

Wentworth

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Date	l 0 <sup>th</sup> July 2003
No of Pages	8 (including this page)

## **ASX CODE: ZIM - FOR IMMEDIATE RELEASE**

Please find attached the following documents for immediate release:

- Fair and reasonable opinion letter to the Board of Zimbabwe Platinum Mines Limited ("Zimplats") prepared by Venmyn Rand (Pty) Limited ("Venmyn"), Independent Expert to Zimplats, on the offer to Zimplats' minorities by Impala Platinum Holdings Limited; and
- 2. Summary independent techno-economic valuation on the mineral assets of Zimplats by Venmyn.

These documents are also available on Zimplats website: www.zimplats.com.

Please contact me if you have any problems.

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Ben Smith Investec Wentworth Financial Advisers to Impala Platinum

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# VENMYN RAND (PTY) LIMITED

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The Directors Zimbabwe Platinum Mines Limited 7 New Street St. Peter Port Guernsey

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## FAIR AND REASONABLE OPINION ON THE OFFER TO ZIMBABWE PLATINUM MINES LIMITED ("ZIMPLATS") MINORITIES BY IMPALA PLATINUM HOLDINGS LIMITED ("IMPLATS") BY VENMYN RAND (PTY) LTD ("VENMYN")

**Dear Sirs** 

Venmyn was requested by directors of Zimplats to provide them with a Fair and Reasonable Opinion concerning the offer to Zimplats minorities in accordance with the Agreement ("Agreement") between Zimplats and Implats, dated 20 November 2002. This opinion is required to comply with Clause 3.2(a)(iii) of the Agreement and to provide comfort to the Directors of Zimplats in their decision to recommend to its shareholders to accept the offer by Implats of AU\$ 4.08 per ordinary share.

In order to satisfy the requirements of a Fair and Reasonable Opinion, Venmyn completed an independent valuation of Zimplats entitled "Summary Independent Techno-Economic Valuation Report" and dated 23 June 2003. Our valuation is based upon the value of Zimplats at the beginning of April 2003 and takes into account the following:-

- the value of the Zimplats undeveloped mineral resources; and
- 70% of the value of Makwiro Platinum Mines (Pvt) Limited ("Makwiro"), including the current opencast operations and takes into consideration the future growth potential of Zimplats.

In arriving at our opinion, we have relied upon the following principal factors and information:-

terms, conditions and rationale of the Agreement;

DIRECTORS: A N CLAY\*, E de V GREYLING, R J LAMMING, W M STEAR (\* British)



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- information and assumptions made available by the directors and management of Zimplats;
- the current technical and financial performance statistics of the Ngezi mine and the Selous Metallurgical Complex ("SMC") which have been combined under the management of Makwiro into a fully operational platinum mine and metallurgical plant;
- the Ngezi Underground Expansion Scoping Study (Jan 2003); and
- the current political conditions in Zimbabwe.

Based upon the above information, in our opinion, the terms and conditions of the proposed offer of AU 408 cps is fair and reasonable to the shareholders of Zimplats.

Our opinion is based upon the economic, market, regulatory, and other conditions and information made available to us up to 23 June 2003. Accordingly, subsequent developments may affect this opinion, which we are under no obligation to update, revise or re-affirm.

We have no direct or indirect interest in the shares of the company and consent to the inclusion of this letter, the Summary Valuation Report and the reference to our opinion in any circular or information memorandum to the Zimplats shareholders in the form and context in which it appears.

Yours faithfully



A N CLAY MSc (Geol), MSc (Min Eng), Dip. Bus. M. Pr Sci Nat, MSAIMM, FAusIMM, MGSSA, AIMA DIRECTOR

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R J LAMMING B.Com.(Econ.), B.Sc. Hons (Geol) MAusIMM, MGSSA DIRECTOR



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## SUMMARY INDEPENDENT TECHNO-ECONOMIC VALUATION

ON

## THE MINERAL ASSETS

OF

## ZIMBABWE PLATINUM MINES LIMITED ("ZIMPLATS")

Venmyn Rand Minerals Management Advisors Sandton South Africa

First Draft Second Draft Final 17<sup>th</sup> April 2003 19<sup>th</sup> June 2003 30 June 2003

- DIRECTORS: A NICLAY, IE de VIGREYLING, IR JILAMMING, IW M, STEAR -





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The Directors Zimbabwe Platinum Mines Limited 7 New Street St. Peter Port Guernsey Channel Islands

## SUMMARY INDEPENDENT TECHNO-ECONOMIC VALUATION ON THE MINERAL ASSETS OF ZIMBABWE PLATINUM MINES LIMITED ("ZIMPLATS")

Dear Sirs

## **EXECUTIVE SUMMARY**

Venmyn Rand (Pty) Ltd ("Venmyn") was requested by the Board of Zimbabwe Platinum Mines Limited ("Zimplats") to prepare a Summary Independent Techno-Economic Valuation Report on the mineral assets of Zimplats. The purpose of this summary valuation is to calculate the value of Zimplats in the event of a possible offer to minorities in accordance with the Agreement ("Agreement") between Zimplats and Impala Platinum Holdings Limited ("Implats"), dated 20 November 2002.

This report is intended for use by the Zimplats Board of Directors in their assessment of the current position of the company and in their decision-making process in relation to the terms of Clause 3.2(a)(iii) of the Agreement.

Our valuation is based upon the value of Zimplats at the beginning of April 2003. This valuation takes into account the value of Makwiro Platinum Mines (Pvt) Limited ("Makwiro") including the current opencast operations and takes into consideration the future growth potential of Zimplats. The immediate future growth of Zimplats is based upon the modular expansion of the unexploited underground Ore Reserves contiguous with the Ngezi South opencast tribute. Venmyn has based its assumptions on a scoping study compiled by Zimplats in 2003. Venmyn has considered the confidence levels that can be attributed to the information contained in the scoping study, sovereign risk, funding requirements, and current market sentiment when valuing the mineral assets of Zimplats.

The valuation summary is shown below. The first table reflects the total value attributable to Makwiro and the second table reflects 70% of this value, attributable to Zimplats. The valuation range of between AU\$3.28 and AU\$4.78, at a nominal discount rate of 17.5%, is presented below.

- Current Value: Includes the opencast operation's Net Present Value ("NPV"), the value of the undeveloped Ore Reserves and Mineral Resources and the company's Net Asset Value ("NAV") (excluding operating assets).
- Intrinsic Value: Current Value and value derived from commissioning Modules
  1 and 2 of the underground expansion.

Value Attributable to Makwiro (US\$)	Current Value	Intrinsic Value
NPV	123,540,425	251,614,092
NAV	2,745,915	2,745,915
Additional Mineral Resources		4,112,935
Total Value	126,286,340	254,360,007





Value Attributable to Zimplats (US\$)	Current Value	Intrinsic Value
NPV	86,478,297	176,129,864
NAV	1,922,141	1,922,141
Additional Mineral Resources	114,902,374	117,781,429
Equity Value	203,302,812	295,833,434
AU\$:US\$ Exchange Rate	1.4972	
Issued Ordinary Shares	89,184,486	
Zimplats Share Options	3,545,000	
Total Shares	92,729,486	
Value per share (AU\$)	328	478

Venmyn has defined their equity value range on operational parameters at a constant discount rate (17.5%). This operational value range can also be sensitised to changes in the discount rate. This sensitivity is shown graphically below.

#### Zimplats Valuation at Various Discount Rates

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In order to establish the fair market value within the value range calculated above, it is important to include investor-related securities exchange considerations. These include:

- the poor liquidity of the company's counter, given the low free float;
- the strategic value of Zimplats to Implats; and HP.
- the historical sector discount of platinum shares to their intrinsic value. (approximately 20%).

The calculated fair value should logically include strategic and market considerations pertaining to the company's current situation.





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## SUMMARY INDEPENDENT TECHNO-ECONOMIC VALUATION ON THE MINERAL ASSETS OF ZIMBABWE PLATINUM MINES LIMITED ("ZIMPLATS")

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#### 1. INTRODUCTION

Venmyn was requested by the Board of Zimplats to prepare a Summary Independent Techno-Economic Valuation Report on the mineral assets of Zimplats. The value takes into account the current Ngezi opencast operations and the potential Ngezi underground expansion that has been incorporated into a scoping study compiled by the company, as a basis from which to prepare a bankable feasibility study. Mr A. N. Clay and Mr R. J. Lamming of Venmyn conducted a site visit to the Ngezi operations on 10 March 2002, in order to familiarize themselves with the latest developments.

Makwiro is the sole operating company within the Zimplats corporate structure, whereby 70% of Makwiro's value is attributable to Zimplats and the remaining 30% to Impala Platinum Zimbabwe Ltd ("Implats (ZW)"). The value of Zimplats, therefore, consists of 70% of the sum of the NAV of Makwiro and the NPV of the Ngezi South opencast and proposed Ngezi underground expansion project, plus 100% of the market-related value of Zimplats' undeveloped mineral resources that have not been included in the mine's operational cashflow. These values have been calculated by using all the material assumptions defined in this report.

Venmyn has been involved in previous valuation due diligence studies of Zimplats and is familiar with the company's mineral assets and many of the strategic issues that surround them.

## 2. COMPETENT PERSONS' DECLARATION

Venmyn's consultants responsible for compiling this report have, collectively, more than twenty years experience in preparing technical advisor's reports and valuations of mining and minerals exploration companies and projects, and all are members in good standing of appropriate professional institutions.

Venmyn has contributed significantly to the preparation and publication of many of the rules that govern best practice and compliance in the minerals industry. Venmyn assists with on-going reporting of public mineral companies and endeavours to apply the highest standards of corporate governance within its practice. The company is an alliance partner to one of the big four international audit firms and is actively involved with the preparation of a valuation code for the South African minerals industry.

The signatories to this report are qualified to express their professional opinions on the above transaction. Neither Venmyn nor its staff have any interest in this transaction capable of affecting its ability to give an unbiased opinion, and will not receive any pecuniary benefits in connection with this assignment other than normal consulting fees.

## 3. UNDERGROUND EXPANSION PROGRAMME

The proposed underground expansion programme is designed to generate an additional 9.6 million tonnes per year of ore, over and above the existing Ngezi-SMC project currently operating. This will take the combined operations to a total production rate of approximately 12 million tonnes per annum. Growth in mined tonnage will be implemented over a period of ten years on a reserve base which will support well in excess of 30 years life of mine. The production schedule below shows the implementation schedule. Growth is modelled in modules of 1.92 million tonnes per annum capacity, each module comprising two mine portals, producing 960 Ktpa each, plus a single stream processing plant of 2Mtpa capacity. The capital expenditure includes the mining and processing infrastructure, ancillary services at Ngezi and smelter capacity expansion at the Selous Metallurgical Complex ("SMC") when it is required.

Table 1 Proposed Underground Expansion Schedule (t 000's)													
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Portal 1	120	285	855	960	960	960	960	960	960	960	960	960	960
Portal 2			165	670	960	960	960	960	960	960	960	960	960
Portal 3				165	670	960	960	960	960	960	960	960	960

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Portal 4	205	800	960	960	960	960	960	960	960
Portal 5		205	800	960	960	960	960	960	960
Portal 6			205	800	960	960	960	960	960
Portal 7				205	800	960	<del>9</del> 60	960	960
Portal 8					<b>20</b> 5	800	960	960	960
Portal 9						205	800	960	960
Portal 10				<u>.</u>			205	800	960

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#### 4. METHODS OF VALUATION

In previous reports we have comprehensively defined the valuation methods that are appropriate for mineral assets. Whilst these are not repeated here, it should be emphasised that the summary output information is based upon the preparation of a discounted cashflow model together with a breakdown NAV.

It is important to note that the value attributable to Zimplats is related to the current corporate structure whereby Zimplats is the beneficial owner of the Ore Reserves and Mineral Resources which will be exploited in the proposed underground expansions. However, it currently owns only 70% of Makwiro which is the operating entity through which these assets will be developed.

## 5. VALUATION OF OPEN CAST AND UNDERGROUND OPERATIONS

We use the discounted cashflow ("DCF") valuation methodology to value the projects as, in our opinion, this approach yields the most accurate results by capturing the pertinent aspects of the business's investment case. Our forecasts cover the estimated life of the project and our assumptions are detailed in the relevant sections below. In previous valuations, Venmyn has included the funding requirements in the cashflow and have subsequently risk adjusted the nominal cashflows by the cost of equity calculated using the Capital Asset Pricing Model ("CAPM"). Due to the uncertain nature of future funding requirements for the expansion program, we have used an unfunded cashflow model to calculate the nominal cashflows and risk adjusted the project's value using a Weighted Average Cost of Capital ("WACC") calculation.

## 5.1 Cost of Equity

In order to calculate the cost of equity, we have utilised the risk free rate applicable to the United States long bond, given that the company's cashflows are US dollar denominated. The risk premium is generally considered to be the investors' reward for investing in an equity rather than a risk-free government bond and should ideally relate to the country in which the investor is residing, in this case Australia. We consider 6% as a fair premium. Although the company's cashflows are US dollar based, its assets are domiciled in Africa and it is listed in Australia. Hence it should incorporate an emerging market risk premium.

The beta of the stock should reflect the stock price's volatility over and above other general equity investments in the country of listing. This should, therefore, be the beta of Zimplats to the Australian All Share Index. However, this calculation has several drawbacks. Poor liquidity and an asset base unrelated to the market in which it is listed, implies that the calculated beta is unlikely to truly represent the risk of the stock. It is also reasonable to factor a consideration of company specific issues into the beta, such as AIDS, with its resultant labour implications and the complexity of the company's legal structure. We have, therefore, utilised what we consider to be the more realistic beta, being that of the Platinum Index (0.99) in South Africa to the South African All Share Index. The resulting cost of equity is 10%.

## 5.2 Cost of Debt

The company's cost of debt is calculated using the actual interest rate being incurred by the company's loan from ABSA Bank Limited ("ABSA"), which is approximately US\$24m at the date of this report. This loan bears interest at LIBOR (3.7%) plus 5% per annum. For this reason, we have assumed a pre-tax interest rate of 8.7%. We have the assurance of management that this loan agreement represents an arms length transaction independent of ABSA's shareholding in Zimplats. In our opinion, this loan is likely to be replaced or increased at a similar interest rate should the need arise, particularly with respect to the proposed expansion of the Ngezi underground potential incorporated into this valuation report.

## 5.3 Weighted Average Cost of Capital

The company's cost of equity and debt should be weighted according to the likely future capital structure. The current debt:equity ratio is 23% and debt requirements are likely to increase during the life of proposed projects, as shown by the cashflow forecasts. Management has indicated that a ratio of 35% would be considered realistic. For this reason, we have incorporated this ratio into the WACC calculation.

Whilst the beta used in this report considers emerging market risk, it is not possible to quantitatively define a market-related value of Zimbabwe's specific sovereign risk. The fact that the majority of the company's assets are domiciled in Zimbabwe is probably the most significant contributing factor to the discount of the current market price to its fair value. In order to quantify this subjective risk, which is discussed in more detail later, we have applied what we consider to be a realistic country discount to the overall WACC.

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Therefore, the expected rate of return for Zimbabwe has been increased by 100% implying that the risk of operating in Zimbabwe is 100% greater than that of similar operations in other regions. The final WACC is 17.5%.

#### 6. FORECAST ASSUMPTIONS

This section is intended to present the input parameters and assumptions that have been used in the DCF model. This was generated as a basis from which to formulate the company value calculations. It should be noted that the summary information presented in this report does not meet the requirements of a comprehensive Competent Persons Report that would be required for a transaction to be reported into the public domain. However, previous reports that Venmyn has prepared have incorporated the necessary information that has not been duplicated in this report. The information incorporated in the company's scoping study for the potential underground expansions has been reviewed and may be considered realistically achievable. They are, however, still subject to the preparation of a bankable feasibility study. We have treated those assumptions with a level of caution which is reflected in the number of modules that we have accepted for the valuation purposes and the risk adjustments. The following sections are summary tabulations of the forecast assumptions incorporated in the cashflow model which is available for inspection at Venmyn's offices:-

#### Ore Reserves and Mineral Resources 6.1

The following Ore Reserves and Mineral Resources have been reported by the company's Competent Person and are compliant with the JORC Code of the Australasian Institute of Mining and Metallurgy ("AusIMM"). The resource statements have not been audited by Venmyn but have been accepted for the purposes of this valuation on the basis that the Competent Person has confirmed that he is fully registered with AusIMM and that the statement has been complied in full compliance with the JORC Code.

#### Tonnes (Mt) 3PGE + Au (g/t)3PGE + Au (Moz) Ngezi South Tribute (70% Zim, 30% Imp) 20.1 3.2 Proved Probable 21.2 3.2 3.24.3 41.3 Sub-Total Zimplats Tenements (100% Zim) 16.7 3.3 Proved 3.4 267.6 Probable 31.1 284.3 3.4 Sub-Total 325.6 3.4 35.4 **Total Ore Reserves**

#### **Table 2 Ore Reserves**

#### **Table 3 Mineral Resources**

	Tonnes (Mt)	3PGE + Au (g/t)	3PGE + Au (Moz)
Ngezi South Tribute (70% Zim, 30% Imp)			
Measured	18.0	3.6	2.9
Indicated	19.0	3.7	2.3
Sub Total Ngezi South	38.0	3.7	4.3
Hartley Platinum (70% Zim, 30% imp)			
Measured	50.0	5.3	8.5
Indicated	96.0	4.7	14.5
Inferred	20.0	4.7	3.0
Sub Total Hartley Platinum	166.0	4.9	26.05
Zimplats Tenements (100% Zimplats)			
Measured	8.4	3.9	1.1
Indicated	216.9	4.2	29.3
Inferred	1348.8	4.1	177.8
Total	1574.1	4.1	208.1
Ngezi South Tenements (100% Zimplats)			
Measured	29.6	3.9	3.7
Indicated	490.1	4.2	66.2
Inferred	184.2	4.1	24.3
Total	703.9	4.1	94.2

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#### 6.2 Grades and Recovery factors

The following grades have been incorporated, having taken into account the company's grade control procedures and their current operating achievements. However, it should be noted that the underground forecasts will be subject to detailed grade control studies that will be initiated within the trial underground mine during the feasibility study. Having reviewed other operations in Zimbabwe, there is no reason to believe that the company cannot achieve the forecast grades.

Table 4 Ngezi Reserve Grades (g/t)	Opencast	Underground
Platinum	1.66	1.73
Palladium	1.37	1.44
Rhodium	0.14	0.15
Gold	0.24	0.23
Nickel	949.73	949.73
Copper	549.28	549.28

#### Table 5 Recovery to Concentrate (%)

Platinum	84.7
Palladium	85.4
Rhodium	88.4
Gold	68.2
Nickel	77.4

Table 6 Recovery to Matt (%)	
Platinum	98.5
Palladium	98.5
Rhodium	98.5
Gold	98.5
Nickel	96.0
Copper	96.0

## 6.3 Operating Costs

The opencast operating costs are based upon the latest management accounts and are quoted in April 2003 money terms. The operating costs for the underground operation are summaries based upon the scoping study prepared by the company. Once again, these will be subject to detailed clarification in the feasibility study and have been considered as a reasonable estimate and materially correct.

Table 7 Opencast Operating Costs	·	
Opencast Ore Mining Cost (US\$/t Mined)		12.31
Ore Transport (US\$/t Mined)		2,80
Processing (Milling/Flotation) Costs (US\$/t Mined)		4.23
Smelter Costs (US\$/t Mined)		2.20
Admin General (US\$/t Mined)		1.98
Matt Transport (US\$/t Mined)		0.07
Royalty (US\$/t Mined)		1.15

#### Table 8 Underground Operating costs

Mining Operating Costs (US\$/t Mined)	8.50
Ore Transport Costs (US\$/t Mined/km)	0.01
Processing (Milling/Flotation) Costs (US\$/t Mined)	4.00
Concentrate Transport (US\$/t Mined)	0.10
Smelter Costs (US\$/t Conc)	1.91
Admin & Overhead Operating Costs (US\$/t Mined)	1.50
Matt Transport (US\$/t Matt)	0.07
Royalty (US\$/t Mined)	1.15

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## 6.4 Metal Price Forecasts

The following metal price forecasts are based upon a review of market information from a number of sources and were considered reasonable by Venmyn.

Table 9 Metal Prices	2003	2004	2005	2006+
Platinum (US\$/oz)	650	600	550	475
Palladium (US\$/oz)	218	200	180	250
Rhodium (US\$/oz)	600	750	1,000	1,200
Gold (US\$/oz)	320	320	320	320
Nickel (US\$/t)	6,000	6,000	6,000	6,000
Copper (US\$/t)	1,700	1,700	1,700	1,700

#### 6.5 Financial Assumptions

The financial assumptions reported below are market-related and are considered realistic.

Table 10 Macro-Economic Indicators	2003	2004	2005	2006+
US Inflation Rate (%)	1.9	2.0	2.0	2.0
LIBOR (%)	3.6	3.6	3.6	3.6

Table 11 Tax & Royalties	2003+
Taxation Rate (%)	25.0
Royalties on all metals (%)	3.0
Assessed Loss (US\$ 000's)	73,000

## 6.6 Monetary Assumptions

The platinum mining operations in Zimbabwe are given special exemption with respect to Zimbabwean Reserve Bank rules since the company's foreign earnings are held offshore in US\$ accounts. All cashflows are US dollar denominated and are escalated from current money using a US inflation rate in order to generate nominal cashflows. The resulting cashflow values have been converted into Australian dollars using the spot rate of Au\$1.4972/US\$.

## 6.7 **Taxation Rates**

The company's mining income is subject to Zimbabwean tax rates, as shown above, given the physical location of its assets. The corporate tax in Zimbabwe is currently 25%. Although the listed holding company has a large assessed loss (~US\$400m), management only considers that US\$73m of this is likely to be allowed. In management's opinion, this is probably a conservative estimate.

In terms of Makwiro's current tax status, the proposed underground expansion will be considered to be an extension of the existing mining operations and future capital expenditure will be written off in the year in which it is expensed. The combined DCF is treated as a single tax entity incorporating the above assumptions.

## 7. FINANCIAL PROJECTIONS

The following standalone operating forecasts are at project level and are consolidated to generate the combined Makwiro cashflow analysis in Section 8.3 below.

## 7.1 Opencast Operating Profit Forecasts

The following table defines the nominal output projections for the opencast operation.

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#### Table 12 Opencast Operating Profit Forecasts (US\$ 000's)

	2003	2004	2005	2006	2007	2008	2009	2010
Total Ore Milled (000t)	2,190.0	2,190.0	2,190.0	2,190.0	2,190.0	2,190.0	2,190.0	2,190.0
Total Matt Produced (000t)	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Metal in Matt (4E 000'oz)	197.9	197.9	197.9	197.9	197.9	197.9	197.9	197.9
Total Revenue	86,448	83,418	80,953	82,753	84,520	86,328	88,176	90,066
US\$/oz Revenue	437	421	409	418	427	436	446	455
Total Operating Costs	(56,700)	(57,687)	(58,738)	(59,917)	(61,118)	(62,344)	(63,593)	(64,868)
US\$/oz Cost	286	291	297	303	309	315	321	328
EBITDA	29,749	25,730	22,215	<b>22,8</b> 36	23,402	23,984	24,582	25,197
% Margin	34%	31%	27%	28%	28%	28%	28%	28%

## 7.2 Underground Operating Profit Forecasts

The following nominal output projection assumes that only Modules 1 and 2 are brought into production. There is a high degree of uncertainty surrounding the ability of the company to fund and bring into production all of the expansions under the current circumstances. This scenario is considered realistically achievable, at this time, and has been a principle adopted in previous valuations of Zimplats by Venmyn.

	2003	2004	2005	2006	2007	2008	2009	2010
Total Ore Milled (000t)			1,215.0	1,938.0	2,767.0	3,805.0	3,862.0	3,840.0
Total Matt Produced (000t)			1.8	2.8	4.1	5.6	5.7	5.6
Total Metal in Matt (4E 000'oz)			1 <b>1</b> 7.6	187.5	267.7	368.2	373.7	371.5
Total Revenue			48,972.0	80,619.5	117,407.5	164,680.2	170,490.1	172,909.3
US\$/oz Revenue			417	430	439	447	456	465
Total operating Costs	(1,220)	(2,954)	(21,225)	(36,371)	(55,474)	(75,950)	(79,821)	(81,208)
US\$/oz Cost			181	194	207	206	214	219
EBITDA	(1,220)	(2,954)	27,747	44,249	61,933	88,730	90,669	91,701
% Margin	0%	0%	57%	55%	53%	54%	53%	53%

Table 13 Underground Operating Profit Forecasts (US\$ 000's)

## 8. SOVEREIGN RISK

The sovereign risk of Zimbabwe and its associated affect on the country's economy is the single most important factor in determining a fair value for Zimplats. There is a general market concern that mineral assets could be expropriated. Whilst this is an implication resulting from the Zimbabwean government's land reform program, the market suspicion is increased by the promulgation of new legislation relating to the South Africa resource industry which is deemed to effectively diminish existing shareholder value. The Zimplats management is of the opinion that expropriation of their mineral assets in Zimbabwe is highly unlikely given the Zimbabwe government's expressed support for the industry. Furthermore, the profitability of the Zimplats operations is largely dependent on the existence of a secure refinery contract which is currently guaranteed through the relationship with the company's major shareholder, Implats. The South African government's support of Implats and ABSA's initial investment in Zimplats may also be considered a further mitigating factor which would reduce the likelihood of expropriation

Venmyn considers that, since its last valuation report, the operating environment has deteriorated. The sovereign risk does contribute significantly in several ways to operational risk that could affect the long term continuity of the mining and processing projects because of the following issues:

the local political instability and associated crime levels could result in a high turnover of key staff;

continued supply of power by the state controlled ZESA appears to be in jeopardy due to the lack of foreign exchange required to pay the neighbouring countries supplying Zimbabwe;

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The power problem may be mitigated, since Zimplats has been in discussions with Eskom regarding a direct power contract with this South African power supply utility. This will require a transmission facility arrangement with ZESA and will be reliant on the continued maintenance of the Zimbabwean power grid; and

Other operational risks, which include the continued supply of fuel and capital equipment at a reasonable cost, AIDS, and the supply of food for staff that could result in higher operational costs.

### 9. VALUATION RESULTS

Based upon all of the above assumptions, the value of Makwiro is incorporated in the combined cashflow output data shown in the sections below.

## 9.1 Valuation of Ore Reserves and Mineral Resources

Venmyn has assumed that the Zimplats Mineral Resources that have not been included in the cashflow valuation have not increased in value since our valuation dated 1 October 2003. The additional mineral resources have been valued at US\$0.20, US\$0.50 and US\$1.00 per ounce (3 PGE + Au) for Inferred, Indicated and Measured mineral resources, respectively. Venmyn has upgraded the value of the Zimplats Tenements' Ore Reserves to US\$ 2.00 and US\$ 1.50 per ounce (3 PGE + Au) for Proven and Probable Ore Reserves respectively. It has previously been noted that the value of Zimbabwean platinum mineral resources appears to be heavily discounted by the market. Venmyn are of the opinion that the market does not factor in the value of these undeveloped resources when placing a value on the Zimplats equity. The value attributed to the Zimplats and Makwiro Ore Reserves and Mineral Resources are listed in Tables 14 and 15.

For the purpose of this valuation, and due to the complexity of the operating structure of Zimplats, when including the value of the undeveloped mineral resources, Venmyn has assumed that Zimplats will sell the required portion of the Ngezi underground Ore Reserves to Makwiro at the values defined below. It has been assumed that the total Ngezi underground reserves (31.1Moz) have been subdivided into five equally sized reserve blocks (6.2Moz) which would sustain each module on the basis that each module is substantially the same. Table 14 assumes that both Modules 1 and 2 are commissioned and therefore 12.4Moz will be sold to Makwiro.

For the purpose of this valuation the cost of the resources required to develop a particular module is expensed in the cashflow at the same time that the development of the first portal for that module begins. The resource cost of US\$ 8.75m per module for Modules 1 and 2 was expensed in FY02 and FY03 respectively.

The cashflow valuation is based on a 25 year life-of-mine which does not exhaust the transferred Ore Reserve block. Therefore, the value of the additional resources sold to the project, but not incorporated in the cashflows for that module is then attributed to Makwiro at the same nominal in situ value per ounce that it cost Makwiro. In Table 14 below, 9.7 Moz are exhausted in the cashflow, with the residual 2.8 Moz, valued at US\$ 4.1m (US\$1.50/oz), being attributable to Makwiro.

	Total (Moz)	Cashflow (Moz)	Residual (Moz)	Value (US\$/oz)	Value (US\$)
Ngezi South Tribute (Makwiro)					
Proved	2.1	2.1	0.0	2.0	0
Probable	2.2	2.2	0.0	1.5	0
Total	4.3	4.3	0.0		0
Ngezi Underground Tribute (Makwiro)					
Proved	1.8	1.8	0.0	2.0	0
Probable	10.6	7.9	2.8	1.5	4,112,935
Total	12.4	9.7	2.8		4,112,935
Zimplats Tenements (Zimplats)					
Proved	1.8	0.0	0.0	2.0	3,575,870
Probable	29.2	0.0	0.0	1.5	43,748,995
Total	31.1	0.0	0.0		47,324,865

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Table 14 Ore Reserve Valuation Summary

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![](_page_13_Picture_13.jpeg)

		Converted to			
	Total (Moz)	Reserve (Moz)	Residual (Moz)	Value (US\$/oz)	Value (US\$)
Ngezi South Tribute (Makwiro)					
Measured	2.1	2.1	0.0	.1.0	0
ndicated	2.3	2.3	0.0	0.5	0
Total	4.7	4.3	0.0		0
Hartley Platinum (Makwiro)					
Measured	8.5	0.0	8.5	1.0	8,519,947
ndicated	14.5	0.0	14.5	0.5	7,253,208
nferred	3.0	0.0	3.0	0.2	604,434
Total	5.9	0.0	26.0		16,377,589
Zimplats Tenements (Zimplats)					
Measured	1.1	0,0	1.1	1.0	1,056,142
Indicated	29.3	0.0	29.3	0.5	14,641,641
Inferred	177.8	0.0	177.8	0.2	35,560,476
Total	207.5	0.0	208.1		51,258,259
Ngezi South Tenements (Zimplats)					
Measured	3.7	3.7	0.0	1.0	0

## Table 15 Mineral Resource Valuation Summary

Total	92.8	69.9	24.3		4,854,938
Inferred	24.3	0.0	24.3	0.2	4,854,938
Indicated	66.2	66.2	0.0	0.5	0

## 9.2 Net Asset Value

The following NAV has been calculated from Makwiro's latest consolidated balance sheet. Makwiro's NAV of US\$2.75m, includes all non-operating assets that are not used in the cashflow. The NAV is as follows:-

Table 16 Breakdown of Net Asset Value Attributable to Makwiro	US\$
Assets	
Property, plant and equipment	15,815,751
Non-current assets	15,815,751
Inventories	2,823,042
Bank and cash	17,799,632
Current assets	20,622,674
Total Assets	36,438,426
Liabilities	
Interest bearing liabilities	8,080,498
Deferred taxation	3,451,016
Non-current liabilities	11,531,514
Short-term portion of long-term loan	16,160,996
Dividend payable	6,000,000
Current liabilities	22,160,996
Total liabilities	33,692,510
Net Asset Value	2,745,915

9.3 Combined Cashflow Analysis

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![](_page_14_Picture_9.jpeg)

![](_page_14_Picture_10.jpeg)

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The following combined cashflow is in nominal terms. The 25yr life of mine can be determined, assuming that a steady state production level has been reached by 2010.

	2003	2004	2005	2006	2007	2008	2009	2010
Opencast Operating Profit (Loss)	29,749	25,730	22,215	22,836	23,402	23,984	24,582	25,197
Underground Operating Profit (Loss)	(1,220)	(2,954)	27,747	44,249	61,933	88,730	90,669	91,701
Total Operating Profit (Loss)	28,529	22,777	49,962	67,085	85,335	112,714	115,251	116,898
Opencast Operation Capex	(1,009)	(1,029)	(1,050)	(1,071)	(1,092)	(3,899)	(1,136)	(1,159)
Underground Expansion Capex		(66,039)	(54,872)	(58,891)	(26,342)	(2,228)	-	
Total Capex	(1,009)	(75,818)	(64,671)	(59,962)	(27,434)	(6,127)	(1,136)	(1,159)
Mining Taxes Payable	_	-		-	-	(14,595)	(28,529)	(28,935)
Ngezi Nominal Cashflow	27,519	(53,042)	(14,709)	7,123	57,901	91,992	85,586	86,804
Ngezi Real Cashflow	25,391	(41,661)	(9,835)	4,054	28,057	37,947	30,055	25,950

#### Table 17 Makwiro Cashflow Analysis (US\$ 000's)

Net Present Value

251,313

#### WACC Calculation

#### Cost of equity

Risk free rate (%	) 4.0
I VISIVILLEE TARE ( 10	) 4.0

## 10. VALUATION SUMMARY

The valuation summary is shown below. The first table reflects the total value attributable to Makwiro and the second table reflects 70% of this value, attributable to Zimplats. The valuation range of between AU\$3.28 and AU\$4.78, at a nominal discount rate of 17.5%, is presented below.

- Current Value: Includes the opencast operation's NPV, the value of the undeveloped Ore Reserves and Mineral Resources and the company's NAV (excluding operating assets).
- Intrinsic Value: Current Value and value derived from commissioning Modules 1 and 2 of the underground expansion.

#### Table 18 Calculation of Final Value (US\$)\_

Value Attributable to Makwiro	Current Value	Intrinsic Value	
NPV	123,540,425	251,312,898	
NAV	2,745,915	2,745,915	
Additional Mineral Resources		4,112,935	
Total Value	126,286,340	254,058,813	

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![](_page_15_Picture_17.jpeg)

![](_page_15_Picture_18.jpeg)

Value Attributable to Zimplats (US\$)	Current Value	Intrinsic Value
NPV	86,478,297	176,129,864
NAV	1,922,141	1,922, <b>141</b>
Additional Mineral Resources	114,902,374	117,781,429
Equity Value	203,302,812	295,833,434
AU\$:US\$ Exchange Rate	1.4972	
Issued Ordinary Shares	89,184,486	
Zimplats Share Options	3,545,000	
Total Shares	92,729,486	
Value per share (AU\$)	328	478

### **11. CONCLUSION AND RECOMMENDATION**

Venmyn have defined their equity value range on operational parameters at a constant discount rate (17.5 %). This operational value range can also be sensitised to changes in the discount rate. This sensitivity is shown graphically below.

#### Zimplats Valuation at Various Discount Rates

![](_page_16_Figure_6.jpeg)

In order to establish the fair market value within the value range calculated above, it is important to include investor related security exchange considerations. These include:

- the poor liquidity of the company's counter given the low free float;
- the strategic value of Zimplats to implats; and
- the historical sector discount of platinum shares to their intrinsic value (approximately 20%).

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The calculated fair value should logically include strategic and market considerations pertaining to the company's current situation.

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Yours faithfully

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![](_page_17_Picture_8.jpeg)

![](_page_17_Picture_9.jpeg)

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