profit continued

Fees payable to the company's auditor and its associates:	2016 £m	2015 (restated) £m	2014 £m
Audit of parent company and consolidated financial statements	5.8	7.5	4.9
Audit of the company's subsidiaries	16.4	16.3	11.2
Attestation under s.404 of Sarbanes-Oxley Act 2002	4.4	4.3	4.0
Audit and audit-related services	26.6	28.1	20.1
Taxation compliance	0.2	0.3	0.6
Taxation advice	1.8	3.2	4.5
Other assurance services	0.3	1.1	8.0
All other services	0.8	0.4	0.5
	29.7	33.1	33.7

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 2016.

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

	2016 £m	2015 £m	2014 £m
Audit	0.4	0.3	0.3
Other services	–	–	–

9. Employee costs

	2016 £m	2015 £m	2014 £m
Wages and salaries	6,391	6,132	5,879
Social security costs	733	633	639
Pension and other post-employment costs, including augmentations (Note 28)	541	467	403
Cost of share-based incentive plans	338	349	346
Severance and other costs from integration and restructuring activities	209	449	253
	8,212	8,030	7,520

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:

	2016 £m	2015 £m	2014 £m
Share Value Plan	271	307	302
Performance Share Plan	39	26	20
Share option plans	4	4	3
Other plans	24	12	21
	338	349	346

9. Employee costs continued

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

	2016 Number	2015 Number	2014 Number
Manufacturing	38,611	37,025	31,726
Selling, general and administration	49,961	52,121	54,618
Research and development	11,255	12,046	12,358
	99,827	101,192	98,702

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 246. The monthly average number of persons employed by GlaxoSmithKline plc in 2016 was nil (2015 – nil).

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

	2016 £m	2015 £m	2014 £m
Wages and salaries	25	23	19
Social security costs	4	2	3
Pension and other post-employment costs	2	3	3
Cost of share-based incentive plans	15	18	13
	46	46	38

10. Major restructuring costs

Major restructuring costs charged in arriving at operating profit include restructuring costs arising under the Major Change programme initiated in 2013, under the Pharmaceuticals Restructuring Programme announced in October 2014 and following the Novartis transaction, completed in 2015.

Under the combined programme the total restructuring costs of £970 million in 2016 were incurred in the following areas:

- Restructuring of the R&D organisation, predominantly in the United Kingdom, North America and Japan.
- Projects to simplify or eliminate processes leading to staff reductions in support functions.
- Restructuring of the Pharmaceuticals business in Emerging Markets and Europe leading to staff reductions in sales force and administration.
- Transformation of the Manufacturing and Vaccines businesses to deliver a step change in quality, cost and productivity.
- The continued integration of the enhanced Vaccines business and the Consumer Healthcare Joint Venture.

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

	2016 £m	2015 £m	2014 £m
Increase in provision for major restructuring programmes (see Note 29)	163	718	267
Amount of provision reversed unused (see Note 29)	(140)	(44)	(4)
Impairment losses recognised	158	419	–
Other non-cash charges	108	51	15
Other cash costs	681	747	472
	970	1,891	750

Provision reversals of £140 million (2015 – £44 million; 2014 – £4 million) reflect release of legacy support function and Novartis integration provisions. Asset impairments of £158 million (2015 – £419 million; 2014 – £nil) and other non-cash charges totalling £108 million (2015 – £51 million; 2014 – £15 million) are non-cash items, principally 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 programme. All other charges have been or will be settled in cash and include the termination of leases, site closure costs, consultancy and project management fees.

Notes to the financial statements continued

11. Finance income

	2016 £m	2015 £m	2014 £m
Interest income arising from:			
cash and cash equivalents	67	71	56
available-for-sale investments	1	1	1
derivatives at fair value through profit or loss	–	24	–
loans and receivables	2	3	9
Fair value adjustments on derivatives at fair value through profit or loss	2	5	2
	72	104	68

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 under IAS 39.

12. Finance expense

	2016 £m	2015 £m	2014 £m
Interest expense arising on:			
financial liabilities at amortised cost	(671)	(655)	(665)
derivatives at fair value through profit or loss	(30)	(64)	(23)
Fair value hedges:			
fair value movements on derivatives designated as hedging instruments	–	–	10
fair value adjustments on hedged items	–	–	(5)
Fair value movements on other derivatives at fair value through profit or loss	(3)	(6)	(15)
Reclassification of cash flow hedge from other comprehensive income	(1)	(2)	–
Unwinding of discounts on provisions	(16)	(16)	(15)
Other finance expense	(15)	(14)	(14)
	(736)	(757)	(727)

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 under IAS 39. Interest expense arising on derivatives at fair value through profit or loss relates to swap interest expense.

13. Associates and joint ventures

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

	2016 £m	2015 £m	2014 £m
Share of after tax profits of associates	9	16	38
Share of after tax losses of joint ventures	(4)	(2)	(8)
	5	14	30

At 31 December 2016, 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 2016 share of after tax profits of associates and other comprehensive income includes a profit of £6 million and other comprehensive income of £nil in respect of Innoviva.

	2016 £m	Since 1 September 2015 £m
Turnover	98	20
Profit after taxation	44	4
Comprehensive income	–	–
Total comprehensive income	44	4

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

In March 2015, the Group divested half of its shareholding in Aspen Pharmacare Holdings Limited and ceased to account for the remaining investment as an associate. In 2014, Aspen was the Group's only significant associate. Summarised income statement information in respect of Aspen is set out below for the periods in which the Group accounted for its investment in Aspen as an associate.

	2016 £m	To 20 March 2015 £m	2014 £m
Turnover	–	441	1,823
Profit after taxation	–	67	313
Comprehensive income	–	16	148
Total comprehensive income	–	83	461

The results of Aspen included in the summarised income statement information above represent the estimated earnings of the Aspen group in the relevant periods, adjusted for transactions between GSK and Aspen.

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

	2016 £m	2015 £m	2014 £m
Share of turnover	133	188	187
Share of after tax (losses)/profits	(1)	12	(9)
Share of other comprehensive income	–	25	–
Share of total comprehensive income/(expense)	(1)	37	(9)

The Group's sales to associates and joint ventures were £43 million in 2016 (2015 – £41 million; 2014 – £85 million).

Notes to the financial statements continued

14. Taxation

Taxation charge based on profits for the year	2016 £m	2015 £m	2014 £m
UK current year charge	241	156	221
Rest of World current year charge	1,326	2,924	1,092
Credit in respect of prior periods	(149)	(508)	(571)
Total current taxation	1,418	2,572	742
Total deferred taxation	(541)	(418)	(605)
	877	2,154	137

In 2016, GSK made payments of £146 million in UK corporation tax to HMRC. In January 2017, GSK made further payments of £71 million in relation to UK corporation tax. These amounts are for corporation tax only, and do not include the various other business taxes borne by GSK each year.

A significant component of the deferred tax credit for each of 2016 and the prior periods arose in respect of the remeasurement of the contingent consideration in relation to the former Shionogi-ViiV Healthcare joint venture. In 2015, the credit also included the unwind of deferred tax liabilities on the disposal of the Group's Oncology business to Novartis.

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	2016 £m	2016 %	2015 £m	2015 %	2014 £m	2014 %
Profit before tax	1,939		10,526		2,968	
UK statutory rate of taxation	388	20.0	2,131	20.25	638	21.5
Differences in overseas taxation rates	593	30.6	1,035	9.8	406	13.7
Benefit of intellectual property incentives	(321)	(16.5)	(286)	(2.7)	(323)	(10.9)
R&D credits	(93)	(4.8)	(38)	(0.4)	(72)	(2.4)
Remeasurement of non-taxable put option liabilities	340	17.5	17	0.2	–	–
Losses not recognised/(previously unrecognised losses)	(15)	(0.8)	31	0.3	(205)	(6.9)
Permanent differences on disposals and acquisitions	(21)	(1.1)	(248)	(2.4)	23	0.8
Other permanent differences	97	5.0	58	0.6	268	9.0
Re-assessments of prior year estimates in respect of current and deferred taxes	(116)	(6.0)	(578)	(5.5)	(617)	(20.8)
Tax on unremitted earnings	25	1.3	32	0.3	19	0.6
Tax charge/tax rate	877	45.2	2,154	20.5	137	4.6

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 2016 were the US, France and India. This was partly offset by the increased benefit of intellectual property incentives from 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 also incurred material non-deductible charges following the revaluation of liabilities for the ViiV Healthcare and Consumer Healthcare Joint Venture put options. The impact of higher overseas tax rates was reduced in 2015 by permanent differences arising on disposals.

The Group's overall effective tax rate for 2016 of 45.2% was influenced by significant transaction-related remeasurement charges arising on the ViiV Healthcare contingent consideration liability and the Consumer Healthcare Joint Venture and ViiV Healthcare put option liabilities. The remeasurement of these liabilities gave rise to a charge to profit before tax in 2016 of £3,862 million with a related tax credit of £396 million (10.3%). Excluding these items, the effective tax rate for the year would have been 21.9%. Further details on the Consumer Healthcare Joint Venture put option are set out in Note 30, 'Other non-current liabilities' and on the ViiV Healthcare arrangements on page 58.

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

Tax on items charged to equity and statement of comprehensive income	2016 £m	2015 £m	2014 £m
Current taxation			
Share-based payments	7	22	55
Defined benefit plans	32	30	–
	39	52	55
Deferred taxation			
Share-based payments	–	(12)	(59)
Defined benefit plans	94	(110)	262
Exchange movements	–	–	(2)
Fair value movements on cash flow hedges	2	–	(1)
Fair value movements on available-for-sale investments	51	(55)	(20)
	147	(177)	180
Total credit/(charge) to equity and statement of comprehensive income	186	(125)	235

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

14. Taxation continued

Issues relating to taxation

The Group's tax charge is the sum of the total current and deferred tax expense. The calculation of the Group's total tax charge 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 2016 the Group held provisions of £1,892 million in respect of such uncertain tax positions (2015 - £1,687 million). The increase in recognised provisions during 2016 was primarily driven by the foreign exchange impact of revaluing overseas exposures. While 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.

The integrated nature of the Group's worldwide operations involves significant investment in research and strategic manufacturing at a limited number of locations, with consequential cross-border supply routes into numerous end-markets. GSK's biggest risk with respect to taxation is that, despite our adherence to the OECD's established 'arm's length principle', different tax authorities will seek to attribute further profit to activities being undertaken in their jurisdiction, potentially resulting in double taxation. 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 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. The Group does not consider there to be any major sources of estimation uncertainty at the end of the reporting period that have a significant risk of resulting in a material adjustment to the carrying amounts of tax-related assets and liabilities within the next financial year.

There continues to be a significant international focus on tax reform, including the OECD's BEPS project and European Commission initiatives, including the increased use of fiscal state aid investigations. Together with domestic initiatives around the world these may result in significant changes to established tax principles and an increase in tax authority disputes. In turn, this could adversely affect our effective tax rate or result in higher cash tax liabilities.

The aggregate amount of unremitted profits at the balance sheet date was approximately £18 billion (2015 – £16 billion). The majority of these unremitted profits would not be subject to tax on repatriation as UK legislation relating to company distributions provides for exemption from tax for most overseas profits, subject to certain exceptions. Provision for deferred tax liabilities of £205 million (2015 – £180 million) has been made in respect of withholding tax that would arise on the distribution of profits by certain overseas subsidiaries. The remainder of unremitted profits on which deferred tax has not been provided was £1.7 billion at 31 December 2016 (2015 – £1.5 billion). Deferred tax on distribution of these remaining profits has not been provided on the grounds that the Group is able to control the timing of the reversal of the remaining temporary differences and it is probable that they will not reverse in the foreseeable future.

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
Asset/liability at 1 January 2016	(346)	(2,234)	790	825	989	97	92	1,170	1,383
Exchange adjustments	(47)	(153)	–	168	164	13	14	87	246
Credit to income statement	16	63	348	61	15	117	4	40	664
Credit to statement of comprehensive income	–	–	–	–	94	–	–	53	147
Asset/liability at 31 December 2016	(377)	(2,324)	1,138	1,054	1,262	227	110	1,350	2,440

The deferred tax credit to the income statement of £664 million includes £123 million of 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 stock 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 stock is sold externally.

The deferred tax asset recognised on tax losses comprises a £173 million (2015 – £97 million) asset related to trading losses and a £54 million (2015 – £nil) asset related to capital losses. Other net temporary differences include accrued expenses for which a tax deduction is only available on a paid basis.

After offsetting deferred tax assets and liabilities where appropriate within territories, the net deferred tax asset comprises:

	2016 £m	2015 £m
Deferred tax assets	4,374	2,905
Deferred tax liabilities	(1,934)	(1,522)
	2,440	1,383

Notes to the financial statements continued

14. Taxation continued

Unrecognised tax losses	2016 Tax losses £m	2016 Unrecognised deferred tax asset £m	2015 (restated) Tax losses £m	2015 (restated) Unrecognised deferred tax asset £m
Trading losses expiring:				
Within 10 years	786	255	414	102
More than 10 years	842	131	1,206	280
Available indefinitely	95	15	58	15
At 31 December	1,723	401	1,678	397
Capital losses	2,320	396	2,771	472
At 31 December	2,320	396	2,771	472

Deferred tax assets are recognised where it is probable that future taxable profit will be available to utilise losses. The amount of unrecognised trading losses for 2015 has been revised following a reassessment of available losses for which deferred tax was not recognised.

15. Earnings per share

	2016 pence	2015 pence	2014 pence
Basic earnings per share	18.8	174.3	57.3
Diluted earnings per share	18.6	172.3	56.7

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	2016 millions	2015 millions	2014 millions
Basic	4,860	4,831	4,808
Dilution for share options and awards	49	57	57
Diluted	4,909	4,888	4,865

16. Dividends

	2016			2015			2014	
	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	14 July 2016	19	923	9 July 2015	19	920	10 July 2014	19	916
Second interim	13 October 2016	19	925	1 October 2015	19	919	2 October 2014	19	918
Third interim	12 January 2017	19	925	14 January 2016	19	919	8 January 2015	19	924
Fourth interim	13 April 2017	23	1,119	14 April 2016	23	1,114	9 April 2015	23	1,111
Total		80	3,892		80	3,872		80	3,869
Special dividend				14 April 2016	20	969			

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 2016 financial statements recognise those dividends paid in 2016, namely the third and fourth interim dividends for 2015, the special dividend declared in 2015 and the first and second interim dividends for 2016.

The amounts recognised in each year are as follows:

	2016 £m	2015 £m	2014 £m
Dividends to shareholders	4,850	3,874	3,843

17. Property, plant and equipment

	Land and buildings £m	Plant, equipment and vehicles £m	Assets in construction £m	Total £m
Cost at 1 January 2015	6,804	10,170	2,381	19,355
Exchange adjustments	(48)	(92)	(42)	(182)
Additions through business combinations	310	285	103	698
Other additions	95	242	1,099	1,436
Capitalised borrowing costs	–	–	19	19
Disposals and write-offs	(74)	(340)	(15)	(429)
Reclassifications	228	557	(875)	(90)
Transfer to assets held for sale	(10)	(47)	–	(57)
Cost at 31 December 2015	7,305	10,775	2,670	20,750
Exchange adjustments	956	1,100	271	2,327
Other additions	117	384	1,043	1,544
Capitalised borrowing costs	–	–	30	30
Disposals and write-offs	(349)	(1,422)	(53)	(1,824)
Reclassifications	110	512	(761)	(139)
Transfer to assets held for sale	(378)	(114)	(32)	(524)
Cost at 31 December 2016	7,761	11,235	3,168	22,164
Depreciation at 1 January 2015	(2,681)	(7,151)	–	(9,832)
Exchange adjustments	16	41	–	57
Charge for the year	(291)	(601)	–	(892)
Disposals and write-offs	54	275	–	329
Transfer (from)/to assets held for sale	(12)	21	–	9
Depreciation at 31 December 2015	(2,914)	(7,415)	–	(10,329)
Exchange adjustments	(377)	(717)	–	(1,094)
Charge for the year	(338)	(640)	–	(978)
Disposals and write-offs	205	1,270	–	1,475
Transfer to assets held for sale	165	92	–	257
Depreciation at 31 December 2016	(3,259)	(7,410)	–	(10,669)
Impairment at 1 January 2015	(116)	(279)	(76)	(471)
Exchange adjustments	(8)	1	1	(6)
Disposals and write-offs	7	16	–	23
Impairment losses	(162)	(177)	(31)	(370)
Reversal of impairments	5	19	–	24
Transfer to assets held for sale	–	47	–	47
Impairment at 31 December 2015	(274)	(373)	(106)	(753)
Exchange adjustments	(45)	(37)	(11)	(93)
Disposals and write-offs	91	135	35	261
Impairment losses	(135)	(117)	(6)	(258)
Reversal of impairments	38	38	2	78
Transfer to assets held for sale	46	10	22	78
Impairment at 31 December 2016	(279)	(344)	(64)	(687)
Total depreciation and impairment at 31 December 2015	(3,188)	(7,788)	(106)	(11,082)
Total depreciation and impairment at 31 December 2016	(3,538)	(7,754)	(64)	(11,356)
Net book value at 1 January 2015	4,007	2,740	2,305	9,052
Net book value at 31 December 2015	4,117	2,987	2,564	9,668
Net book value at 31 December 2016	4,223	3,481	3,104	**10,808**

The weighted average interest rate for capitalised borrowing costs in the year was 3.8% (2015 – 3.8%). Disposals and write-offs in the year include 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 2016 of the Group's land and buildings comprised freehold properties £3,887 million (2015 – £3,251 million), properties with leases of 50 years or more £294 million (2015 – £327 million) and properties with leases of less than 50 years £42 million (2015 – £100 million).

Included in land and buildings at 31 December 2016 were leased assets with a cost of £590 million (2015 – £756 million), accumulated depreciation of £253 million (2015 – £233 million), impairment of £1 million (2015 – £nil) and a net book value of £448 million (2015 – £523 million). Included in plant, equipment and vehicles at 31 December 2016 were leased assets with a cost of £44 million (2015 – £31 million), accumulated depreciation of £15 million (2015 – £27 million), impairment of £nil (2015 – £nil) and a net book value of £29 million (2015 – £4 million). Some lease agreements include renewal or purchase options or escalation clauses.

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 relevant specific risks. 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 £45 million (2015 – £109 million), R&D £15 million (2015 – £63 million) and SG&A £120 million (2015 – £174 million), and included £151 million (2015 – £327 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 2016 of assets for which impairments have been charged or reversed in the year was £171 million (2015 – £138 million).

During 2016, £139 million (2015 – £90 million) of computer software was reclassified from assets in construction to intangible assets on becoming ready for use.

18. Goodwill

	2016 £m	2015 £m
Cost at 1 January	5,162	3,724
Exchange adjustments	814	66
Additions through business combinations (Note 38)	7	1,372
Transfer to assets held for sale	(18)	–
Cost at 31 December	5,965	5,162
Net book value at 1 January	5,162	3,724
Net book value at 31 December	5,965	5,162

In 2016, GSK acquired the HIV R&D preclinical and discovery stage portfolio from Bristol Myers Squibb. Goodwill of £7 million arose from this acquisition which was allocated to Pharmaceuticals.

Goodwill is allocated to the Group's segments as follows. The allocations for 2015 have been revised to reflect the current segment structure.

	2016 £m	2015 £m
Pharmaceuticals	3,288	2,952
Vaccines	1,353	1,003
Consumer Healthcare	1,324	1,207
Net book value at 31 December	5,965	5,162

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 country or 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%
	Vaccines	2% p.a.	7%
	Consumer Healthcare	2% p.a.	7%

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 £211 million (2015 – £240 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 £9.03 billion (2015 – £7.71 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 2015	1,818	10,281	422	2,155	14,676
Exchange adjustments	32	74	3	(14)	95
Capitalised development costs	–	217	–	–	217
Capitalised borrowing costs	7	–	–	–	7
Additions through business combinations	–	2,791	–	5,997	8,788
Other additions	174	132	–	–	306
Reclassifications	90	–	–	–	90
Disposals and asset write-offs	(91)	(98)	–	–	**(189)**
Transfer to assets held for sale	(2)	(3)	(38)	(64)	**(107)**
Cost at 31 December 2015	2,028	13,394	387	8,074	23,883
Exchange adjustments	137	1,139	20	1,320	2,616
Capitalised development costs	–	219	21	–	240
Capitalised borrowing costs	4	–	–	–	4
Additions through business combinations	–	102	–	–	102
Other additions	238	349	–	–	587
Disposals and asset write-offs	(389)	(21)	(1)	(7)	**(418)**
Transfer to assets held for sale	(1)	(39)	–	(12)	**(52)**
Reclassifications	139	–	–	–	139
Cost at 31 December 2016	2,156	15,143	427	9,375	27,101
Amortisation at 1 January 2015	(1,213)	(3,492)	(134)	–	**(4,839)**
Exchange adjustments	(15)	(34)	(1)	–	**(50)**
Charge for the year	(140)	(596)	(2)	–	**(738)**
Disposals and asset write-offs	73	92	–	–	165
Transfer to assets held for sale	1	–	4	–	5
Amortisation at 31 December 2015	(1,294)	(4,030)	(133)	–	**(5,457)**
Exchange adjustments	(92)	(410)	(5)	–	**(507)**
Charge for the year	(152)	(553)	(91)	–	**(796)**
Disposals and asset write-offs	353	–	5	–	358
Transfer to assets held for sale	1	10	–	–	11
Amortisation at 31 December 2016	(1,184)	(4,983)	(224)	–	**(6,391)**
Impairment at 1 January 2015	(42)	(1,239)	(154)	(82)	**(1,517)**
Exchange adjustments	1	(58)	–	–	(57)
Impairment losses	(14)	(148)	(15)	(40)	**(217)**
Disposals and asset write-offs	16	6	–	–	22
Transfer to assets held for sale	–	–	15	–	15
Impairment at 31 December 2015	(39)	(1,439)	(154)	(122)	**(1,754)**
Exchange adjustments	(3)	(266)	–	(3)	**(272)**
Impairment losses	(2)	(15)	–	(5)	**(22)**
Disposals and asset write-offs	35	40	11	–	86
Transfer to assets held for sale	–	28	–	–	28
Impairment at 31 December 2016	(9)	(1,652)	(143)	(130)	**(1,934)**
Total amortisation and impairment at 31 December 2015	(1,333)	(5,469)	(287)	(122)	**(7,211)**
Total amortisation and impairment at 31 December 2016	(1,193)	(6,635)	(367)	(130)	**(8,325)**
Net book value at 1 January 2015	563	5,550	134	2,073	8,320
Net book value at 31 December 2015	695	7,925	100	7,952	16,672
Net book value at 31 December 2016	963	8,508	60	9,245	18,776

The weighted average interest rate for capitalised borrowing costs in the year was 3.8% (2015 – 3.8%).

The net book value of computer software included £620 million (2015 – £407 million) of internally generated costs.

The charge for impairments in the year includes the impairments of Oncomed, Ansolar and Maxinutrition. The carrying value at 31 December 2016 of intangible assets, for which impairments have been charged or reversed in the year, following those impairments or reversals, was £116 million (2015 – £308 million).

The patent expiry dates of the Group's most significant assets, where relevant, are set out on pages 250 and 251.

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	
	2016 £m	2015 £m	**2016 £m**	2015 £m
Cost of sales	582	532	7	143
Selling, general and administration	95	66	2	22
Research and development	119	140	13	52
	796	738	22	217

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:

	2016 £m	2015 £m
dolutegravir	1,487	1,585
Benlysta	1,019	1,083
Menveo	919	833
Bexsero	941	819
Men ABCWY	669	591
Fluarix/FluLaval	380	333
HIV assets acquired from BMS	277	–
Selzentry	188	208
Okairos technology platform	173	167
Others	2,455	2,306
	8,508	7,925

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:

	2016 £m	2015 £m
Voltaren	2,847	2,411
Otrivin	1,447	1,225
Fenistil	680	576
Theraflu	462	391
Panadol	354	361
Sensodyne	243	258
Lamisil	304	257
Breathe Right	199	217
Stiefel trade name	211	201
Excedrin	194	164
Physiogel	166	147
Polident	103	109
Others	2,035	1,635
	9,245	7,952

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. The increase in carrying value in the year primarily reflects the impact of exchange rate movements.

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 country and currency specific 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 5% 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	2016 Total £m	Joint ventures £m	Associates £m	2015 Total £m
At 1 January	20	187	207	8	332	340
Exchange adjustments	4	41	45	1	2	3
Additions	3	8	11	13	10	23
Disposals	–	–	–	–	(143)	(143)
Transfer from other investments	–	–	–	–	146	146
Distributions received	(2)	(1)	(3)	–	(38)	(38)
Other movements	(2)	–	(2)	–	(165)	(165)
(Loss)/profit after tax recognised in the consolidated income statement	(4)	9	5	(2)	16	14
Other comprehensive income recognised in the consolidated statement of comprehensive income	–	–	–	–	27	27
At 31 December	19	244	263	20	187	207

The Group held one significant associate at 31 December 2016, Innoviva, Inc. At 31 December 2016, the Group owned 32 million shares or 29.5% of Innoviva, which is a biopharmaceutical company listed on NASDAQ. The company 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 retains a 15% economic interest in future royalties to be paid by GSK on sales of Closed Triple, if approved and commercialised. The remaining 85% of the economic interest in these royalties will be due to Theravance Biopharma Inc., a company spun out of Innoviva in 2014, in which the Group holds 18.6% of the common stock. The investment in Innoviva had a market value of £278 million at 31 December 2016 (2015 – £229 million).

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

	At 31 December 2016 £m	At 31 December 2015 £m
Non-current assets	146	143
Current assets	160	146
Current liabilities	(16)	(9)
Non-current liabilities	(575)	(513)
Net liabilities	(285)	(233)

	2016 £m	2015 £m
Interest in associated undertaking	(84)	(65)
Goodwill	84	64
Fair value and other adjustments	138	113
Carrying value at 31 December	138	112

21. Other investments

	2016 £m	2015 £m
At 1 January	1,255	1,114
Exchange adjustments	211	38
Additions	96	120
Fair value gain on reclassification from investment in associate	–	457
Other net fair value movements	130	323
Impairment losses	(24)	(258)
Transfer to investments in associates and joint ventures	–	(146)
Disposals	(683)	(393)
At 31 December	985	1,255

Other investments comprise non-current equity investments which are available-for-sale investments 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 included listed investments of £580 million (2015 – £987 million). The decrease in the carrying value during the year was primarily due to the sale of the Group's remaining stake in Aspen Pharmacare Holdings Limited which had a book value at 31 December 2015 of £383 million. The most significant of the investments held at 31 December 2016 was in Theravance Biopharma, Inc. in which the Group holds 18.6% of the common stock. This investment had a fair value at 31 December 2016 of £248 million (2015 – £93 million). The other investments include equity stakes in companies with which GSK has research collaborations, which provide access to biotechnology developments of potential interest and interests in companies that arise from business divestments.

On disposal of investments, fair value movements are reclassified from equity to the income statement based on average cost for shares acquired at different times.

The impairment losses recorded above have been recognised in the income statement for the year within Other operating income, together with amounts reclassified from the fair value reserve on recognition of the impairments. These impairments initially result from prolonged or significant declines in the fair value of the equity investments below acquisition cost, subsequent to which any further declines in fair value are immediately taken to the income statement.

The carrying value at 31 December of Other investments which have been impaired is as follows:

	2016 £m	2015 £m
Original cost	515	1,049
Cumulative impairments recognised in the income statement	(314)	(549)
Subsequent fair value increases	282	279
Carrying value at 31 December	483	779

22. Other non-current assets

	2016 £m	2015 £m
Amounts receivable under insurance contracts	602	477
Pension schemes in surplus	313	258
Other receivables	284	255
	1,199	990

Notes to the financial statements continued

23. Inventories

	2016 £m	2015 £m
Raw materials and consumables	1,068	1,563
Work in progress	2,299	1,453
Finished goods	1,735	1,700
	5,102	4,716

24. Trade and other receivables

	2016 £m	2015 £m
Trade receivables, net of provision for bad and doubtful debts	4,615	3,824
Accrued income	64	55
Other prepayments	335	307
Interest receivable	11	9
Employee loans and advances	17	36
Other receivables	984	1,384
	6,026	5,615

Trade receivables included £9 million (2015 – £8 million) due from associates and joint ventures. Other receivables included £7 million (2015– £nil) due from associates and joint ventures.

Bad and doubtful debt provision	2016 £m	2015 £m
At 1 January	167	142
Exchange adjustments	23	(2)
Charge for the year	77	45
Subsequent recoveries of amounts provided for	(59)	(17)
Utilised	(1)	(1)
At 31 December	207	167

25. Cash and cash equivalents

	2016 £m	2015 £m
Cash at bank and in hand	1,462	1,114
Short-term deposits	3,435	4,716
	4,897	5,830

26. Assets held for sale

	2016 £m	2015 £m
Property, plant and equipment	184	32
Goodwill	13	–
Other intangibles	12	5
Inventory	7	15
Other	(1)	(6)
	215	46

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.

Included within Assets held for sale are assets which were written down to fair value less costs to sell of £79 million (2015 – £36 million). The valuation methodology uses significant inputs which are not based on observable market data, therefore, this valuation is classified as level 3 in the fair value hierarchy.

27. Trade and other payables

	2016 £m	2015 £m
Trade payables	3,596	3,120
Wages and salaries	1,236	1,069
Social security	120	118
ViiV Healthcare put option	1,319	–
Other payables	447	368
Deferred income	158	73
Customer return and rebate accruals	2,778	2,056
Other accruals	2,310	2,081
	11,964	8,885

Trade and other payables included £36 million (2015 – £17 million) due to associates and joint ventures.

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 £2,218 million (2015 – £1,671 million) in respect of US Pharmaceuticals and Vaccines, as more fully described in the Group financial review on page 76. 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 rebates, discounts or allowances given and returns made 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 was recognised during 2016 and is currently exercisable. 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	2016 £m
10 cent appreciation of US Dollar	65
10 cent depreciation of US Dollar	(55)
10 cent appreciation of Euro	36
10 cent depreciation of Euro	(30)

An explanation of the accounting for ViiV Healthcare is set out on page 58.

28. Pensions and other post-employment benefits

Pension and other post-employment costs	2016 £m	2015 (restated) £m	2014 (restated) £m
UK pension schemes	205	177	125
US pension schemes	106	96	85
Other overseas pension schemes	140	135	123
Unfunded post-retirement healthcare schemes	90	59	70
	541	467	403
Analysed as:			
Funded defined benefit/hybrid pension schemes	304	291	216
Unfunded defined benefit pension schemes	43	36	34
Unfunded post-retirement healthcare schemes	90	59	70
Defined benefit schemes	437	386	320
Defined contribution pension schemes	104	81	83
	541	467	403

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

	2016 £m	2015 £m	2014 £m
Cost of sales	135	127	102
Selling, general and administration	221	194	165
Research and development	81	65	53
	437	386	320

Notes to the financial statements continued

28. Pensions and other post-employment benefits continued

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 2015 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 scale BB-2D to allow for future improvements in life expectancy.

The average life expectancy assumed now for an individual at the age of 60 and projected to apply in 2036 for an individual then at the age of 60 is as follows:

	UK		US	
	Male Years	Female Years	Male Years	Female Years
Current	27.8	29.8	27.2	28.9
Projected for 2036	29.6	31.9	28.9	30.6

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 Group reviewed the investment strategy of the UK plans in 2011 and the asset allocation for the UK plans has been adjusted to approximately 55% return seeking assets and 45% liability matching assets. In 2013, the target asset allocation of the US plans was also updated to 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, and bank counterparty risk.

The Plan liabilities are a series of future cash flows with relatively long duration. On an IAS 19R 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.

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 the US the former Glaxo Wellcome and SmithKline Beecham defined benefit schemes were merged during 2001. 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		
	2016 % pa	2015 % pa	2014 % pa	**2016 % pa**	2015 % pa	2014 % pa	**2016 % pa**	2015 % pa	2014 % pa
Rate of increase of future earnings	2.00	2.00	2.00	4.00	4.00	4.00	2.70	2.70	2.60
Discount rate	2.70	3.80	3.60	3.90	4.20	3.80	1.60	2.20	2.00
Expected pension increases	3.20	3.10	3.00	n/a	n/a	n/a	2.10	2.00	2.00
Cash balance credit/conversion rate	n/a	n/a	n/a	3.20	3.20	3.00	0.30	0.60	0.50
Inflation rate	3.20	3.10	3.00	2.25	2.25	2.25	1.50	1.40	1.40

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 2016 in relation to the defined benefit pension and post-retirement healthcare schemes were as follows:

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
Remeasurements recorded in the statement of comprehensive income	(165)	(27)	(224)	(416)	(59)

2015	UK (restated) £m	US £m	Rest of World £m	Pensions Group (restated) £m	Post-retirement benefits Group £m
Amounts charged to operating profit					
Current service cost	77	67	110	254	22
Past service cost/(credit)	25	2	(10)	17	(8)
Net interest cost	14	22	13	49	52
Gains from settlements	–	1	(9)	(8)	(7)
Expenses	7	4	4	15	–
	123	96	108	327	59
Remeasurements recorded in the statement of comprehensive income	82	(30)	147	199	62

2014	UK (restated) £m	US £m	Rest of World £m	Pensions Group (restated) £m	Post-retirement benefits Group £m
Amounts charged to operating profit					
Current service cost	68	66	90	224	24
Past service cost/(credit)	7	1	(11)	(3)	(8)
Net interest (credit)/cost	(7)	14	14	21	54
Gains from settlements	–	–	(4)	(4)	–
Expenses	6	4	2	12	–
	74	85	91	250	70
Remeasurements recorded in the statement of comprehensive income	(629)	(223)	(244)	(1,096)	(85)

The amounts included within past service costs include £52 million (2015 – £25 million; 2014 – £7 million) of augmentation costs of which £23 million is arising from major restructuring programmes (see Note 29, 'Other provisions').

Notes to the financial statements continued

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:

	2016 £m	2015 £m	2014 £m
Recognised in Other non-current assets:			
Pension schemes in surplus	313	258	93
Recognised in Pensions and other post-employment benefits:			
Pension schemes in deficit	**(2,397)**	(1,842)	(1,782)
Post-retirement benefits	**(1,693)**	(1,387)	(1,397)
	(4,090)	(3,229)	(3,179)

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 2016		UK £m	US £m	Rest of World £m	Group £m
Equities:	– listed	5,357	1,358	486	7,201
	– unlisted	1,545	–	14	1,559
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

The index-linked gilts held as part of the UK repo programme are included in government bonds. The related loan is included within 'Other assets' at a value of £(1,698) million (2015 – £(2,215) million; 2014 – £(537) million).

At 31 December 2015		UK (restated) £m	US £m	Rest of World £m	Group (restated) £m
Equities:	– listed	5,187	1,235	355	6,777
	– unlisted	481	–	1	482
Property:	– unlisted	302	175	8	485
Corporate bonds:	– listed	251	727	76	1,054
	– unlisted	232	–	2	234
Government bonds:	– listed	5,687	184	664	6,535
Insurance contracts		755	–	439	1,194
Other assets		(2,611)	180	205	(2,226)
Fair value of assets		10,284	2,501	1,750	14,535
Present value of scheme obligations		(10,601)	(3,134)	(2,384)	(16,119)
Net obligation		(317)	(633)	(634)	(1,584)
Included in Other non-current assets		232	–	26	258
Included in Pensions and other post-employment benefits		(549)	(633)	(660)	(1,842)
		(317)	(633)	(634)	(1,584)
Actual return on plan assets		(17)	(30)	23	(24)

28. Pensions and other post-employment benefits continued

At 31 December 2014		UK (restated) £m	US £m	Rest of World £m	Group (restated) £m
Equities:	– listed	5,358	1,203	325	6,886
	– unlisted	247	–	9	256
Property:	– unlisted	256	146	4	406
Corporate bonds:	– listed	1,358	921	97	2,376
	– unlisted	247	–	25	272
Government bonds:	– listed	2,445	152	603	3,200
Insurance contracts		803	–	378	1,181
Other assets		(163)	109	88	34
Fair value of assets		10,551	2,531	1,529	14,611
Present value of scheme obligations		(10,991)	(3,133)	(2,176)	(16,300)
Net obligation		(440)	(602)	(647)	(1,689)
Included in Other non-current assets		72	–	21	93
Included in Pensions and other post-employment benefits		(512)	(602)	(668)	(1,782)
		(440)	(602)	(647)	(1,689)
Actual return on plan assets		913	99	181	1,193

				Pensions	Post-retirement benefits
Movements in fair values of assets	UK (restated) £m	US £m	Rest of World £m	Group (restated) £m	Group £m
Assets at 1 January 2014	9,878	2,514	1,467	13,859	–
Exchange adjustments	–	154	(101)	53	–
Interest income	437	112	47	596	–
Expenses	(6)	(4)	(2)	(12)	–
Settlements and curtailments	–	–	(65)	**(65)**	–
Remeasurement	476	(13)	134	597	–
Employer contributions	151	19	102	272	70
Scheme participants' contributions	4	–	10	14	10
Benefits paid	(389)	(251)	(63)	(703)	(80)
Assets at 31 December 2014	10,551	2,531	1,529	14,611	–
Exchange adjustments	–	147	(52)	95	–
Additions through business combinations	–	–	233	233	–
Interest income	374	95	33	502	–
Expenses	(7)	(4)	(4)	(15)	–
Settlements and curtailments	–	–	(16)	(16)	–
Remeasurement	(391)	(125)	(10)	(526)	–
Employer contributions	164	132	112	408	82
Scheme participants' contributions	4	–	14	18	14
Benefits paid	(411)	(275)	(89)	(775)	(96)
Assets at 31 December 2015	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	–

In addition to the above assets, there are assets held by UK defined contribution plans amounting to £1,862 million at December 2016 (2015 – £1,591 million; 2014 – £1,501 million) which had previously been included in these figures. Prior year figures have been restated to reflect this change.

During 2016, the Group made special funding contributions to the UK pension schemes totalling £191 million (2015 – £85 million; 2014 – £85 million) and £nil (2015 – £111 million; 2014 – £nil) to the US scheme. In 2016, 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 2014 actuarial funding valuation. Based on the funding agreements following the 2014 valuation, the additional contributions to eliminate the pension deficit are expected to be £123 million in 2017. 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 2017, including special funding contributions, are estimated to be approximately £362 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 (restated) £m	US £m	Rest of World £m	Pensions Group (restated) £m	Post-retirement benefits Group £m
Obligations at 1 January 2014	(9,766)	(2,793)	(1,913)	**(14,472)**	**(1,246)**
Exchange adjustments	–	(188)	139	**(49)**	**(68)**
Service cost	(68)	(66)	(90)	**(224)**	**(24)**
Past service cost	(7)	(1)	11	3	8
Interest cost	(430)	(126)	(61)	**(617)**	**(54)**
Settlements and curtailments	–	–	69	69	–
Other movements	–	–	(6)	**(6)**	2
Remeasurement	(1,105)	(210)	(378)	**(1,693)**	**(85)**
Scheme participants' contributions	(4)	–	(10)	**(14)**	**(10)**
Benefits paid	389	251	63	**703**	80
Obligations at 31 December 2014	(10,991)	(3,133)	(2,176)	**(16,300)**	**(1,397)**
Exchange adjustments	–	(184)	78	**(106)**	**(64)**
Additions through business combinations	–	–	(397)	**(397)**	**(11)**
Service cost	(77)	(67)	(110)	**(254)**	**(22)**
Past service cost	(25)	(2)	10	**(17)**	8
Interest cost	(388)	(117)	(46)	**(551)**	**(52)**
Settlements and curtailments	–	(1)	25	24	7
Remeasurement	473	95	157	725	62
Scheme participants' contributions	(4)	–	(14)	**(18)**	**(14)**
Benefits paid	411	275	89	775	96
Obligations at 31 December 2015	(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)**

In addition to the above obligations, there are obligations of UK defined contribution plans amounting to £1,862 million at December 2016 (2015 – £1,591 million; 2014 – £1,501 million) which had previously been included in these figures. Prior year figures have been restated to reflect this change.

The defined benefit pension obligation is analysed as follows:

	2016 £m	2015 (restated) £m	2014 (restated) £m
Funded	(18,974)	(15,552)	(15,849)
Unfunded	(680)	(567)	(451)
	(19,654)	(16,119)	(16,300)

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 7% (2015 – 6.5%), grading down to 5% in 2025 and thereafter. At 31 December 2016, the US post-retirement healthcare scheme obligation was £1,463 million (2015 – £1,208 million; 2014 – £1,191 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:

	2016 £m	2015 (restated) £m	2014 (restated) £m
At 1 January	**(1,584)**	(1,689)	(613)
Exchange adjustments	**(218)**	(11)	4
Additions through business combinations	**–**	(164)	–
Service cost	**(246)**	(254)	(224)
Past service cost	**(54)**	(17)	3
Interest (cost)/income	**(56)**	(49)	(21)
Settlements and curtailments	28	8	4
Remeasurements:			
Return on plan assets, excluding amounts included in interest	2,195	(526)	597
Gain/(loss) from change in demographic assumptions	85	120	(64)
(Loss)/gain from change in financial assumptions	**(2,770)**	362	(1,578)
Experience (losses)/gains	**74**	243	(51)
Employer contributions	481	408	272
Expenses/other movements	**(19)**	(15)	(18)
At 31 December	**(2,084)**	(1,584)	(1,689)

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

	2016 £m	2015 £m	2014 £m
Gain from change in demographic assumptions	**–**	15	10
(Loss)/gain from change in financial assumptions	**(81)**	59	(120)
Experience gains/(losses)	22	(12)	25
	(59)	62	(85)

Notes to the financial statements continued

28. Pensions and other post-employment benefits continued

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

	2016 £m	2015 £m	2014 £m
Active	4,576	5,510	5,422
Retired	9,574	7,969	7,967
Deferred	5,504	4,231	4,412
	19,654	17,710	17,801

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

	2016 £m	2015 £m	2014 £m
Active	594	499	590
Retired	1,099	887	805
Deferred	–	1	2
	1,693	1,387	1,397

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

	2016 years	2015 years	2014 years
Pension benefits	16	16	16
Post-retirement benefits	12	12	12

Sensitivity analysis

Effect of changes in assumptions used on the benefit obligations and on the 2017 annual defined benefit pension and post retirement costs.

	£m
A 0.25% decrease in discount rate would have the following approximate effect:	
Increase in annual pension cost	27
Decrease in annual post-retirement benefits cost	(1)
Increase in pension obligation	769
Increase in post-retirement benefits obligation	48
A one year increase in life expectancy would have the following approximate effect:	
Increase in annual pension cost	20
Increase in annual post-retirement benefits cost	2
Increase in pension obligation	548
Increase in post-retirement benefits obligation	43
A 1% increase in the rate of future healthcare inflation would have the following approximate effect:	
Increase in annual post-retirement benefits cost	4
Increase in post-retirement benefits obligation	77
A 0.25% increase in inflation would have the following approximate effect:	
Increase in annual pension cost	18
Increase in pension obligation	491

29. Other provisions

	Legal and other disputes £m	Major restructuring programmes £m	Employee related provisions £m	Other provisions £m	Total £m
At 1 January 2016	352	816	275	321	1,764
Exchange adjustments	67	100	32	37	236
Charge for the year	162	163	58	66	449
Reversed unused	–	(140)	(9)	(7)	**(156)**
Unwinding of discount	(1)	4	–	13	16
Utilised	(233)	(368)	(41)	(108)	**(750)**
Reclassifications and other movements	(3)	2	(9)	(26)	**(36)**
Transfer to Pension obligations	–	(23)	–	–	**(23)**
At 31 December 2016	344	554	306	296	1,500
To be settled within one year	296	363	90	99	848
To be settled after one year	48	191	216	197	652
At 31 December 2016	344	554	306	296	1,500

Legal and other disputes

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

The charge for the year of £162 million (net of reversals and estimated insurance recoveries) primarily related to provisions for product liability cases regarding *Paxil* and other products, commercial disputes and various other government investigations.

The discount on the provisions increased by £1 million in 2016 (2015 – decreased by £1 million) due to higher discount rates in 2016 compared to 2015. 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.

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 £296 million of the amount provided at 31 December 2016 will be settled within one year. At 31 December 2016, it was expected that £nil (2015 – £nil) of the provision made for legal and other disputes will be reimbursed by third party insurers. For a discussion of legal issues, see Note 46, 'Legal proceedings'.

Major restructuring programmes

In 2013, the Group initiated the Major Change restructuring programme focused on opportunities to simplify supply chain processes, build the Group's capabilities in manufacturing and R&D and restructure the European Pharmaceuticals business.

The Pharmaceuticals restructuring programme, announced in October 2014, has been focused on rescaling commercial operations, global support functions and certain R&D/manufacturing operations across Pharmaceuticals. In addition, an integration restructuring programme was initiated in 2015, following the completion of the Novartis transaction. All of these restructuring and integration programmes are now reported together as one combined major restructuring programme.

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 £23 million (2015 – £25 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 2016, the provision for these benefits amounted to £135 million (2015 – £111 million). Other employee benefits reflect a variety of provisions for severance costs, jubilee awards and other long-service benefits.

Other provisions

Included in other provisions are insurance provisions of £40 million (2015 – £98 million), onerous property lease provisions of £113 million (2015 – £135 million) and a number of other provisions including vehicle insurance and regulatory matters.

Notes to the financial statements continued

30. Other non-current liabilities

	2016 £m	2015 £m
Accruals and deferred income	66	64
Consumer Healthcare put option liability	7,420	6,287
Other payables	959	756
	8,445	7,107

The Consumer Healthcare put option liability relates to the ability of Novartis to put its shares in the Consumer Healthcare Joint Venture to GSK at certain points in the future, commencing in 2018. The liability is recorded at the present value of the estimated redemption value, applying a discount rate of 7%, of the expected redemption amount, calculated using an average of relevant public company multiples approach with no premium or discount, based on the forecast revenue and earnings of the Consumer Healthcare Joint Venture, which forms part of GSK's Consumer Healthcare segment. The remeasurement charge in the year was £1,133 million (2015 – £83 million), see Note 7, 'Other operating income/(expense)'. The table below shows on an indicative basis the income statement and balance sheet sensitivity to reasonably possible changes in key assumptions.

Increase/(decrease) in financial liability and loss/(gain) in Income statement	2016 £m
10% increase in sales forecasts or sales multiple applied	726
10% decrease in sales forecasts or sales multiple applied	**(726)**
10 cent appreciation of US Dollar	42
10 cent depreciation of US Dollar	**(36)**
10 cent appreciation of Euro	203
10 cent depreciation of Euro	**(171)**

31. Net debt

	Listing exchange	2016 £m	2015 £m
Current assets:			
Liquid investments		89	75
Cash and cash equivalents		4,897	5,830
		4,986	5,905
Short-term borrowings:			
Commercial paper		**(1,094)**	–
Bank loans and overdrafts		**(332)**	(435)
Obligations under finance leases		**(23)**	(23)
0.7% US$ US Medium Term Note 2016	New York Stock Exchange	–	(850)
1.50% US$ US Medium Term Note 2017	New York Stock Exchange	**(1,612)**	–
5.625% € European Medium Term Note 2017	London Stock Exchange	**(1,068)**	–
		(4,129)	(1,308)
Long-term borrowings:			
1.50% US$ US Medium Term Note 2017	New York Stock Exchange	–	(1,358)
5.625% € European Medium Term Note 2017	London Stock Exchange	–	(918)
5.65% US$ US Medium Term Note 2018	New York Stock Exchange	**(2,216)**	(1,869)
0.625% € European Medium Term Note 2019	London Stock Exchange	**(1,276)**	(1,096)
2.85% US$ US Medium Term Note 2022	New York Stock Exchange	**(1,603)**	(1,351)
2.8% US$ US Medium Term Note 2023	New York Stock Exchange	**(999)**	(841)
1.375% € European Medium Term Note 2024	London Stock Exchange	**(845)**	(726)
4.00% € European Medium Term Note 2025	London Stock Exchange	**(635)**	(546)
3.375% £ European Medium Term Note 2027	London Stock Exchange	**(593)**	(592)
5.25% £ European Medium Term Note 2033	London Stock Exchange	**(986)**	(985)
5.375% US$ US Medium Term Note 2034	London Stock Exchange	**(401)**	(338)
6.375% US$ US Medium Term Note 2038	New York Stock Exchange	**(2,199)**	(1,854)
6.375% £ European Medium Term Note 2039	London Stock Exchange	**(695)**	(695)
5.25% £ European Medium Term Note 2042	London Stock Exchange	**(988)**	(987)
4.2% US$ US Medium Term Note 2043	New York Stock Exchange	**(395)**	(333)
4.25% £ European Medium Term Note 2045	London Stock Exchange	**(789)**	(788)
Obligations under finance leases		**(41)**	(47)
		(14,661)	(15,324)
Net debt		**(13,804)**	(10,727)

31. Net debt continued

Current assets

Liquid investments are classified as available-for-sale investments. At 31 December 2016, they included US Treasury Notes and other government bonds. The effective interest rate on liquid investments at 31 December 2016 was approximately 0.7% (2015 – approximately 0.7%). Liquid investment balances at 31 December 2016 earning interest at floating rates amount to £89 million (2015 – £4 million). Liquid investment balances at 31 December 2016 earning interest at fixed rates amount to £nil (2015 – £71 million).

The effective interest rate on cash and cash equivalents at 31 December 2016 was approximately 1.3% (2015 – approximately 1.3%). Cash and cash equivalents at 31 December 2016 earning interest at floating and fixed rates amount to £4,584 million and £3 million respectively (2015 – £5,654 million and £nil).

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 (£8.1 billion) US commercial paper programme, of which $1.4 billion (£1.1 billion) was in issue at 31 December 2016 (2015 – no issuances). GSK also has £1.9 billion five year committed facilities and $2.5 billion (£2.0 billion) of 364 day committed facilities. The five-year committed facilities were agreed in September 2015 and were extended by one year to 2021 in September 2016. The 364 day committed facilities were agreed in September 2016. Liquid investments, cash and cash equivalents were as shown in the table on page 198.

The weighted average interest rate on commercial paper borrowings at 31 December 2016 was 0.88% (2015 – no issuances).

The weighted average interest rate on current bank loans and overdrafts at 31 December 2016 was 3.47% (2015 – 3.49%).

The average effective pre-swap interest rate of notes classified as short term at 31 December 2016 was 3.2% (2015 – 0.04%).

Long-term borrowings

At the year-end, GSK had long-term borrowings of £14.7 billion (2015 – £15.3 billion) of which £11.1 billion (2015 – £10 billion) falls due in more than five years. The average effective pre-swap interest rate of all notes in issue at 31 December 2016 was approximately 4.1% (2015 – approximately 3.9%).

Long-term borrowings repayable after five years carry interest at effective rates between 1.54% and 6.42%. The repayment dates range from 2022 to 2045.

Pledged assets

The Group held pledged investments in US Treasury Notes with a par value of $105 million (£85 million), (2015 – $105 million (£71 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, £23 million (2015 – £37 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 entered into by Human Genome Sciences, Inc. prior to its acquisition by the Group.

Finance lease obligations

	2016 £m	2015 £m
Rental payments due within one year	25	25
Rental payments due between one and two years	23	21
Rental payments due between two and three years	12	15
Rental payments due between three and four years	7	6
Rental payments due between four and five years	–	6
Rental payments due after five years	–	4
Total future rental payments	67	77
Future finance charges	(3)	(7)
Total finance lease obligations	64	70

32. Contingent liabilities

At 31 December 2016, contingent liabilities, comprising guarantees, discounted bills and other items arising in the normal course of business, amounted to £281 million (2015 – £200 million). At 31 December 2016, £1 million (2015 – £nil) of financial assets were pledged as collateral for contingent liabilities. Provision is made for the outcome of tax, legal and other disputes where it is both probable that the Group will suffer an outflow of funds and it is possible to make a reliable estimate of that outflow. At 31 December 2016, 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 tax, legal and other disputes to which the Group is a party are set out in Note 14, 'Taxation' and Note 46, 'Legal proceedings'.

Notes to the financial statements continued

33. Share capital and share premium account

	Ordinary Shares of 25p each		Share premium
	Number	£m	£m
Share capital authorised			
At 31 December 2014	10,000,000,000	2,500	
At 31 December 2015	10,000,000,000	2,500	
At 31 December 2016	10,000,000,000	2,500	
Share capital issued and fully paid			
At 1 January 2014	5,342,206,696	1,336	2,595
Issued under employee share schemes	13,090,536	3	164
At 31 December 2014	5,355,297,232	1,339	2,759
Issued under employee share schemes	6,010,415	1	72
At 31 December 2015	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

	31 December 2016 000	31 December 2015 000
Number of shares issuable under employee share schemes	71,382	99,833
Number of unissued shares not under option	4,560,302	4,538,859

At 31 December 2016, of the issued share capital, 42,710,419 shares were held in the ESOP Trusts, 458,205,950 shares were held as Treasury shares and 4,867,399,693 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 earnings and other reserves amounted to £(3,172) million at 31 December 2016 (2015 – £943 million; 2014 – £165 million) of which £329 million (2015 – £283 million; 2014 – £337 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 2014	586	(3)	(133)	450
Exchange movements on overseas net assets	(504)	7	16	**(481)**
Reclassification of exchange on liquidation or disposal of overseas subsidiaries	(219)	–	–	**(219)**
At 31 December 2014	(137)	4	(117)	**(250)**
Exchange movements on overseas net assets	(624)	6	8	**(610)**
At 31 December 2015	(761)	10	(109)	**(860)**
Exchange movements on overseas net assets	633	13	603	1,249
At 31 December 2016	(128)	23	494	389

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

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 on reclassification of fair value movements on 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 gains on defined benefit plans	(475)	–	–	**(475)**
Tax remeasurement gains in defined benefit plans	126	–	–	126
Other comprehensive income for the year	284	75	603	962

2015	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	(624)	6	–	(618)
Fair value movements on available-for-sale investments	–	416	–	416
Deferred tax on fair value movements on available-for-sale investments	–	(91)	–	(91)
Reclassification of fair value movements on available-for-sale investments	–	(346)	–	(346)
Deferred tax on reclassification of fair value movements on available-for-sale investments	–	36	–	36
Reclassification of cash flow hedges to income statement	–	2	–	2
Fair value movements on cash flow hedges	–	2	–	2
Share of other comprehensive income of associates and joint ventures	(77)	–	–	(77)
Items that will not be reclassified to income statement:				
Exchange movements on overseas net assets of non-controlling interests	–	–	8	8
Remeasurement gains on defined benefit plans	261	–	–	261
Tax on remeasurement gains in defined benefit plans	(80)	–	–	(80)
Other comprehensive (expense)/income for the year	(520)	25	8	(487)

Notes to the financial statements continued

34. Movements in equity continued

2014	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	(504)	7	–	**(497)**
Reclassification of exchange on liquidation or disposal of overseas subsidiaries	(219)	–	–	**(219)**
Deferred tax on exchange movements	(2)	–	–	**(2)**
Fair value movements on available-for-sale investments	–	29	–	29
Deferred tax on fair value movements on available-for-sale investments	–	(78)	–	**(78)**
Reclassification of fair value movements on available-for-sale investments	–	(155)	–	**(155)**
Deferred tax on reclassification of fair value movements on available-for-sale investments	–	58	–	58
Reclassification of cash flow hedges to income statement	–	(5)	–	**(5)**
Fair value movements on cash flow hedges	–	5	–	5
Deferred tax on fair value movements on cash flow hedges	–	(1)	–	**(1)**
Share of other comprehensive income of associates and joint ventures	18	–	–	18
Items that will not be reclassified to income statement:				
Exchange movements on overseas net assets of non-controlling interests	–	–	16	16
Remeasurement losses on defined benefit plans	(1,181)	–	–	**(1,181)**
Deferred tax on remeasurement losses in defined benefit plans	262	–	–	262
Other comprehensive (expense)/income for the year	(1,626)	(140)	16	**(1,750)**

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 2014	(356)	413	(12)	2,108	2,153
Transferred to income and expense in the year on disposals	–	(155)	(5)	–	**(160)**
Net fair value movement in the year	–	16	4	–	20
Ordinary shares acquired by ESOP Trusts	(245)	–	–	–	**(245)**
Write-down of shares held by ESOP Trusts	450	–	–	–	450
Forward contract on non-controlling interest	–	–	–	21	21
At 31 December 2014	(151)	274	(13)	2,129	2,239
Transferred to income and expense in the year on disposals	–	(356)	2	–	**(354)**
Transferred to income and expense in the year on impairments	–	10	–	–	10
Net fair value movement in the year	–	367	2	–	369
Ordinary shares acquired by ESOP Trusts	(99)	–	–	–	**(99)**
Write-down of shares held by ESOP Trusts	175	–	–	–	175
At 31 December 2015	(75)	295	(9)	2,129	2,340
Transferred to income and expense in the year on disposals	(16)	(268)	–	–	(284)
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

Other reserves include various non-distributable merger and pre-merger reserves amounting to £1,849 million at 31 December 2016 (2015 – £1,849 million; 2014 – £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 2016 (2015 – £280 million; 2014 – £280 million).

35. Related party transactions

At 31 December 2016, GSK owned 32 million shares or 29.5% 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 £108 million (£28 million from 1 September to 31 December 2015). At 31 December 2016, the balance payable by GSK to Innoviva was £36 million.

At 31 December 2016, 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 2016, GSK sold £43 million (2015 – £27 million) of its vaccine products into the joint venture. At 31 December 2016, the trading balance due to GSK from JVC was £9 million and the balance payable by GSK to JVC was £nil. Loans of £6 million to JVC, £2 million to Medicxi Ventures I LP and £2 million to Index Ventures Life VI (Jersey) LP remained due to GSK at 31 December 2016.

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

	2016 £m	2015 £m	2014 £m
Profit after tax	1,062	8,372	2,831
Tax on profits	877	2,154	137
Share of after tax profits of associates and joint ventures	(5)	(14)	(30)
Finance expense net of finance income	664	653	659
Depreciation	978	892	780
Amortisation of intangible assets	796	738	704
Impairment and assets written off	226	822	205
Profit on sale of businesses	(5)	(9,308)	–
Profit on sale of intangible assets	(178)	(349)	(255)
Profit on sale of investments in associates	–	(843)	–
Profit on sale of equity investments	(254)	(342)	(149)
Changes in working capital:			
Decrease/(increase) in inventories	70	(111)	(529)
(Increase)/decrease in trade receivables	(188)	98	347
Increase in trade payables	96	40	91
Decrease/(increase) in other receivables	381	(593)	95
Contingent consideration paid (see Note 39)	(358)	(121)	(4)
Other non-cash increase in contingent consideration liabilities	2,281	1,986	770
Increase in other payables	1,989	276	(68)
(Decrease)/increase in pension and other provisions	(621)	100	(41)
Share-based incentive plans	319	368	332
Fair value adjustments	(3)	–	313
Other	(21)	(187)	96
	7,044	(3,741)	3,453
Cash generated from operations	8,106	4,631	6,284

Notes to the financial statements continued

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

	2016 £m	2015 £m	2014 £m
Net debt at beginning of year	**(10,727)**	(14,377)	(12,645)
Increase/(decrease) in cash and bank overdrafts	**(1,164)**	1,503	(1,287)
Decrease/(increase) in liquid investments	**–**	2	(1)
Net increase in long-term loans	**–**	–	(1,960)
Net (increase in)/repayment of short-term loans	**(148)**	2,412	1,709
Net repayment of obligations under finance leases	**18**	25	23
Exchange adjustments	**(1,781)**	(268)	(193)
Other non-cash movements	**(2)**	(24)	(23)
Movement in net debt	**(3,077)**	3,650	(1,732)
Net debt at end of year	**(13,804)**	(10,727)	(14,377)

Analysis of changes in net debt	At 1 January 2016 £m	Exchange £m	Other £m	Reclass-ifications £m	Acquisitions £m	Cash flow £m	At 31 December 2016 £m
Liquid investments	75	14	–	–	–	–	**89**
Cash and cash equivalents	5,830	297	–	–	41	(1,271)	**4,897**
Overdrafts	(344)	(14)	–	–	–	66	**(292)**
	5,486	283	–	–	41	(1,205)	**4,605**
Debt due within one year:							
Commercial paper	–	(27)	–	–	–	(1,067)	**(1,094)**
European and US Medium Term Notes	(850)	(414)	–	(2,281)	–	865	**(2,680)**
Other	(114)	(8)	3	(16)	–	72	**(63)**
	(964)	(449)	3	(2,297)	–	(130)	**(3,837)**
Debt due after one year:							
European and US Medium Term Notes	(15,277)	(1,624)	–	2,281	–	–	**(14,620)**
Other	(47)	(5)	(5)	16	–	–	**(41)**
	(15,324)	(1,629)	(5)	2,297	–	–	**(14,661)**
Net debt	(10,727)	(1,781)	(2)	–	41	(1,335)	**(13,804)**

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:

2016

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 period 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.

2015

Acquisitions

Novartis Consumer Healthcare and Vaccines businesses

The three-part inter-conditional transaction with Novartis AG involving the Consumer Healthcare, Vaccines and Oncology businesses completed on 2 March 2015.

GSK and Novartis have contributed their respective Consumer Healthcare businesses into a Consumer Healthcare Joint Venture in a non-cash transaction. GSK has an equity interest of 63.5% and majority control of the Joint Venture. In addition, GSK has acquired Novartis' global Vaccines business (excluding influenza vaccines) for an initial cash consideration of $5.25 billion (£3.417 billion) with contingent consideration representing subsequent potential milestone payments of up to $1.8 billion (£1.2 billion) arising on the achievement of specified development targets and ongoing royalties based on the future sales performance of certain products, and so the total amount payable is unlimited. The first milestone of $450 million (£300 million) was paid on 26 March 2015.

Other business acquisitions

In addition, GSK completed one smaller Vaccines business acquisition for cash consideration of £120 million, net of cash acquired, and the fair value of existing investments of £15 million. This represented goodwill of £22 million and intangible assets of £124 million less other net liabilities of £11 million.

Notes to the financial statements continued

38. Acquisitions and disposals continued

The fair values of the assets acquired in business combinations, including goodwill, are set out in the table below.

	Novartis Consumer Healthcare business £m	Novartis Vaccines business £m	Other £m
Net assets acquired:			
Intangible assets	6,003	2,680	124
Property, plant and equipment	249	434	1
Inventory	257	347	–
Trade and other receivables	400	162	2
Other assets including cash and cash equivalents	304	283	19
Trade and other payables	(402)	(107)	(3)
Deferred tax liabilities	(1,154)	(78)	(26)
Other liabilities	(165)	(299)	–
	5,492	3,422	117
Non-controlling interest	(2,150)	(19)	–
Goodwill	774	576	22
	4,116	3,979	139
Consideration settled by shares in GSK Consumer Healthcare Holdings	4,116	–	–
Cash consideration paid after purchase adjustments	–	3,461	124
Fair value of equity investment disposal	–	–	15
Contingent consideration	–	594	–
Deferred tax on contingent consideration	–	(52)	–
Loss on settlement of pre-existing relationships	–	(24)	–
Total consideration	4,116	3,979	139

The non-controlling interest in the Consumer Healthcare Joint Venture, calculated applying the full goodwill method, represents Novartis' share of the net assets it contributed to the Joint Venture together with attributable goodwill.

The goodwill in the businesses acquired represents the potential for further synergies arising from combining the acquired businesses with GSK's existing businesses together with the value of the workforce acquired. The majority of the goodwill recognised is not expected to be deductible for tax purposes.

Total transaction costs recognised in 2014 and 2015 for the acquisitions from Novartis amounted to £102 million.

Between 2 March 2015 and 31 December 2015, turnover of £1,941 million arising from the Novartis Consumer Healthcare and Vaccines businesses was included in Group turnover. If the businesses had been acquired at the beginning of the year, it is estimated that Group turnover in 2015 would have been approximately £320 million higher. These businesses have been integrated into the Group's existing activities and it is not practical to identify the impact on the Group profit in the period.

Disposals

Oncology

GSK has divested its marketed Oncology business, related R&D activities and rights to its AKT inhibitor and also granted commercialisation partner rights for future oncology products to Novartis for consideration of $16 billion (£10,395 million) before purchase adjustments.

Other business disposals

GSK also made a number of small business disposals in the period for net cash consideration of £309 million. Profit on disposal of the businesses has been determined as follows:

	Oncology £m	Other £m
Cash consideration including currency forwards and purchase adjustments	10,060	309
Net assets sold:		
Goodwill	(497)	(14)
Intangible assets	(516)	(107)
Property, plant and equipment	–	(25)
Inventory	–	(51)
Cash	–	(5)
Other net assets	–	(6)
	(1,013)	(208)
Loss on currency forwards booked in 2014	299	–
Disposal costs	(118)	(21)
Profit on disposal	9,228	80

38. Acquisitions and disposals continued

Investments in associates and joint ventures

In March 2015, GSK sold half of its shareholding in Aspen, representing 6.2% of the issued share capital of the company, for £571 million in cash. As a result of the sale, the Group was no longer considered to have the ability to exert significant influence over Aspen and the Group's remaining investment was transferred from Investments in associates to Other investments.

	£m
Cash consideration	571
Net book value of shares	(143)
Reclassification of exchange from other comprehensive income	(30)
Transaction fees	(7)
Other items	(5)
Profit on disposal	386

Cash flows	Business acquisitions £m	Business disposals £m	Associates and JV disposals £m	Total £m
Cash consideration (paid)/received after purchase adjustments	(3,585)	10,369	571	7,355
Cash and cash equivalents acquired/(divested)	404	(5)	–	399
Deferred cash proceeds	–	(38)	–	(38)
Contingent consideration paid	(338)	–	–	(338)
Transaction costs and other	(22)	(80)	(7)	(109)
Cash (outflow)/inflow in 2015	(3,541)	10,246	564	7,269

In addition, GSK made cash investments of £16 million into associates and joint ventures.

2014

Acquisitions

There were no acquisitions in 2014.

Acquisition and integration costs of £141 million arising on the proposed three-part inter-conditional transaction with Novartis AG were expensed in 2014, of which £104 million was paid in cash in the year.

Disposals

During the year, £225 million was received as deferred consideration from the sale of the anti-coagulant business completed in 2013 and £1 million from the disposal of an associate.

GSK also made cash investments of £9 million into associates.

Cash flows	Business acquisitions and disposals £m	Associates and joint ventures £m	Total £m
Cash consideration paid	–	9	9
Transaction costs paid	104	–	104
Purchase of businesses and associates	104	9	113
Net cash proceeds from disposals	225	1	226

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 2014	923	–	1	924
Remeasurement through goodwill	–	–	(4)	(4)
Remeasurement through income statement	768	–	2	770
Cash payments: operating cash flows	(4)	–	–	(4)
Cash payments: purchases of businesses	(3)	–	–	(3)
Other movements	–	–	41	41
At 31 December 2014	1,684	–	40	1,724
Additions through business combinations	–	594	–	594
Remeasurement through income statement	1,874	111	1	1,986
Cash payments: operating cash flows	(121)	–	–	(121)
Cash payments: purchases of businesses	(38)	(300)	–	(338)
Other movements	10	–	–	10
At 31 December 2015	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: purchases of businesses	(66)	(7)	–	(73)
Other movements	(4)	–	1	(3)
At 31 December 2016	5,304	545	47	5,896

The additions in the year represented the recognition of the preferential dividends payable to Shionogi of £154 million and a contingent consideration liability on the acquisition of the HIV business from BMS of £40 million.

Of the contingent consideration payable at 31 December 2016, £561 million (2015 – £306 million) is expected to be paid within one year. The consideration payable for the acquisition of the Shionogi-ViiV Healthcare joint venture and the Novartis Vaccines business is expected to be paid over a number of years. As a result, the total estimated liabilities are discounted to their present values, shown above. The Shionogi-ViiV Healthcare contingent consideration liability is discounted at 8.5% and the Novartis Vaccines contingent consideration liability is discounted partly at 8% and partly at 9%.

The Shionogi-ViiV Healthcare contingent consideration liability is calculated based on the forecast sales performance of specified products, principally dolutegravir, over the life 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	535	66
10% decrease in sales forecasts	(535)	(62)
1% increase in discount rate	(233)	(38)
1% decrease in discount rate	252	45
10% increase in probability of milestone success		48
10% decrease in probability of milestone success		(47)
10 cent appreciation of US Dollar	358	34
10 cent depreciation of US Dollar	(304)	(5)
10 cent appreciation of Euro	94	17
10 cent depreciation of Euro	(79)	(8)

An explanation of the accounting for ViiV Healthcare is set out on page 58.

40. Non-controlling interests

The Group has two subgroups that have material non-controlling interests, ViiV Healthcare Limited and its subsidiaries and GSK Consumer Healthcare Holdings Limited and its subsidiaries. Summarised financial information in respect of the ViiV Healthcare group and GSK Consumer Healthcare Joint Venture is set out below:

ViiV Healthcare

	2016 £m	2015 £m	2014 £m
Turnover	3,527	2,330	1,466
Loss after taxation	(1,249)	(1,426)	(606)
Other comprehensive income	36	7	8
Total comprehensive expense	(1,213)	(1,419)	(598)

	2016 £m	2015 £m
Non-current assets	3,064	2,466
Current assets	2,357	1,619
Total assets	5,421	4,085
Current liabilities	(1,977)	(1,218)
Non-current liabilities	(7,983)	(5,490)
Total liabilities	(9,960)	(6,708)
Net liabilities	(4,539)	(2,623)

	2016 £m	2015 £m	2014 £m
Net cash inflow from operating activities	1,750	1,097	765
Net cash outflow from investing activities	(326)	(63)	(25)
Net cash outflow from financing activities	(1,023)	(814)	(540)
Increase in cash and bank overdrafts in the year	401	220	200

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 loss after taxation of £1,249 million (2015 – loss after taxation of £1,426 million; 2014 – loss after taxation of £606 million) is stated after charging preferential dividends payable to GSK, Shionogi and Pfizer and after a charge of £2,186 million (2015 – £1,874 million; 2014 – £768 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:

	2016 £m	2015 £m	2014 £m
Total comprehensive expense for the year attributable to non-controlling interests	(83)	(143)	(16)
Dividends paid to non-controlling interests	152	163	120
Non-controlling interests in the Consolidated balance sheet	(353)	68	

Notes to the financial statements continued

40. Non-controlling interests continued

Consumer Healthcare Joint Venture

	2016 £m	2015 £m
Turnover	6,530	4,627
Profit/(Loss) after taxation	660	(39)
Other comprehensive income	1,640	72
Total comprehensive income	2,300	33

	2016 £m	2015 £m
Non-current assets	13,315	11,602
Current assets	3,996	3,810
Total assets	17,311	15,412
Current liabilities	(3,060)	(2,822)
Non-current liabilities	(2,062)	(1,849)
Total liabilities	(5,122)	(4,671)
Net assets	12,189	10,741

	2016 £m	2015 £m
Net cash inflow from operating activities	1,496	277
Net cash outflow from investing activities	(537)	(691)
Net cash outflow from financing activities	(980)	(42)
Decrease in cash and bank overdrafts in the year	(21)	(456)

The above financial information relates to the Consumer Healthcare Joint Venture on a stand-alone basis since its formation on 2 March 2015, 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:

	2016 £m	2015 £m
Total comprehensive income for the year attributable to non-controlling interests	730	14
Non-controlling interests in the Consolidated balance sheet	3,755	3,371

41. Commitments

Contractual obligations and commitments	2016 £m	2015 £m
Contracted for but not provided in the financial statements:		
Intangible assets	7,199	6,264
Property, plant and equipment	496	502
Investments	166	157
Purchase commitments	52	38
Pensions	874	340
Other commitments	143	191
Interest on loans	9,410	9,282
Finance lease charges	3	7
	18,343	16,781

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. A number of commitments were made in 2016 under licensing and other agreements including arrangements with Janssen Sciences Ireland UC and Miltenyi Biotec GmbH. These new arrangements were offset by reduced commitments due on prior year transactions including amendments to the agreement with OncoMed Pharmaceuticals, Inc. and Five Prime Therapeutics, Inc.

In 2016, 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 2014 actuarial funding valuation. A payment of £123 million is due in 2017 and each subsequent year up to, and including 2023. The table above includes this commitment, but excludes the normal ongoing annual funding requirement in the UK of approximately £130 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. £186 million (2015 – £314 million) is provided against these commitments on the Group's balance sheet.

Commitments under non-cancellable operating leases	2016 £m	2015 £m
Rental payments due within one year	153	191
Rental payments due between one and two years	129	98
Rental payments due between two and three years	94	76
Rental payments due between three and four years	74	58
Rental payments due between four and five years	66	53
Rental payments due after five years	324	313
Total commitments under non-cancellable operating leases	840	789

Notes to the financial statements continued

42. Financial instruments and related disclosures

GSK uses a variety of financial instruments to finance its operations and derivative financial instruments to manage market risks from these operations. These derivatives, principally comprising interest rate swaps, foreign exchange forward contracts and swaps, are used to swap borrowings and liquid assets into currencies required for Group purposes and to manage exposure to financial risks from changes in foreign exchange rates and interest rates.

GSK does not hold or issue derivatives for speculative purposes and the Treasury policies specifically prohibit such activity. All transactions in financial instruments are undertaken to manage the risks arising from underlying business activities.

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 £13.8 billion (see Note 31, 'Net debt') and shareholders' equity of £1.1 billion (see 'Consolidated statement of changes in equity' on page 160). Total capital, including that provided by non-controlling interests, is £18.8 billion.

Our long-term credit rating with Standard and Poor's is A+ (stable 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 2016, GSK had £4.1 billion of borrowings repayable within one year and held £5.0 billion of cash and cash equivalents and liquid investments of which £3.2 billion was held centrally. GSK has access to short-term finance under a $10 billion (£8.1 billion) US commercial paper programme; $1.4 billion (£1.1 billion) was in issue at 31 December 2016 (2015 – no issuances). GSK also has £1.9 billion five year committed facilities and $2.5 billion (£2.0 billion) of 364 day committed facilities. The five-year committed facilities were agreed in September 2015 and were extended by one year to 2021 in September 2016. The 364 day committed facilities were agreed in September 2016. These facilities were undrawn at 31 December 2016. GSK considers this level of committed facilities to be adequate, given current liquidity requirements.

GSK has a £15 billion European Medium Term Note programme and at 31 December 2016, £7.9 billion of notes were in issue under this programme. The Group also had $11.8 billion (£9.5 billion) of notes in issue at 31 December 2016 under a US shelf registration. GSK is currently in the process of renewing its US shelf registration statement in order to maintain access to the US debt markets. GSK's borrowings mature at dates between 2017 and 2045.

The put options owned by minority interest partners in ViiV Healthcare and the Consumer Healthcare JV business are exercisable immediately and from 2018, respectively. In reviewing liquidity requirements GSK considers that sufficient financing options are available should the put options be exercised.

Market risk

Interest rate risk management

GSK's objective is to minimise the effective net interest cost and to balance the mix of debt at fixed and floating interest rates over time. The policy on interest rate risk management limits the amount of floating interest payments to a prescribed percentage of operating profit.

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 the 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

The Group considers its maximum credit risk at 31 December 2016 to be £11,002 million (31 December 2015 – £11,423 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 215 for details on the Group's total financial assets. At 31 December 2016, GSK's greatest concentration of credit risk was £0.9 billion with Citibank (A/A1) (2015 – £0.8 billion with Citibank (A/A1)).

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

At 31 December 2016, £93 million of cash is categorised as held with unrated or sub-investment grade rated counterparties (lower then BBB-/Baa3) of which £63 million is cash in transit. The remaining exposure is concentrated in overseas banks used for local cash management or investment purposes, including £19 million in Nigeria held with United Bank for Africa, Zenith Bank and Stanbic IBTC Bank, £4 million with BTV in Austria, £2 million with Islandsbanki in Iceland and £1 million with Produbanco in Ecuador.

Of the £388 million of bank balances and deposits held with BBB/Baa rated counterparties, £42 million was held with BBB-/Baa3 rated counterparties, including balances or deposits of £12 million with State Bank of India and £27 million with HDFC Bank in India. These banks are used for either local cash management or local investment purposes.

2016	AAA/Aaa £m	AA/Aa £m	A/A £m	BBB/Baa £m	BB+/Ba1 and below /unrated £m	Total £m
Bank balances and deposits	–	542	1,560	388	93	2,583
US Treasury and Treasury repo only money market funds	2,248	–	–	–	–	2,248
Liquidity funds	66	–	–	–	–	66
Government securities	–	85	–	4	–	89
3rd party financial derivatives	–	70	86	–	–	156
Total	2,314	697	1,646	392	93	5,142

2015	AAA/Aaa £m	AA/Aa £m	A/A £m	BBB/Baa £m	BB+/Ba1 and below /unrated £m	Total £m
Bank balances and deposits	–	1,354	1,979	386	48	3,767
US Treasury and Treasury repo only money market funds	624	–	–	–	–	624
Liquidity funds	1,439	–	–	–	–	1,439
Government securities	–	72	–	3	–	75
3rd party financial derivatives	–	55	67	3	–	125
Total	2,063	1,481	2,046	392	48	6,030

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.

Notes to the financial statements continued

42. Financial instruments and related disclosures continued

GSK's centrally managed cash reserves amounted to £3.2 billion at 31 December 2016, all available within three months. This includes £1.6 billion centrally managed cash held by 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 2016. At 31 December 2016, the Group had trade receivables due from these three wholesalers totalling £1,323 million (2015 – £990 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. However, the Group believes there is no further credit risk provision required in excess of the normal provision for bad and doubtful debts (see Note 24, 'Trade and other receivables').

Fair value of financial assets and liabilities

The table on page 215 presents the carrying amounts and the fair values of the Group's financial assets and liabilities at 31 December 2016 and 31 December 2015.

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 – based on quoted market prices or calculated based on observable inputs in the case of marketable securities; based on principal amounts in the case of non-marketable securities because of their short repricing periods
- 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 in the case of European and US Medium term notes and other fixed rate borrowings (a level 1 fair value measurement); approximates to the carrying amount in the case of floating rate bank loans and other 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
- Lease obligations – approximates to the carrying amount.

Fair value of investments in GSK shares

At 31 December 2016, the Employee Share Ownership Plan (ESOP) Trusts held GSK shares with a carrying value of £286 million (2015 – £75 million) and a fair value of £667 million (2015 – £409 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 2016, 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 2016, GSK held Treasury shares at a cost of £6,451 million (2015 – £6,917 million) which has been deducted from retained earnings.

42. Financial instruments and related disclosures continued

	Notes	2016 Carrying value £m	2016 Fair value £m	2015 Carrying value £m	2015 Fair value £m
Available-for-sale investments:					
Liquid investments (Government bonds)	a	89	89	75	75
Other investments	a	985	985	1,255	1,255
Loans and receivables:					
Cash and cash equivalents	e	4,897	4,897	5,830	5,830
Trade and other receivables and certain Other non-current assets in scope of IAS 39	b	5,499	5,499	5,114	5,114
Financial assets at fair value through profit or loss:					
Other non-current assets in scope of IAS 39	a, b	361	361	279	279
Derivatives designated as at fair value through profit or loss	a, d, e	23	23	6	6
Derivatives classified as held for trading under IAS 39	a, d, e	133	133	119	119
Total financial assets		11,987	11,987	12,678	12,678
Financial liabilities measured at amortised cost:					
Borrowings excluding obligations under finance leases:					
– bonds in a designated hedging relationship	d	(3,189)	(3,335)	(2,740)	(2,872)
– other bonds		(14,111)	(16,996)	(13,387)	(15,209)
– bank loans and overdrafts	e	(332)	(332)	(435)	(435)
– commercial paper		(1,094)	(1,094)	–	–
Total borrowings excluding obligations under finance leases	f	(18,726)	(21,757)	(16,562)	(18,516)
Obligations under finance leases		(64)	(64)	(70)	(70)
Total borrowings		(18,790)	(21,821)	(16,632)	(18,586)
Trade and other payables, Other provisions and certain Other non-current liabilities in scope of IAS 39	c	**(18,713)**	**(18,713)**	(14,748)	(14,748)
Financial liabilities at fair value through profit or loss:					
Contingent consideration liabilities	a, c	**(5,896)**	**(5,896)**	(3,855)	(3,855)
Derivatives designated as at fair value through profit or loss	a, d, e	(92)	(92)	(97)	(97)
Derivatives classified as held for trading under IAS 39	a, d, e	(102)	(102)	(56)	(56)
Total financial liabilities		(43,593)	(46,624)	(35,388)	(37,342)
Net financial assets and financial liabilities		(31,606)	(34,637)	(22,710)	(24,664)

The valuation methodology used to measure fair value in the above table is described and categorised on page 214. Trade and other receivables, Other non-current assets, Trade and other payables, Other provisions, Other non-current liabilities and Contingent consideration liabilities are reconciled to the relevant Notes on pages 217 and 218.

Notes to the financial statements continued

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 2016	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Financial assets at fair value				
Available–for–sale financial assets:				
Liquid investments	84	5	–	89
Other investments	580	–	405	985
Financial assets at fair value through profit or loss:				
Other non-current assets	–	355	6	361
Derivatives designated as at fair value through profit or loss	–	23	–	23
Derivatives classified as held for trading under IAS 39	–	133	–	133
	664	516	411	1,591
Financial liabilities at fair value				
Financial liabilities at fair value through profit or loss:				
Contingent consideration liabilities	–	–	(5,896)	(5,896)
Derivatives designated as at fair value through profit or loss	–	(92)	–	(92)
Derivatives classified as held for trading under IAS 39	–	(101)	(1)	(102)
	–	(193)	(5,897)	(6,090)

At 31 December 2015	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Financial assets at fair value				
Available–for–sale financial assets:				
Liquid investments	71	4	–	75
Other investments	987	–	268	1,255
Financial assets at fair value through profit or loss:				
Other non-current assets	–	276	3	279
Derivatives designated as at fair value through profit or loss	–	6	–	6
Derivatives classified as held for trading under IAS 39	–	116	3	119
	1,058	402	274	1,734
Financial liabilities at fair value				
Financial liabilities at fair value through profit or loss:				
Contingent consideration liabilities	–	–	(3,855)	(3,855)
Derivatives designated as at fair value through profit or loss	–	(97)	–	(97)
Derivatives classified as held for trading under IAS 39	–	(55)	(1)	(56)
	–	(152)	(3,856)	(4,008)

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

	2016 £m	2015 £m
At 1 January	(3,582)	(1,504)
Net losses recognised in the income statement	(2,283)	(1,994)
Net gains recognised in other comprehensive income	29	36
Contingent consideration liabilities for businesses acquired during the year	(194)	(594)
Payment of contingent consideration liabilities	431	459
Additions	81	77
Disposals	(15)	(64)
Transfers from Level 3	(11)	(7)
Exchange	58	9
At 31 December	(5,486)	(3,582)

42. Financial instruments and related disclosures continued

The net losses of £2,283 million (2015 – £1,994 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. These net losses were reported in Other operating income. £2,162 million (2015 – £1,874 million) arose from remeasurement of the contingent consideration payable for the acquisition of the former Shionogi-ViiV Healthcare joint venture and £152 million (2015 – £111 million) arose from remeasurement of the contingent consideration payable on the acquisition in 2015 of the Novartis Vaccines business. Net gains of £29 million (2015 – £36 million) attributable to Level 3 equity investments reported in Other comprehensive income as Fair value movements on available-for-sale investments included net gains of £21 million (2015 – net losses of £8 million) in respect of equity investments held at the end of the year.

Financial liabilities measured using Level 3 valuation methods at 31 December included £5,304 million (2015 – £3,409 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 £545 million (2015 – £405 million) in respect of contingent consideration for the acquisition 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 and Other non-current assets in scope of IAS 39

The following table reconciles financial instruments within Trade and other receivables and Other non-current assets which fall within the scope of 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 IAS 39.

	2016					2015				
	At fair value through profit or loss £m	Loans and receivables £m	Financial instruments £m	Non-financial instruments £m	Total £m	At fair value through profit or loss £m	Loans and receivables £m	Financial instruments £m	Non-financial instruments £m	Total £m
Trade and other receivables (Note 24)	–	5,135	5,135	891	6,026	–	4,751	4,751	864	5,615
Other non-current assets (Note 22)	361	364	725	474	1,199	279	363	642	348	990
	361	5,499	5,860	1,365	7,225	279	5,114	5,393	1,212	6,605

The following table shows the ageing of such financial assets which are past due and for which no provision for bad or doubtful debts has been made:

	2016 £m	2015 £m
Past due by 1–30 days	137	200
Past due by 31–90 days	178	136
Past due by 91–180 days	55	76
Past due by 181–365 days	53	49
Past due by more than 365 days	98	90
	521	551

Notes to the financial statements continued

42. Financial instruments and related disclosures continued

(c) Trade and other payables, Other provisions, Other non-current liabilities and Contingent consideration liabilities in scope of IAS 39

The following table reconciles financial instruments within Trade and other payables, Other provisions, Other non-current liabilities and Contingent consideration liabilities which fall within the scope of 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 IAS 39.

	2016					2015				
	At fair value through profit or loss £m	Other liabilities £m	Financial instruments £m	Non-financial instruments £m	Total £m	At fair value through profit or loss £m	Other liabilities £m	Financial instruments £m	Non-financial instruments £m	Total £m
Trade and other payables (Note 27)	–	(11,041)	(11,041)	(923)	(11,964)	–	(8,199)	(8,199)	(686)	(8,885)
Other provisions (Note 29)	–	(113)	(113)	(1,387)	(1,500)	–	(159)	(159)	(1,605)	(1,764)
Other non-current liabilities (Note 30)	–	(7,559)	(7,559)	(886)	(8,445)	–	(6,390)	(6,390)	(717)	(7,107)
Contingent consideration liabilities (Note 39)	(5,896)	–	(5,896)	–	(5,896)	(3,855)	–	(3,855)	–	(3,855)
	(5,896)	(18,713)	(24,609)	(3,196)	(27,805)	(3,855)	(14,748)	(18,603)	(3,008)	(21,611)

(d) Derivative financial instruments and hedging programmes

The following table sets out the fair values of derivatives held by GSK. All the derivatives have a maturity of less than one year.

	2016 Fair value		2015 Fair value	
	Assets £m	Liabilities £m	Assets £m	Liabilities £m
Net investment hedges – Foreign exchange contracts (principal amount – £5,362 million (2015 – £6,192 million))	18	(92)	3	(97)
Cash flow hedges – Foreign exchange contracts (principal amount – £170 million (2015 – £69 million))	5	–	3	–
Derivatives designated as at fair value through profit or loss	23	(92)	6	(97)
Foreign exchange contracts (principal amount – £14,943 million (2015 – £12,152 million))	133	(99)	115	(54)
Embedded and other derivatives	–	(3)	4	(2)
Derivatives classified as held for trading under IAS 39	133	(102)	119	(56)
Total derivative instruments	156	(194)	125	(153)

Foreign exchange contracts classified as held for trading under IAS 39

The principal amount on foreign exchange contracts is the absolute total of outstanding positions at the balance sheet date. The Group's foreign exchange contracts are for periods of 12 months or less. At 31 December 2016, the Group held outstanding foreign exchange contracts with a net asset fair value of £34 million (£133 million asset less £99 million liability). At December 2015, the fair value was a £61 million net asset (£115 million asset less £54 million liability).

The overall decrease in the net asset fair value has been due to the weakening of Sterling against all major currencies in 2016, in particular impacting the hedging of Euro and US Dollar denominated inter-company loan balances that are not designated as accounting hedges. Fair value movements are taken to the Income statement in the period to offset the exchange gains and losses on the related inter-company loan balances.

42. Financial instruments and related disclosures continued

Fair value hedges
At 31 December 2016, 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 hedges relating to the Japanese (Yen) foreign operations were closed out during the year.

The carrying value of bonds on page 215 includes £3,189 million (2015 – £2,740 million) that are designated as hedging instruments in net investment hedges.

Cash flow hedges
During 2016, the Group entered into forward foreign exchange contracts which have been designated as cash flow hedges. These are hedging the foreign exchange exposure arising on Euro and US Dollar denominated coupon payments relating to the Group's European and US medium term notes and a number of highly probable forecast transactions denominated in US Dollars.

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.

(e) Offsetting of financial assets and liabilities
The following tables set out the financial assets and financial liabilities which are subject to offsetting, enforceable master netting arrangements and similar agreements. Amounts which are set off against financial assets and liabilities in the Group's balance sheet are set out below. For Trade and other receivables, Trade and other payables, Derivative financial assets and Derivative financial liabilities, amounts not offset in the balance sheet but which could be offset under certain circumstances are also set out.

At 31 December 2016	Gross financial assets/ (liabilities) £m	Gross financial (liabilities)/ assets set off £m	**Net financial assets/ (liabilities) per balance sheet £m**	Related amounts not set off in the balance sheet £m	Net £m
Trade and other receivables	5,136	(1)	5,135	(29)	5,106
Derivative financial assets	156	–	156	(117)	39
Cash and cash equivalents	4,897	–	4,897		
	10,189	(1)	10,188		
Trade and other payables	(11,042)	1	(11,041)	29	(11,012)
Derivative financial liabilities	(194)	–	**(194)**	117	(77)
Bank loans and overdrafts	(332)	–	**(332)**		
	(11,568)	1	(11,567)		

At 31 December 2015	Gross financial assets/ (liabilities) £m	Gross financial (liabilities)/ assets set off £m	Net financial assets/ (liabilities) per balance sheet £m	Related amounts not set off in the balance sheet £m	Net £m
Trade and other receivables	4,757	(6)	4,751	(17)	4,734
Derivative financial assets	125	–	125	(98)	27
Cash and cash equivalents	5,833	(3)	5,830		
	10,715	(9)	10,706		
Trade and other payables	(8,205)	6	(8,199)	17	(8,182)
Derivative financial liabilities	(153)	–	(153)	98	(55)
Bank loans and overdrafts	(438)	3	(435)		
	(8,796)	9	(8,787)		

The gross financial assets and liabilities set off in the balance sheet primarily relate to cash pooling arrangements with banks. 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.

Notes to the financial statements continued

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.

	2016	2015
	Total debt £m	Total £m
Floating and fixed rate debt less than one year	(4,106)	(1,285)
Between one and two years	(2,216)	(2,276)
Between two and three years	(1,277)	(1,868)
Between three and four years	–	(1,096)
Between four and five years	–	–
Between five and ten years	(4,082)	(3,464)
Greater than ten years	(7,045)	(6,573)
Total	(18,726)	(16,562)
Original issuance profile:		
Fixed rate interest	(17,342)	(16,127)
Floating rate interest	(1,381)	(434)
Total interest bearing	(18,723)	(16,561)
Non-interest bearing	(3)	(1)
	(18,726)	(16,562)

(g) Sensitivity analysis

Foreign exchange and interest rate sensitivity analysis has been prepared on the assumption that the amount of net debt, the ratio of fixed to floating interest rates of the debt and derivatives portfolio and the proportion of financial instruments in foreign currencies are all constant and on the basis of the hedge designations as at 31 December. Financial instruments affected by market risk include cash and cash equivalents, borrowings, trade receivables and payables and derivative financial instruments.

The following analyses are intended to illustrate the sensitivity of such financial instruments to changes in foreign exchange and interest rates.

Foreign exchange sensitivity

Foreign currency exposures arise from the translation of financial assets and liabilities which are not in the functional currency of the entity that holds them (cash and cash equivalents, bank loans and overdrafts, inter-company loans and deposits, other receivables and payables and trade receivables and payables) and derivative financial instruments hedging legal provisions and activities arising from acquisitions and disposals of assets.

The Group is primarily exposed to foreign exchange risk in relation to Sterling against movements in US Dollar, Euro and Japanese Yen. Based on the Group's net financial assets and liabilities as at 31 December, a weakening of Sterling against these currencies, with all other variables held constant, is illustrated in the table below. The table excludes financial instruments that expose the Group to foreign exchange risk where this risk is fully hedged with another financial instrument.

	2016	2015
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	77	77
10 cent appreciation of the Euro	18	7
10 yen appreciation of the Yen	1	(1)

An equivalent depreciation in the above currencies would cause the following increase/(decrease) in income £(66) million, £(16) million and £(1) million (2015 – £(67) million, £(6) million and £1 million) for US Dollar, Euro and Yen exchange rates respectively.

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 and US Dollar denominated coupon payments relating to the Group's European and US medium term notes and a number of highly probable forecast transactions denominated in US Dollars.

	2016	2015
Equity impact of non-functional currency foreign exchange exposures	**Increase/(decrease) in equity £m**	Increase/(decrease) in equity £m
10 cent appreciation of the US Dollar	**11**	–
10 cent appreciation of the Euro	**(795)**	(676)
10 yen appreciation of the Yen	**–**	(20)

An equivalent depreciation in the above currencies would cause the following (decrease)/increase in equity: £(10) million, £670 million and £nil (2015 – £nil, £584 million and £18 million) for US Dollar, Euro and Yen exchange rates respectively.

The table below presents the Group's sensitivity to foreign exchange rates based on the composition of net debt as shown in Note 31 adjusting for the effects of foreign exchange derivatives that are not part of net debt but affect future foreign currency cash flows.

	2016	2015
Impact of foreign exchange movements on net debt	**(Increase)/decrease in net debt £m**	(Increase)/decrease in net debt £m
10 cent appreciation of the US Dollar	**(746)**	(471)
10 cent appreciation of the Euro	**190**	221
10 yen appreciation of the Yen	**(11)**	4

An equivalent depreciation in the above currencies would have the following impact on net debt: £634 million, £(160) million and £10 million for US Dollar, Euro and Yen exchange rates respectively (2015 – £411 million, £(190) million and £(4) million).

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 variable 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 2016 would have increased by approximately £3 million (2015 – £37 million increase). A 1% (100 basis points) movement in interest rates is not deemed to have a material effect on equity.

	2016	2015
Income statement impact of interest rate movements	**Increase/(decrease) in income £m**	Increase/(decrease) in income £m
1% (100 basis points) increase in Sterling interest rates	**3**	19
1% (100 basis points) increase in US Dollar interest rates	**(3)**	14
1% (100 basis points) increase in Euro interest rates	**3**	4

Notes to the financial statements continued

42. Financial instruments and related disclosures continued

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

The following tables provides an analysis of the anticipated contractual cash flows including interest payable for the Group's non-derivative financial liabilities on an undiscounted basis. The Group did not use interest rate swaps to manage its interest rate risk. 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 2016	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	(4,108)	(705)	(23)	(2)	(11,621)	**(16,459)**
Between one and two years	(2,218)	(566)	(22)	(1)	(8,784)	**(11,591)**
Between two and three years	(1,282)	(503)	(12)	–	(961)	**(2,758)**
Between three and four years	–	(496)	(7)	–	(786)	**(1,289)**
Between four and five years	–	(496)	–	–	(705)	**(1,201)**
Between five and ten years	(4,117)	(2,122)	–	–	(3,474)	**(9,713)**
Greater than ten years	(7,124)	(4,522)	–	–	(3,135)	**(14,781)**
Gross contractual cash flows	(18,849)	(9,410)	(64)	(3)	(29,466)	**(57,792)**

At 31 December 2015	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	(1,285)	(638)	(23)	(2)	(8,505)	**(10,453)**
Between one and two years	(2,280)	(625)	(20)	(1)	(479)	**(3,405)**
Between two and three years	(1,871)	(510)	(14)	(1)	(7,688)	**(10,084)**
Between three and four years	(1,103)	(457)	(6)	–	(452)	**(2,018)**
Between four and five years	–	(451)	(6)	–	(655)	**(1,112)**
Between five and ten years	(3,498)	(2,047)	(1)	–	(2,452)	**(7,998)**
Greater than ten years	(6,651)	(4,554)	–	(3)	(2,635)	**(13,843)**
Gross contractual cash flows	(16,688)	(9,282)	(70)	(7)	(22,866)	**(48,913)**

The increase in contractual cash flows for non-derivative financial liabilities of £8.8 billion over the year resulted partially from the initial recognition of the ViiV Healthcare put option liability of £1.3 billion. In addition, there was an increase of £2.9 billion in forecast future cash flows in respect of contingent consideration payable for the acquisition of the former Shionogi-ViiV Healthcare joint venture in 2012 and for the acquisition of the Novartis Vaccines business in 2015.

Anticipated contractual cash flows for the repayment of debt and debt interest have increased by £2.3 billion over the year, principally due to the retranslation of US Dollar denominated debt which has been adversely impacted by the weakening of Sterling due to volatility in the markets compounded by political and economic events throughout 2016.

The table below provides an analysis of the anticipated contractual cash flows for the Group's derivative instruments, excluding embedded derivatives and equity options 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.

The amounts receivable and payable in less than one year have increased compared with 31 December 2015 as a result of hedging of the US commercial paper programme and increased hedging of Euro receivables.

	2016		2015	
	Receivables £m	Payables £m	Receivables £m	Payables £m
Due in less than one year	21,266	(21,303)	18,283	(18,318)
Between one and two years	20	(20)	20	(20)
Gross contractual cash flows	21,286	(21,323)	18,303	(18,338)

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 2016 was £338 million (2015 – £349 million; 2014 – £346 million). Of this amount, £271 million (2015 – £307 million; 2014 – £302 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 4.5% (2015 – 5.7%; 2014 – 5.2%) 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 2014	31,067		20,838	
Awards granted	12,410	£12.65	7,842	$41.56
Awards exercised	(9,642)		(6,787)	
Awards cancelled	(923)		(666)	
At 31 December 2014	32,912		21,227	
Awards granted	13,019	£11.57	7,198	$35.66
Awards exercised	(11,476)		(8,878)	
Awards cancelled	(1,878)		(2,027)	
At 31 December 2015	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	

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 2014 to Directors and members of the CET, 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.

For those awards made to all other eligible employees the performance conditions are based on both GSK's EPS growth compared with the increase in the UK Retail Prices Index over the three year measurement period and adjusted free cash flow. In addition, some businesses have an element of their award based on a strategic or operational business measure, over a three year measurement period, specific to the employee's business area.

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 2016, awards were made of 4.6 million shares at a weighted fair value of £11.01 and 1.2 million ADS at a weighted fair value of $31.78. At 31 December 2016, there were outstanding awards over 13.2 million shares and 3.3 million ADS.

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:

	2016 Grant	2015 Grant	2014 Grant
Risk-free interest rate	0.32%	0.88%	0.7%
Dividend yield	4.9%	6.5%	5.8%
Volatility	23%	21%	19%
Expected life	3 years	3 years	3 years
Savings-related options grant price (including 20% discount)	£12.95	£10.14	£11.31

Notes to the financial statements continued

43. Employee share schemes continued

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 2016	6,133	£12.37	7,547	$47.06	6,267	£10.89
Range of exercise prices on options outstanding at year end	£11.47 – £14.88		$33.42 – $58.00		£10.13 – £12.95	
Weighted average market price on exercise during year		£15.85		$42.08		£14.93
Weighted average remaining contractual life		1.8 years		1.1 years		2.5 years

Options over 1.3 million shares were granted during the year under the savings-related share option scheme at a weighted average fair value of £2.69. At 31 December 2016, 6.1 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. In 2016, Treasury shares with a carrying value of £466 million were purchased by the UK ESOP Trust to satisfy future awards. 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	2016	2015
Number of shares (000)	42,571	29,662
	£m	£m
Nominal value	11	7
Carrying value	285	74
Market value	665	407

Shares held for share option schemes	2016	2015
Number of shares (000)	139	139
	£m	£m
Nominal value	–	–
Carrying value	1	1
Market value	2	2

44. Post balance sheet events

On 28 February 2017, GSK completed the sale of its anaesthesia portfolio to Aspen, excluding the US and Canada markets, for £180 million together with milestones of up to £100 million.

45. Principal Group companies

The following represent the principal subsidiaries and their countries of incorporation of the Group at 31 December 2016. 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 (63.5%)
GlaxoSmithKline Consumer Healthcare (UK) Trading Limited (63.5%)
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. (63.5%)
Corixa Corporation
GlaxoSmithKline Capital Inc.
GlaxoSmithKline Consumer Healthcare, L.P. (55.9%)
GlaxoSmithKline Holdings (Americas) Inc.
GlaxoSmithKline LLC
Human Genome Sciences, Inc.
Novartis Consumer Health, Inc. (63.5%)
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) (63.5%)
Laboratoire GlaxoSmithKline (France)
ViiV Healthcare SAS (France) (78.3%)
GlaxoSmithKline Consumer Healthcare GmbH & Co. KG (Germany) (63.5%)
GlaxoSmithKline GmbH & Co. KG (Germany)
GSK Vaccines GmbH (Germany)
GlaxoSmithKline Consumer Healthcare S.p.A. (Italy) (63.5%)
GlaxoSmithKline S.p.A. (Italy)
GSK Vaccines S.r.l. (Italy)
GlaxoSmithKline B.V. (Netherlands)
GlaxoSmithKline Pharmaceuticals S.A. (Poland)
GSK Services Sp z o.o. (Poland)
GlaxoSmithKline Trading Services Limited (Republic of Ireland) (i)
GlaxoSmithKline S.A. (Spain)
Laboratorios ViiV Healthcare, S.L. (Spain) (78.3%)
Novartis Consumer Health S.A. (Switzerland) (63.5%)

Others

GlaxoSmithKline Argentina S.A. (Argentina)
GlaxoSmithKline Australia Pty Ltd (Australia)
GlaxoSmithKline Consumer Healthcare Australia Pty Ltd (Australia) (63.5%)
GlaxoSmithKline Brasil Limitada (Brazil)
GlaxoSmithKline Consumer Healthcare Inc. (Canada) (63.5%)
GlaxoSmithKline Inc. (Canada)
ID Biomedical Corporation of Quebec (Canada)
GlaxoSmithKline Limited (China (Hong Kong))
Sino-American Tianjin Smith Kline & French Laboratories Ltd (China) (34.9%)
GlaxoSmithKline Consumer Healthcare Limited (India) (72.5%)
GlaxoSmithKline Pharmaceuticals Limited (India) (75%)
GlaxoSmithKline Consumer Healthcare Japan K.K. (Japan) (63.5%)
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 Ilaclari 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 272 to 282, 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. and GlaxoSmithKline Capital plc 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. and GlaxoSmithKline Capital plc.

See pages 272 to 282 for a complete list of subsidiary undertakings, associates and joint ventures, which form part of these financial statements.

Notes to the financial statements continued

46. Legal proceedings

The Group is involved in significant legal and administrative proceedings, principally product liability, intellectual property, tax, anti-trust 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 2016, the Group's aggregate provision for legal and other disputes (not including tax matters described in Note 14, 'Taxation') was £344 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.

Advair **HFA,** *Flovent* **HFA,** *Ventolin* **HFA**

On 29 September 2015, Mylan Pharmaceuticals (Mylan) filed a petition for an Inter Partes Review (IPR) with the United States Patent and Trademark Office (USPTO) seeking to invalidate a patent, U.S. Patent No. 6,743, 413 ('413 patent'). The '413 patent claims a method of treatment with a formulation containing an active medication and a propellant known as 134a, substantially free of surfactant, and its use in the hydrofluoroalkane (HFA) metered dose inhalers for *Advair*, *Flovent* and *Ventolin*. The Group exclusively licenses the patent from 3M and has the first right to enforce and defend it. The patent, which expires on 1 December 2021, is listed in the Orange Book. On 14 November 2016, the Group entered into a settlement agreement with Mylan resolving the IPR. The terms of the settlement agreement are confidential. The patent that was the subject of the IPR and settlement is one of a number of patents covering *Advair*, *Flovent* and *Ventolin* and their use in HFA metered dose inhalers.

On 15 February 2017, the Group received a Paragraph IV certification from Teva for *Flovent* HFA. This is the first Paragraph IV certification the Group has received from a generic pharmaceutical company seeking to make an AB rated version of Flovent HFA. Three patents are at issue. Teva alleges that their generic version of *Flovent* will not infringe two patents directed to actuation indicators listed in the Orange Book. Teva also alleges that the '413 patent, which was the subject of the Mylan IPR proceeding that was settled in November 2016, is not valid. The Group is evaluating Teva's Paragraph IV certification. The deadline for filing a patent infringement suit that would trigger a '30-month stay' (a statutory preclusion of ANDA approval for the generic product for 30 months from the date of the Group's receipt of notice of the Paragraph IV certification) under the Hatch-Waxman Act is 2 April 2017.

Bexsero/**Men B vaccines**

Following its acquisition of the Novartis Vaccine business, the Group has taken over litigation originally filed by Novartis against Pfizer, Inc. (Pfizer) in the UK, Italy and the United States related to meningococcal B (Men B) vaccines. On 18 February 2015, Novartis filed suit against Pfizer in the UK High Court (Patents Court) for a declaration that a European patent owned by Pfizer was not infringed by *Bexsero* and was invalid. Pfizer filed a Statement of Defence on 27 May 2015 and counterclaimed for infringement. Trial was held on 8-18 March 2016, and on 5 May 2016, the judge ruled that Pfizer's patent was valid and infringed by the *Bexsero* product. The Group has appealed the decision, and the appeal hearing is expected to be heard in the week of 12 December 2017.

On 18 February 2015, Novartis filed suit against Pfizer in the Court of Rome for a declaration that a European patent owned by Pfizer was not infringed by *Bexsero* and was invalid. The Group has assumed responsibility for this matter. The Group is also prosecuting a lawsuit against Pfizer, originally filed by Novartis, for a declaration that a European patent issued to Pfizer related to meningitis B vaccines is not infringed by *Bexsero*. Pfizer has counterclaimed seeking a declaration that *Bexsero* infringes their patents and an order for damages. The Group is actively pursuing these actions.

46. Legal proceedings continued

On 18 February 2015, Novartis filed suit against Pfizer in the US District Court for the District of New Jersey for patent infringement. The complaint asserts six patents against Pfizer, alleging that Pfizer's sale of *Trumenba* infringes those patents. On 27 April 2015, the Group filed a First Amended Complaint against Pfizer reasserting the six patents originally asserted by Novartis, but also asserting one additional recently-granted patent. The Group filed a Second Amended Complaint on 15 March 2016 asserting an additional five patents covering *Trumenba* against Pfizer. No dates have been set for summary judgement motions or trial.

On 25 July 2016, Pfizer filed a suit with the UK High Court against the Group, Novartis, and the Craig Venter Institute, seeking to invalidate six UK patents owned by the Group that have relevance to Pfizer's *Trumenba*. These six patents, formerly owned by Novartis, have also been opposed in the European Patent Office (EPO) by Pfizer. Two of the six patents were revoked by the EPO Opposition Division. However, in September 2016, one of the patents was upheld by the EPO Board of Appeal and another one was upheld by the EPO Opposition Division. The Group believes that *Trumenba* infringes both of these patents. Two trials have been set to cover the patents in issue. The first trial date is January 2018 and the second trial date is February 2018.

On 12 October 2016, the Group filed suit seeking injunctive relief against Pfizer in Ireland claiming infringement of four Group patents (including the Group patent upheld by the EPO Board of Appeals in September, 2016 and the other patent maintained in the first instance) by virtue of its manufacture of *Trumenba* and its proposed commercialisation in Ireland. The Group's application to enter the Commercial Division of the Irish High Court in order to expedite the case was successful. The hearing is likely to be scheduled for Q3 2017.

On 12 October 2016, the same day that the Group filed suit against Pfizer in the UK and Ireland, the Group filed suit in Austria seeking injunctive relief against Boehringer Ingelheim (BI), Pfizer's contract manufacturer of the antigens for *Trumenba*, claiming infringement of a Group patent upheld by the EPO Board of Appeal in September 2016. BI has filed a response to the complaint. The trial is likely to be scheduled for some time in 2017.

On 25 November 2016, Pfizer filed suit in the Canadian Federal Court against the Group for infringement of a Pfizer Canadian patent covering *Trumenba*. Pfizer seeks damages but is not seeking an injunction. The trial is not likely to occur before 2019.

Coreg CR

Mylan sent a Paragraph IV certification, dated 26 August 2015, to the Group and Flamel Ireland Ltd. (Flamel) stating that it had submitted an Abbreviated New Drug Application (ANDA) to the US Food and Drug Administration (FDA) seeking approval of a generic version of *Coreg CR*. The notice asserted that the patents listed in the Orange Book for *Coreg CR* were either invalid or not infringed by Mylan's product. On 9 October 2015, Flamel filed a civil complaint in the US District Court for the Northern District of West Virginia alleging that Mylan's product infringes Flamel's Orange Book-listed extended release formulation patent which expires on 11 March 2026. The Group is the exclusive licensee of this patent for Coreg CR. Mylan answered on 18 December 2015, asserting that Flamel's patent was invalid or not infringed. Mylan also filed a third party complaint against the Group requesting a declaration that the Group's patent on carvedilol phosphate hemihydrate was invalid or not infringed. On 2 December 2016, the parties settled the matter on terms that are confidential.

Kivexa

The patent covering the combination of lamivudine and abacavir for *Kivexa* and the corresponding Supplementary Protection Certificates (SPCs) were challenged independently by Teva and Mylan in several major European markets. These challenges have been withdrawn pursuant to a confidential settlement agreement with Teva dated 18 May 2015 and a confidential settlement agreement with Mylan dated 10 May 2016.

In Q3 2016, challenges to the validity of the SPC for the combination patent for *Kivexa* were brought in Germany by Betapharm (Dr. Reddy's), Hexal (Sandoz) and Hormosan (Lupin). ViiV Healthcare commenced proceedings for injunctive relief against all three companies. ViiV Healthcare's application for injunctive relief against Hexal was denied. On 10 October 2016, a confidential settlement agreement was reached with Dr. Reddy's covering a number of European markets. Pursuant to this agreement, the German actions involving Betapharm have been withdrawn. No trial dates have been set for the Hexal or Hormosan actions.

Sandoz also has filed nullity actions in Austria, Germany, Spain and Sweden in September and October 2016 alleging that the *Kivexa* SPC was invalid because the underlying patent covering the combination of lamivudine and abacavir was invalid. Sandoz launched an abacavir/lamivudine product in Austria, Spain and Sweden. ViiV Healthcare has commenced proceedings for injunctive relief in Austria and Sweden, with decisions on injunctive relief expected in the first half of 2017. ViiV Healthcare also has counterclaimed for infringement within the nullity action in Spain. No trial dates have been set in these jurisdictions.

Notes to the financial statements continued

46. Legal proceedings continued

DOC Generici filed an action in September 2016 in the Court of Rome seeking a declaration that the Italian SPC covering *Kivexa* was invalid because it is based upon the invalid combination patent. Company Eurogenerics has joined the action. No trial date has been set.

In Portugal, ViiV Healthcare initiated arbitration proceedings against Lupin, Vale Pharmaceuticals and Zentiva under the patent covering the combination of lamivudine and abacavir. All three companies had filed for marketing approval for a generic version of *Kivexa*. Sandoz joined the proceedings as the future holder of the Lupin marketing approval. No arbitration date has yet been scheduled in any of these actions.

In December 2016, Accord Healthcare Ltd. (Accord) filed a revocation action against the SPC in the UK. The action has been resolved in a confidential settlement between Accord and the Group. In February 2017, Kyowa Pharmaceuticals filed a nullity action relating to *Kivexa* in Japan. ViiV Healthcare is evaluating its options with regard to this action.

Lexiva

On 4 February 2016, Lupin filed a petition in the US Patent and Trademark Office (USPTO) seeking to challenge the validity of the patent claims covering *Lexiva* in an Inter Partes Review (IPR). This is the second petition for IPR that Lupin has filed against this patent. In the earlier petition, the USPTO instituted an IPR on broad claims in the patent, but denied instituting a challenge to the specific claims to *Lexiva*, which are now being challenged. The patent expires on 24 June 2018. On 2 August 2016, the USPTO granted the petition and instituted a trial on the remaining claims in the *Lexiva* patent. An oral hearing is scheduled for 5 April 2017. Under the relevant rules, the USPTO must issue a decision on the IPR by 2 August 2017.

Additionally, on 9 February 2017, Lupin sent ViiV Healthcare a Paragraph IV certification under the Hatch-Waxman Act alleging that the patent covering *Lexiva* is not valid. The patent expires on 24 December 2017 and has pediatric exclusivity extending to 24 June 2018. ViiV Healthcare is evaluating the certification.

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. The federal cases filed against the Group are part of a multi-district litigation proceeding pending in the US District Court for the Eastern District of Pennsylvania (the 'MDL Court'). Cases have also been filed in a number of state courts. In addition, the County of Santa Clara, California, has brought an action on behalf of California residents which is pending in the MDL Court, alleging violations of California's False Advertising Act and seeking restitution, damages, and civil penalties.

As of February 2017, the Group has reached agreements to settle the substantial majority of federal and state cases pending in the US.

There are four purported class actions in the US seeking economic damages on behalf of third party payers (TPPs) asserting claims arising under various state and federal laws, including the Racketeer Influenced and Corrupt Organizations Act (RICO), state unfair trade practices and/or consumer protection laws. The MDL Court has consolidated these four actions for pre-trial proceedings, and has appointed a Plaintiffs Steering Committee. The Group was successful in obtaining an initial case management order that requires the four named plaintiffs to produce documentation relating to the merits of their claims. Two of the four named plaintiffs have filed motions to dismiss voluntarily their claims, which the Group has opposed in order to require these plaintiffs to comply with their discovery obligations. The Group has filed a motion for summary judgement on the basis of pre-emption in the TPP actions. Oral argument on the motions was heard on 13 February 2017, and the Court has taken the matter under advisement.

In the Santa Clara County action, the Group has pending a motion for summary judgement on the basis of pre-emption and also is seeking partial summary judgement on the County's restitution claim. However, no decision is expected until the MDL Court first disposes of Santa Clara's motion to dismiss based on lack of federal jurisdiction. Oral argument was heard on 12 November 2015 on Santa Clara's motion to dismiss for lack of jurisdiction. The Court has not yet issued its decision.

There are fifteen class actions in Canada, two of which are active. In the two active cases, class certification hearings were held. On 7 December 2016, the court issued a decision certifying a nationwide class of all users of *Avandia*. The Group has filed a notice of intent to appeal.

46. Legal proceedings continued

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 or persistent pulmonary hypertension; (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 2017, but a number of claims related to use during pregnancy are still pending in various courts in the US. Other matters have been dismissed without payment.

There are nine cases pending in the Philadelphia, Pennsylvania Mass Tort Program (MTP). Rader v. GSK went to trial on 17 March 2016. On 4 April 2016, the judge presiding over the trial granted the Group's motion for non-suit, ending the trial in the Group's favour when he ruled that the plaintiff failed to introduce the necessary evidence to proceed. On 17 June 2016, the court denied plaintiff's motion for post-trial relief, which sought a new trial. Plaintiff's appeal was docketed on 19 July 2016 and is proceeding.

Following their loss in Rader, plaintiffs' counsel asked the MTP Court to stay the remaining eight cases until an issue in Rader was addressed by the Pennsylvania appellate courts. The Group opposed that request. On 19 April 2016, the MTP Court granted plaintiffs' counsel's request and entered an Order staying all the cases until the resolution of the Rader appeal. The Group then moved to lift the Order granting the stay, arguing that a host of dispositive issues in these cases did not depend on the outcome of the Rader appeal. The Court denied the Group's motions on 13 July 2016.

There are eight cases pending in a single California state court pursuant to a coordination order. Motions to quash for personal jurisdiction and forum non conveniens were denied. On 6 December 2016, the Group filed writs seeking review by the California Court of Appeals. The court has not yet issued a ruling.

Fourteen cases were filed in state court in St. Louis, Missouri. The Group removed each of the cases to the Federal Court for the Eastern District of Missouri and, concurrently, filed motions to dismiss for lack of personal jurisdiction, or in the alternative, to transfer to the federal court in the plaintiffs' respective home states. As of 15 February 2017, all fourteen cases have been dismissed.

On 10 October 2016, the parties agreed to a settlement of the 65-plaintiff case in state court in St. Louis, Missouri. In Meyers, the denial of the Group's motion to dismiss on personal jurisdiction grounds was affirmed by the Illinois appellate court. In El-Massri, the Connecticut federal court granted the Group's motion for summary judgement on 1 February 2017. The Kiker case that had been set for trial on 21 January 2017 was settled.

In Canada, the Bartram action, which was certified as a national class action in British Columbia, was settled in December 2016, eliminating the need for a trial. The Singh action in Alberta, also a proposed national class action, seeks to certify a class relating to birth defects generally. A hearing on the motion to certify this class, previously scheduled for early 2015, was adjourned at plaintiffs' request so that additional evidence could be filed. A revised hearing date has not been set, but is likely to be in mid-2017. There is also one inactive proposed national class action in British Columbia (Wakeman). A new class action, Jensen, alleging *Paxil* (and other SSRI) use and autism was filed in Saskatchewan in January 2017.

– Acts of violence

As of February 2017, 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. Trial on one of the US cases, Dolin, begins on 14 March 2017 in federal court in Chicago, Illinois.

– Discontinuation

In the UK, one hundred and three cases remain. These were the subject of a hearing held on 14 December 2015. The judgement from the hearing was published on 4 February 2016 and allowed the remaining claims to continue under court management. Further case management conferences were held on 29 July 2016 and 23 February 2017 and a new timetable ordered for the proceedings.

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 2017, the Group is a defendant in 312 personal injury lawsuits in the US. Three hundred and two of the cases are part of a multi-district litigation proceeding (MDL) in the District of Massachusetts. The MDL cases are in discovery. On 27 January 2016, the MDL court issued an order denying the Group's motion to dismiss all claims of the grounds that they are pre-empted under federal law. The Group may renew the motion at a later date. The MDL continues with monthly status conferences where issues such as the sufficiency of the pleadings and the scope of discovery will be addressed. The Group continues to seek the dismissal of individual cases as appropriate.

There has been no significant activity in 2016 in the ten state court cases in the US, eight of which are located in California. The Group is also a defendant in four proposed class actions in Canada. There has been no significant activity in 2016 in the Canadian class actions.

Notes to the financial statements continued

46. 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'.

SEC/DOJ and SFO Anti-corruption enquiries

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. 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) also confirmed that it had concluded its investigation into the Group's commercial practices and would take no action against the Group. The SEC and DOJ investigations were initiated as part of an industry-wide inquiry in 2010 into whether pharmaceutical companies had violated the US FCPA. The Group agreed to the resolution without admitting or denying the SEC's allegations.

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 has requested information from the Group on its commercial operations in these countries. The Group is responding to the SFO's requests. The Group is unable to make a reliable estimate of the expected financial effect of these investigations, and no provision has been made for them.

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 is responding to the subpoena. The Group is unable to make a reliable estimate of the expected financial effect of this matter, and no provision has been made for it.

US subpoena relating to *Imitrex* and *Amerge*

On 7 March 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 US contracts for *Imitrex* and *Amerge*. The Group is responding to the subpoena. The Group is unable to make a reliable estimate of the expected financial effect of this matter, and no provision has been made for it.

Avandia

The Group is defending an action by the County of Santa Clara, California, which was brought under California's consumer protection laws seeking civil penalties and restitution as a result of the Group's marketing of *Avandia*. The Group has filed a number of dispositive motions which are pending before the MDL Court. The County of Santa Clara recently has filed a motion to dismiss the action from federal court for lack of federal jurisdiction. This motion has been briefed and argued by the parties.

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.

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. The Court denied the Group's motion to dismiss, and discovery is scheduled to be completed in 2017, with trial expected to be scheduled sometime in 2018.

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 totalling £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 between 2001 and 2003. The Group terminated the agreements at issue in 2004. The Group believes it has strong grounds to appeal the CMA's finding to the Competition Appeal Tribunal (CAT) such that the fine is overturned or substantially reduced. The appeal to the CAT is due to commence on 28 March 2017. No provision has been made for this matter.

46. 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 26 October 2015, the trial court denied the Group's motion for a stay and set a schedule for early dispositive motions and discovery. The Group filed a petition for certiorari with the US Supreme Court on 19 February 2016. On 7 November 2016, the US Supreme Court denied the Group's petition for certiorari. In the trial court, on 22 March 2016, the Group's motion for judgement on the pleadings was granted in large part, dismissing, on statute of limitations grounds, most of the claims alleged by the purported indirect purchaser class. On 18 May 2016, the trial court denied the indirect purchaser class plaintiffs' motion for reconsideration. As a result, the indirect purchaser class representatives have agreed to a settlement to exit the case and resolve their remaining claims. Terms of the settlement are confidential. The case will continue to move forward with document production and witness depositions with regard to the claims of the direct purchasers.

Wellbutrin XL

Plaintiffs claimed anti-trust injury related to allegedly sham patent litigation filed by Biovail against generic companies pursuing ANDAs for generic *Wellbutrin XL*. The Group initially was named as a party plaintiff in two patent infringement actions but later withdrew from those matters. The Group was not a party in the remaining two patent infringement actions relating to *Wellbutrin XL*. Plaintiffs alleged that a conspiracy to delay generic approval existed between Biovail and the Group, but the Court granted summary judgement in favour of the Group on those claims. The sole remaining claims in the matter relate to plaintiffs' allegations that the Group entered into an anti-competitive reverse payment settlement to resolve the patent infringement litigation. The District Court granted summary judgement in favour of the Group on all claims, and the matter is currently pending on appeal before the US Court of Appeals for the Third Circuit Court.

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, except as noted below. Matters for which the Group has made a provision are also noted in Note 29, 'Other provisions'.

Securities/ERISA class actions – Stiefel

There are currently three outstanding private lawsuits brought by former Stiefel Laboratories, Inc. (Stiefel) employees alleging 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.

The Fried case is currently on appeal to the US Court of Appeals for the Eleventh Circuit, with oral argument having taken place in February 2016. Stiefel won a complete defence verdict in this matter at a jury trial in federal court in Florida in October 2013 and the plaintiff appealed. Trial of a second Florida case has been stayed pending resolution of the Fried matter. Discovery also continues in a case pending in New York federal court.

In addition to the private litigant suits, on 12 December 2011, the US Securities and Exchange Commission (SEC) filed a formal complaint against Stiefel 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. The case had been stayed but was returned to active status in early summer 2015. Since then, the parties engaged in discovery and re-briefed their summary judgement motions at the court's request. However, although briefing on the motions was completed in July 2016, the court has not yet ruled on the motions.

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 21 sites, of which 11 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. While the cost of investigation, study and remediation at such sites could, over time, be significant, the Group routinely accrues amounts related to its share of the liability for such matters.

Financial statements of GlaxoSmithKline plc
prepared under UK GAAP (including FRS 101 'Reduced Disclosure Framework')

Directors' statement of responsibilities in relation to the company's financial statements

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

UK company law requires the Directors to prepare financial statements for each financial year. Under that law 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 parent company financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the parent company and its profit or loss for that period.

In preparing those 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 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 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 company and to enable them to ensure that the parent company financial statements and Remuneration report (on pages 111 to 136) comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The parent company financial statements for the year ended 31 December 2016, comprising the balance sheet for the year ended 31 December 2016 and supporting notes, are set out on pages 235 to 238 of this report.

The responsibilities of the auditors in relation to the parent company financial statements are set out in the Independent Auditors' report on pages 233 to 234.

The financial statements for the year ended 31 December 2016 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.

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 auditors

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 auditors are 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 auditors are 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

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.

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 79 to 110. 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 auditors have considered the Directors' statement of compliance in relation to those points of the UK Corporate Governance Code which are specified for their review.

Philip Hampton
Chairman

13 March 2017

Independent Auditors' report
to the members of GlaxoSmithKline plc

Report on the parent company financial statements

Our Opinion
In our opinion, GlaxoSmithKline plc's parent company financial statements (the "financial statements"):

- give a true and fair view of the state of the parent company's affairs at
- 31 December 2016;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

What we have audited
The financial statements, included within the Annual Report, comprise:

- the Company balance sheet at 31 December 2016;
- the Company statement of changes in equity for the year then ended; and
- the notes to the financial statements, which include a summary of significant accounting policies and other explanatory information.

Certain required disclosures have been presented elsewhere in the Annual Report, rather than in the notes to the financial statements. These are cross-referenced from the financial statements and are identified as audited. The financial reporting framework that has been applied in the preparation of the financial statements is applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice), including FRS 101 "Reduced Disclosure Framework".

Other required reporting

Consistency of other information
Companies Act 2006 opinion
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 addition, in light of the knowledge and understanding of the group and its environment obtained in the course of the audit, we are required to report if we have identified any material misstatements in the Strategic Report and the Directors' Report. We have nothing to report in this respect.

ISAs (UK & Ireland) reporting
Under International Standards on Auditing (UK and Ireland) ("ISAs (UK & Ireland)") we are required to report to you if, in our opinion, information in the Annual Report is:

- materially inconsistent with the information in the audited financial statements; or
- apparently materially incorrect based on, or materially inconsistent with, our knowledge of the company acquired in the course of performing our audit; or
- otherwise misleading.

We have no exceptions to report arising from this responsibility.

Adequacy of accounting records and information and explanations received
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 financial statements and the part of the Directors' Remuneration Report to be audited are not in agreement with the accounting records and returns.

We have no exceptions to report arising from this responsibility.

Directors' remuneration
Under the Companies Act 2006, we are required to report to you if, in our opinion, certain disclosures of directors' remuneration specified by law are not made. We have no exceptions to report arising from this responsibility.

Directors' Remuneration report – Companies Act 2006 opinion
In our opinion, the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006.

Other Companies Act 2006 reporting
Under the Companies Act 2006, we are required to report to you if, in our opinion, certain disclosures of directors' remuneration specified by law are not made. We have no exceptions to report arising from this responsibility.

Independent Auditors' report
to the members of GlaxoSmithKline plc continued

Report on the parent company financial statements continued

Responsibilities for the financial statements and the audit

Our responsibilities and those of the directors

As explained more fully in the Directors' Statement of Responsibilities set out on page 232, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view.

Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and ISAs (UK & Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

This report, including the opinions, has been prepared for and only for the company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

What an audit of financial statements involves

We conducted our audit in accordance with ISAs (UK & Ireland). An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of:

- whether the accounting policies are appropriate to the parent company's circumstances and have been consistently applied and adequately disclosed;
- the reasonableness of significant accounting estimates made by the directors; and
- the overall presentation of the financial statements.

We primarily focus our work in these areas by assessing the directors' judgements against available evidence, forming our own judgements, and evaluating the disclosures in the financial statements.

We test and examine information, using sampling and other auditing techniques, to the extent we consider necessary to provide a reasonable basis for us to draw conclusions. We obtain audit evidence through testing the effectiveness of controls, substantive procedures or a combination of both.

In addition, we read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material mis-statements or inconsistencies, we consider the implications for our report. With respect to the Strategic Report and Directors' Report, we consider whether those reports include the disclosures required by applicable legal requirements.

Other matters

We have reported separately on the Group financial statements of GlaxoSmithKline plc for the year ended 31 December 2016 and on the information in the Directors' Remuneration Report that is described as having been audited.

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

PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
London

13 March 2017

Company balance sheet – UK GAAP

(including FRS 101 'Reduced Disclosure Framework') as at 31 December 2016

	Notes	2016 £m	2016 £m	2015 £m	2015 £m
Fixed assets – investments	F		20,236		20,096
Current assets:					
Trade and other receivables	G		2,128		6,635
Cash at bank			12		2
Total current assets			2,140		6,637
Bank overdrafts			(10)		–
Trade and other payables	H		(555)		(671)
Total current liabilities			(565)		(671)
Net current assets			1,575		5,966
Total assets less current liabilities			21,811		26,062
Provisions	I		(23)		(40)
Other non-current liabilities	J		(534)		(398)
Net assets			21,254		25,624
Capital and reserves					
Called up share capital	K		1,342		1,340
Share premium account	K		2,954		2,831
Other reserves			1,420		1,420
Retained earnings:					
At 1 January		20,033		23,251	
(Loss)/profit for the year		(111)		656	
Other changes in retained earnings		(4,384)		(3,874)	
	L		15,538		20,033
Equity shareholders' funds			21,254		25,624

The financial statements on pages 235 to 238 were approved by the Board on 13 March 2017 and signed on its behalf by

Philip Hampton
Chairman
GlaxoSmithKline plc
Registered number: 388879

Company statement of changes in equity

for the year ended 31 December 2016

	Share capital £m	Share premium account £m	Other reserves £m	Retained earnings £m	Total £m
At 1 January 2015	1,339	2,759	1,420	23,251	**28,769**
Profit attributable to shareholders	–	–	–	656	**656**
Dividends to shareholders	–	–	–	(3,874)	**(3,874)**
Shares issued under employee share schemes	1	72	–	–	**73**
At 31 December 2015	1,340	2,831	1,420	20,033	**25,624**
Loss attributable to shareholders	–	–	–	(111)	**(111)**
Dividends to shareholders	–	–	–	(4,850)	**(4,850)**
Shares issued under employee share schemes	2	87	–	–	**89**
Treasury shares transferred to the ESOP Trust	–	36	–	466	**502**
At 31 December 2016	1,342	2,954	1,420	15,538	**21,254**

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 2016, with comparative figures as at 31 December 2015.

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.

Legal and other disputes

The company provides for anticipated settlement costs where an outflow of resources is considered probable and a reliable estimate may be made of the likely outcome of the dispute and legal and other expenses arising from claims against the company. At 31 December 2016 provisions for legal and other disputes amounted to £23 million (2015 – £40 million).

C) Key accounting judgements and estimates

Legal and other disputes

The company provides for anticipated settlement costs where an outflow of resources is considered probable and a reliable estimate may be made of the likely outcome of the dispute and legal and other expenses arising from claims against the company. 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 new facts emerge and each dispute progresses.

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 2016 provisions for legal and other disputes amounted to £23 million (2015 – £40 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 £12,053 (2015 – £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 2015. For further details, see Note 16 to the Group financial statements, 'Dividends'.

F) Fixed assets – investments

	2016 £m	2015 £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	**545**	405
	20,236	20,096

G) Trade and other receivables

	2016 £m	2015 £m
Amounts due within one year:		
UK Corporation tax recoverable	**201**	201
Other receivables	**4**	41
Amounts owed by Group undertakings	**1,478**	5,977
	1,683	6,219
Amounts due after more than one year:		
Amounts owed by Group undertakings	**445**	416
	2,128	6,635

Notes to the company balance sheet – UK GAAP

(including FRS 101 'Reduced Disclosure Framework') continued

H) Trade and other payables

	2016 £m	2015 £m
Amounts due within one year:		
Other creditors	514	478
Contingent consideration payable	11	7
Amounts owed to Group undertakings	30	186
	555	671

The company has guaranteed debt issued by its subsidiary companies from one of which it receives an annual fee. In aggregate, the company has outstanding guarantees over £18.4 billion of debt instruments. 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).

I) Provisions

	2016 £m	2015 £m
At 1 January	40	25
Exchange adjustments	13	3
Charge for the year	78	139
Utilised	(108)	(127)
At 31 December	23	40

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

J) Other non-current liabilities

	2016 £m	2015 £m
Contingent consideration payable	534	398
	534	398

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'.

K) Called up share capital and share premium account

	Ordinary Shares of 25p each		Share premium account
	Number	£m	£m
Share capital authorised			
At 31 December 2015	10,000,000,000	2,500	
At 31 December 2016	10,000,000,000	2,500	
Share capital issued and fully paid			
At 1 January 2015	5,355,297,232	1,339	2,759
Issued under employee share schemes	6,010,415	1	72
At 31 December 2015	5,361,307,647	1,340	2,831
Issued under employee share schemes	7,008,415	2	87
Treasury shares transferred to the ESOP Trust	–	–	36
At 31 December 2016	5,368,316,062	1,342	2,954

	31 December 2016 000	31 December 2015 000
Number of shares issuable under employee share schemes	71,382	99,833
Number of unissued shares not under option	4,560,302	4,538,859

At 31 December 2016, of the issued share capital, 42,710,419 shares were held in the ESOP Trusts, 458,205,950 shares were held as Treasury shares and 4,867,399,693 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'.

L) Reserves

The loss of GlaxoSmithKline plc for the year was £111 million (2015 – £656 million profit), which after dividends of £4,850 million (2015 – £3,874 million), gave a retained loss of £4,961 million (2015 – £3,218 million loss). No Treasury shares were purchased in the year (2015 – £nil). After the effect of the £466 million Treasury shares transferred to a subsidiary company (2015 – £nil), retained earnings at 31 December 2016 stood at £15,538 million (2015 – £20,033 million), of which £4,096 million was unrealised (2015 – £4,096 million).

M) Group companies

See pages 272 to 282 for a complete list of subsidiaries, associates and joint ventures, which forms part of these financial statements.