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#### Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Harmony Gold Mining Company Limited

In our opinion, the accompanying consolidated balance sheets and the related consolidated income statements, statements of comprehensive income, statements of changes in shareholders' equity and cash flow statements present fairly, in all material respects, the financial position of Harmony Gold Mining Company Limited and its subsidiaries at June 30,2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended June 30, 2016 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of June 30, 2016, based on criteria established in Internal Control - Integrated Framework (2013 Framework) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Annual Report on Internal Control over Financial Reporting appearing under Item 15 (b).

Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers Inc. Johannesburg, Republic of South Africa 26 October 2016

# **GROUP INCOME STATEMENTS**

for the years ended 30 June 2016

	US dollar			
Figures in million	Notes	2016	2015	2014
Revenue Cost of sales	5	1 264 (1 088)	1 348 (1 645)	1 515 (1 549)
Production costs Amortisation and depreciation		(914) (149)	(1 103) (216)	(1 148) (207)
Reversal of impairment/(impairment) of assets Employment termination and restructuring costs Other items		3 (1) (27)	(285) (22) (19)	(135) (26) (33)
Gross profit/(loss)		176	(297)	(34)
Corporate, administration and other expenditure Social investment expenditure		(28) (4)	(33) (6)	(42) (9)
Exploration expenditure		(13)	(23)	(44)
Loss on scrapping of property, plant and equipment	13	`(4)	(42)	-
Foreign exchange translation loss (net)	6	(13)	(32)	(18)
Other income/(expenses) (net)	7	(3)	-	1
Operating profit/(loss)	8	111	(433)	(146)
Loss from associates Profit on disposal of investments	19	-	(2)	(10) 1
Net gain on financial instruments	16	1	1	16
Investment income	9	16	20	21
Finance cost	10	(19)	(22)	(27)
Profit/(loss) before taxation Taxation	11	109 (43)	(436) 62	(145) 27
Net profit/(loss) for the year		66	(374)	(118)
Attributable to:				
Owners of the parent		66	(374)	(118)
Non-controlling interest		-	-	-
Earnings/(loss) per ordinary share (cents)				
Total earnings/(loss)	12	15	(86)	(27)
Diluted earnings/(loss) per ordinary share (cents) Total diluted earnings/(loss)	12	15	(86)	(27)
Total anatoa oarinigo/(1000/	12	10	(00)	(21)

# **GROUP STATEMENTS OF COMPREHENSIVE INCOME**

for the years ended 30 June 2016

		U	S dollar		
Figures in million	Notes	2016	2015	2014	
Net profit/(loss) for the year Other comprehensive income/(loss) for the year, net of income tax		66 (375)	(374) (367)	(118) (209)	
Items that may be reclassified subsequently to profit or loss		(375)	(368)	(206)	
Foreign exchange translation gain/(loss) Gain on fair value movement of available-for-sale investments Movement on available-for-sale investments recognised in profit or loss	23 23 23	(375) - -	(368) - -	(206) 1 (1)	
Items that will not be reclassified to profit or loss		-	1	(3)	
Remeasurement of retirement benefit obligation Actuarial gain/(loss) recognised during the year Deferred taxation thereon	25	-	1 -	(4) 1	
Total comprehensive income/(loss) for the year		(309)	(741)	(327)	
Attributable to: Owners of the parent Non-controlling interest		(309)	(741) -	(327)	

# **GROUP BALANCE SHEETS**

		US de	ollar
Figures in million	Notes	At 30 June 2016	At 30 June 2015
ASSETS			
Non-current assets			
Property, plant and equipment	13	2 033	2 430
Intangible assets	14	59	73
Restricted cash Restricted investments	15 16	4 170	4 196
Inventories	21	3	3
Trade and other receivables	18	12	7
Total non-current assets		2 281	2 713
Current assets			
Inventories	21	79	106
Restricted cash	15	1	1
Trade and other receivables Income and mining taxes	18	44	62 2
Derivative financial assets	17	25	-
Cash and cash equivalents		85	88
Total current assets		234	259
Total assets		2 515	2 972
EQUITY AND LIABILITIES			
Share capital and reserves			
Share capital	22	4 036	4 035
Other reserves	23	(1 591)	(1 238)
Accumulated loss		(531)	(597)
Total equity		1 914	2 200
Non-current liabilities			
Deferred tax liabilities	11	164	157
Provision for environmental rehabilitation	24	148	182
Retirement benefit obligation	25	11	13
Other non-current liabilities Borrowings	26 27	1 139	3 280
Total non-current liabilities	21	463	635
Total non-current naminies		403	033
Current liabilities			
Borrowings	27	20	-
Income and mining taxes		3	
Trade and other payables	28	115	137
Total current liabilities		138	137
Total equity and liabilities		2 515	2 972

# **GROUP STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY**

for the years ended 30 June 2016

	Number of ordinary	Share	Share	Accumulated	Other	
Figures in million (US dollar)	shares issued	capital	premium	loss	reserves	Total
Notes	22	22			23	
Balance - 30 June 2013	435 289 890	33	4 002	(105)	(701)	3 229
Issue of shares	433 209 090	33	4 002	(103)	(701)	3 229
- Exercise of employee share options	535 557	-	-	-	-	_
Share-based payments	-	-	-	-	23	23
Net loss for the year	-	-	-	(118)	-	(118)
Other comprehensive income for the year	-	-	-	-	(209)	(209)
Balance - 30 June 2014	435 825 447	33	4 002	(223)	(887)	2 925
Issue of shares						
- Exercise of employee share options	361 686	_	_	_	_	_
Share-based payments	-	_	_	_	16	16
Net loss for the year	-	-	-	(374)	-	(374)
Other comprehensive loss for the year	-	-	-	-	(367)	(367)
Balance - 30 June 2015	436 187 133	33	4 002	(597)	(1 238)	2 200
Issue of shares						
- Exercise of employee share options	1 077 346	_		_	_	_
- Share issued to the Tlhakanelo Employee	1 011 040					
Share Trust	35 000		_			
Share-based payments		-	-		22	22
Reversal of provision for odd lot repurchases	-	-	1	-	-	1
Net profit for the year	-	-	-	66	-	66
Other comprehensive income for the year	-	-	•	-	(375)	(375)
Balance - 30 June 2016	437 299 479	33	4 003	(531)	(1 591)	1 914

# **GROUP CASH FLOW STATEMENTS**

for the years ended 30 June 2016

	US dollar			
Figures in million	Notes	2016	2015	2014
CASH FLOW FROM OPERATING ACTIVITIES				
Cash generated by operations	29	322	168	218
Interest received		5	9	13
Interest paid Income and mining taxes refunded/(paid)		(11) (4)	(9) 8	(12)
Cash generated by operating activities		312	176	219
CASH FLOW FROM INVESTING ACTIVITIES				
(Increase)/decrease in restricted cash		(1)	1	(1)
(Increase)/decrease in amounts invested in restricted investments		3	2	(2)
Proceeds on disposal of investments  Loan to associate advanced	19	-	(10)	5
Loan to ARM BBEE Trust	18	(14)	(10)	-
Proceeds on disposal of property, plant and equipment		` -	1	-
Additions to intangible assets		- (4.00)	(1)	(1)
Additions to property, plant and equipment		(168)	(246)	(256)
Cash utilised by investing activities		(180)	(253)	(255)
CASH FLOW FROM FINANCING ACTIVITIES				
Borrowings raised	27	24	80	60
Borrowings paid	27	(138)	(65)	(44)
Cash generated/(utilised) by financing activities		(114)	15	16
Foreign currency translation adjustments		(21)	(22)	(17)
Net increase/(decrease) in cash and cash equivalents		(3)	(84)	(37)
Cash and cash equivalents - beginning of year		88	172	209
Cash and cash equivalents - end of year		85	88	172

## NOTES TO THE GROUP FINANCIAL STATEMENTS

for the years ended 30 June 2016

#### 1 GENERAL INFORMATION

Harmony Gold Mining Company Limited (the company) and its subsidiaries (collectively Harmony or the group) are engaged in gold mining and related activities, including exploration, extraction and processing. Gold bullion, the group's principal product, is currently produced at its operations in South Africa and Papua New Guinea (PNG).

The company is a public company, incorporated and domiciled in South Africa. The address of its registered office is Randfontein Office Park, Corner Main Reef Road and Ward Avenue. Randfontein. 1759.

The consolidated financial statements were authorised for issue by the board of directors on 26 October 2016.

#### 2 ACCOUNTING POLICIES

#### **BASIS OF PREPARATION**

The principal accounting policies applied in the preparation of the consolidated financial statements have been consistently applied in all years presented. No new standards, amendments to standards or interpretations to existing standards were adopted by the group during the financial year.

The consolidated financial statements have been prepared on a going concern basis.

The financial statements of the group have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board (IASB) and IFRIC Interpretations (collectively IFRS).

#### RECENT ACCOUNTING DEVELOPMENTS

New standards, amendments to standards and interpretations to existing standards that are not yet effective and have not been early adopted

At the date of authorisation of these financial statements, the standards, amendments to standards and interpretations listed below were in issue but not yet effective. These new standards and interpretations have not been early adopted by the group and the group plans on adopting these standards, amendments to standards and interpretations on the dates when they become effective.

The effective dates below are for the financial periods beginning on or after the given date.

The following standards or amendments to standards are not relevant to the group:

Pronouncement	Title	Effective date
IFRS 14	Regulatory Deferral Accounts	1 January 2016
IFRS 10 and IAS 28	Consolidated Financial Statements and Investments in Associates and Joint Ventures -	1 January 2016
(Amendments)	Investment entities	
IAS 16 and IAS 38	Property, Plant and Equipment and Intangible Assets - Clarification of acceptable	1 January 2016
(Amendments)	methods of depreciation and amortisation	
IAS 16 and IAS 41	Amendments to Property, Plant and Equipment and Agriculture –	1 January 2016
(Amendments)	Bearer plants	
IAS 27 (Amendments)	Separate Financial Statements	1 January 2016

The following standards or amendments to standards are not expected to have an impact on the results of the group but will affect the disclosure in the financial statements:

Pronouncement	Title	Effective date
IAS 1 (Amendments)	Presentation of Financial Statements	1 January 2016
IAS 7 (Amendments)	Statement of Cash Flows	1 January 2017

The following standards, amendments to standards and interpretations to existing standards may possibly have an impact on the group:

Pronouncement	Title	Effective date
IFRS 2 (Amendments)	Share-Based Payment - Classification and Measurement of Share-Based Payment	1 January 2018
	Transactions	
	The amendments, which were developed through the IFRS Interpretations Committee,	
	provide requirements on the accounting for:	
	a. the effects of vesting and non-vesting conditions on the measurement of cash-settled	
	share-based payments;	
	b. share-based payment transactions with a net settled feature for withholding tax	
	obligations; and	
	c. a modification to the terms and conditions of a share-based payment that changes the	
	classification of the transaction from cash-settled to equity-settled.	

for the years ended 30 June 2016

## 2 ACCOUNTING POLICIES continued

## RECENT ACCOUNTING DEVELOPMENTS continued

The following standards, amendments to standards and interpretations to existing standards may possibly have an impact on the group: continued

Pronouncement	Title	Effective date
IFRS 9	Financial Instruments This standard on classification and measurement of financial assets and financial liabilities will replace IAS 39, Financial Instruments: Recognition and Measurement. IFRS 9 has two measurement categories: amortised cost and fair value. All equity instruments are measured at fair value.	1 January 2018
	A debt instrument is measured at amortised cost only if the entity is holding it to collect contractual cash flows and the cash flows represent principal and interest. The standard introduces a fair value through other comprehensive income category for certain debt instruments, where part of a fair value change due to an entity's own credit risk is recorded in other comprehensive income rather than the income statement.	
	Hedge accounting The new requirements in IFRS 9 align hedge accounting more closely with risk management, and establishes a more principles-based approach to hedge accounting and addresses inconsistencies and weaknesses in the current model in IAS 39.	
	Expected credit losses IFRS 9 introduces a new model for the recognition of impairment losses – the expected credit losses (ECL) model. The new rules mean that entities will have to record a day 1 loss equal to the 12-month ECL on initial recognition of financial assets that are not credit impaired (or lifetime ECL for trade receivables).	
	IFRS 9 contains a 'three stage' approach which is based on the change in credit quality of financial assets since initial recognition. The stages dictate how an entity measures impairment losses and applies the effective interest rate method.	
	Disclosures  Extensive disclosures are required, including reconciliations from opening to closing amounts of the ECL provision, assumptions and inputs and a reconciliation on transition of the original classification categories under IAS 39 to the new classification categories in IFRS 9.	
	The impact of the standard is currently being assessed by management. The standard would affect the classification and measurement of financial instruments, however, the initial assessment indicates that the standard would not have a significant impact on the financial statements based on the group's existing financial instruments at year end.	
IFRS 10 and IAS 28 (Amendments)	Consolidated Financial Statements and Investments in Associates and Joint Ventures  The main consequence of the amendments is that a full gain or loss is recognised when a transaction involves a business (whether it is housed in a subsidiary or not). A partial gain or loss is recognised when a transaction involves assets that do not constitute a business, even if these assets are housed in a subsidiary.  The impact of the amendment is currently being assessed by management. Initial	Date to be determined at a later stage
	assessments indicate that the standard would not have an impact on the financial statements.	
IFRS 11 (Amendments)	Joint Arrangements - Acquisitions of interests in joint operations Amends IFRS 11 Joint Arrangements to require an acquirer of an interest in a joint operation in which the activity constitutes a business (as defined in IFRS 3 Business Combinations) to: Apply all of the business combinations accounting principles in IFRS 3 and other IFRSs, except for those principles that conflict with guidance in IFRS 11; Disclose the information required by IFRS 3 and either IFRSs for business combinations.	1 January 2016
	The amendments apply both to the initial acquisition of an interest in joint operation, and the acquisition of an additional interest in a joint operation (in the latter case, previously held interests are not remeasured).	
	The impact of the amendment is currently being assessed by management. Initial assessments indicate that the amendment would have an impact on the financial statements if the group were to acquire an initial or additional interest in a joint operation.	

for the years ended 30 June 2016

#### 2 ACCOUNTING POLICIES continued

#### RECENT ACCOUNTING DEVELOPMENTS continued

The following standards, amendments to standards and interpretations to existing standards may possibly have an impact on the group: continued

Pronouncement	Title	Effective date
FRS 15	Revenue from Contracts with Customers  The core principle is that revenue must be recognised when goods or services are transferred to the customer, at the transaction price. The most significant changes that flow from the principle are:  1. Any bundled goods or services that are distinct must be separately recognised, and any discounts or rebates on the contract price must generally be allocated to the separate elements.  2. Revenue may be recognised earlier than under current standards if the consideration varies for any reasons (such as for incentives, rebates, performance fees, royalties, success of an outcome etc.) - minimum amounts must be recognised if they are not at significant risk of reversal.  3. The point at which revenue is able to be recognised may shift: some revenue which is currently recognised at a point in time at the end of a contract may now be recognised over the contract term and vice versa.	1 January 2018
	The impact of the standard is currently being assessed by management. Initial assessments indicate that the standard would not have a significant impact on the financial statements based on the group's existing operations and processes in place.	
FRS 16	Leases This standard replaces the current guidance in IAS 17, as well as IFRIC 4. The new standard requires lessees to recognise a lease liability reflecting future lease payments and a 'right-of-use asset' for virtually all lease contracts (with limited exceptions), whereas previously, lessees were required to make a distinction between a finance lease (on balance sheet) and an operating lease (off balance sheet).	1 January 2019
	For lessors, the accounting stays almost the same. However, as the IASB has updated the guidance on the definition of a lease (as well as the guidance on the combination and separation of contracts), lessors will also be affected by the new standard. The new accounting model for lessees is expected to impact negotiations between lessors and lessees. Under IFRS 16, a contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.	
	The impact of the standard is currently being assessed by management.	
FRSs	Annual Improvements 2012-2014 cycle IFRS 5 – Non-current Assets Held for Sale and Discontinued Operations – Addresses changes in methods of disposal. IFRS 7 – Financial Instruments: Disclosures – Addresses servicing contracts and the applicability of the amendments to IFRS 7 to condensed interim financial statements. IFRS 19 – Employee Benefits – Addresses issues related to regional markets when determining discount rates. IFRS 34 – Interim Financial Reporting – Addresses disclosure of information 'elsewhere in the interim financial report'.	1 January 2016
	The impact of the improvements are currently being assessed by management. Initial assessments indicate that the improvements would not have a significant impact on the financial statements.	
AS 12 (Amendments)	Income taxes - Recognition of deferred tax assets for unrealised losses  These amendments clarify how to account for deferred tax assets related to debt instruments measured at fair value, as well as deferred tax where an asset is measured at fair value and that fair value is below the asset's tax base.	1 January 2017
	The impact of the amendment is currently being assessed by management.	

#### **MEASUREMENT BASIS**

The financial statements have been prepared under the historical cost convention, as modified by the revaluation of available-for-sale financial assets, financial assets and financial liabilities at fair value through profit or loss and cash-settled share-based payments.

#### **GROUP ACCOUNTING POLICIES**

Accounting policies are included in the relevant notes to the consolidated financial statements and have been highlighted in grey shading in the notes to the group financial statements. The accounting policies below are applied throughout the financial statements:

#### 2.1 Consolidation

The group recognises that control is the single basis for consolidation for all types of entities in accordance with IFRS 10 - Consolidated Financial Statements.

The consolidated financial information includes the financial statements of the company, its subsidiaries, interest in associates and joint arrangements and structured entities. Where the group has no control over an entity, that entity is not consolidated.

for the years ended 30 June 2016

#### 2 ACCOUNTING POLICIES continued

#### **GROUP ACCOUNTING POLICIES continued**

#### 2.1 Consolidation continued

Control

The group, regardless of the nature of its involvement with an entity, shall determine whether it is a parent by assessing whether it controls the investee.

The group controls an entity when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

#### (i) Subsidiaries

Subsidiaries are entities over which the group has control. Subsidiaries are fully consolidated from the date on which control is transferred to the group up until when that control ceases.

Intercompany transactions, balances and unrealised gains on transactions between group companies are eliminated. Unrealised losses are also eliminated. Accounting policies of subsidiaries have been changed to ensure consistency with the policies adopted by the group.

The group uses the acquisition method of accounting to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair value of the assets transferred, liabilities incurred and the equity interests issued by the group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. On an acquisition-by-acquisition basis, the group recognises any non-controlling interests in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's net assets.

The excess of the sum of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquired fair value of any previous equity interest in the acquiree over the fair value of the group's share of the identifiable net assets acquired is recorded as goodwill. If this is less than the fair value of the net assets of the subsidiary acquired, in the case of a bargain purchase, the difference is recognised directly in the income statement.

#### (ii) Associates

Associates are entities in which the group has significant influence, but not control, over operational and financial policies. This may be when there is a shareholding of between 20% and 50% of the voting rights or when significant influence can be otherwise demonstrated, for example where the group has the right of representation on the board of directors of the entity.

Investments in associates are accounted for by using the equity method of accounting, and are initially recognised at cost. The group's investment in associates includes goodwill identified on acquisition. Cumulative post-acquisition movements are adjusted against the carrying amount of the investment. The group's share of the associates' post-acquisition profits or losses is recognised in the income statement, and its share of post-acquisition movement in reserves is recognised in other reserves.

When the group's share of losses in an associate equals or exceeds its interest in the associate, the group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate.

If an associate is acquired in stages, the cost of the associate is measured as the sum of the consideration paid for each purchase plus a share of investee's profits and other equity movements. Any acquisition-related costs are treated as part of the investment in associate. Any related goodwill is calculated at each stage of the acquisition based on the consideration paid and the share of fair value of net assets acquired at the date of each acquisition.

Where the previously held interest was classified as an available-for-sale financial instrument, any existing gains or losses recognised in the available-for-sale revaluation reserve are reversed through other comprehensive income. The cost basis of the investment is then further adjusted by including the group's share of profits after dividends, other comprehensive income and other equity movements relating to the previously held interest is accounted for in equity.

The carrying value of an associate is reviewed on a regular basis and, if impairment in the carrying value has occurred, it is written off in the period in which such impairment is identified.

Unrealised gains on transactions between the group and its associates are eliminated to the extent of the group's interest in the associates. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment that should be recognised.

Accounting policies of associates have been reviewed to ensure consistency with the policies adopted by the group.

for the years ended 30 June 2016

#### 2 ACCOUNTING POLICIES continued

#### **GROUP ACCOUNTING POLICIES continued**

#### 2.1 Consolidation continued

#### (iii) Joint arrangements

Joint arrangements are arrangements of which two or more parties have joint control and are contractually bound. The joint arrangement can either be a joint operation or a joint venture. A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement and have the right to the assets, and obligations for the liabilities, relating to the arrangement. These parties are called joint operators. A joint venture is a joint arrangement where the parties that have joint control of the arrangement have rights to the net assets of the arrangement. Those parties are called joint venturers.

For interest in joint operations, the group includes its share of the joint operations' individual income and expenses, assets and liabilities and cash flows on a line-by-line basis with similar items in the group's financial statements.

The group recognises the portion of gains or losses on the sale of assets by the group to the joint operation that is attributable to the other joint operators. The group does not recognise its share of profits or losses from the joint operation that result from the purchase of assets by the group from the joint operation until it resells the assets to an independent party. However, if a loss on the transaction provides evidence of a reduction in the net realisable value of current assets or an impairment loss, the loss is recognised immediately.

The group recognises its interest in a joint venture as an investment and accounts for it using the equity accounting method.

#### (iv) Structured entities

A structured entity is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity, such as when any voting rights relate to administrative tasks only and the relevant activities are directed by means of contractual arrangements.

The accounting treatment for a structured entity will fall into one of the aforementioned categories (i to iii) depending on whether the group has control over that structured entity.

#### 2.2 Foreign currency translation

#### (i) Functional and presentation currency

Items included in the financial statements of each of the group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency).

For translation of the rand financial statement items to US dollar, the average of R14.50 (2015: R11.45) (2014: R10.35) per US\$1 was used for income statement items (unless this average was not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case these items were translated at the rate on the date of the transactions) and the closing rate of R14.72 (2015: R12.16) per US\$1 for asset and liability items. Equity items were translated at historic rates.

The translation effect from rand to US dollar is included in other comprehensive income in the US dollar financial statements.

References to "A\$" refers to Australian currency, "R" to South African currency, "\$" or "US\$" to United States currency and "K" or "kina" to Papua New Guinean currency.

#### (ii) Transactions and balances

Foreign exchange gains and losses resulting from the settlement of foreign currency transactions and from the translation to year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the income statement. Gains and losses recognised in the income statement are included in the determination of foreign exchange translation gains/losses.

#### (iii) Group companies

The results and financial position of all group entities (none of which has the currency of a hyperinflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- Assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet while equity items are translated at historic rates;
- Income and expenses for each income statement are translated at average exchange rates (the rate on the date of the transaction is used if the average is not a reasonable rate for the translation of the transaction);
- All resulting exchange differences are recognised as a separate component of other comprehensive income.

On consolidation, exchange differences arising from the translation of the net investment in foreign operations, and of borrowings and other currency instruments designated as hedges of such investments, are taken to other comprehensive income. When a foreign operation is sold or control is otherwise lost, exchange differences that were recorded in other comprehensive income are recognised in profit or loss in the period of the disposal or change in control. Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign entity and translated at the closing rate.

#### 2.3 Revenue recognition

The group has determined that gold is its primary product and other metals produced as part of the extraction process are considered to be byproducts of gold. Revenue arising from metal sales is only recognised when the significant risks and rewards of ownership have been transferred,
neither continuing managerial involvement nor effective control over the metals sold has been retained, the amount of revenue and costs incurred can
be measured reliably and it is probable that the economic benefits associated with the sale will flow to the group. These conditions are satisfied when
the gold has been delivered in terms of the contract and the sales price fixed, as evidenced by the certificate of sale issued by the refinery. The sales
price for the majority of the group's gold is based on the gold spot price according to the afternoon London Bullion Market fixing price for gold on the
date the sale is concluded.

Revenue further excludes value-added tax. Revenues from silver and other by-product sales are credited to production costs as a by-product credit.

for the years ended 30 June 2016

#### 2 ACCOUNTING POLICIES continued

#### **GROUP ACCOUNTING POLICIES continued**

#### 2.4 Exploration expenditure

The group has elected to expense all exploration and evaluation expenditures until it is concluded that the project is technically feasible and commercially viable, and that future economic benefits are therefore probable. The information used to make that determination depends on the level of exploration as well as the degree of confidence in the ore body as set out below.

Exploration and evaluation expenditure on greenfield sites, being those where the group does not have any mineral deposits which are already being mined or developed, is expensed as incurred until the technical and commercial viability of the project has been demonstrated usually through the completion of a final feasibility study. However, in certain instances, the technical and commercial viability of the deposit may be demonstrated at an earlier stage, for example where an extended feasibility study is conducted and the underlying feasibility study in respect of specific components of the mineral deposit has advanced to such a stage that significant commercially viable reserves have been established, and the other criteria for the recognition of an asset have been met.

Exploration and evaluation expenditure on brownfield sites, being those adjacent to mineral deposits which are already being mined or developed, is expensed as incurred until the group is able to demonstrate that future economic benefits are probable through the completion of a feasibility study, after which the expenditure is capitalised as mine development cost. A 'feasibility study' consists of a comprehensive study of the viability of a mineral project that has advanced to a stage where the mining method has been established, and which, if an effective method of mineral processing has been determined, includes a financial analysis based on reasonable assumptions of technical, engineering, operating economic factors and the evaluation of other relevant factors. The feasibility study, when combined with existing knowledge of the mineral property that is adjacent to mineral deposits that are already being mined or developed, allows the group to conclude that the project is technically feasible and commercially viable.

Exploration and evaluation expenditure relating to extensions of mineral deposits which are already being mined or developed, including expenditure on the definition of mineralisation of such mineral deposits, is capitalised as a mine development cost following the completion of an economic evaluation equivalent to a feasibility study. This economic evaluation is distinguished from a feasibility study in that some of the information that would normally be determined in a feasibility study is instead obtained from the existing mine or development. This information, when combined with existing knowledge of the mineral property already being mined or developed, allows the directors to conclude that the project is technically feasible and commercially viable.

#### 2.5 Impairment of non-financial assets

Assets that have an indefinite useful life are not subject to amortisation and are tested annually for impairment or when there is an indication of impairment.

Assets that are subject to amortisation are reviewed annually on 30 June for impairment or whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

An impairment loss is recognised in the income statement for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units). Each operating shaft, along with allocated common assets such as plants and administrative offices, is considered to be a cash-generating unit as each shaft is largely independent from the cash flows of other shafts and assets belonging to the group.

Fair value less costs to sell is generally determined by using discounted estimated after-tax future cash flows. Future cash flows are estimated based on quantities of recoverable minerals, expected gold prices (considering current and historical prices, price trends and related factors), production levels, capital expenditure and cash costs of production, all based on life-of-mine plans. Future cash flows are discounted to their present value using a post-tax discount rate that reflects current market assessments of the time value of money and risk specific to the asset. Refer to note 13 for detail.

The term "recoverable minerals" refers to the estimated amount of gold that will be obtained from reserves and resources and all related exploration stage mineral interests (except for other mine-related exploration potential and greenfields exploration potential discussed separately below) after taking into account losses during ore processing and treatment. Estimates of recoverable minerals from such related exploration stage mineral interests will be risk adjusted based on management's relative confidence in such materials.

In estimating future cash flows, assets are grouped at the lowest level for which there are identifiable cash flows that are largely independent of cash flows from other asset groups. With the exception of other mine-related exploration potential and greenfields exploration potential, estimates of future undiscounted cash flows are included on an area of interest basis, which generally represents an individual operating mine, even if the mines are included in a larger mine complex.

In the case of mineral interests associated with other mine-related exploration potential and greenfields exploration potential, cash flows and fair values are individually evaluated based primarily on recent exploration results and recent transactions involving sales of similar properties, if any. Assumptions underlying future cash flow estimates are subject to significant risks and uncertainties.

Impairment losses on goodwill are recognised immediately in the income statement and are not reversed. The impairment testing is performed annually on 30 June or when events or changes in circumstances indicate that it may be impaired.

Non-financial assets other than goodwill that suffered an impairment are reviewed annually for possible reversal of the impairment at 30 June. Reversal of impairments is also considered when there is objective evidence to indicate that the asset is no longer impaired. Where an impairment subsequently reverses, the carrying amount of the asset or CGU is increased to the revised estimate of its recoverable amount, but not higher than the carrying value that would have been determined had no impairment been recognised in prior years.

for the years ended 30 June 2016

#### 3 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

The preparation of the financial statements in conformity with IFRS requires the group's 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.

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The resulting accounting estimates may differ from actual results. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the group financial statements are:

- Estimate of taxation note 11;
- Gold mineral reserves and resources note 13;
- Production start date note 13;
- Impairment of assets note 13;
- Depreciation of property, plant and equipment note 13;
- Impairment of goodwill note 14;
- · Valuation of derivative assets note 17;
- · Valuation of loans receivable note 18;
- Valuation of interest in associate note 19;
- Estimate of exposure and liabilities with regard to rehabilitation costs note 24;
- Estimate of employee benefit liabilities note 25;
- Valuation of certain non-current liabilities note 26;
- Fair value of share-based payments note 31;
- Assessment of contingencies note 33.

Please refer to the specific notes for further information on the key accounting estimates and assumptions applied.

for the years ended 30 June 2016

#### 4 FINANCIAL RISK MANAGEMENT

The group's financial instruments expose it to a variety of financial risks: market risk (including currency risk, cash flow interest rate risk and other price risk), credit risk and liquidity risk. The group may use derivative financial instruments to hedge certain risk exposures.

The group's financial assets and liabilities are set out below:

Figures in million (US dollars)	Loans and receivables	Available-for- sale financial assets	Held-to- maturity investments	Fair value through profit or loss	Financial liabilities at amortised cost
At 30 June 2016					
Financial assets					
Restricted cash	5	-	-	-	-
Restricted investments	-	-	126	44	-
Other non-current receivables	12	-	-	-	-
Derivative financial assets	-	-	-	25	-
Trade and other receivables	26	-	-	-	-
Cash and cash equivalents	85	-	-	-	-
Financial liabilities					
Borrowings	-	-	-	-	159
Other non-current liabilities	-	-	-	-	1
Trade and other payables	-	•	•	-	29
At 30 June 2015					
Financial assets					
Restricted cash	5	-	-	-	-
Restricted investments	39	-	113	44	-
Trade and other receivables	52	-	-	-	-
Cash and cash equivalents	88	-	-	-	-
Financial liabilities					
Borrowings	-	-	-	-	280
Other non-current liabilities	-	-	-	-	2
Trade and other payables	-	-	-	-	48

Risk management is carried out by a central treasury department (group treasury) under policies approved by the board of directors. Group treasury identifies, evaluates and hedges certain selected financial risks in close cooperation with the group's operating units. The audit and risk committee and the board provides written principles for overall risk management, as well as written policies covering specific areas, such as foreign exchange risk, interest rate risk, credit risk, use of derivative financial instruments and non-derivative financial instruments, and the investment of excess liquidity.

#### MARKET RISK

#### (i) Foreign exchange risk

The group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar (US\$). Foreign exchange risk arises from future commercial transactions, recognised assets and liabilities and net investments in foreign operations. Foreign exchange risk arises when future commercial transactions or recognised assets or liabilities are denominated in a currency that is not the entity's functional currency. Harmony's revenues are sensitive to the R/US\$ exchange rate as all revenues are generated by gold sales denominated in US\$. Harmony generally does not enter into forward sales, derivatives or other hedging arrangements to establish an exchange rate in advance for the sale of its future gold production. See note 34(b) for transactions after the reporting date.

The group is exposed to foreign exchange risk arising from borrowings and cash denominated in a currency other than the functional currency of that entity. Harmony generally does not enter into forward sales, derivatives or other hedging arrangements to manage this risk. During February 2016, Harmony entered into foreign exchange hedging contracts. Refer to note 17 for details of the contracts.

The group has reviewed its foreign currency exposure on financial assets and financial liabilities and has identified the following sensitivities for a 10% change in the exchange rate that would affect profit or loss. Management considers a range between 10% and 20% to be a reasonable change.

	US d	lollar
Figures in million	2016	2015
Sensitivity analysis - borrowings		
Rand against US\$		
Balance at 30 June	139	247
Strengthen by 10%	14	25
Weaken by 10%	(14)	(25)
Closing rate	14.72	12.16

for the years ended 30 June 2016

#### 4 FINANCIAL RISK MANAGEMENT continued

#### MARKET RISK continued

#### (i) Foreign exchange risk continued

	US o	lollar
Figures in million	2016	2015
Sensitivity analysis - financial assets		
Rand against US\$		
Balance at 30 June	25	-
Strengthen by 10%	32	-
Weaken by 10%	(38)	-
Closing rate	14.72	n/a
US\$ against Kina		
Balance at 30 June	14	6
Strengthen by 10%	1	-
Weaken by 10%	(2)	(1)
Closing rate	0.32	0.37

#### (ii) Other price risk

The group is exposed to the risk of fluctuations in the fair value of the available-for-sale financial assets and fair value through profit or loss financial assets as a result of changes in market prices (other than changes in interest rates and foreign currencies). Harmony generally does not use any derivative instruments to manage this risk.

#### Sensitivity analysis

Certain of the restricted investments are linked to the Shareholder Weighted Top 40 Index (SWIX 40) and the Top 40 Index on the JSE. A 1% increase in the SWIX 40 and Top 40 index at the reporting date, with all other variables held constant, would have increased profit or loss by US\$0.2 million); an equal change in the opposite direction would have decreased profit or loss by US\$0.2 million (2015: US\$0.1 million). A 1% increase in the share price of the available-for-sale investments at the reporting date, with all other variables held constant, would not have had a material impact on other comprehensive income for 2015 and 2016.

#### Commodity price sensitivity

The profitability of the group's operations, and the cash flows generated by those operations, are affected by changes in the market price of gold. Harmony generally does not enter into forward sales, derivatives or others hedging arrangements to establish a price in advance for the sale of future gold production. See note 34(b) for transactions after the reporting date.

#### (iii) Interest rate risk

The group's interest rate risk arises mainly from long-term borrowings. The group has variable interest rate borrowings. Variable rate borrowings expose the group to cash flow interest rate risk. The group has not entered into interest rate swap agreements. Interest rate risk arising from long-term borrowings is offset by cash, restricted cash and restricted investments held at variable rates.

A change of 100 basis points in interest rates at the reporting date would have increased/(decreased) profit or loss before tax by the amounts shown below. This analysis assumes that all other variables remain constant. The analysis is performed on the same basis for 2015.

	US d	ollar
Figures in million	2016	2015
Sensitivity analysis - borrowings		
Increase by 100 basis points Decrease by 100 basis points	(2) 2	(3) 3
Sensitivity analysis - financial assets		
Increase by 100 basis points Decrease by 100 basis points	2 (2)	3 (3)

for the years ended 30 June 2016

#### 4 FINANCIAL RISK MANAGEMENT continued

#### **CREDIT RISK**

Credit risk is the risk that a counterparty may default or not meet its obligations timeously. Financial instruments, which subject the group to concentrations of credit risk, consist predominantly of restricted cash, restricted investments, derivative financial assets, trade and other receivables (excluding non-financial instruments) and cash and cash equivalents.

Exposure to credit risk on trade and other receivables is monitored on a regular basis. Refer to note 18 for management's assessment. The credit risk arising from restricted cash, cash and cash equivalents and restricted investments is managed by ensuring amounts are only invested with financial institutions of good credit quality. The contracts for derivative financial assets were entered into with counterparties of good credit quality. The group has policies that limit the amount of credit exposure to any one financial institution.

#### Financial institutions' credit rating by exposure

		dollar
Figures in million	2016	2015
Cash and cash equivalents		
Casil and Casil equivalents		
AA+	49	35
AA	12	23
AA-	24	26
A+	-	4
	85	88
Restricted cash		
resulted cash		
AA	2	3
AA-	3	-
A+	-	2
	5	5
Restricted investments (environmental trust funds)		
AA+	51	41
AA	100	136
AA-	16	-
A+	-	15
	167	192
Derivative financial assets		
AA	8	_
AA-	17	-
	25	-

The social plan trust fund of US\$2.8 million (2015: US\$3.8 million) has been invested in unit trusts comprising shares in listed companies.

The group's maximum exposure to credit risk is represented by the carrying amount of all financial assets determined to be exposed to credit risk, amounting to US\$322.7 million as at 30 June 2016 (2015: US\$341.0 million).

#### CAPITAL RISK MANAGEMENT

The primary objective of managing the group's capital is to ensure that there is sufficient capital available to support the funding requirements of the group, in a way that optimises the cost of capital and matches the current strategic business plan.

The group manages and makes adjustments to the capital structure, which consists of debt and equity, as and when borrowings mature or when funding is required. This may take the form of raising equity, market or bank debt or hybrids thereof. In doing so, the group ensures it stays within the debt covenants agreed with lenders (refer to note 27 for details on the covenants). The group may also sell assets to reduce debt or schedule projects to manage the capital structure.

The group follows a conservative approach to debt and prefers to maintain low levels of gearing. Net debt is as follows:

	US d	ollar
Figures in million	2016	2015
Cash and cash equivalents Borrowings	85 (159)	88 (280)
Net debt	(74)	(192)

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

for the years ended 30 June 2016

#### 4 FINANCIAL RISK MANAGEMENT continued

#### LIQUIDITY RISK

Prudent liquidity risk management implies maintaining sufficient cash and marketable securities, and the availability of funding through an adequate amount of committed credit facilities

In the ordinary course of business, the group receives cash from its operations and is required to fund working capital and capital expenditure requirements. The cash is managed to ensure that surplus funds are invested in a manner to achieve market-related returns and to provide sufficient liquidity at the minimum risk. The group is able to actively source financing at competitive rates.

The following are the contractual maturities of financial liabilities (including principal and interest payments):

		US dollar
		More than 1
Figures in million	Current	year
2016		
Other non-current liabilities	-	1
Borrowings		
Due between 0 to six months	24	-
Due between six to 12 months	3	-
Due between one to two years	-	143
Due between two to five years	-	-
Trade and other payables (excluding non-financial liabilities)	29	-
	56	144
2015		
Other non-current liabilities	-	2
Borrowings		
Due between 0 to six months	5	-
Due between six to 12 months	5	-
Due between one to two years	-	42
Due between two to five years	-	255
Trade and other payables (excluding non-financial liabilities)	48	-
	58	299

#### FAIR VALUE DETERMINATION OF FINANCIAL ASSETS AND LIABILITIES

The carrying values (less any impairment allowance) of short-term financial instruments are assumed to approximate their fair values.

The fair value levels of hierarchy are as follows:

- (1) Quoted prices (unadjusted) in active markets for identical assets (level 1);
- (2) Inputs other than quoted prices included within level 1 that are observable for the asset, either directly (that is, as prices) or indirectly (that is, derived from other prices) (level 2);
- (3) Inputs for the asset that are not based on observable market data (that is, unobservable inputs) (level 3).

The following table presents the group's financial assets and liabilities that are measured at fair value by level at the reporting date.

Figures in million (US dollar)	Fair value hierarchy level	At 30 June 2016	At 30 June 2015
Fair value through profit and loss financial assets			
Restricted investments <sup>1</sup>	Level 2	44	44
Derivative financial assets <sup>2</sup>	Level 2	25	-

<sup>&</sup>lt;sup>1</sup> Level 2 fair values are directly derived from the Shareholders Weighted Top 40 (SWIX 40) or the Top 40 index on the JSE, and are discounted at market interest rate. The fair value of US\$2.8 million (2015: US\$3.8 million) of the balance in 2016, attributable to the Social Plan Trust, is derived by reference to quoted prices of the shares held within <sup>2</sup> The mark-to-market remeasurement of the foreign exchange hedging contracts (zero cost collars) is derived from a Black-Scholes valuation technique, derived from spot rand/US\$ exchange rate inputs and discounted at market interest rate.

The fair values of borrowings are not materially different to their carrying amounts since the interest payable on those borrowings is at current market rates. The fair value of borrowings are based on discounted cash flows using a current borrowing rate. The determination of the fair values are level 3 in the fair value hierarchy due to the use of unobservable inputs, including own credit risk.

for the years ended 30 June 2016

#### 5 COST OF SALES

	l	JS dollar	
Figures in million	2016	2015	2014
Production costs (a)	914	1 103	1 148
Amortisation and depreciation of mining assets	144	211	202
Amortisation and depreciation of assets other than mining assets (b)	5	5	5
Rehabilitation (credit)/expenditure (c)	(3)	(1)	1
Care and maintenance cost of restructured shafts	8	9	6
Employment termination and restructuring costs (d)	1	22	26
Share-based payments (e)	23	18	26
(Reversal of impairment)/impairment of assets (f)	(3)	285	135
Other (g)	(1)	(7)	-
Total cost of sales	1 088	1 645	1 549

(a) Production costs include mine production and transport and refinery costs, applicable general administrative costs, movement in inventories and ore stockpiles, ongoing environmental rehabilitation costs and transfers for stripping activities. Employee termination costs are included, except for employee termination costs associated with major restructuring and shaft closures, which are separately disclosed. Production costs, analysed by nature, consist of the following:

	U	S dollar	
Figures in million	2016	2015	2014
Labour costs, including contractors	559	678	711
Consumables	230	303	317
Water and electricity	148	175	182
Insurance	7	9	11
Transportation	12	15	16
Change in inventory	7	17	(10)
Capitalisation of mine development costs	(93)	(133)	(139)
Stripping activities	(3)	(21)	(13)
By-product sales	(23)	(18)	(22)
Royalty expense	12	8	12
Other	58	70	83
Total production costs	914	1 103	1 148

- (b) Amortisation and depreciation of assets other than mining assets includes the amortisation of intangible assets.
- (c) For the assumptions used to calculate the rehabilitation provision, refer to note 24. The total includes the change in estimate for the rehabilitation provision where an asset no longer exists as well as rehabilitation cost. For 2016, US\$4.8 million (2015: US\$5.8 million) (2014: US\$5.1 million) was spent on rehabilitation.
- (d) During the 2015 financial year, the group embarked on a restructuring process at Kusasalethu, Masimong and Hidden Valley. Target 3 was placed on care and maintenance and Ernest Oppenheimer Hospital was closed in December 2014. Voluntary severance packages were offered to management in September 2014.

For the 2014 financial year, the programme embarked on by the group's South African operations whereby voluntary severance packages were offered to all employees and significant restructuring process at Hidden Valley, both having started during 2013 was completed in June 2014.

- (e) Refer to note 31 for details on the share-based payment schemes implemented by the group.
- (f) The (reversal of impairment)/impairment of assets consists of the following:

and			US dollar	
2016	Figures in million	2016	2015	2014
466	Hidden Valley (i)	32	174	-
(738)	Doornkop (ii)	(50)	85	-
229	Masimong (iii)	15	-	-
-	Phakisa (iv)	-	23	130
-	Freddies 9 (Other - underground) (iv)	-	3	-
-	Steyn 2 (Bambanani) (iv)	-	-	3
-	St Helena (other-underground) (iv)	-	-	2
(43)	Total (reversal of impairment)/impairment of assets	(3)	285	135
	2016 466 (738) 229 - - -	2016 Figures in million  466 Hidden Valley (i) (738) Doornkop (ii) 229 Masimong (iii) - Phakisa (iv) - Freddies 9 (Other - underground) (iv) - Steyn 2 (Bambanani) (iv) - St Helena (other-underground) (iv)	2016         Figures in million         2016           466         Hidden Valley (i)         32           (738)         Doornkop (ii)         (50)           229         Masimong (iii)         15           - Phakisa (iv)         -           - Freddies 9 (Other - underground) (iv)         -           - Steyn 2 (Bambanani) (iv)         -           - St Helena (other-underground) (iv)         -	2016         Figures in million         2016         2015           466         Hidden Valley (i)         32         174           (738)         Doornkop (ii)         (50)         85           229         Masimong (iii)         15         -           -         Phakisa (iv)         -         23           -         Freddies 9 (Other - underground) (iv)         -         3           -         Steyn 2 (Bambanani) (iv)         -         -           -         St Helena (other-underground) (iv)         -         -

(i) For the 2016 financial year, an impairment of US\$31.7 million was recognised on Hidden Valley following a change in the life-of-mine plan during the annual planning process. The updated life-of-mine plan for Hidden Valley results in lower production for the 2017 financial year, as the mine will only process ore stockpiles followed by an extended period of care and maintenance, compared to the previous plan. Stripping activities for stage 5 are planned to recommence in the 2018 financial year according to the year-end life-of-mine plan. The recoverable amount of Hidden Valley is US\$21.7 million. Refer to note 34(d) for transactions after the reporting date.

For the 2015 financial year, an impairment of US\$173.8 million was recognised on Hidden Valley following a change in the life-of-mine plan during the annual planning process. Low commodity prices and high operating costs resulted in the shortening of the life-of-mine of the operation. In 2015, the recoverable amount of Hidden Valley was US\$53.7 million.

(ii) For the 2016 financial year, a reversal of US\$50.1 million was recognised for Doornkop. The higher recoverable amount for Doornkop, which resulted in the reversal, was mainly due to the increased rand gold price assumption, improvements in operational efficiencies during the 2016 financial year that resulted in increased production levels in the updated life-of-mine plan and new mining areas included in the life-of-mine plan based on additional exploration performed during the year. The recoverable amount of Doornkop is US\$190.2 million.

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#### 5 COST OF SALES continued

For the 2015 financial year, an impairment of US\$85.2 million was recognised. Following the decision to restructure Doornkop in May 2015, a revised life-of-mine plan was completed. This plan included lower production levels and focused on the higher grade areas. In addition, the resource value reduced as resources below the existing shaft infrastructure which were previously included in the additional resource value were removed. The updated plan and lower resource value for 2015 resulted in a lower recoverable amount. In 2015, the recoverable amount of Doornkop was US\$151.8 million.

- (iii) For the 2016 financial year, an impairment of US\$15.6 million was recorded for Masimong, which is a low margin operation and has a remaining life of three years. The exploration programme to locate additional areas of the higher grade B Reef proved unsuccessful and was stopped during the 2016 financial year. In addition, the grade estimation of the Basal Reef decreased and as a result a portion of the resource was abandoned at 30 June 2016. The lower resource value resulted in a lower recoverable amount and the recognition of an impairment. The recoverable amount of Masimong is US\$32.1 million.
- (iv) For the 2015 financial year, other impairments include US\$22.9 million on Phakisa following the annual life-of-mine plan assessments, and US\$3.5 million for Freddies 9 as plans to develop the project further were abandoned. In 2015, the recoverable amounts were US\$328 million and US\$nil for Phakisa and Freddies 9 respectively.

For the 2014 financial year, an impairment of US\$130.3 million was recognised on Phakisa. The impairment followed a change in the life-of-mine plan during the annual planning process. The previously planned decline shaft that required significant additional capital expenditure, was removed from the life-of-mine plan. The impairment comprised of US\$123.1 million on goodwill and US\$7.1 million on mining assets. In 2014, the recoverable amount of Phakisa was US\$401.7 million. Impairments on Steyn 2 of US\$3.4 million and St Helena of US\$2.0 million were recognised following the decision not to mine these operations in future. These operations were impaired to the recoverable amount of US\$nil.

The recoverable amounts for these assets have been determined on a fair value less costs to sell basis using the assumptions per note 13 in discounted cash flow models and attributable resource values. These are fair value measurements classified as level 3.

(g) Included in Other for the 2015 financial year is a credit of US\$7.6 million relating to the reduction in employees qualifying for post-retirement benefits. Refer to note 25. In addition, amounts relating to non-current inventory adjustments are included in Other for the 2016, 2015 and 2014 financial years. Refer to note 21.

#### 6 FOREIGN EXCHANGE TRANSLATION LOSS (NET)

	US dollar		
Figures in million	2016	2015	2014
Translation loss on US\$ revolving credit facility (a)	46	33	15
Unrealised derivative gain (b)	(25)	-	-
Realised derivative gain (b)	(5)	-	-
Other	(3)	(1)	3
Total foreign exchange translation loss (net)	13	32	18

- a) Refer to note 27 for details on the US\$ revolving credit facility.
- b) During February 2016, Harmony entered into foreign exchange hedging contracts (forex hedging contracts) in the form of zero cost collars, which establish a minimum (floor) and maximum (cap) rand/US dollar exchange rate at which to convert US dollars to rands. The nominal value of open forex hedging contracts at 30 June 2016 was US\$500 million. The hedging contracts are spread over a 12 month period with a weighted average cap price of US\$1=R18.27 and weighted average floor price of US\$1=R15.55. The mark-to-market of the derivative asset was US\$25.1 million positive as at 30 June 2016. This was due to the strengthening of the rand exchange rate against the US dollar since entering into the forex hedging contracts. The gains have been recorded in the income statement as hedge accounting was not applied. Refer to note 17 for more detail.

#### 7 OTHER INCOME/EXPENSES (NET)

	US dollar		
Figures in million	2016	2015	2014
Bad debts provision expense (a)	2	1	2
Bad debts written off	2	-	-
Profit on sale of property, plant and equipment (b)	-	(1)	(3)
Other income - net (c)	(1)	-	-
Total other income/expenses (net)	3	-	(1)

....

- (a) The total for 2016 includes the reversal of provision for bad debts relating to trade debtors of US\$1.9 million that had been written off, which was offset by the provision for the loans to the ARM Broad Based Economic Empowerment Trust (ARM BBEE Trust) of US\$2.2 million and Rand Refinery (Pty) Limited (Rand Refinery) of US\$1.6 million (2015: US\$1.0 million). Refer to note 18 (b) and (c) for further details.
- (b) During the 2014 financial year, a ground swap between Joel mine and Sibanye Gold Limited's (Sibanye) Beatrix mine was completed which resulted in a non-cash profit being recognised for the difference between carrying value of the Joel portion and the fair value of the Beatrix portion.
- (c) During July 2015, Harmony signed a US\$12.0 million guarantee for the ARM BBEE Trust. The guarantee was for additional security for the ARM BBEE Trust's loan to Nedbank Limited (Nedbank). A fair value loss of US\$1.0 million was recorded as a result. The guarantee was subsequently cancelled in April 2016 and a gain of US\$1.1 million was recorded in investment income. The transaction therefore had a zero effect on the income statement for the 2016 year.

Offsetting the fair value loss is an insurance credit of US\$2.1 million for Doornkop.

for the years ended 30 June 2016

#### 8 OPERATING PROFIT/LOSS

The following have been included in operating profit/loss:

		US dollar		
Figures in million	2016	2015	2014	
Auditor's remuneration				
Made up as follows: External				
Fees - current year	2	2	2	
Total auditor's remuneration	2	2	2	

#### 9 INVESTMENT INCOME

#### **ACCOUNTING POLICY**

Interest income is recognised on a time proportion basis, taking into account the principal outstanding and the effective rate over the period to maturity, when it is determined that such income will accrue to the group.

Dividend income is recognised when the shareholder's right to receive payment is established. This is recognised at the last date of registration.

Cash flows from dividends and interest received are classified under operating activities in the cash flow statement.

		US dollar		
Figures in million	2016	2015	2014	
Interest income	16	20	21	
Loans and receivables	2	1	2	
Held-to-maturity investments	9	9	6	
Cash and cash equivalents	5	9	12	
South African Revenue Services (SARS)	-	1	1	
Total investment income	16	20	21	

#### 10 FINANCE COST

		US dollar	
Figures in million	2016	2015	2014
Financial liabilities			
Borrowings	12	10	12
Other creditors and liabilities	-	-	-
Total finance cost from financial liabilities	12	10	12
Non-financial liabilities			
Post-retirement benefits	1	1	2
Time value of money and inflation component of rehabilitation costs	11	13	13
South African Revenue Services (SARS)	-	-	1
Total finance cost from non-financial liabilities	12	14	16
Total finance cost before interest capitalised	24	24	28
Interest capitalised (a)	(5)	(2)	(1)
Total finance cost	19	22	27

<sup>(</sup>a) The capitalisation rate used to determine the amount of borrowing costs eligible for capitalisation in 2016 was 10.5% (2015: 3.4% (2014: 3.4%)).

for the years ended 30 June 2016

#### 11 TAXATION

#### **ACCOUNTING POLICY**

Taxation is made up of current and deferred taxation. The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the group operates and generates taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred taxation is recognised on temporary differences existing at each reporting date between the tax base of all assets and liabilities and their carrying amounts. Substantively enacted tax rates are used to determine future anticipated effective tax rates which in turn are used in the determination of deferred taxation, except to the extent that deferred tax arises from the initial recognition of an asset or liability in a transaction that is not a business combination and does not affect the accounting or taxable profit or loss at the time of the transaction. Deferred tax is charged to profit or loss, except where the tax relates to items recognised in other comprehensive income or directly in equity in which case the tax is also recognised in other comprehensive income or directly in equity. The effect on deferred tax of any changes in tax rates is recognised in the income statement, except to the extent that it relates to items previously charged or credited directly to equity.

The principal temporary differences arise from amortisation and depreciation on property, plant and equipment, provisions, unutilised tax losses and unutilised capital allowances carried forward. Deferred tax assets relating to the carry forward of unutilised tax losses and unutilised capital allowances are recognised to the extent that it is probable that future taxable profit will be available against which the unutilised tax losses and unutilised capital allowances can be utilised. The recoverability of these assets is reviewed at each reporting date and adjusted if recovery is no longer probable.

Deferred income tax is provided on temporary differences arising from investments in subsidiaries, joint ventures and associates, except where the timing of the reversal of the temporary difference is controlled by the group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

Interest received from and paid to the tax authorities is classified as investment income and finance cost on the income statement.

#### **CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS**

The group is subject to income tax in several jurisdictions. Significant judgement is required in determining the worldwide provision for income taxes. There are many transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business. Where the final tax outcome is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

Management has to exercise judgement with regard to deferred tax assets. Where the possibility exists that no future taxable income may flow against which these assets can be offset, the deferred tax assets are not recognised.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled. When different tax rates apply to different levels of taxable income, deferred tax assets and liabilities are measured using the average tax rates that are expected to apply to the taxable profit (tax loss) of the periods in which the temporary differences are expected to reverse. At the group's South African operations, such average tax rates are directly impacted by the profitability of the relevant mine. The deferred tax rate is therefore based on the current estimate of future profitability of an operation when temporary differences will reverse, based on tax rates and tax laws that have been enacted at the balance sheet date. The future profitability of each mine, in turn, is determined by reference to the life-of-mine (LoM) plan for that operation. The LoM plan is influenced by factors as disclosed in note 13, which may differ from one year to the next and normally result in the deferred tax rate changing from one year to the next.

The taxation credit/(expense) for the year is as follows:

		JS dollar	
Figures in million	2016	2015	2014
SA taxation			
Mining tax (a)	(3)	1	(3)
- current year - prior year	(4)	(1) 2	(5) 2
Non-mining tax (b)	(5)		1
- current year - prior year	(5)	-	(1) 2
Deferred tax (c)	(35)	67	32
- current year	(35)	67	32
	(43)	68	30
Foreign taxation			
Deferred tax	-	(6)	(3)
- current year (d) - derecognition of deferred tax asset (e)	-	(1) (5)	(3) -
Total taxation credit/(expense)	(43)	62	27

for the years ended 30 June 2016

#### 11 TAXATION continued

		US dollar		
Figures in million	2016	2015	2014	
Taxation by type				
Mining tax	(3)	1	(3)	
Non-mining tax	(5)	-	1	
Deferred tax	(35)	61	29	
	(43)	62	27	

(a) Mining tax on gold mining taxable income in South Africa is determined according to a formula, based on the taxable income from mining operations. 5% of total revenue is exempt from taxation while the remainder is taxable at a higher rate than non-mining income as a result of applying the gold mining formula.

All qualifying mining capital expenditure is deducted from taxable mining income to the extent that it does not result in an assessed loss. Accounting depreciation is eliminated when calculating the South African mining tax income. Excess capital expenditure is carried forward as unredeemed capital to be claimed from future mining taxable income. The group has several tax paying entities in South Africa. In terms of the mining ring-fencing application, each ring-fenced mine is treated separately and deductions can normally only be utilised against mining income generated from the relevant ring-fenced mine.

- (b) Non-mining taxable income of mining companies and the taxable income for non-mining companies are taxed at the statutory corporate rate of 28% (2015: 28%) (2014: 28%). The expense in 2016 relates to the non-mining tax arising from the derivative gains (realised and unrealised) recognised on the forex hedging contracts mainly for Freegold (Harmony) Pty Ltd (Freegold) and Avgold Limited (Avgold). Refer to note 6 for details on the derivative gains recorded.
- (c) The deferred tax rate used to calculate deferred tax is based on the current estimate of future profitability when temporary differences will reverse based on tax rates and tax laws that have been enacted at the balance sheet date. Depending on the profitability of the operations, the deferred tax rate can consequently be significantly different from year to year.

The deferred tax expense in 2016 is mainly a result of the increase in the average deferred tax rate due to increased estimated profitability at most South African operations, as well as the unwinding of the deferred tax asset related to the utilisation of unredeemed capital expenditure for Freegold against mining taxable income due to increased profitability for Freegold during 2016. Refer below for further details.

- (d) Mining and non-mining income of Australian entities and PNG operation are taxed at a standard rate of 30% (2015: 30%) (2014: 30%).
- (e) In 2015, the recoverability of the remaining deferred tax asset for Australia was not considered probable, following the revised life-of-mine plan and impairment recognised on Hidden Valley and as a result it was derecognised on 30 June 2015.

#### INCOME AND MINING TAX RATES

The tax rate remains unchanged for the 2014, 2015 and 2016 years.

Major items causing the group's income tax provision to differ from the South African mining statutory tax rate of 34% (2015: 34%) (2014: 34%) were:

		S dollar	
Figures in million	2016	2015	2014
Tax on net (profit)/loss at the mining statutory tax rate	(37)	148	49
Non-allowable deductions			
Impairment of assets	(8)	(63)	(43)
Finance costs	(3)	(3)	(3)
Share-based payments	(6)	(6)	(8)
Other	(3)	(15)	(14)
Difference between effective mining tax rate and statutory mining rate on mining income	8	3	5
Difference between non-mining tax rate and statutory mining rate on non-mining income	1	-	-
Effect on temporary differences due to changes in effective tax rates <sup>1</sup>	(15)	(21)	11
Prior year adjustment	1	2	5
Capital allowance and other rate differences <sup>2</sup>	33	45	50
Derecognition of deferred tax asset <sup>3</sup>	-	(5)	-
Deferred tax asset not recognised <sup>4</sup>	(14)	(23)	(25)
Income and mining taxation	(43)	62	27
Effective income and mining tax rate (%)	40	(14)	(19)

<sup>&</sup>lt;sup>1</sup> This relates to the increase in the deferred tax rates related to Harmony Gold Mining Company Limited (Harmony) (12.5% to 21.1%) and Freegold (16.7% to 20.0%) mainly due to higher estimated profitability. This was partially offset by a decrease in the deferred tax rate for Randfontein Estates Limited (Randfontein) (14.3% to 10.1%) mainly due to lower estimated profitability. In 2015, the decrease in the deferred tax rates related to Freegold (20.3% to 16.7%) and Randfontein (18.9% to 14.3%) mainly due to the lower estimated profitability. In 2014, the significant decreases in the deferred tax rates related to Harmony (26.4% to 13.4%) and Freegold (22.9% to 20.3%) mainly due to the lower estimated profitability.

<sup>&</sup>lt;sup>2</sup> This relates to the additional capital allowance that may be deducted from taxable income from mining operations in South Africa. A significant portion relates to Avgold Limited (Avgold) which has a 0% effective tax rate.

<sup>&</sup>lt;sup>3</sup> In 2015, the Australian deferred tax asset was derecognised as the recoverability was deemed unlikely following the revised life-of-mine for Hidden Valley.

<sup>&</sup>lt;sup>4</sup> This relates primarily to Hidden Valley and the PNG exploration operations and represents tax losses and deductible temporary difference arising in the year for which future taxable profits are not considered probable.

for the years ended 30 June 2016

#### 11 TAXATION continued

#### **DEFERRED TAX**

The analysis of deferred tax assets and liabilities is as follows:

	US dollar	
Figures in million	2016	2015
Deferred tax assets	(40)	(70)
Deferred tax asset to be recovered after more than 12 months	(34)	(52)
Deferred tax asset to be recovered within 12 months	(6)	(18)
Deferred tax liabilities	204	227
Deferred tax liability to be recovered after more than 12 months	191	212
Deferred tax liability to be recovered within 12 months	13	15
Net deferred tax liability	164	157

Deferred tax liabilities and assets on the balance sheet at 30 June 2016 and 30 June 2015 relate to the following:

	US dollar	
Figures in million	2016	2016
Gross deferred tax liabilities	204	227
Amortisation and depreciation	204	227
Gross deferred tax assets	(40)	(70)
Unredeemed capital expenditure	(15)	(41)
Provisions, including non-current provisions	(9)	(10)
Tax losses	(16)	(19)
Net deferred tax liability	164	157

Movement in the net deferred tax liability recognised in the balance sheet is as follows:

		ollar
Figures in million	2016	2015
Balance at beginning of year	157	245
(Credit)/expense per income statement	35	(61)
Foreign currency translation	(28)	(27)
Balance at end of year	164	157

...

As at 30 June, the group had the following potential future tax deductions:

	US d	lollar
Figures in million	2016	2015
Unredeemed capital expenditure available for utilisation against future mining taxable income <sup>1</sup> Tax losses carried forward utilisable against mining taxable income <sup>2</sup>	1 649 320	1 891 339
Capital Gains Tax (CGT) losses available to be utilised against future CGT gains	39	47
As at 30 June, the group has not recognised the following deferred tax asset amounts relating to the above	559	595
The unrecognised temporary differences are:		
Unredeemed capital expenditure <sup>3</sup>	1 510	1 617
Tax losses <sup>2</sup>	206	202
CGT losses <sup>4</sup>	39	47

<sup>&</sup>lt;sup>1</sup> Includes Avgold US\$915.0 million (2015: US\$1 004.2 million), Freegold US\$2.9 million (2015: US\$111.4 million), Randfontein US\$132.9 million (2015: US\$152.3 million) and Hidden Valley US\$595.3 million (2015: US\$613.5 million). These have an unlimited carry-forward period.

<sup>&</sup>lt;sup>2</sup> Relates mainly to Hidden Valley and the PNG exploration operations. These have an unlimited carry-forward period.

<sup>&</sup>lt;sup>3</sup> Relates to Avgold and Hidden Valley.

<sup>&</sup>lt;sup>4</sup> The CGT losses relate to the gross CGT losses available to be utilised against future CGT gains.

for the years ended 30 June 2016

#### 11 TAXATION continued

#### **DIVIDEND TAX (DT)**

A withholding tax of 15% on dividends (excluding a return of capital) and other distributions to the beneficial owners of shares (shareholders) became effective on 1 April 2012. DT is withheld by the company declaring the dividend or the withholding agent, unless specifically exempt. Foreign residents could qualify for an exemption or a reduced DT rate in terms of their relevant tax treaty. The withholding tax is a tax on the shareholder and if applicable will be withheld by the company and will reduce the amount paid to the shareholder.

#### 12 EARNINGS/(LOSS) PER SHARE

#### BASIC EARNINGS/(LOSS) PER SHARE

Basic earnings/(loss) per share is calculated by dividing the net income attributable to shareholders by the weighted number of ordinary shares in issue during the year.

	2016	2015	2014
Ordinary shares in issue ('000) Adjustment for weighted number of ordinary shares in issue ('000)	437 299 (624)	436 187 (185)	435 825 (287)
Weighted number of ordinary shares in issue ('000) Treasury shares ('000)	436 675 (936)	436 002 (1 578)	435 538 (2 326)
Basic weighted average number of ordinary shares in issue ('000)	435 739	434 424	433 212
		US dollar	
	2016	2015	2014
Total net earnings/(loss) attributable to shareholders (millions)	66	(374)	(118)
Total basic earnings/(loss) per share (cents)	15	(86)	(27)

#### DILUTED EARNINGS/(LOSS) PER SHARE

For diluted earnings/(loss) per share, the weighted average number of ordinary shares in issue is adjusted to assume conversion of all potential dilutive ordinary shares as a result of share options granted to employees under the share option schemes in issue. A calculation is performed to determine the number of shares that could have been acquired at fair value, determined as the average annual market share price of the company's shares, based on the monetary value of the subscription rights attached to the outstanding share options. The number of shares calculated as above is compared with the number of shares that would have been issued assuming the exercise of the share options.

	2016	2015	2014
Weighted average number of ordinary shares in issue ('000) Potential ordinary shares ('000)	435 739 10 659	434 424 3 667	433 212 1 503
Weighted average number of ordinary shares for diluted earnings per share ('000)	446 398	438 091	434 715
		US dollar	
	2016	2015	2014
Total diluted earnings/(loss) per share (cents)	15	(86)	(27)

The inclusion of share options issued to employees, as potential ordinary shares, has a dilutive effect on the earnings/(loss) per share. The issue price and the exercise price include the fair value of any service to be supplied to the entity in the future under the share option or other share-based payment arrangement.

#### **DIVIDENDS**

#### **ACCOUNTING POLICY**

Dividends declared are recognised in the period in which they are approved by the board of directors. Dividends are payable in South African rand.

Cash flows from dividends paid are classified under financing activities in the cash flow statement.

No dividend was declared during the years ended 30 June 2014, 30 June 2015 and 30 June 2016.

Refer to note 34(c) for the dividend declared after the reporting date.

for the years ended 30 June 2016

#### 13 PROPERTY, PLANT AND EQUIPMENT

	US d	ollar
Figures in million	2016	2015
Mining assets (a)	1 541	1 862
Mining assets under construction (b)	107	104
Undeveloped properties (c)	371	445
Other non-mining assets (d)	14	19
Total property, plant and equipment	2 033	2 430

#### (a) Mining assets

#### **ACCOUNTING POLICY**

Mining assets, including mine development costs and mine plant facilities are initially recorded at cost, whereafter they are measured at cost less accumulated depreciation and impairment. Costs include expenditure that is directly attributable to the acquisition of the items. Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the group and the cost of the item can be measured reliably.

The net assets of operations placed on care and maintenance are impaired to their recoverable amount. Expenditure on the care and maintenance of these operations is charged against income, as incurred. Mineral and surface use rights represent mineral and surface use rights for parcels of land both owned and not owned by the group. Mineral and surface rights include acquired mineral use rights in production, development and exploration phase properties. The amount capitalised related to a mineral and surface right represents its fair value at the time it was acquired, either as an individual asset purchase or as part of a business combination, and is recorded at cost of acquisition.

The group's mineral use rights are enforceable regardless of whether proved or probable reserves have been established. In certain limited situations, the nature of use changes from an exploration right to a mining right upon the establishment of proved and probable reserves. The group has the ability and intent to renew mineral use rights where the existing term is not sufficient to recover all identified and valued proved and probable reserves and/or undeveloped mineral interests.

#### Depreciation

Depreciation of mining assets is computed principally by the units-of-production method over life-of-mine based on estimated quantities of economically recoverable proved and probable reserves, which can be recovered in future from known mineral deposits.

In most instances, proved and probable reserves provide the best indication of the useful life of the group's mines (and related assets). However, in some instances, proved and probable reserves may not provide a realistic indication of the useful life of the mine (and related assets). This may be the case, for example, where management is confident that further inferred resources will be converted into measured and indicated resources and if they are economically recoverable, they can also be classified as proved and probable reserves. Management is approaching economic decisions affecting the mine on this basis, but has chosen to delay the work required to designate them formally as reserves.

In assessing which resources to include so as to best reflect the useful life of the mine, management considers resources that have been included in the life-of-mine plan. To be included in the life-of-mine plan, resources need to be above the cut-off grade set by management, which means that the resource can be economically mined and is therefore commercially viable. This consistent systematic method for inclusion in the life-of-mine plan takes management's view of the gold price, exchange rates as well as cost inflation into account. In declaring the resource, management would have had to obtain a specified level of confidence of the existence of the resource through drilling as required by the South African Code for Reporting Exploration Results, Mineral Resources and Mineral Reserves (SAMREC).

Additional confidence in the existence, commercial viability and economical recovery of such resources may be based on historical experience and available geological information, such as geological information obtained from other operations that are contiguous to the group's as well as where the group mines continuations of these other operations' orebodies and reefs. This is in addition to the drilling results obtained by the group and management's knowledge of the geological setting of the surrounding areas, which would enable simulations and extrapolations to be done with a reasonable degree of accuracy.

In instances where management is able to demonstrate the economic recovery of such resources with a high level of confidence, such additional resources, which may also include certain, but not all, of the inferred resources, as well as the associated future development costs of accessing those resources, are included in the calculation of depreciation. The future development costs are those costs that need to be incurred to access these inferred resources, for example the costs to complete a decline or level, which may include infrastructure and equipping costs. These amounts have been extracted from the cash flow projections for the life-of-mine plans.

Mineral rights associated with production phase mineral interests are amortised over the life of mine using the units-of-production method in order to match the amortisation with the expected underlying future cash flows.

#### Impairment

Testing for impairment is done in terms of the group policy as discussed in note 2.5.

#### Stripping activities

The removal of overburden and other mine waste materials is often necessary during the initial development of a mine site, in order to access the mineral ore deposit. The directly attributable cost of this activity is capitalised in full within mining assets under construction, until the point at which the mine is considered to be capable of commercial production.

The removal of waste material after the point at which a mine is capable of commercial production is referred to as production stripping.

When the waste removal activity improves access to ore extracted in the current period, the costs of production stripping are charged to the income statement as operating costs in accordance with the principles of IAS 2 *Inventories*.

for the years ended 30 June 2016

#### 13 PROPERTY, PLANT AND EQUIPMENT continued

#### (a) Mining assets continued

#### **ACCOUNTING POLICY** continued

#### Stripping activities continued

Where production stripping activity both produces inventory and improves access to ore in future periods the associated costs of waste removal are allocated between the two elements. The portion which benefits future ore extraction is capitalised within stripping and development capital expenditure. If the amount to be capitalised cannot be specifically identified it is determined based on the volume of waste extracted compared with expected volume for the identified component of the orebody. Components are specific volumes of a mine's orebody that are determined by reference to the life-of-mine plan.

In certain instances significant levels of waste removal may occur during the production phase with little or no associated production. The cost of this waste removal is capitalised in full.

All amounts capitalised in respect of waste removal are depreciated using the units-of-production method based on proved and probable ore reserves of the component of the orebody to which they relate.

The effects of changes to the life-of-mine plan on the expected cost of waste removal or remaining reserves for a component are accounted for prospectively as a change in estimate.

#### Scrapping of assets

Where significant adverse changes have taken place relating to the useful life of an asset, that asset is tested for impairment in terms of the group policy as discussed in note 2.5. Whether or not an impairment is recognised, it is then necessary to review the useful lives and residual values of the assets within the CGU – this is reviewed at least annually. Where necessary, the useful lives and residual values of the individual assets are revised.

Where the useful life of an asset is nil as a result of no future economic benefit expected from the use or disposal of that asset, it is necessary to derecognise the asset. The loss arising from the derecognition is included in profit or loss in the period in which the asset was derecognised.

# CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS – GOLD MINERAL RESERVES AND RESOURCES

Gold mineral reserves and resources are estimates of the amount of ounces that can be economically and legally extracted from the group's properties. In order to calculate the gold mineral reserves and resources, estimates and assumptions are required about a range of geological, technical and economic factors, including quantities, grades, production techniques, recovery rates, production costs, commodity prices and exchange rates.

Estimating the quantities and/or grade of the reserves and resources requires the size, shape and depth of the orebodies to be determined by analysing geological data such as the logging and assaying of drill samples. This process may require complex and difficult geological judgements and calculations to interpret the data

Because the economic assumptions used to estimate the gold mineral reserves and resources change from year to year, and because additional geological data is generated during the course of operations, estimates of the mineral reserves and resources may change from year to year. Changes in the reserves and resources may affect the group's financial results and financial position in a number of ways, including:

- Asset carrying values may be affected due to changes in estimated cash flows;
- · Scrapping of assets to be recorded in the income statement, following the derecognition of assets as no future economic benefit expected;
- Depreciation and amortisation charged in the income statement may change as they are calculated on the units-of-production method:
- Environmental provisions may change as the timing and/or cost of these activities may be affected by the change in mineral reserves; and
- Useful life and residual values may be affected by the change in mineral reserves.

At the end of each financial year, the estimate of proved and probable gold mineral reserves and resources is updated. Depreciation of mining assets is prospectively adjusted, based on these changes.

# SENSITIVITY ANALYSIS - GOLD MINERAL RESERVES AND RESOURCES EFFECT ON DEPRECIATION

The group includes certain inferred resources in the denominator and future development costs in the numerator when performing the depreciation calculation for certain of its operations, where proved and probable reserves alone do not provide a realistic indication of the useful life of mine (and related assets). During the periods presented, this related to the Doornkop South Reef and Masimong shafts. Had the group only used proved and probable reserves in its calculations, depreciation for 2016 would have amounted to US\$153.4 million (2015: US\$226.4 million) (2014: US\$217.6 million), compared with the reported totals of US\$149.9 million (2015: US\$215.8 million) (2014: US\$207.0 million).

#### CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS - PRODUCTION START DATE

Various relevant criteria are considered in order to assess when the mine is substantially complete and ready for its intended use and moves into the production phase. Some of the criteria would include but are not limited to the following:

- The level of capital expenditure compared to the total project cost estimates;
- The ability to produce gold in a saleable form (where more than an insignificant amount of gold has been produced); and
- The ability to sustain the ongoing production of gold.

for the years ended 30 June 2016

#### 13 PROPERTY, PLANT AND EQUIPMENT continued

#### (a) Mining assets continued

#### CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS - IMPAIRMENT OF ASSETS

The recoverable amount of mining assets is generally determined utilising real discounted future cash flows.

Management also considers such factors as the quality of the individual orebody, market risk, asset specific risks and country risk in determining the fair value

Key assumptions for the calculations of the mining assets' recoverable amounts are the commodity prices, resource values, marketable discount rates, costs to sell, exchange rates and the annual life-of-mine plans. In determining the commodity prices and resource values to be used, management assesses the long-term views of several reputable institutions on commodity prices and based on this, derives the commodity prices and resource values. The life-of-mine plans are based on the proved and probable reserves as included in the Reserve Declaration, which are determined in terms of SAMREC and The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC), as well as resources where management has high confidence in the orebody and economical recovery of gold, based on historic and similar geological experience.

The group calculated the recoverable amounts (generally fair value less costs to sell) based on updated life-of-mine plans and the following gold price, silver price and exchange rates assumptions:

	2016		2015		2014
		Short term M	ledium term	Long term	
		Year 1	Year 2	Year 3+	
US\$ gold price per ounce	1 189	1 150	1 180	1 200	1 300
US\$ silver price per ounce	17.80	14.00	14.50	17.00	21.00
Exchange rate (R/US\$)	13.86	12.17	11.86	11.66	10.17
Exchange rate (PGK/US\$)	3.10	2.75	2.75	2.75	2.27
Rand gold price (R/kg)	530 000	450 000	450 000	450 000	425 000

For 2015, the short-, medium- and long-term assumptions were in response to the sharp decline in the gold and silver prices after the financial year end. The post-tax real discount rate for Hidden Valley was 11.77% (2015: 12.03%) (2014: 9.33%) and the post-tax real discount rates for the South African operations ranged between 8.43% and 11.48% (2015: 7.99% and 11.38%) (2014: 7.03% and 11.56%), depending on the asset, were used to determine the recoverable amounts (generally fair value less costs to sell). Cash flows used in the impairment calculations are based on life-of-mine plans which exceed five years for the majority of the mines. Refer to note 5 for details of impairments and reversals of impairments recorded. The following is the attributable gold resource value assumptions:

	South Africa		South Africa Hidden Valley			
US dollar per ounce	2016	2015	2014	2016	2015	2014
Measured	40.86	40.86	45.40	n/a	n/a	n/a
Indicated	23.35	23.35	25.94	5.84	15.00	76.79
Inferred	5.84	5.84	6.49	5.84	6.00	25.00

Should management's estimate of the future not reflect actual events, further impairments may be identified.

Factors affecting the estimates include:

- Changes to proved and probable ore reserves;
- Economical recovery of resources;
- The grade of the ore reserves may vary significantly from time to time;
- Review of strategy;
- Unforeseen operational issues at the mines;
- Differences between actual commodity prices and commodity price assumptions;
- · Changes in the discount rate and foreign exchange rates; and
- Changes in capital, operating mining, processing and reclamation costs.

#### SENSITIVITY ANALYSIS - IMPAIRMENT OF ASSETS

One of the most significant assumptions that influence the life-of-mine plans and therefore impairments is the expected commodity prices. The sensitivity scenario of a 10% decrease in the commodity prices used in the discounted cash flow models and the resource values would have resulted in an additional impairment at Masimong of US\$19.0 million and Hidden Valley of US\$21.6 million. The decreases noted would have resulted in impairments at Unisel of US\$10.9 million, Free State Surface of US\$9.1 million, other Harmony assets of US\$3.1 million and Doornkop of US\$1.0 million (as opposed to the reversal of US\$50.1 million). This analysis assumes that all other variables remain constant.

If the commodity prices used in the discounted cash flow models increased by 10%, impairments previously recorded at the following operations would reverse: Doornkop US\$13.6 million, Phakisa US\$21.8 million and Hidden Valley US\$11.4 million. The increase would also have resulted in no impairment being recorded on Masimong.

for the years ended 30 June 2016

#### 13 PROPERTY, PLANT AND EQUIPMENT continued

#### (a) Mining assets continued

The movement in the mining assets balance is as follows:

		lar
Figures in million	2016	2015
Cost		
Balance at beginning of year	3 731	4 181
Elimination of fully depreciated and impaired assets no longer in use	(69)	(55)
Additions	133	207
Disposals	(2)	(4)
Scrapping of assets	(9)	(83)
Adjustment to rehabilitation asset	(7)	3
Transfers and other movements	21	9
Translation	(609)	(527)
Balance at end of year	3 189	3 731
Accumulated depreciation and impairments	4.000	4 000
Balance at beginning of year	1 869	1 686
Elimination of fully depreciated and impaired assets no longer in use	(69)	(55)
Impairment of assets	47	285
Reversal of impairment of assets	(50)	-
Disposals	(2)	(3)
Scrapping of assets	(5)	(41)
Depreciation	147	215
Transfers and other movements		(1)
Translation	(289)	(217)
Balance at end of year	1 648	1 869
Net carrying value	1 541	1 862

#### Scrapping of assets

During the 2016 financial year, the abandonment of unprofitable areas in the life-of-mine plans resulted in the derecognition of property, plant and equipment as no future economic benefits are expected from their use or disposal. Included in the total for 2016 are losses for Unisel amounting to US\$1.1 million, Joel of US\$1.8 million and US\$ 0.7 million for Free State Surface.

In 2015, the Harmony management embarked on a life-of-mine optimisation process for the South African operations which was finalised in December 2014. The optimisation led to the abandonment of levels and areas with a carrying value at Masimong and Kusasalethu. Losses of US\$18.5 million on Kusasalethu and US\$18.7 million on Masimong were recorded. At 30 June 2015, following the annual life-of-mine planning, additional amounts of US\$1.7 million and US\$1.1 million were recorded for Kusasalethu and Masimong respectively. A loss of US\$1.9 million was also recorded for Tshepong. All of the losses were as a result of the abandonment of uneconomical areas in the plans.

#### Stripping activities

Included in the balance for mining assets is an amount of US\$1.6 million (2015: US\$2.5 million) for stripping activities. Depreciation of US\$0.9 million (2015: US\$24.8 million) and an impairment of US\$2.4 million (2015: US\$32.3 million), related to Hidden Valley, were recorded for these activities.

#### (b) Mining assets under construction

### **ACCOUNTING POLICY**

At the group's surface mines, when it has been determined that a mineral property can be economically developed as a result of establishing proved and probable reserves, costs incurred to develop the property are capitalised as incurred until the mine is considered to have moved into the production phase. These costs include costs to further delineate the orebody and remove overburden to initially expose the orebody. At the group's underground mines, all costs incurred to develop the property, including costs to access specific ore blocks or other areas of the underground mine, are capitalised to the extent that such costs will provide future economic benefits. These costs include the cost of shaft sinking and access, the costs of building access ways, lateral development, drift development, ramps, box cuts and other infrastructure development.

Borrowing costs are capitalised to the extent that they are directly attributable to the acquisition and construction of qualifying assets. Qualifying assets are assets that take a substantial time to get ready for their intended use. These costs are capitalised until the asset moves into the production phase. Other borrowing costs are expensed.

Where a depreciable asset is used in the construction or extension of a mine, the depreciation is capitalised against the mine's cost.

Exploration properties acquired are recognised in the balance sheet within development cost and are shown at cost less provisions for impairment determined in accordance with the group's accounting policy on impairment of non-financial assets.

Mineral interests associated with development and exploration phase mineral interests are not amortised until such time as the underlying property is converted to the production stage.

Capitalisation of pre-production costs ceases when commercial levels of production are reached. Commercial levels of production are discussed under "production start date" above.

for the years ended 30 June 2016

#### 13 PROPERTY, PLANT AND EQUIPMENT continued

#### (b) Mining assets under construction continued

The movement in the mining assets under construction balance is as follows:

		US dollar		
Figures in million	2016	2015		
Cost				
Balance at beginning of year	104	97		
Additions	36	30		
Finance costs capitalised <sup>1</sup>	5	2		
Transfers and other movements	(21)	(11)		
Translation	(17)	(14)		
Balance at end of year	107	104		

<sup>&</sup>lt;sup>1</sup>The average capitalisation rate applied was 10.5% (2015: 3.4%).

#### (c) Undeveloped properties

#### **ACCOUNTING POLICY**

Undeveloped properties are initially valued at the fair value of resources obtained through acquisitions. The carrying values of these properties are annually tested for impairment. Once development commences, these properties are transferred to mining properties and accounted for in accordance with the related accounting policy.

The movement in the undeveloped properties balance is as follows:

		lollar
Figures in million	2016	2015
Cost		
Balance at beginning of year	446	512
Translation	(74)	(66)
Balance at end of year	372	446
Accumulated impairments		
Balance at beginning of year	1	1
Balance at end of year	1	1
Net carrying value	371	445

#### (d) Other non-mining assets

### **ACCOUNTING POLICY**

Land is shown at cost and not depreciated. Other non-mining fixed assets are shown at cost less accumulated depreciation and accumulated impairment losses

Other non-mining fixed assets are depreciated on a straight-line basis over their estimated useful lives as follows:

- · Vehicles at 20% per year.
- Computer equipment at 33.3% per year.
- Furniture and equipment at 16.67% per year.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each balance sheet date.

for the years ended 30 June 2016

#### 13 PROPERTY, PLANT AND EQUIPMENT continued

#### (d) Other non-mining assets continued

The movement in the other non-mining assets balance is as follows:

		ollar
Figures in million	2016	2015
Cost		
Balance at beginning of year	34	45
Elimination of fully depreciated and impaired assets no longer in use	(1)	(20)
Additions	1	11
Transfers and other movements	-	2
Translation	(5)	(4)
Balance at end of year	29	34
Accumulated depreciation and impairments		
Balance at beginning of year	15	32
Elimination of fully depreciated and impaired assets no longer in use	(1)	(20)
Depreciation	3	3
Transfers and other movements	-	1
Translation	(2)	(1)
Balance at end of year	15	15
Net carrying value	14	19

#### 14 INTANGIBLE ASSETS

#### **ACCOUNTING POLICY**

Intangible assets consist of all identifiable non-monetary assets without physical substance. They are stated at cost less accumulated amortisation and accumulated impairment losses, if any. The following are the main categories of intangible assets:

#### Goodwill

Goodwill is an intangible asset with an indefinite useful life which is not amortised but tested for impairment on an annual basis, or when there is an indication of impairment. The excess of consideration transferred over the amount of any non-controlling interest in the acquiree and the acquiristion-date fair value of any previous equity interest in the acquiree over the fair value of the group's share of the identifiable net assets acquired is recorded as goodwill. Goodwill on acquisition of subsidiaries, joint ventures and businesses is included in intangible assets. Goodwill on acquisition of associates is included in investments in associates and tested for impairment as part of the overall balance.

Goodwill is tested annually for impairment and carried at cost less accumulated impairment losses. Goodwill is allocated to cash-generating units for the purpose of impairment testing. The allocation is made to those cash-generating units or groups of cash-generating units that are expected to benefit from the business combination in which the goodwill arose. If the composition of one or more cash-generating units to which goodwill has been allocated changes due to a re-organisation, the goodwill is re-allocated to the units affected.

The gain or loss on disposal of an entity includes the carrying amount of goodwill relating to the entity sold.

#### **Technology-based assets**

Acquired computer software licences that require further internal development are capitalised on the basis of costs incurred to acquire and bring to use the specific software. These technology-based assets are classified as intangible assets with a finite useful life. These assets are amortised on a straight-line basis over their estimated useful lives, which are reviewed annually, as follows:

• Computer software at 20% per year.

#### CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS - IMPAIRMENT OF GOODWILL

Due to the wasting nature of mining assets and the finite life of a mine's reserves, the allocation of goodwill to a shaft will eventually result in an impairment charge for the goodwill. The group tests annually whether separately identifiable goodwill has suffered any impairment in accordance with the accounting policy stated in note 2.5. These calculations use estimates as per note 13.

		dollar
Figures in million	2016	2015
Goodwill (a) Technology-based assets (b)	57 2	70 3
Total intangible assets	59	73

for the years ended 30 June 2016

#### 14 INTANGIBLE ASSETS continued

#### (a) Goodwill

		ollar
Figures in million	2016	2015
Cost		
Balance at beginning of year	195	224
Translation	(34)	(29)
Balance at end of year	161	195
Accumulated amortisation and impairments		
Balance at beginning of year	125	144
Translation	(21)	(19)
Balance at end of year	104	125
Net carrying value	57	70
The net carrying value of goodwill has been allocated to the following cash-generating units:		
Bambanani	15	19
Tshepong Joel	39 3	48 3
JUEI	3	
Net carrying value	57	70

#### (b) Technology-based assets

		US dollar		
Figures in million	2016	2015		
Cost				
Balance at beginning of year	16	17		
Additions	-	1		
Translation	(3)	(2)		
Balance at end of year	13	16		
Accumulated amortisation				
Balance at beginning of year	13	13		
Amortisation charge for the year	1	1		
Translation	(3)	(1)		
Balance at end of year	11	13		
Net carrying value	2	3		

Technology-based assets includes computer software and intellectual property which has been acquired and developed for the group. These assets are amortised over five years.

### ACCOUNTING POLICY - FINANCIAL ASSETS (APPLICABLE TO NOTES 15, 16, 17 AND 18)

Financial assets are initially measured at fair value when the group becomes a party to their contractual arrangements, with the exception of loans and receivables which are recognised on origination date. Transaction costs are included in the initial measurement of financial instruments, with the exception of financial instruments classified as at fair value through profit or loss. The subsequent measurement of financial assets is discussed below.

A financial asset is derecognised when the right to receive cash flows from the asset has expired or the group has transferred its rights to receive cash and either (a) has transferred substantially all the risks and rewards of the asset, or (b) has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the assets.

On derecognition of a financial asset, the difference between the carrying amount and the sum of the consideration received and any cumulative gain or loss recognised in equity is recognised in profit or loss.

Financial assets and liabilities are offset and the net amount reported in the balance sheet when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis, or realise the asset and settle the liability simultaneously.

The group classifies financials assets as follows:

Held-to-maturity investments are non-derivative financial assets with fixed or determinable payments and fixed maturities that the group's
management has the positive intention and ability to hold to maturity. The group's held-to-maturity investments are subsequently measured at
amortised cost using the effective interest method. The group assesses at the end of each reporting period whether there is objective evidence that
a held-to-maturity investment is impaired as a result of an event.

A portion of restricted investments held by the environmental trust funds (refer to note 16) are classified as held-to-maturity investments.

for the years ended 30 June 2016

#### ACCOUNTING POLICY - FINANCIAL ASSETS (APPLICABLE TO NOTES 15, 16, 17 AND 18) continued

- Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They arise
  when the group provides money, goods or services directly to a debtor with no intention of trading the receivable. Loans and receivables are
  subsequently measured at amortised cost using the effective interest method. Loans and receivables include trade and other receivables
  (excluding VAT and prepayments), restricted cash and cash and cash equivalents.
  - Cash and cash equivalents are defined as cash on hand, deposits held at call with banks and short-term highly liquid investments with original maturities of three months or less. Cash and cash equivalents exclude restricted cash.
  - Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment. A provision for impairment of receivables is established when there is objective evidence that the group will not be able to collect all amounts due according to the original terms of receivables. The amount of the provision is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the effective interest rate. The carrying amount of the asset is reduced through the use of a provision for impairment (allowance account) and the amount of the loss is recognised in the income statement. When a trade receivable is uncollectible, it is written off against the allowance account for trade receivables. Subsequent recoveries of amounts previously written off are credited in the income statement.
- Available-for-sale financial assets are non-derivatives that are either designated in this category or not classified in any of the other categories.
   They are included in non-current assets unless the investment matures or management intends to dispose of the investment within 12 months of the balance sheet date.

Available-for-sale financial assets are subsequently carried at fair value. The fair values of quoted investments are based on current bid prices. If the fair value for a financial instrument cannot be obtained from an active market, the group establishes fair value by using valuation techniques.

The group assesses at each balance sheet date whether there is objective evidence that a financial asset or a group of financial assets is impaired. In the case of equity securities classified as available for sale, a significant or prolonged decline in the fair value of the security below its cost is considered in determining whether the securities are impaired. If considered impaired, the cumulative loss is removed from other reserves and recognised in the income statement. Subsequent increases in the fair value are recognised in equity as impairment losses recognised in the income statement are not reversed through the income statement.

Financial assets at fair value through profit or loss have two sub-categories: financial assets held-for-trading, and those designated at fair value through profit or loss at inception. Derivative assets are categorised as held for trading unless designated as hedges. These assets are subsequently measured at fair value with gains or losses arising from changes in fair value recognised in the income statement in the period in which they arise.

#### 15 RESTRICTED CASH

	US d	lollar
Figures in million	2016	2015
Non-current	4	4
Environmental guarantees (a)	4	4
Environmental guarantees (a)	7	7
Current	1	1
Environmental rehabilitation (b)	1	1
Total restricted cash	5	5

- (a) The amount relates to funds set aside to serve as collateral against guarantees made to the Department of Mineral Resources (DMR) in South Africa for environmental and rehabilitation obligations. Refer to note 24. A portion of the funds are held on call account and the remaining amounts are invested in money market funds.
- (b) The amount relates to monies released from the environmental trusts as approved by the DMR. These funds may only be used for further rehabilitation.

#### 16 RESTRICTED INVESTMENTS

	US dollar	
Figures in million	2016	2015
Investments held by environmental trust funds (a) Investments held by social trust funds (b)	167 3	192 4
Total restricted investments	170	196

#### (a) Environmental trust funds

#### **ACCOUNTING POLICY**

Contributions are made to the group's environmental trust funds, created in accordance with statutory requirements, to fund the estimated cost of pollution control, rehabilitation and mine closure at the end of the life of the group's mines. The trusts are consolidated into the group as the group exercises control of the trusts. The measurement of the investments held by the trust funds is dependent on their classification under financial assets. Income received and gains are treated in accordance with these classifications.

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#### 16 RESTRICTED INVESTMENTS continued

#### (a) Environmental trust funds continued

The environmental trust funds are irrevocable trusts under the group's control. Contributions to the trusts are invested in interest-bearing short-term and medium-term cash investments and medium term equity-linked notes issued by commercial banks that provide guaranteed interest and additional interest or growth linked to the growth of the Shareholder Weighted Top 40 (SWIX 40) or the Top 40 index of the JSE. The equity-linked notes are designated as fair value through profit or loss investments and recorded at fair value whilst the interest-bearing short-term investments are classified either as held-to-maturity and recorded at amortised cost or as cash and cash equivalents and recorded at fair value. These investments provide for the estimated cost of rehabilitation at the end of the life of the group's mines. Income earned on the investments is retained in the funds and reinvested.

The environmental trust funds consist of:

	US dolla	
Figures in million	2016	2015
Held-to-maturity financial assets	126	113
Cash and cash equivalents (loans and receivables)	-	39
Fair value through profit or loss financial assets	41	40
Total environmental trust funds	167	192

Reconciliation of the movement in the investments held by environmental trust funds:

		US dollar	
igures in million	2016	2015	
Delenes at havinging of con-	400	242	
Balance at beginning of year Interest income	192	213	
	9	11	
Fair value gain	1	1	
Withdrawal of funds	(2)	(4)	
Equity-linked deposits matured/(acquired)	6	(22)	
Acquisition of held-to-maturity investments	27	18	
Net transfer of cash and cash equivalents	(33)	4	
Translation	(33)	(29)	
Balance at end of year	167	192	

#### (b) The social trust fund

The social trust fund is an irrevocable trust under the group's control. The purpose of the trust is to fund the social plan to reduce the negative effects of restructuring on the group's workforce, to put measures in place to ensure that the technical and life skills of the group's workforce are developed and to develop the group's workforce in such a manner as to avoid or minimise the effect of job losses and a decline in employment through turnaround or redeployment strategies.

The social trust fund investment comprises a unit trust portfolio that is exposed to the fair value changes in the equity market and is classified as a fair value through profit or loss investment.

Reconciliation of the movement in the investments held by the social trust fund:

	US dollar	
Figures in million	2016	2015
Balance at beginning of year Translation	4 (1)	4
Balance at end of year	3	4

for the years ended 30 June 2016

#### 17 DERIVATIVE FINANCIAL ASSETS

	US dollar	
Figures in million	2016	2015
Derivative financial assets		
Foreign exchange hedging contracts	25	
Total derivative financial assets	25	-

During February 2016, Harmony entered into foreign exchange hedging contracts (forex hedging contracts) in the form of zero cost collars, which establish a minimum (purchased put options) and maximum (sold call options) rand/US dollar exchange rate at which to convert US dollars to rands. The nominal value of open forex hedging contracts at 30 June 2016 was US\$500 million. Refer to note 6 for further details.

The forex hedging contracts are classified as held-for-trading and the fair value is based upon market valuations. The mark-to-market remeasurement of the forex hedging contracts is derived from a Black-Scholes valuation technique, derived from spot rand/US\$ exchange rate inputs, implied volatilities on the rand/US\$ exchange rate, rand/US\$ inter-bank interest rates and discounted at market interest rate (zero-coupon interest rate curve).

The derivative financial instruments are subject to enforceable master netting arrangements, as the group and the counterparty have both elected to settle the forex hedging contracts on a net basis.

#### 18 TRADE AND OTHER RECEIVABLES

		lollar
Figures in million	2016	2015
Current assets		
Financial assets		
Trade receivables (gold)	11	35
Other trade receivables	8	10
Provision for impairment	(2)	(5)
Trade receivables - net	17	40
Interest and other receivables (a)	4	4
Loan to associate (net) (b)(i)	4	-
Employee receivables	1	1
Non-financial assets		
Prepayments	2	5
Value added tax	16	12
Total current trade and other receivables	44	62
Non-current assets		
Financial assets		
Loans to associates (b)	8	17
Loan to ARM BBEE Trust (c)	14	-
Provision for impairment (b) (c)	(10)	(10)
Total non-current trade and other receivables	12	7

- (a) No impairment allowance is necessary in respect of any balances included in interest and other receivables as all amounts are classified as fully performing.
- (b) (i) During 2015, Rand Refinery drew down on the facility provided by its shareholders. Harmony's portion of the shareholder's loan was US\$10 million. As the loan is considered to be part of the net investment in associate, Harmony's share of Rand Refinery's losses of US\$1.2 million was recorded against the loan. An additional provision of US\$1.6 million (2015: US\$1.2 million) was provided for. The loan is due during December 2016. Refer to note 19 for more details.
  - (ii) The balance in 2016 comprises US\$7.9 million (2015: US\$9.5 million) owed by Pamodzi Gold Limited (Pamodzi). Pamodzi was placed into liquidation during 2009 and the loan was provided in full. Harmony is a concurrent creditor in the Pamodzi Orkney liquidation.
- (c) During 2016, Harmony advanced US\$13.5 million to the ARM BBEE Trust, a shareholder of African Rainbow Minerals Limited (ARM). The trust is controlled and consolidated by ARM, who holds 14.6% of Harmony's shares. Harmony is a trustee of the ARM BBEE Trust. The loan is subordinated and unsecured. The interest is market related (3 month JIBAR plus 4.25%) and is receivable on the maturity of the loan on 31 December 2022. At year end, the loan was tested for impairment following the decrease in the ARM share price since advancing the loan to the ARM BBEE Trust and an amount of US\$2.2 million was provided for. The recoverable amount was calculated using a discounted cash flow model. The cash flows in the model includes projected interest payments and projected ARM share price on the expected repayment date.

for the years ended 30 June 2016

### 18 TRADE AND OTHER RECEIVABLES continued

The movement in the provision for impairment of current trade and other receivables during the year was as follows:

		US dollar	
Figures in million	2016	2015	
Balance at beginning of year	5	6	
Impairment loss recognised	1	-	
Reversal of impairment loss	(2)	-	
Translation	(2)	(1)	
Balance at end of year	2	5	

The movement in the provision of loans receivable during the year was as follows:

	US d	ollar
Figures in million	2016	2015
Balance at beginning of year Impairment loss recognised Translation	10 4 (1)	11 1 (2)
Total provision of loans receivable	13	10
Total provision of non-current loans receivable Total provision of current loans receivable	10 3	10 -

The ageing of current trade receivables at the reporting date was:

	US	dollar
Figures in million	Gross	Impairment
30 June 2016		
Fully performing	15	
Past due by 1 to 30 days	-	-
Past due by 31 to 60 days	-	-
Past due by 61 to 90 days	1	-
Past due by more than 90 days	1	-
Past due by more than 361 days	2	2
	19	2
30 June 2015		
Fully performing	38	-
Past due by 1 to 30 days	1	-
Past due by 31 to 60 days	-	-
Past due by 61 to 90 days	-	-
Past due by more than 90 days	1	1
Past due by more than 361 days	5	4
	45	5

The ageing of loans receivable at the reporting date was:

	US	dollar
Figures in million	Gross	Impairment
30 June 2016		
Fully performing	21	5
Past due by 1 to 30 days	-	-
Past due by 31 to 60 days Past due by 61 to 90 days		
Past due by more than 361 days	8	8
	29	13
30 June 2015		
Fully performing	7	1
Past due by 1 to 30 days	-	-
Past due by 31 to 60 days	-	-
Past due by 61 to 90 days	-	-
Past due by more than 361 days	10	9
	17	10

for the years ended 30 June 2016

#### 18 TRADE AND OTHER RECEIVABLES continued

Based on past experience, the group believes that no impairment allowance is necessary in respect of fully performing receivables as the amount relates to customers that have a good track record with the group. The majority of fully performing trade receivables are indirectly associated with financial institutions of good credit quality. Provisions for the other loans and receivables have been raised following an assessment of their credit risk by management

During the 2015 and 2016 years there was no renegotiation of the terms of any receivable.

As at 30 June 2016 and 30 June 2015, there was no collateral pledged or held for any of the receivables.

#### 19 INVESTMENTS IN ASSOCIATES

#### **CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS**

The investments in associates are evaluated annually for impairment by comparing the entire carrying value of the investment (which includes loans to associates that form part of the net investment in associates) to the recoverable amount, which is the higher of value in use or fair value less costs to sell. Discounted cash flow models are used to calculate the net present value of the investments. The cash flows in the models include expected interest and capital payments on loans, dividends and proceeds on disposal.

- (a) Harmony acquired a 32.4% interest in Pamodzi on 27 February 2008, initially valued at US\$46.5 million. Pamodzi was listed on the JSE and had interests in operating gold mines in South Africa. Pamodzi was placed in liquidation in March 2009 and the trading of its shares on the JSE was suspended. As at 30 June 2016, the liquidation process has not been concluded. No financial information subsequent to 31 March 2009 is available and therefore no information has been disclosed.
- (b) Rand Refinery provides precious metal smelting and refining services in South Africa. Harmony holds a 10.38% share in Rand Refinery. Although the group holds less than 20% of the equity shares of Rand Refinery, the group is able to exercise significant influence by virtue of having a right to appoint a director on the board. Through the 10% shareholding and the right to appoint a director on the board, the investment has been accounted for as an associate.

The investment was written down to Rnil during the 2014 financial year following a discrepancy between the actual inventory and the accounting records being noted due to issues experienced following the implementation of a new Enterprise Resource Planning (ERP) system on 1 April 2013

As a precautionary measure following these challenges Rand Refinery's shareholders extended Rand Refinery an irrevocable, subordinated loan facility of up to U\$\$114.2 million. Harmony's maximum commitment in terms of this facility is U\$\$13.3 million. The agreements relating to the facility were signed on 23 July 2014. In December 2014, Rand Refinery drew down U\$\$88.1 million on the shareholders' loan. Harmony's portion of the shareholders' loan was U\$\$10.4 million. Interest on the facility is JIBAR plus a margin of 3.5%. The facility is convertible to equity after a period of two years. The loan, in substance, forms part of Harmony's net investment in Rand Refinery.

During the 2016 financial year, interest received on the loan amounted to US\$0.8 million (2015: US\$0.5 million). For the 2016 year, Harmony recognised its share of profits from associate of US\$0.5 million (2015: losses of US\$2.1 million) against the loan. An additional provision for impairment of US\$1.6 million (2015: US\$1.2 million) was also recorded. This impairment is included in "Other expenses (net)" in the income statement. The recoverable amount of the loan at 30 June 2016 is US\$4.2 million (2015: US\$6.6 million).

The fair value measurement of the net investment is classified as level 3 and is non-recurring. The loan is due in December 2016 and has been included in Other receivables - current.

Harmony has equity accounted for its share of the profits and losses based on Rand Refinery's most recent available management accounts.

The movement in the loan to associate during the year is as follows:

	US dollar	
Figures in million	2016	2015
	_	
Balance at beginning of year	7	-
Drawn down	-	10
Interest accrued	1	1
Interest received	-	(1)
Share of profit/(loss)	-	(2)
Impairment	(2)	(1)
Translation	(2)	-
Balance at end of year	4	7

for the years ended 30 June 2016

#### 19 INVESTMENTS IN ASSOCIATES continued

The results of Rand Refinery, and its aggregated assets (including goodwill) and liabilities, are as follows at the reporting date:

		ollar
Figures in million	2016	2015
Non-current assets Current assets Other current assets (excluding cash and cash equivalents)	50 21 12	44 31 24
Cash and cash equivalents	9	7
Total assets	71	75
Non-current liabilities <sup>1</sup>	1	88
Current liabilities <sup>2</sup>	99	23
Total liabilities	100	111
Revenue Total comprehensive loss	37 (19)	54 (33)
Percentage interest held	10.38%	10.38%

<sup>&</sup>lt;sup>1</sup> Includes the sub-ordinated loans from shareholders, which are convertible into equity on maturity, in 2015.

Rand Refinery's year end is 31 August (2015: 30 September).

#### 20 INVESTMENT IN JOINT OPERATIONS

#### MOROBE MINING JOINT VENTURES (MMJV) PARTNERSHIP AGREEMENT

The group has a 50% interest in mining and exploration assets located in the Morobe province, PNG. Newcrest Mining Limited (Newcrest) owns the remaining 50% interest in these assets. The assets include the Hidden Valley mine and the Wafi-Golpu projects. This partnership was formed during the 2009 financial year through a range of transactions, which included Newcrest's purchase of a 30.01% participating interest and a further farm-in of an additional 19.99% participating interest in the assets. The total value of the transaction was estimated at US\$530 million and was completed by 30 June 2009. The joint arrangement is accounted for as a joint operation. Refer to note 34(d) for transactions after the reporting date.

#### 21 INVENTORIES

#### **ACCOUNTING POLICY**

Inventories, which include bullion on hand, gold-in-process, gold in lock-up, ore stockpiles and consumables, are measured at the lower of cost and net realisable value. Net realisable value is assessed at each reporting date and is determined with reference to relevant market prices.

The cost of bullion, gold-in process and gold in lock-up is determined by reference to production cost, including amortisation and depreciation at the relevant stage of production. Ore stockpiles are valued at average production cost. Stockpiles and gold in lock-up are classified as non-current assets where the stockpile exceeds current processing capacity and where a portion of static gold in lock-up is expected to be recovered more than 12 months after balance sheet date.

Gold in-process inventories represent materials that are currently in the process of being converted to a saleable product. In-process material is measured based on assays of the material fed to process and the projected recoveries at the respective plants. In-process inventories are valued at the average cost of the material fed to process attributable to the source material coming from the mine or stockpile plus the in-process conversion costs, including the applicable depreciation relating to the process facility, incurred to that point in the process. Gold in-process includes gold in lock-up which is generally measured from the plants onwards. Gold in lock-up is expected to be extracted when plants are demolished at the end of their useful lives, which is largely dependent on the estimated useful life of the operations feeding the plants. Where mechanised mining is used in underground operations, in-progress material is accounted for at the earliest stage of production when reliable estimates of quantities and costs are capable of being made. At the group's open pit operations, gold in-process represents production in broken ore form.

Consumables are valued at weighted average cost value after appropriate allowances for slow moving and redundant items.

	US	dollar
Figures in million	2016	2015
Gold in lock-up Gold in-process, ore stockpiles and bullion on hand Consumables at weighted average cost (net of provision)	3 36 43	3 50 56
Total inventories Non-current portion of gold in lock-up and gold in-process	82 (3)	109 (3)
Total current portion of inventories	79	106
Included in the balance above is: Inventory valued at net realisable value	19	44

<sup>&</sup>lt;sup>2</sup> Includes the sub-ordinated loans from shareholders, which are convertible into equity on maturity, in 2016.

for the years ended 30 June 2016

#### 21 INVENTORIES continued

During the 2016 financial year, an increase of US\$0.1 million (2015: a write-down of US\$1.2 million) was made for the net realisable value adjustment for gold in lock-up.

During the year, an increase of US\$6.2 million (2015: US\$4.7 million) to the provision for slow moving and redundant stock was made. The increase in 2016 and 2015 in the provision was primarily the result of additional redundant stock items identified in PNG and provided for. The total provision at 30 June 2016 was US\$14.5 million (2015: US\$10.0 million).

#### 22 SHARE CAPITAL

#### **ACCOUNTING POLICY**

Ordinary shares are classified as equity, incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

The cost of treasury shares is eliminated against the share capital balance.

#### **Authorised**

1 200 000 000 (2015: 1 200 000 000) ordinary shares of 50 SA cents each.

#### Issued

437 299 479 (2015: 436 187 133) ordinary shares of 50 SA cents each. All issued shares are fully paid.

#### Share issues

Shares issued in the 2015 and 2016 financial years relate to the exercise of share options by employees. During March 2016, 35 000 shares were issued to the Tlhakanelo Employee Share Trust, the vehicle used for the employee share ownership plan (ESOP). Note 31 and 32 set out details in respect of the share option scheme.

#### Treasury shares

Included in the total of treasury shares is an amount of 335 shares held by Lydenburg Exploration Limited, a wholly owned subsidiary of the company.

During August 2012, 3.5 million shares were issued to the Tlhakanelo Employee Share Trust. As the trust is controlled by the group, the shares are treated as treasury shares. During March 2016, an additional 35 000 shares were issued to the Tlhakanelo Employee Share Trust for purposes of settling the 2014 and 2015 offers of ESOP share appreciation rights that vested during the current year. During 2016, 537 757 (2015: 670 859) shares were exercised by employees and the remaining 524 915 shares are still held as treasury shares.

#### 23 OTHER RESERVES

	US dollar	
Figures in million	2016	2015
Foreign exchange translation reserve (a)	(1 753)	(1 378)
Equity component of convertible bond (b)	41	41
Acquisition of non-controlling interest in subsidiary (c)	(57)	(57)
Share-based payments (d)	197	175
Repurchase of equity interest (e)	(13)	(13)
Other (f)	(6)	(6)
Total other reserves	(1 591)	(1 238)

(a) The balance of the foreign exchange translation reserve movement represents the cumulative translation effect of the group's off-shore operations. It also includes the translation effect from rand to US dollar.

	US dollar	
Figures in million	2016	2015
Balance at beginning of year Current year's foreign exchange translation gain/(loss)	(1 378) (375)	(1 010) (368)
Balance at end of year	(1 753)	(1 378)

(b) On 24 May 2004, the group issued a convertible bond. The amount representing the value of the equity conversion component is included in other reserves, net of deferred income taxes. The equity conversion component is determined on the issue of the bonds and is not changed in subsequent periods. The convertible bonds were repaid in 2009.

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#### 23 OTHER RESERVES continued

- (c) On 15 March 2004, Harmony announced that it had made an off-market cash offer to acquire all the ordinary shares, listed and unlisted options of Abelle Limited, held by non-controlling interests. The excess of the purchase price of US\$86.5 million over the carrying amount of non-controlling interest acquired, amounting to US\$57 million, has been accounted for under other reserves.
- (d) Share-based payments

	US	US dollar	
Figures in million	2016	2015	
Balance at beginning of year	175	159	
Share-based payments expensed (i)	22	16	
Balance at end of year	197	175	

(i) The group issues equity-settled instruments to certain qualifying employees under an employee share option scheme and employee share ownership plan (ESOP) to purchase shares in the company's authorised but unissued ordinary shares. Equity share-based payments are measured at the fair value of the equity instruments at the date of the grant. Share-based payments are expensed over the vesting period, based on the group's estimate of the shares that are expected to eventually vest. During the 2016 financial year, the equity-settled share-based payment expense of US\$22.1 million (2015: US\$16.4 million) was charged to the income statement (refer to note 31 for more details).

The 2014 and 2015 offers of ESOP share appreciation rights that vested during the 2016 financial year were settled through the issue of ordinary shares to the Tihakanelo Employee Share Trust. This was due to the positive share price appreciation since grant date, and therefore resulted in the treatment of these awards as equity-settled.

- (e) On 19 March 2010, Harmony Gold Mining Company Limited concluded an agreement with African Vanguard Resources (Proprietary) Limited (AVRD), for the purchase of its 26% share of the mining titles of the Doornkop South Reef. The original sale of the 26% share in the mining titles was accounted for as an in-substance call option by AVRD over the 26% mineral right. The agreement to purchase AVRD's 26% interest during the 2010 financial year is therefore considered to be a repurchase of the option (equity interest). The 26% interest was transferred from AVRD to Harmony in exchange for Harmony repaying the AVRD Nedbank loan and the issue of 2 162 359 Harmony shares. The difference between the value of the shares issued of US\$20.5 million, the liability to the AVRD and transaction costs, have been taken directly to equity.
- (f) Included in the 2016 financial year is an actuarial gain of US\$0.3 million (2015: US\$0.4 million), net of tax of US\$0.1 million (2015: US\$0.2 million), on post-retirement benefits recognised in other comprehensive income (refer to note 25 for more details). The cumulative actuarial loss (net of tax) is US\$2.2 million at 30 June 2016 (2015: US\$2.5 million).

#### **ACCOUNTING POLICY - PROVISIONS (APPLICABLE TO NOTES 24, 25 AND 26)**

Provisions are recognised when the group has a present legal or constructive obligation as a result of past events where it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate of the amount of the obligation can be made.

The amount recognised as a provision is the net present value of the best estimate of the expenditure required to settle the present obligation at balance sheet date using a pre-tax rate that reflects current market assessment of the time value of money and the risks specific to the obligation. The estimate takes into account the associated risks and uncertainties. The increase in the provision due to the passage of time is recognised as interest expense.

Provisions are reviewed at each balance sheet date and adjusted to reflect the current best estimate. If it is no longer probable that an outflow of economic benefits will be required, the provision is reversed.

#### 24 PROVISION FOR ENVIRONMENTAL REHABILITATION

#### **ACCOUNTING POLICY**

Estimated long-term environmental obligations, comprising pollution control, rehabilitation and mine closure, are based on the group's environmental management plans in compliance with current technological, environmental and regulatory requirements.

Based on disturbances to date, the net present value of expected rehabilitation cost estimates is recognised and provided for in full in the financial statements. The estimates are reviewed annually and are discounted using a pre-tax risk-free rate that is adjusted to reflect the current market assessments of the time value of money and the risks specific to the obligation.

Annual changes in the provision consist of finance costs relating to the change in the present value of the provision and inflationary increases in the provision estimate, as well as changes in estimates. The present value of environmental disturbances created are capitalised to mining assets against an increase in the rehabilitation provision. If a decrease in the liability exceeds the carrying amount of the asset, the excess is recognised immediately in the income statement. If the asset value is increased and there is an indication that the revised carrying value is not recoverable, impairment is performed in accordance with the accounting policy dealing with impairments of non-financial assets. Rehabilitation projects undertaken, included in the estimates are charged to the provision as incurred. The cost of ongoing current programmes to prevent and control pollution is charged against income as incurred. Over time, the liability is increased to reflect an interest element, and the capitalised cost is depreciated over the life of the related asset.

for the years ended 30 June 2016

#### 24 PROVISION FOR ENVIRONMENTAL REHABILITATION continued

#### **CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS**

Significant judgement is applied in estimating ultimate rehabilitation cost that will be required in future to rehabilitate the group's mines. Ultimate cost may significantly differ from current estimates.

For the South African operations, management used an inflation rate of 6.75% (2015: 6.50%) (2014:6.50%) and the expected life of the mines according to the life-of-mine plans in the calculation of the estimated net present value of the rehabilitation liability. The discount rates used for the calculation are dependent on the operation's life of mine and are as follows: up to 12 months – 8.00% (2015: 6.50%) (2014: 6.75%); for one to five years – 8.40% (2015: 7.30%) (2014: 7.75%); for six to nine years – 9.00% (2015: 7.80%) (2014: 8.00%) and for ten years or more – 9.20% (2015: 8.00%) (2014: 8.25%). These estimates were based on recent yields determined on government bonds. In calculating the rehabilitation liability in PNG for 2016, an inflation rate of 5.0% (2015: 5.0%) (2014: 2.9%) was used, together with a discount rate of 6.25% (2015: 6.25%) (2014: 6.25%).

The group's mining and exploration activities are subject to extensive environmental laws and regulations. The group has made, and expects to make in the future, expenditures to comply with such laws and regulations, but cannot predict the full amount of such future expenditures. Estimated future reclamation costs are based principally on legal and regulatory requirements.

The following is a reconciliation of the total liability for environmental rehabilitation:

	US dollar	
Figures in million	2016	2015
Provision raised for future rehabilitation		
Balance at beginning of year	182	198
Change in estimate - Balance sheet	(7)	3
Change in estimate - Income statement <sup>1</sup>	(7)	(6)
Time value of money and inflation component of rehabilitation costs	11	13
Translation	(31)	(26)
Total provision for environmental rehabilitation	148	182

<sup>&</sup>lt;sup>1</sup> The change in estimate includes rehabilitation work performed during the year. Refer to note 5(c).

The provision for environmental rehabilitation for PNG amounts to US\$34.7 million (2015; US\$36.4 million) and is unfunded.

While the ultimate amount of rehabilitation costs to be incurred in the future is uncertain, the group has estimated that, based on current environmental and regulatory requirements, the total undiscounted cost for the mines, in the current monetary terms, is approximately US\$203.7 million (2015: US\$237.3 million).

	US dollar	
Figures in million	2016	2015
Future net undiscounted obligation		
Ultimate estimated rehabilitation cost	204	237
Amounts invested in environmental trust funds (refer to note 16)	(167)	(192)
Total future net undiscounted obligation	37	45

The group intends to finance the ultimate rehabilitation costs from the money invested in environmental trust funds as well as the proceeds on sale of assets and gold from plant clean-up at the time of mine closure. The group has guarantees in place, some cash-backed, relating to some of the environmental liabilities. Refer to notes 15 and 33.

During 2015 and 2016, the group rehabilitated certain decommissioned operations in the Free State as part of its overall strategy of eliminating safety and health exposures and reducing the environmental rehabilitation liability. Following several years of working closely with the DMR to determine the best solution for rehabilitating certain pits, Kalgold received a decision from the DMR during 2015 to use tailings to backfill pits that have been mined out and as a result the deposition into these pits is in progress.

#### 25 RETIREMENT BENEFIT OBLIGATION

## **ACCOUNTING POLICY**

The group provides medical cover to current employees and certain retirees through certain funds. The medical accounting costs for the defined benefit plan are assessed using the projected unit credit method. The health care obligation is measured at the present value of the estimated future cash outflows using government bond interest rates consistent with the terms and risks of the obligation. Actuarial gains and losses as a result of these valuations are recognised in other comprehensive income (OCI) at revaluation date. Actuarial gains and losses recognised in OCI will not be recycled to profit or loss. The future liability for current and retired employees and their dependants is accrued in full based on actuarial valuations obtained annually.

#### **CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS**

An updated actuarial valuation is carried out at the end of each financial year. Assumptions used to determine the liability include a discount rate of 9.7%, no increases in employer subsidies (in terms of the agreement) and mortality rates according to the SA 1956/62 mortality table (SA ""a mf"" tables) (retirement age of 60 years) and a medical inflation rate of 7.7% (2015: discount rate of 9%, retirement age of 60 years and 7% medical inflation rate). Management determined the discount rate by assessing government bonds with similar terms to the liability. The changes to the discount rate and medical inflation rate are similar to changes in interest and inflation rates in South Africa.

for the years ended 30 June 2016

#### 25 RETIREMENT BENEFIT OBLIGATION continued

#### (a) Pension and provident funds

The group contributes to several pension and provident funds governed by the Pension Funds Act, 1956 for the employees of its South African subsidiaries. The pension funds are multi-employer defined contribution industry plans. The group's liability is therefore limited to its monthly determined contributions. The provident funds are funded on a "monetary accumulative basis" with the member's and employer's contributions having been fixed in the constitution of the funds.

The Australian group companies make contributions to each employee's superannuation (pension) funds in accordance with the Superannuation Guarantee Scheme (SGS). The SGS is a Federal Government initiative enforced by law which compels employers to make regular payments to regulated funds providing for each employee on their retirement. The SGS were set at a minimum of 9.5% of gross salary and wages for the 2016 year (2015: 9.5%). The fund is a defined contribution plan.

The PNG Superannuation Act 2002 requires a compulsory employer contribution of 8.4% (2015: 8.4%) into an approved superannuation (pension) fund if an employee is appointed for a period of three months or more. The approved superannuation funds are defined contribution plans.

Substantially all the group's employees are covered by the above mentioned retirement benefit plans. Funds contributed by the group for the 2016 financial year amounted to US\$34.3 million (2015: US\$43.0 million).

#### (b) Post-retirement benefits other than pensions

Harmony inherited a post-retirement medical benefit obligation, which existed at the time of the Freegold acquisition in 2002. The group's obligation in this regard is to pay a subsidy of 2% for every completed year of employment up to a maximum of 50% of total medical aid contributions, commencing on date of retirement. Should the employee die, either in service or after retirement, this benefit will transfer to his/her dependants. The medical aid tariffs are based on the Bestmed medical scheme (Bestmed) options. Except for the aforementioned employees, Harmony has no other post-retirement obligation for the other group employees.

The liability is unfunded and will be settled out of cash and cash equivalents when it becomes due. The liability is based on an actuarial valuation conducted during the year ended 30 June 2016, using the projected unit credit method. The next actuarial valuation will be performed on 30 June 2017.

The principal actuarial assumptions used to determine the present value of unfunded obligations are discussed above. In addition the following was also considered:

- It is assumed that all Continuation and Widow Members (CAWMs) will remain on the current benefit option and income band. For employed members, post-employment contributions were assumed to be equal to the average payable for the current CAWMs membership;
- It is assumed that not all employed members will remain employed until retirement therefore estimated resignation and ill-health retirement rates are also taken into account;
- It is assumed that 90% of employed members will be married at retirement or earlier death and that wives are four years younger than their husbands. It is assumed that the only dependants will be spouses.

Through the post-employment medical plan, the group is exposed to a number of risks, the most significant of which are discussed below:

- Change in bond yields: A decrease in the bond yields will increase the plan liability.
- Inflation risk: The obligation is linked to inflation and higher inflation will lead to a higher liability.
- Life expectancy: The obligation is to provide benefits for the life of the member, so increases in life expectancy will result in an increase in the plan's liabilities.

The net actuarial gain for 2016 was mainly due to exits of current employees being higher than expected, partially offset by exits of CAWMS being lower than expected and the actual subsidy inflation being higher than assumed (2015: net actuarial gain was mainly as a result of exits of current employees being higher than expected).

		ar
Figures in million	2016	2015
Present value of unfunded obligations	11	13
Current employees	4	5
Retired employees	7	8
Movement in the liability recognised in the balance sheet		
Balance at beginning of year	13	23
Contributions paid	(1)	(1)
Curtailments <sup>1</sup>	-	(8)
Finance cost	1	1
Net actuarial gain recognised during the year <sup>2</sup>	-	(1)
Translation	(2)	(1)
Balance at end of year	11	13

<sup>&</sup>lt;sup>1</sup> The curtailment in 2015 relates to the significant reduction in members qualifying for the post-retirement benefit, mainly arising from the change in the terms of employment of members, resulting in a reduction of the liability of US\$8.2 million.

<sup>&</sup>lt;sup>2</sup> The net actuarial gain has been recorded in other comprehensive income

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#### 25 RETIREMENT BENEFIT OBLIGATION continued

#### (b) Post-retirement benefits other than pensions continued

	US dollar	
Figures in million	2016	2015
The net liability of the defined benefit plan is as follows:  Present value of defined benefit obligation	11	13
Net liability of defined benefit plan	11	13

The effect of a percentage point increase and decrease in the assumed medical cost trend rate is as follows:

		lollar
Figures in million	2016	2015
Effect of a 1% increase on:		
Defined benefit obligation	1	2
Effect of a 1% decrease on:		
Defined benefit obligation	1	2

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. The analysis is performed on the same basis for 2015.

The group expects to contribute approximately US\$0.5 million to the benefit plan in 2017.

The weighted average duration of the defined benefit obligation is 15.5 years.

#### ACCOUNTING POLICY - FINANCIAL LIABILITIES (APPLICABLE TO NOTES 26, 27 AND 28)

Financial liabilities are initially measured at fair value when the group becomes a party to their contractual arrangements. Transaction costs are included in the initial measurement of financial liabilities, with the exception of financial liabilities classified at fair value through profit or loss. The subsequent measurement of financial liabilities is discussed below. A financial liability is derecognised when the obligation under the liability is discharged, cancelled or expires. The group classifies financial liabilities as follows:

Borrowings are initially recognised at fair value net of transaction costs incurred and subsequently measured at amortised cost, comprising original
debt less principal payments and amortisation, using the effective yield method. Any difference between proceeds (net of transaction cost) and the
redemption value is recognised in the income statement over the period of the borrowing using the effective interest rate method.

Fees paid on the establishment of the loan facilities are capitalised as a pre-payment and amortised over the period of the facility to which it relates, to the extent it is probable that some or all of the facility will be drawn down. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is expensed.

Borrowings are classified as current liabilities unless the group has an unconditional right to defer settlement of the liability for at least 12 months after the balance sheet date.

• Trade and other payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method. Payables are classified as current liabilities if payment is due within a year or less. If not, they are presented as non-current liabilities.

#### **26 OTHER NON-CURRENT LIABILITIES**

#### **ACCOUNTING POLICY**

Refer to the accounting policy on provisions above, accounting policies on financial liabilities below and note 31 for the accounting policy on share-based payments.

		US dollar	
Figures in million	2016	2015	
Financial liabilities			
Sibanye Beatrix ground swap royalty provision (a)	1	2	
Non-financial liabilities			
ESOP share-based payment liability (b)	-	1	
Total other non-current liabilities	1	3	

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# 26 OTHER NON-CURRENT LIABILITIES continued

- (a) During 2014, Harmony and Sibanye entered into an agreement whereby the Joel mine exchanged two portions of its mining right for two portions of Sibanye's Beatrix mine's mining right, as well as acquiring two additional portions from Beatrix (sale portions). The transaction was completed in May 2014. The purchase consideration of the sale portions acquired by Joel is payable as a royalty of 3% on gold revenue generated from these two portions. The royalty liability recorded is the net present value of 3% of future gold revenue of the sale portions. During 2016, an amount of US\$0.2 million (2015: US\$0.2 million) was recorded relating to time value of money and US\$0.4 million (2015: US\$0.3 million) relating to changes in estimates. An amount of US\$0.4 million (2015: US\$0.2 million) has been reclassified as current and recorded in other payables. Refer to note 13(a) for further details on the key assumptions for the calculation of the provision, which is based on the life-of-mine plan of Joel.
- (b) The liability in 2015 relates to the cash-settled share-based payment transaction following the award of ESOP share appreciation rights (SARs) to qualifying employees through the Tlhakanelo Employee Share Trust. As all outstanding awards vest in March 2017, the remaining liability is recorded in Trade and other payables. Refer to note 31 for more details.

#### 27 BORROWINGS

#### **Nedbank Limited**

On 20 December 2013, the company entered into a loan facility with Nedbank Limited, comprising a revolving credit facility of R1 300 million (US\$125.6 million). In January 2015, R400 million (US\$34.9 million) was drawn down. On 7 July 2015 an additional R300 million (US\$24.1 million) was drawn down while on 26 November 2015 R400 million (US\$28.2 million) was repaid.

Interest accrues on a day-to-day basis over the term of the loan at a variable interest rate.

Refer to note 34(a) for transactions after the reporting date.

#### US dollar revolving credit facilities

On 11 August 2011, the company entered into a loan facility which was jointly arranged by Nedbank Limited and FirstRand Bank Limited (acting through its Rand Merchant Bank division) (syndicate), comprising a US\$300 million syndicated revolving credit facility, of which only US\$270 million was drawn down. The facility was utilised to fund exploration projects in PNG. Interest at LIBOR plus 260 basis points was paid quarterly. The syndicated revolving facility was settled in February 2015 by drawing against the new facility (discussed below).

On 22 December 2014, the company entered into a loan facility agreement which was jointly arranged by Nedbank Limited and Barclays Bank Plc, comprising a revolving credit facility of up to US\$250 million. All conditions precedent were met during February 2015 and US\$205 million was drawn down to repay the syndicated revolving credit facility, resulting in a net cash outflow of US\$65 million. The remaining US\$45 million was drawn down during May 2015.

During the 2016 financial year, the following repayments were made: 4 December 2015 - US\$50 million; 8 February 2016 - US\$20 million; 9 May 2016 - US\$40 million.

Interest accrues on a day-to-day basis over the term of the loan at a variable interest rate.

#### Terms and debt repayment schedule at 30 June 2016

	Interest charge	Repayment terms	Repayment date	Security
Nedbank Limited (secured loan - rand revolving credit facility)	1, 3 or 6 month JIBAR plus 3.5%, payable at the elected interest interval	Repayable on maturity	23 December 2016	Cession and pledge of operating subsidiaries' shares
US dollar revolving credit facility (secured loan)	3 or 6 month LIBOR plus 3%, payable at the elected interest interval	Repayable on maturity	6 February 2018	Cession and pledge of operating subsidiaries' shares

#### **Debt covenants**

The debt covenant tests for both the rand and US dollar revolving credit facilities were renegotiated during December 2014 and are as follows:

- The group's interest cover ratio shall not be less than five (EBITDA<sup>1</sup>/Total interest paid);
- Tangible Net Worth<sup>2</sup> to total net debt ratio shall not be less than six times or eight times when dividends are paid;
- Leverage<sup>3</sup> shall not be more than 2.5 times.

<sup>1</sup> Earnings before interest, taxes, depreciation and amortisation (EBITDA) as defined in the agreement excludes unusual items such as impairment and restructuring cost.

<sup>2</sup> Tangible Net Worth is defined as total equity less intangible assets.

<sup>3</sup> Leverage is defined as total net debt to EBITDA.

The debt covenant tests are performed on a quarterly basis. No breaches of the covenants were identified during the tests in the 2015 and 2016 financial years.

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## 27 BORROWINGS continued

#### Interest-bearing borrowings

	US dollar	r
Figures in million	2016	2015
Non-current borrowings		
Nedbank Limited (secured loan - rand revolving credit facilities)	_	33
Balance at beginning of year	33	-
Draw down	24	35
Repayments	(28)	-
Transferred to current borrowings Translation	(20) (9)	(2)
Syndicated (secured loan - US\$ revolving credit facility)	-	-
Balance at beginning of year Repayments	-	270 (270)
Topaymone		(2.0)
US dollar revolving credit facility (secured loan)	139	247
Balance at beginning of year	247	-
Draw down Repayments	(110)	250
Issue cost	(110)	(4)
Amortisation of issue costs	2	1
Total non-current borrowings	139	280
Current borrowings		
Nedbank Limited (secured loan - rand revolving credit facilities)	20	-
Balance at beginning of year	-	-
Transferred from non-current liabilities	20	-
Total current borrowings	20	-
Total interest-bearing borrowings	159	280
The maturity of borrowings is as follows:		
Current	20	_
Between one to two years	139	33
Between two to five years	-	247
	159	280
Undrawn committed borrowing facilities:		
Expiring within one year	68	
Expiring within one year Expiring after one year	68 110	74

#### Interest rates

	Effective	e rate
	2016	2015
	%	%
Nedbank Limited - rand revolving credit facility	10.4	9.7
US dollar revolving credit facility	3.5	3.0

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#### 28 TRADE AND OTHER PAYABLES

#### **ACCOUNTING POLICY**

The group accrues for the cost of the leave days granted to employees during the period in which the leave days accumulate.

		lollar
Figures in million	2016	2015
Financial liabilities		
Trade payables	24	43
Other liabilities	5	5
Non-financial liabilities		
Payroll accruals	26	27
Leave liabilities (a)	23	26
Shaft related accruals	24	22
Other accruals	8	9
ESOP share-based payment liability (b)	1	1
Value added tax	4	4
Total trade and other payables	115	137

#### (a) Leave liabilities

Employee entitlements to annual leave are recognised on an ongoing basis. An accrual is made for the estimated liability for annual leave as a result of services rendered by employees up to the balance sheet date. The movement in the liability recognised in the balance sheet is as follows:

		aoliar
Figures in million	2016	2015
Balance at beginning of year	26	31
Benefits paid	(26)	
Total expense per income statement	27	32
Translation	(4)	(4)
Balance at end of year	23	26

#### (b) ESOP share-based payment liability

The liability relates to the cash-settled share-based payment transaction following the award of ESOP SARs to qualifying employees through the Tlhakanelo Employee Share Trust. Refer to note 31 for more details.

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#### 29 CASH GENERATED BY OPERATIONS

		US dollar	
Figures in million	2016	2015	2014
Reconciliation of profit/(loss) before taxation to cash generated by operations:			
Profit/(loss) before taxation	109	(436)	(145)
Adjustments for:			
Amortisation and depreciation	149	216	207
(Reversal of impairment)/impairment of assets	(3)	285	135
Share-based payments	23	18	26
Net decrease in provision for post-retirement benefits	(1)	(8)	(1)
Net decrease in provision for environmental rehabilitation	(7)	(6)	(4)
Profit on sale of property, plant and equipment	-	(1)	(3)
Loss on scrapping of property, plant and equipment	4	42	-
(Profit)/loss from associates	-	2	10
Profit on disposal of investments	-	-	(1)
Net gain on financial instruments	(1)	(1)	(16)
Interest received	(16)	(20)	(21)
Finance cost	19	22	27
Inventory adjustments	7	18	(9)
Non-cash net foreign exchange translation difference	20	34	16
Provision for bad debts	4	1	2
Exploration (amortisation and depreciation)	-	4	4
Other non-cash adjustments	(3)	2	1
Effect of changes in operating working capital items			
Receivables	12	10	18
Inventories	5	-	(4)
Payables	1	(14)	(24)
Cash generated by operations	322	168	218

#### ADDITIONAL CASH FLOW INFORMATION

- (i) The income and mining taxes paid in the statement of cash flow represents actual cash paid less refunds received.
- (ii) At 30 June 2016, US\$177.9 million (2015: US\$74.0 million) of borrowing facilities had not been drawn down and is therefore available for future operational activities and future capital commitments. Refer to note 27.

#### FOR THE FINANCIAL YEARS ENDED 30 JUNE 2015 AND 30 JUNE 2016

#### (a) Principal non-cash transactions

Share-based payments (refer to note 31).

#### FOR THE FINANCIAL YEAR ENDED 30 JUNE 2014

#### (a) Acquisitions and disposal of investments/businesses

- Profit on sale of property, plant and equipment

  During May 2014, the ground swap between Joel mine and Sibanye's Beatrix mine was completed, resulting in a non-cash profit being recognised for the difference between the carrying value of the Joel portion and the fair value of the Beatrix portion.
- (ii) Investments in financial assets

  During 2014, a cash offer for Witwatersrand Consolidated Gold Resources Limited's (Wits Gold) entire share capital was made to all Wits Gold shareholders by Sibanye. Harmony accepted the offer and on 14 April 2014 a total consideration of US\$4.9 million was received.

#### (b) Principal non-cash transactions

Share-based payments (refer to note 31). Joel/Sibanye ground swap (refer to note 26).

for the years ended 30 June 2016

#### 30 EMPLOYEE BENEFITS

#### **ACCOUNTING POLICY**

- Pension, provident and medical benefit plans are funded through monthly contributions. The group pays fixed contributions into a separate entity in terms of the defined contribution pension, provident and medical plans which are charged to the income statement in the year to which they relate. The group's liability is limited to its monthly determined contributions and it has no further liability, legal or constructive, if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. Refer to note 25 for details of the post-retirement medical benefit plan.
- Termination benefits are payable when employment is terminated before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The group recognises termination benefits at the earlier of the following dates: (a) when the group can no longer withdraw the offer of those benefits; and (b) when the entity recognises costs for a restructuring that is within the scope of IAS 37 and involves the payment of termination benefits. In the case of an offer made to encourage voluntary redundancy, the termination benefits are measured based on the number of employees expected to accept the offer. Benefits falling due more than 12 months after balance sheet date are discounted to present value.

	2016	2015
New to a few and a section of 200 to a section		
Number of permanent employees as at 30 June:		
South African operations	25 861	26 000
International operations <sup>1</sup>	1 339	1 465
Total number of permanent employees	27 200	27 465

	US do	ollar
Figures in million	2016	2015
Aggregate earnings		
The aggregate earnings of employees including directors were:		
Salaries and wages and other benefits	459	592
Retirement benefit costs	34	43
Medical aid contributions	13	16
Total aggregated earnings <sup>2</sup>	506	651

<sup>&</sup>lt;sup>1</sup>The total number of employees in Australia, including the Brisbane office, at 30 June 2016 was 72 (2015: 75). The total for the international operations includes the MMJV employees.

Remuneration for directors and executive management is fully disclosed in note 32.

During the 2016 financial year US\$6.5 million (2015: US\$25.2 million) was included in the payroll costs for termination costs. Termination costs include the cost relating to the voluntary retrenchment and restructuring process as well as retrenchments due to shaft closures (refer to note 5).

<sup>&</sup>lt;sup>2</sup> These amounts have been included in cost of sales, corporate expenditure and capital expenditure.

for the years ended 30 June 2016

#### 31 SHARE-BASED PAYMENTS

#### **ACCOUNTING POLICY**

The group operates the following employee share incentive plans:

- · Equity-settled share-based payments plan where the group grants share options to certain employees in exchange for services received;
- · Equity-settled and cash-settled employee share ownership plan.

Equity-settled share-based payments are measured at fair value that includes market performance conditions but excludes the impact of any service and non-market performance conditions of the equity instruments at the date of the grant. The share-based payments are expensed over the vesting period, based on the group's estimate of the shares that are expected to eventually vest. The group used an appropriate option pricing model in determining the fair value of the options granted. Non-market vesting conditions are included in assumptions about the number of options that are expected to vest. At each balance sheet date, the estimates of the number of options that are expected to become exercisable are revised. The impact of the revision of original estimates, if any, is recognised in the income statement, with a corresponding adjustment to equity. The proceeds received net of any directly attributable transaction costs are credited to share capital (nominal value) and share premium when the options are exercised.

Cash-settled share-based payments are measured at fair value. The liability is remeasured at each balance sheet date until the date of settlement.

#### **CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS**

The fair value of options granted is being determined using either a binomial, Black-Scholes or a Monte Carlo valuation model. The significant inputs into the model are: vesting period, risk free interest rate, volatility, price on date of grant and dividend yield.

#### **EMPLOYEE SHARE-BASED PAYMENTS**

The group has the 2012 employee share ownership plan (ESOP) and the 2006 share plan that are active. The objective of these schemes is to recognise the contributions of employees to the group's financial position and performance and to retain key employees.

The total cost relating to employee share-based payments is made up as follows:

	US c	dollar
Figures in million	2016	2015
2012 employee share ownership plan (a) 2006 share plan (b)	2 21	5
		10
Total employee share-based payments included in cost of sales	23	18

The 2003 scheme expired during 2015 with the remaining 614 476 options with a weighted average price of R44.76 lapsing. There was no cost for the 2015 and 2016 years.

The directors are authorised to issue up to 60 011 669 ordinary shares to participants who have received awards in accordance with Harmony's employee share incentive schemes.

Subsequent to the annual general meeting held on 1 December 2010, 1 039 794 ordinary shares have been issued in terms of the 2003 scheme and 3 218 067 ordinary shares have been issued in terms of the 2006 share plan. 49 990 794 outstanding share option awards have been granted in terms of the 2006 share plan. The Tihakanelo Employee Share Trust is authorised to allocate 12 864 000 ordinary shares to the employee share ownership plan.

#### (a) 2012 employee share ownership plan

During August 2012, Harmony issued the first awards under its ESOP. The ESOP is overseen by the Tlhakanelo Employee Share Trust. In terms of the ESOP rules, qualifying employees are offered one scheme share for every two share appreciation rights (SARs).

On the fifth anniversary of the first allocation date, any unallocated scheme shares and SARs will be distributed to all employees who participated in the ESOP and who are still employed with the company pro rata in accordance with the number of scheme shares previously allocated to the employees.

The scheme shares are accounted for as equity-settled.

The vesting of the SARs is linked to the positive share appreciation of Harmony's share price from the grant of the award. The SARs incorporate a cash bonus with a minimum pay-out guarantee of R18 (applicable where there is no share appreciation or share appreciation less than R18) and a maximum pay-out ceiling of R32 per SAR over the vesting period. The SARs include an equity-settled portion as well as a cash-settled portion related to the cash bonus. The cash-settled portion has been recognised as a liability in the balance sheet (refer to note 26 and 28), the fair value of which is remeasured at each reporting date.

The total cost relating to the 2012 ESOP is made up as follows:

		ollar
Figures in million	2016	2015
2012 employee share ownership plan		
Equity-settled Cash-settled	1	3
Cash-settled	1	2
	2	5

for the years ended 30 June 2016

## 31 SHARE-BASED PAYMENTS continued

## EMPLOYEE SHARE-BASED PAYMENTS continued

## (a) 2012 employee share ownership plan continued

#### Activity on awards

	Scheme shares	SAF	
Activity on awards outstanding	Number of awards	Number of awards	Weighted average award price (SA rand)
For the year ended 30 June 2016  Balance at beginning of year  Awards granted  Awards exercised  Awards forfeited	1 052 032 25 600 (549 276) (22 236)	2 104 064 51 200 (1 098 552) (44 472)	75.11 39.48 75.42 68.36
Balance at end of year	506 120	1 012 240	73.26
For the year ended 30 June 2015			
Balance at beginning of year Awards granted Awards exercised Awards forfeited	1 699 748 46 760 (651 442) (43 034)	3 399 496 93 520 (1 302 884) (86 068)	77.65 20.47 77.95 73.06
Balance at end of year	1 052 032	2 104 064	75.11

	Number of	Award price	Remaining
List of awards granted but not yet vested (listed by grant date)	awards	(SA rand)	life (years)
As at 30 June 2016			
Scheme shares			
8 August 2012 allocation	422 900	n/a	0.7
8 March 2013 allocation	19 800	n/a	0.7
15 March 2014 allocation	17 000	n/a	0.7
15 March 2015 allocation	21 140	n/a	0.7
15 March 2016 allocation	25 280	n/a	0.7
	506 120		
Share appreciation rights			
8 August 2012 allocation	845 800	80.03	0.7
8 March 2013 allocation	39 600	56.35	0.7
15 March 2014 allocation	34 000	40.32	0.7
15 March 2015 allocation	42 280	31.01	0.7
15 March 2016 allocation	50 560	39.48	0.7
	1 012 240		
Total awards granted but not yet vested	1 518 360		

	US d	ollar
Figures in million	2016	2015
Gain realised by participants on awards traded during the year	3	4
Fair value of awards exercised during the year	3	4

for the years ended 30 June 2016

#### 31 SHARE-BASED PAYMENTS continued

#### **EMPLOYEE SHARE-BASED PAYMENTS continued**

#### (a) 2012 employee share ownership plan continued

#### Measurement

The fair value of equity instruments granted during the year was valued using the Cox-Ross-Rubinstein binomial tree on the equity-settled portion of the SARs. The minimum payout guarantee is valued at net present value and the spot share price on grant date was used for the scheme shares.

	Scheme	
(i) Assumptions applied at grant date for awards granted during the year	shares	SAR
Price at date of grant (SA rand per share):		
15 March 2015 allocation	20.47	20.47
15 March 2016 allocation	39.48	39.48
Risk-free interest rate:		
15 March 2015 allocation	n/a	6.53%
15 March 2016 allocation	n/a	7.38%
Expected volatility: *		
15 March 2015 allocation	n/a	52.62%
15 March 2016 allocation	n/a	87.06%
Expected dividend yield:		
for all allocations	n/a	1%
Minimum payout guarantee (SA rand per SAR):		
or all allocations	n/a	18.00 to
Vesting period (from grant date):		32.00
15 March 2015 allocation	2 years	2 years
15 March 2016 allocation	1 year	1 year

<sup>\*</sup> The volatility is measured as an annualised standard deviation of historical share price returns, using an exponentially weighted moving average (EWMA) model, with a lambda of 0.99. The volatility is calculated on the grant date, and takes into account historical data matched to the term of the allocation.

	SA rand	per award	
	Scheme		Minimum payout
(ii) Fair values used as a basis to recognise share-based cost	shares	SARs	guarantee
15 March 2015 allocation	19.97	0.50	17.09
15 March 2016 allocation	38.98	0.50	16.72

#### (iii) Cash-settled liability

	US de	ollar
Figures in million	2016	2015
Cash-settled liability		
Non-current		1
Current	1	1
Total cash-settled liability	1	2
Movement in the cash-settled liability recognised in the balance sheet:		
Balance at beginning of year	2	3
IFRS 2 share-based payment charge for the year	1	2
Awards paid	(1)	(2)
Translation	(1)	(1)
Balance at end of year	1	2

for the years ended 30 June 2016

#### 31 SHARE-BASED PAYMENTS continued

#### **EMPLOYEE SHARE-BASED PAYMENTS continued**

### (b) Options granted under the 2006 share plan

The 2006 share plan consists of share appreciation rights (SARs), performance shares (PS) and restricted shares (RS). The share plan is equity-settled.

Award	Vesting	Performance criteria
SARs	SARs will vest in equal thirds in year three, four and five, subject to the performance conditions having been satisfied.  The SARs will have an expiry date of six years from the grant date and the offer price equals the closing market prices of the underlying shares on the trading date immediately preceding the grant.	2009 to 2013 allocation: The group's headline earnings per share must have grown since the allocation date by more than the South African Consumer Price Index (CPI).
PS	The PS will vest after three years from the grant date, if and to the extent that the performance conditions have been satisfied.	2015 allocation  50% of the number of the rights awarded are linked to the total shareholder return of the group on an absolute basis.  50% of the number of the rights awarded are linked to the total shareholder return of the group as compared to that of the South African Gold Index.  2014 allocation  the number of the rights awarded are linked to the group's performance in comparison to the South African Gold Index.  2012 to 2013 allocation  50% (senior management) or 70% (management) of the number of the rights awarded are linked to the annual gold.
		production of the group in relation to the targets set annually.  • 50% (senior management) or 30% (management) of the number of the rights awarded are linked to the group's performance in comparison to the South African Gold Index.
RS	The RS will vest after three years from grant date.	The participant is still employed within the group.

Termination of employees' participation in the share plan is based on "no fault" and "fault" definitions.

- Fault All unvested and unexercised SARs and all PS and RS not yet vested are lapsed and cancelled.
- No fault Accelerated vesting occurs and all unvested and unexercised share options are settled in accordance with the rules of the plan.

#### Activity on share options

			SA	.Rs	PS	RS
Activity on options and rights granted but not yet exercised	l		Number of options and rights	Weighted average option price (SA rand)	Number of rights	Number of rights
For the year ended 30 June 2016						
Balance at beginning of year Options granted and accepted Options accepted Options exercised Options forfeited and lapsed			16 419 967 - 669 824 (432 650) (2 500 359)	38.86 - 18.42 24.58 59.21	14 322 508 25 652 631 - (803 301) (4 193 800)	673 102 508 920 - (272 482) (53 566)
Balance at end of year			14 156 782	34.74	34 978 038	855 974
For the year ended 30 June 2015						
Balance at beginning of year Options granted and accepted Options exercised Options forfeited and lapsed			12 222 725 6 998 079 (137 276) (2 663 561)	54.85 18.46 20.41 59.55	9 123 758 7 255 423 (336 931) (1 719 742)	629 056 83 000 (29 350) (9 604)
Balance at end of year			16 419 967	38.86	14 322 508	673 102
	SA			S	RS	
Options and rights vested but not exercised at year end	2016	2015	2016	2015	2016	2015
Options and rights vested but not exercised Weighted average option price (SA rand)	1 427 179 85.22	1 884 175 82.29	- n/a	- n/a	- n/a	- n/a

for the years ended 30 June 2016

#### 31 SHARE-BASED PAYMENTS continued

#### **EMPLOYEE SHARE-BASED PAYMENTS continued**

#### (b) Options granted under the 2006 share plan continued

	Number of		
	options and	Award price	Remaining
List of options and rights granted but not yet exercised (listed by allocation date)	rights	(SA rand)	life (years)
As at 30 June 2016			
Share appreciation rights			
15 November 2010	576 377	84.81	0.4
15 November 2011	591 440	104.79	1.4
16 November 2012	1 369 526	68.84	2.4
15 November 2013	4 926 488	33.18	3.4
17 November 2014	6 692 951	18.41	4.4
	14 156 782		
Performance shares			
15 November 2013	4 617 529	n/a	0.4
17 November 2014	6 391 388	n/a	1.4
16 November 2015	23 457 121	n/a	2.4
17 February 2016	512 000	n/a	2.4
	34 978 038		
Restricted shares <sup>1</sup>			
15 November 2010	79 281	n/a	0.4
15 November 2011	64 000	n/a	1.4
16 November 2012	143 353	n/a	2.4
15 November 2013	79 281	n/a	0.4
17 November 2014	60 000	n/a	1.4
16 November 2015	430 059	n/a	2.4
	855 974		
Total options and rights granted but not yet exercised	49 990 794		

<sup>&</sup>lt;sup>1</sup> The 2010, 2011 and 2012 restricted shares vested in November 2013, November 2014 and November 2015 respectively. Restricted shares that were not exercised, partially or fully, at that time remain restricted for a further three years, but were supplemented by a matching grant of restricted shares. All restricted shares are then only settled after the end of a further three year period.

	US d	lollar
Figures in million	2016	2015
Gain realised by participants on options and rights traded during the year	2	1
Fair value of options and rights exercised during the year	3	1

#### Measurement

The fair value of equity instruments granted during the year was valued using the Monte Carlo simulation on the market-linked PS, Cox-Ross-Rubinstein binomial tree on the SARs and spot share price on grant date for the RS.

(i) Assumptions applied at grant date for awards granted during the year	SARs	Performance shares	Restricted shares
Price at date of grant (SA rand per share):			
17 November 2014 allocation	17.95	n/a	17.95
28 October 2015 allocation <sup>1</sup>	n/a	n/a	10.85
16 November 2015 allocation	n/a	n/a	8.92
Risk-free interest rate:			
17 November 2014 allocation	7.21%	7.44%	n/a
16 November 2015 allocation	n/a	7.77%	n/a
17 February 2016 allocation	n/a	7.70%	n/a
Expected volatility: <sup>2</sup>			
17 November 2014 allocation	44.39%	53.81%	n/a
16 November 2015 allocation	n/a	71.53%	n/a
17 February 2016 allocation	n/a	71.53%	n/a
Expected dividend yield:			
17 November 2014 allocation	1.00%	0.00%	n/a
16 November 2015 allocation	n/a	0.00%	n/a
17 February 2016 allocation	n/a	0.00%	n/a
Vesting period (from grant date)			
for all allocations	5 years	3 years	3 years

<sup>&</sup>lt;sup>1</sup> All awards for this allocation were exercised in the 2016 financial year.

<sup>&</sup>lt;sup>2</sup> The volatility is measured as an annualised standard deviation of historical share price returns, using an exponentially weighted moving average (EWMA) model, with a lambda of 0.99. The volatility is calculated on the grant date, and takes into account the previous three years of historical data.

for the years ended 30 June 2016

#### 31 SHARE-BASED PAYMENTS continued

#### **EMPLOYEE SHARE-BASED PAYMENTS continued**

#### (b) Options granted under the 2006 share plan continued

#### **Measurement** continued

In all cases, valuation date is the same as allocation date, except for the 16 November 2015 and 17 November 2014 allocation of performance shares with a valuation date of 16 February 2016 and 2 June 2015 respectively.

	SA rand per award		
		Performance	Restricted
(ii) Fair values used as a basis to recognise share-based cost	SARs	shares	shares
17 November 2014 allocation	7.86	11.19	17.95
28 October 2015 allocation	n/a	n/a	10.85
16 November 2015 allocation	n/a	36.96	8.92
17 February 2016 allocation	n/a	37.01	n/a

#### OTHER SHARE-BASED PAYMENTS

On 20 March 2013 Harmony signed transaction and funding agreements to give effect to an empowerment transaction to dispose of 30% of its Free State based Phoenix operation (Phoenix) to BEE shareholders, which includes a free-carry allocation of 5% to a community trust that has been created and is currently controlled by Harmony. The transaction closed on 25 June 2013, following the fulfilment of the last condition precedent. In terms of the agreements Phoenix was transferred to a newly incorporated subsidiary (PhoenixCo).

The awards to the BEE partners have been accounted for as in-substance options as the BEE partners will only share in the upside, and not the downside of their equity interest in PhoenixCo until the date the financing provided by Harmony is fully repaid. On this date the options will be exercised and a non-controlling interest in PhoenixCo will be recognised. The award of the options to the BEE partners is accounted for by the group as an equity-settled share-based payment arrangement. The in-substance options carry no vesting conditions and the fair value of the options of US\$2.3 million was expensed on the grant date, 25 June 2013.

for the years ended 30 June 2016

#### 32 RELATED PARTIES

None of the directors of Harmony or, to the knowledge of Harmony, their families, had an interest, directly or indirectly, in any transaction from 1 July 2013 or in any proposed transaction that has affected or will materially affect Harmony or its subsidiaries, other than as stated below.

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the group, directly or indirectly, including any director (whether executive or otherwise) of the group.

During 2016, the executive directors received remuneration of US\$3.4 million, comprising of US\$1.2 million for salaries, US\$0.1 million for retirement contributions, US\$0.4 million for bonuses and US\$1.7 million from the exercising or settlement of share options. The non-executive directors received US\$0.6 million in directors' fees. The aggregate of remuneration received by executive management was US\$2.4 million (including share options exercised).

During 2015, the executive directors received remuneration of US\$1.9 million, comprising of US\$1.5 million for salaries, US\$0.03 million for retirement contributions, US\$0.3 million for bonuses and US\$0.04 million from the exercising of share options. The non-executive directors received US\$0.7 million in directors' fees. The aggregate of remuneration received by executive management was US\$3.0 million (including share options exercised).

The following directors and prescribed officers own shares in Harmony at year-end:

	Number	of shares
Name of director/prescribed officer	2016	2015
Directors		
Andre Wilkens	101 303	101 303
Frank Abbott	521 790	203 243
Graham Briggs <sup>1</sup>	n/a	24 718
Harry 'Mashego' Mashego	593	3 096
Ken Dicks	35 000	20 000
Prescribed officers		
Alwyn Pretorius <sup>2</sup>	n/a	7 987
Beyers Nel <sup>3</sup>	2 907	n/a
Johannes van Heerden	-	28 184
Phillip Tobias <sup>4</sup>	11 750	n/a

<sup>&</sup>lt;sup>1</sup> Graham Briggs resigned as a director with effect from 31 December 2015.

All the production of the group's South African operations is sent to Rand Refinery in which Harmony holds a 10.38% interest. Refer to note 19.

	US d	ollar
Figures in million	2016	2015
Sales and services rendered to related parties  Joint operations	1	1
Associates <sup>1</sup>	1	-
Total	2	1
Purchases and services acquired from related parties Associates	2	2
Outstanding balances due by related parties		
Associates <sup>1</sup>	4	6

<sup>&</sup>lt;sup>1</sup> Refer to note 18 and 19 for details relating to the loan to associate. The outstanding balance is not secured.

#### 33 COMMITMENTS AND CONTINGENCIES

#### **COMMITMENTS AND GUARANTEES**

	US d	ollar
Figures in million	2016	2015
Capital expenditure commitments		
Contracts for capital expenditure	14	11
Share of joint venture's contract for capital expenditure	4	2
Authorised by the directors but not contracted for	35	21
Total capital commitments	53	34

 $<sup>^2\</sup>mbox{\sc Alwyn}$  Pretorius resigned from the group with effect from 30 November 2015.

<sup>&</sup>lt;sup>3</sup> Beyers Nel appointed as chief operating officer of the South African operations with effect from 1 March 2016.

<sup>&</sup>lt;sup>4</sup>Phillip Tobias appointed as chief operating officer: safety, mining projects, new development and corporate strategy with effect from 1 March 2016.

for the years ended 30 June 2016

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#### COMMITMENTS AND CONTINGENCIES continued

#### COMMITMENTS AND GUARANTEES continued

There are no significant commitments for operating leases. Contractual obligations in respect of mineral tenement leases amount to US\$17.2 million (2015: US\$57.2 million). This includes US\$16.8 million (2015: US\$57.1 million) for the MMJV.

	US c	lollar
Figures in million	2016	2015
Guarantees <sup>1</sup>		
Guarantees and suretyships	1	1
Environmental guarantees <sup>2</sup>	33	38
Total guarantees	34	39

<sup>&</sup>lt;sup>1</sup> Guarantees and suretyships of US\$0.1 million (2015: US\$1.0 million) and environmental guarantees of US\$2.5 million (2015: US\$3.3 million) relating to the Evander group, have been excluded. These guarantees were cancelled shortly after year end.

#### **CONTINGENT LIABILITIES**

#### CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Contingencies will only realise when one or more future events occur or fail to occur. The exercise of significant judgement and estimates of the outcome of future events are required during the assessment of the impact of such contingencies.

Litigation and other judicial proceedings as a rule raise difficult and complex legal issues and are subject to uncertainties and complexities including, but not limited to, the facts and circumstances of each particular case, issues regarding the jurisdiction in which the suit is brought and differences in applicable law. Upon resolution of any pending legal matter, the group may be forced to incur charges in excess of the presently established provisions and related insurance coverage. It is possible that the financial position, results of operations or cash flows of the group could be materially affected by the outcome of the litigation.

The following contingent liabilities have been identified:

(a) On 3 March 2011, judgement was handed down in the Constitutional Court in the case of Mr Thembekile Mankayi v AngloGold Ashanti Limited regarding litigation in terms of the Occupational Diseases in Mines and Works Act (ODIMWA). The judgement allows claimants, such as Mr Mankayi, to institute action against their current and former employers for damages suffered as a result of them contracting occupational diseases which result from their exposure to harmful quantities of dust whilst they were employed at a controlled mine as referred to in ODIMWA. In this regard, should anyone bring similar claims against Harmony in future, those claimants would need to prove that silicosis, as an example, was contracted whilst in the employ of the company and that it was contracted due to negligence on the company's part to provide a safe and healthy working environment. The link between the cause (negligence by the company in exposing the claimant to harmful quantities of dust whilst in its employ) and the effect (the silicosis) will be an essential part of any case.

If Harmony, or any of its subsidiaries were to face a significant number of such claims and the claims were suitably established against it, the payments of compensation of the claims could have a material adverse effect on Harmony or the group's results of operations and financial position. In addition, Harmony or the group may incur significant additional costs arising out of these issues, including costs relating to the payment of fees, levies or other contributions in respect of compensatory or other funds established (if any), and expenditures arising out of its efforts to resolve any outstanding claims or other potential action.

#### i) Consolidated class action:

On 23 August 2012, Harmony and certain of its subsidiaries (Harmony group) were served with court papers in terms of which three former employees made application to the South Gauteng High Court to certify a class for purposes of instituting a class action against the Harmony group. In essence, the applicants want the court to declare them as suitable members to represent a class of current and former mineworkers for purposes of instituting a class action for certain relief and to obtain directions from the court as to what procedure to follow in pursuing the relief required against the Harmony group. Similar applications were also brought against various other gold mining companies for similar relief during August 2012.

On 8 January 2013, the Harmony group, alongside other gold mining companies operating in South Africa (collectively the respondents), was served with another application to certify two classes of persons representing a class of current and former mine workers who work or have worked on gold mines owned and/or controlled by the respondents and who allegedly contracted silicosis and/or other occupational lung diseases, and another class of dependents of mine workers who have died of silicosis and who worked on gold mines owned and/or controlled by the respondents. The Harmony group opposed both applications and instructed its attorneys to defend the application.

Following receipt of the aforesaid application, the Harmony group was advised that there was a potential overlap between the application of 23 August 2012 and the application of 8 January 2013. On 17 October 2013, the five certification applications were consolidated by order of court.

The applications were heard in October 2015. On 13 May 2016, the Johannesburg High Court ordered the certification of a silicosis class and a tuberculosis class, which are to proceed as a single class against the mining companies acted in the application. The companies requested leave to appeal to the Supreme Court of Appeal, which was granted by the Supreme Court of Appeal on 13 September 2016. Harmony submitted its notice of appeal in respect of the transmissibility of the general damages order on 22 July 2016.

<sup>&</sup>lt;sup>2</sup>These guarantees relate to our environmental and rehabilitation obligation (refer to note 24). At 30 June 2016, US\$4.0 million (2015: US\$3.8 million) has been pledged as collateral for environmental guarantees in favour of certain financial institutions. Refer to note 15.

for the years ended 30 June 2016

#### 33 COMMITMENTS AND CONTINGENCIES continued

#### **CONTINGENT LIABILITIES** continued

#### (a) Silicosis continued

Anglo American South Africa, AngloGold Ashanti, Gold Fields, Sibanye and Harmony (the companies) announced in November 2014 that they have formed a gold mining industry working group to address issues relating to the compensation and medical care for occupational lung diseases in the gold mining industry in South Africa. Essentially, the companies are seeking a comprehensive and sustainable solution which deals both with the legacy compensation issues and future legal frameworks which, while being fair to employees, also ensures the future sustainability of companies in the industry. The companies have engaged all stakeholders on these matters, including government, organised labour, other mining companies and legal representatives of claimants who have filled legal suits against the companies.

Due to the limited information available on the above claim and potential other claims, and the uncertainty of the outcome of the matter, no costs estimation can as yet be made for the possible obligation.

#### ii) Individual claims:

On 3 May 2013, Harmony and one of its subsidiaries received a summons from Richard Spoor Attorneys on behalf of an employee. The plaintiff is claiming R25 million (US\$1.7 million) in damages plus interest from Harmony and one of its subsidiaries, and another gold mining group of companies. The plaintiff alleges to have contracted silicosis with progressive massive fibrosis during the course of his employment. At this stage, and in the absence of a court decision on this matter, it is not yet certain as to whether the company will incur any costs (except legal fees) related to the above claim.

Due to the limited information available on the above claim and the uncertainty of the outcome of the consolidated class certification application, no costs estimation can as yet be made for the possible obligation.

- (b) On 1 December 2008, Harmony issued 3 364 675 Harmony shares to Rio Tinto Limited (Rio Tinto) for the purchase of Rio Tinto's rights to the royalty agreement entered into prior to our acquisition of the Golpu deposits in PNG. The shares were valued at US\$23 million on the transaction date. An additional US\$10 million in cash will be payable when the decision to mine is made. Of this amount, Harmony is responsible for paying the first US\$6 million, with the balance of US\$4 million being borne equally by the joint operators.
- (c) The group may have a potential exposure to rehabilitate groundwater and radiation that may exist where the group has and/or continues to operate. The group has initiated analytical assessments to identify, quantify and mitigate impacts if and when (or as and where) they arise. Numerous scientific, technical and legal studies are underway to assist in determining the magnitude of the contamination and to find sustainable remediation solutions. The group has instituted processes to reduce future potential seepage and it has been demonstrated that Monitored Natural Attenuation (MNA) by the existing environment will contribute to improvement in some instances.

At 30 June 2016, the group was in the process of implementing water treatment facilities at Doornkop and at Kusasalethu. These treatment facilities will reduce our dependency on Rand Water and allow the mines to supply their own water. The facilities will also enable the operations to manage any post closure decant should this ever arise.

In terms of Free State operations, Harmony has taken the initiative to develop a comprehensive regional closure plan which will ensure that there is sufficient water for our organic growth initiatives. The geohydrological studies confirm that there is no risk of decant in Welkom.

Should the group determine that any part of these contingencies require them being recorded and accounted for as liabilities, that is where they become estimable and probable, it could have material impact on the financial statements of the group.

- (d) Due to the interconnected nature of mining operations in South Africa, any proposed solution for potential flooding and potential decant risk posed by deep groundwater needs to be a combined one, supported by all the mines located in these goldfields. As a result, the Department of Mineral Resource and affected mining companies are involved in the development of a regional mine closure strategy. Harmony operations have conducted a number of specialist studies and the risk of surface decant due to rising groundwater levels has been obviated at the entire Free State region and Kalgold. Therefore there is no contingency arising from these operations. Additional studies have been commissioned at Doornkop and Kusasalethu. In view of the limitation of current information for accurate estimation of a liability, no reliable estimate can be made for these operations.
- (e) The individual Harmony mining operations have applied for the respective National Water Act, Section 21 Water Use Licenses (WUL) to the Department of Water and Sanitation (DWS). As part of the Water Use License Application (WULA) process for the respective operations, Harmony has requested certain exemptions (relevant to the respective mining operations) from GNR 704 of 4 June 1999, "Regulations on the use of water for mining and related activities aimed at the protection of water resources". The respective WULA's have subsequently not yet been approved by DWS. The WUL conditions for the respective operations are subsequently not yet known and the subsequent potential water resource impact liability as part of the mine rehabilitation and closure process (to which DWS is an important participant and decision maker) is uncertain.
- (f) In terms of the sale agreements entered into with Rand Uranium, Harmony retained financial exposure relating to environmental disturbances and degradation caused by it before the effective date, in excess of R75 million (US\$5.1 million) of potential claims. Rand Uranium is therefore liable for all claims up to R75 million (US\$5.1 million) and retains legal liability. The likelihood of potential claims cannot be determined presently and no provision for any liability has been made in the financial statements.
- (g) Legal proceedings commenced in December 2010 against the Hidden Valley mine in PNG over alleged damage to the Watut River (which runs adjacent to the Hidden Valley mine), alleged to have been caused by waste rock and overburden run-off from the mine. The damages sought by the plaintiffs were not specified. The defendants intend to defend the claims. No active steps have been taken by the plaintiffs in this proceeding for more than five years. It is not practicable to make any reasonable assessment of the prospects of the plaintiffs succeeding should they proceed with these claims, nor the potential liability of the defendants if the plaintiffs were to succeed. As a result, no provision has been recognised in the financial statements for this matter.

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#### 34 SUBSEQUENT EVENTS

- (a) On 7 July 2016, Harmony repaid the remaining R300 million (US\$20.0 million) outstanding on the R1.3 billion Nedbank ZAR facility.
- (b) During July 2016, Harmony entered into short term gold forward sale contracts for a total of 13 440 kg/432 000 oz over a period of 24 months. These contracts manage variability of cash flows for approximately 20% of the group's total production and were concluded at an average gold price of R682 000/kg. We plan on applying cash flow hedge accounting to these contracts. The financial effect will be determined as the contracts mature as the realised gain or loss is dependant on the R/kg gold price on the date of maturity.
- (c) On 15 August 2016, the board declared a dividend of 50 SA cents (4 US cents) for the year ended 30 June 2016. US\$14.9 million was paid on 19 September 2016.
- (d) On 19 September 2016, Harmony announced that it would acquire Newcrest's 50% of Hidden Valley for a cash consideration of US\$1, subject to certain regulatory approvals. Harmony will assume all liabilities and expenses related to the Hidden Valley joint venture and mine, including all closure, rehabilitation and remediation obligations, with effect from 31 August 2016. Newcrest will pay an amount of US\$22.5 million as its once-off contribution towards Hidden Valley's future closure liability. Harmony and Newcrest will remain joint venture partners in the Wafi-Golpu project.

The transaction became unconditional on 25 October 2016. Management will begin the process for the purchase price allocation in accordance with IFRS 3, *Business Combinations*. An life-of-mine plan will be completed for Hidden Valley. On completion of the transaction, 100% of the operation's assets, liabilities, income and expenses will be recognised in the financial statements.

#### 35 SEGMENT REPORT

#### **ACCOUNTING POLICY**

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker (CODM). The chief operating decision-maker has been identified as the executive committee.

The group has one main economic product, being gold. In order to determine operating and reportable segments, management reviewed various factors, including geographical location as well as managerial structure. It was determined that an operating segment consists of a shaft or a group of shafts or open pit mine managed by a single general manager and management team.

After applying the quantitative thresholds from IFRS 8, the reportable segments were determined as: Kusasalethu, Doornkop, Phakisa, Tshepong, Masimong, Target 1, Bambanani, Joel, Unisel, Target 3 and Hidden Valley. All other operating segments have been grouped together under all other surface operations.

When assessing profitability, the CODM considers the revenue and production costs of each segment. The net of these amounts is the production profit or loss. Therefore, production profit has been disclosed in the segment report as the measure of profit or loss. The CODM also considers capital expenditure when assessing the overall economic sustainability of each segment. The CODM, however, does not consider depreciation or impairment and therefore these amounts have not been disclosed in the segment report.

Segment assets consist of mining assets and mining assets under construction included under property, plant and equipment which can be attributed to the segment. Current and non-current group assets that are not allocated at a segment level form part of the reconciliation to total assets.

A reconciliation of the segment totals to the group financial statements has been included in note 36.

for the years ended 30 June 2016

35 SEGMENT REPORT continued

		Revenue 30 June		Δ.	Production cost 30 June		Produc	Production profit/(loss) 30 June	(ss)	Ä	Mining assets 30 June		Capital 3	Capital expenditure 30 June		Ounce	Ounces produced <sup>1</sup> 30 June		ō	Tons milled <sup>1</sup> 30 June	
	2016	2015 US\$ million	2014	2016	2015 US\$ million	2014	2016 L	2015 US\$ million	2014	2016	2015 JS\$ million	2014	2016 US	_	2014	2016	2015 oz	2014	2016	2015 t'000	2014
South Africa Underground																					
Kusasalethu	143	169	189	125	174	169	18	(2)	20	256	298	341	25	40	49	124 198	127 092	150 916	736	1 00 1	1 260
Doornkop	102	107	109	72	92	106	30	12	3	203	184	319	14	21		87 772	85 618	83 687	695	665	812
Phakisa	151	124	124	95	103	103	26	21	21	288	354	433	22	35		128 217	100 246	95 680	756	674	636
Tshepong	190	170	176	127	141	132	63	29	44	283	331	372	21	27	59	161 751	137 540	135 772	1 200	1 095	1 044
Masimong	91	86	113	72	87	96	19	11	18	33	73	100	8	15		78 190	79 187	87 385	716	739	739
Target 1	126	152	188	98	104	101	40	48	87	192	229	261	22	26		108 895	122 944	144 453	814	826	851
Bambanani 2	112	116	124	26	62	99	26	54	28	22	89	62	7	10		96 870	93 495	95 424	256	253	263
Joel	84	91	96	22	29	29	27	24	32	49	48	42	15	16	14	73 239	72 596	75 072	265	209	604
Unisel	64	29	1.1	52	09	28	12	7	19	37	49	63	4	6	8	54 785	54 495	59 093	467	460	450
Target 3 3		19	29		15	25		4	2	36	44	51		2	13		15 529	45 429		66	331
Surface All other surface operations	110	117	122	88	96	96	. 22	22	27	30	40	45	4	4	4	95 553	94 105	93 236	12 112	11 488	11 516
Total South Africa	1 173	1 230	1 377	830	1 003	1 043	343	227	334	1 462	1 718	2 106	142	205	231 1	1 009 470	982 847 1	1 066 147	18 349	17 907	18 506
International Hidden Valley	91	118	138	8	100	105	7	18	33	44	114	340	гO	=	12	72 565	94 619	105 840	1 906	2 012	2 207
Total international	91	118	138	84	100	105	7	18	33	44	114	340	5	11	12	72 565	94 619	105 840	1 906	2 012	2 207
Total operations	1 264	1 348	1 515	914	1 103	1 148	350	245	367	1 506	1 832	2 446	147	216	243 1	1 082 035	1 077 466 1	1 171 987	20 255	19 919	20 713
Reconciliation of the segment information to the consolidated income statements and balance sheets (refer to note 36)	,			·						1 009	1 140	1 406									
	1 264	1 348	1 515	914	1 103	1 148				2 515	2 972	3 852									

<sup>1</sup> Production statistics are unaudited.
<sup>2</sup> Includes Steyn 2 for the June 2014 amounts.
<sup>3</sup> Target 3 was placed on care and maintenance in October 2014.

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# 36 RECONCILIATION OF SEGMENT INFORMATION TO CONSOLIDATED INCOME STATEMENTS AND BALANCE SHEETS

		US dollar	
Figures in million	2016	2015	2014
Reconciliation of production profit to consolidated profit/(loss) before taxation			
Total segment revenue	1 264	1 348	1 515
Total segment production costs	(914)	(1 103)	(1 148)
Production profit	350	245	367
Cost of sales items other than production costs	(174)	(542)	(401
Amortisation and depreciation of mining assets	(144)	(211)	(202
Amortisation and depreciation of assets other than mining assets Rehabilitation credit/(expenditure)	(5)	(5) 1	(5 (1
Care and maintenance cost of restructured shafts	(8)	(9)	(6
Employment termination and restructuring costs	(1)	(22)	(26
Share-based payments	(23)	(18)	(26
Reversal of impairment/(impairment) of assets	` <b>3</b> ´	(285)	(135
Other	1	7	-
Gross profit/(loss)	176	(297)	(34
Corporate, administration and other expenditure	(28)	(33)	(42
Social investment expenditure	(4)	(6)	(9
Exploration expenditure	(13)	(23)	(44
Loss on scrapping of property, plant and equipment	(4)	(42)	
Foreign exchange translation loss	(13)	(32)	(18
Other income/(expenses) (net)	(3)	-	1
Operating profit/(loss)	111	(433)	(146
Profit/(loss) from associate	-	(2)	(10
Profit on disposal of investments	-	-	1
Net gain on financial instruments	1	1	16
Investment income	16	20	21
Finance costs	(19)	(22)	(27
Profit/(loss) before taxation	109	(436)	(145
Reconciliation of total segment assets to consolidated assets includes the following:			
Non-current assets			
Property, plant and equipment	527	598	670
ntangible assets	59	73	84
Restricted cash	4	4	4
Restricted investments	170	196	217
Deferred tax asset	-	-	8
nventories	3	3	5
Other non-current receivables	12	7	
Current assets			
nventories	79	106	145
Restricted cash	1	1	1
Frade and other receivables	44	62	90
	-	2	10
ncome and mining taxes			
ncome and mining taxes Derivative financial assets	25	-	
	25 85	88	172