

41. Accounting estimates and judgements (continued)

3. Critical accounting judgements in applying the Group's accounting policies (continued)

Post-retirement obligations

The Group provides retirement benefits for its permanent employees through pension funds with defined benefit and defined contribution categories. Actuarial valuations are based on assumptions which include the discount rate, inflation rate, salary increase rate, expected return on plan assets and the pension increase allowance rate.

Puttable non-controlling interest liabilities

The Group has entered into put arrangements where non-controlling interests are entitled to sell certain of their holdings in subsidiaries to the Group at future contracted dates. The puttable non-controlling interest liability is calculated as the present value of the expected redemption value, discounted from the expected redemption date to the reporting date. There are two main assumptions used in the calculation of the liability; the expected redemption value at the expected redemption date and the discount rate used to discount the expected redemption value to the reporting date.

The discount rate is derived from an applicable government bond yield curve, in the country in which the subsidiary operates, and is applied over the number of years between the reporting date and the redemption date, plus an appropriate credit spread.

42. Determination of fair values

A number of the Group's accounting policies and disclosures require the determination of fair values, for both financial and non-financial assets and liabilities. Fair values have been determined for measurement and/or disclosure purposes based on the following methods. Where applicable, further information about the assumptions made in determining fair values is disclosed in the notes specific to that asset or liability.

Property, plant and equipment

The fair value of property, plant and equipment recognised as a result of a business combination is based on market values. The market value of property is the estimated amount for which a property could be exchanged on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion. The market values of other assets are based on the quoted market prices for similar items.

Intangible assets

The fair value of intangible assets is based on the discounted cash flows expected to be derived from the use and eventual sale of the assets.

Inventory

The fair value of inventory acquired in a business combination is determined based on its estimated selling price in the ordinary course of business less the estimated costs of completion and sale, and a reasonable profit margin based on the efforts required to complete and sell the inventory.

Investments

Fair value of listed investments is calculated by reference to stock exchange quoted selling prices at the close of business on the report date. Fair value of unlisted investments is determined by using appropriate valuation models. (refer note 19)

Forward exchange contracts

The fair value of forward exchange contracts is based on their market prices.

Borrowings

Fair value, which is determined for disclosure purposes, is calculated based on the present value of future principal and interest cash flows, discounted at the market rate of interest at the reporting date. For finance leases the market rate of interest is determined by reference to similar lease agreements. The carrying value of the bank overdrafts is the fair value.

Share-based payments

The fair value of the share options is measured using a modified Black-Scholes method. Measurement inputs include share price at measurement date, exercise price of the instrument, expected volatility (based on the historic volatility), option life, distribution yield and the risk-free interest rate (based on the ZAR bond static yield curve).

43. Subsequent events

Effective 1 August 2019 following the dissolution of the Adcock Ingram Broad-Based Black Empowerment Scheme, the Group attained a 50.14% voting rights controlling interest in Adcock Ingram. This investment will be consolidated from 1 August 2019.

The acquisition of Eqstra for R3.1 billion enterprise value, was announced on 15 July 2019 and is subject to normal approvals and conditions precedent.