MARTEN & CO

Update | Mining companies

3 April 2017

Caledonia Mining

18% production increase boosts earnings

Caledonia Mining (Caledonia) achieved targeted gold production of 50,400oz (50.4koz) in 2016, an 18% increase on 2015, after processing a record quantity of ore at its Blanket mine.

The company is aiming to increase production by a further 20%, to around 60koz of gold, in 2017 as part of an internally-funded expansion programme to increase gold production to 81koz by 2020.

EPS for 2016 was up 78% and EBITDA was US$16.7m.

The company paid a total dividend of US5.0c per share in 2016, for a yield of 3.6%, one of the highest in the sector. We believe that the company will have the ability to increase its dividend substantially, as its capital investment programme winds down and increased production reduces unit costs.

Caledonia has a 49% interest in the 100-year-old Blanket gold mine, in Zimbabwe, although, through the structure of its indigenisation arrangement, it participates currently in the mine's cash flow at the much higher level of 77%.

We project attributable EPS of US35.1c in 2017 and US30.2c in 2018, and believe that the company should maintain its annual dividend of US5.5c in 2017 and project an increase to US10c in 2018.

Year	Gold prod. (koz)	AISC (US$/oz)	Rev. (US$m)	EBITDA (US$m)	EBITDA margin (%)	EPS* (USc)
2017f	60.6	823	77.8	31.6	41%	35.1
2018f	62.6	818	83.4	35.9	43%	30.2
2019f	69.3	786	92.4	42.6	46%	35.5

Source: Marten & Co * Attributable to Caledonia shareholders after non-controlling interests

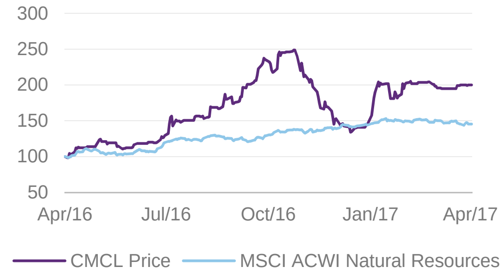
Valuation summary

Our analysis, using a long-term gold price of US$1,350/oz, leads to an NPV$^{15\%}$ for Caledonia's share of Blanket cashflows of 180.4p per Caledonia share and a NAV for the company of 218.0p per share. This suggests that Caledonia is currently trading in London at a discount of 49% to NAV.

Listed	AIM, TSX
Ticker	CMCL LN, CAL CN
Base currency	GBP
Price	112.0p
Daily volume (1-year average)	64,657 shares
1-year high	144.00p
1-year low	48.50p
1-month performance	(4.3%)
3-month performance	39.1%
1-year performance	130.9%
Calendar YTD perf.	34.9%
2016 yield	3.6%

Caledonia v MSCI ACWI Natural Resources (rebased)

Time period: 21/03/2016 to 21/03/2017



Source: Bloomberg, Marten & Co

Net cash (US$m)	11.3
NAV$^{15\%}$ p/share	218.0
P/NAV	0.51
Market cap (GBPm)	59.1
Shares outstanding (m)	52.8

Click here for our initiation note
Click here for our most recent update note

This note should be read in conjunction with our initiation report of 28 July 2016 and update note of 15 August 2016.

Further information regarding Caledonia can be found at the company's website:

www.caledoniamining.com

Key investment points

- 2016 basic EPS was up 78% to US15.8c (see page 2).
- 2016 net profit rose 98% to US$11.1m.
- Net profit attributable to Caledonia's shareholders increased substantially from US$4.8m to US$8.5m in 2016, and from US$1.9m to US$3.3m in Q4 2016 (year-on-year).
- The quarterly dividend increased to an annualised US5.5c per share (US5.0c paid in 2016, indicating a yield of 3.6%) (see page 4).
- Our modelling suggests that the company should see further growth in EPS and we believe that the company will have sufficient funds to increase the dividend in 2018 (see page 8).
- Gold production in 2016 was 50.4koz, up 17.6% on 2015 (42.8koz). Fourth-quarter 2016 production was a record at 13.6koz, up 18% year-on-year (see page 3).
- Tonnes milled for the year were a record 511kt (see page 3).
- On-mine unit costs were reduced by 9%, to US$636/oz, and AISC by 12%, to US$912/oz (see page 3).
- The mine is targeting a further increase in production to approximately 60koz in 2017, at an AISC of US$810-850/oz, and 80koz by 2021 (see page 4).
- The expansion in production is being funded internally (see page 4).
- The company completed significant elements of the expansion programme in 2016, with the key element, a new vertical shaft, on schedule for mid-2018 completion (see pages 4 to 6).
- We have projected a significant lift in NAV$^{15\%}$ to 218.0p per share (see page 6).
- Shares are currently trading at 49% discount to NAV.
- Year-to-date stock-market performance showed a rise of 24%.
- The company has cash of US$14.3m and debt of US$3m.

2016 results

Caledonia reports its financial statements in US dollars on a consolidated basis

Caledonia has reported comprehensive 2016 earnings of US$11.1m compared with US$5.6m for 2015.

When adjusted to reflect underlying performance, EPS was US21.4c compared with US8.8c a year earlier, an increase of 143%.

Net profit attributable to Caledonia's shareholders increased substantially from US$4.8m to US$8.5m in 2016 and from US$1.9m to US$3.3m in Q4 2016 (year-on-year).

EBITDA for the year was US$19.7m, a 122% improvement on 2015.

Net profit benefitted from an export incentive from the Zimbabwe government of 2.5% of the value of gold sales (US$1.1m) and through the sale of treasury bills issued by the government of Zimbabwe in 2015 (US$3.2m). There was also a one-off reduction in the royalty rate of incremental gold sales above the 2015 figure.

The improvement in underlying profitability was the result of an increase in revenue, owing mainly to a significant increase in gold production, and despite a small increase in total costs.

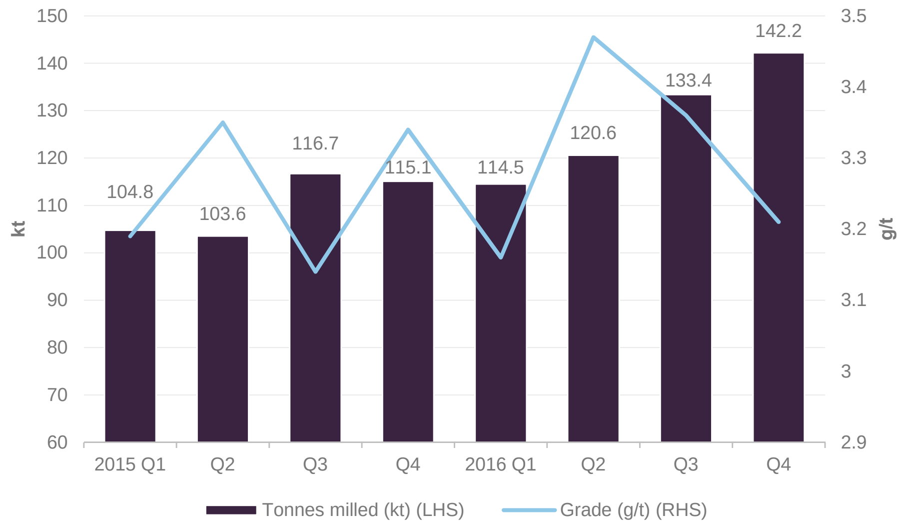
Revenue from gold sales increased by 27% as a result of an 18% rise in gold production and an 8% increase in the gold price received.

Gold production was up 18% to 50.4koz

Gold production for the year rose to 50.4koz as the initial benefits of the expansion programme led to an increase in ore production from below the 750m level. In addition, the commissioning of a new ball mill increased the processing capacity of the plant. The average ore grade treated was also up marginally on 2015.

Figure 1 shows the improving trend in tonnes milled and grade, quarter-by-quarter, since the beginning of 2015.

Figure 1: Historic tonnes milled and grade

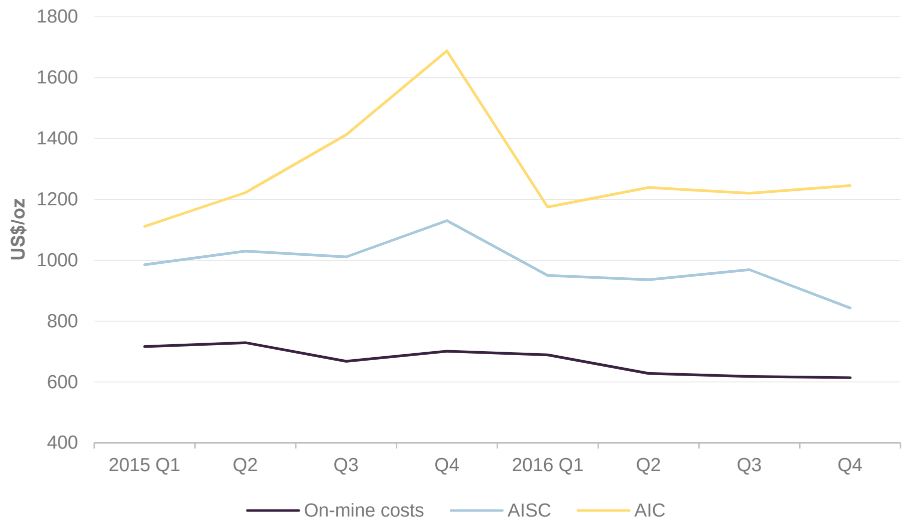


Source: Caledonia Mining

AISC declined by 12% to US$912/oz

Production costs increased by 7% to US$32.1m after the cost of consumables rose by 13%. However, because of the increased gold production, unit costs recorded significant reductions. On-mine costs fell by 9% to US$636/oz and AISC fell 12% to US$912/oz. Figure 2 shows the quarterly trend in unit costs.

Figure 2: Gold unit costs (US$/oz gold sold)



Source: Caledonia Mining

US$11.3m net cash at the end of 2016

The Blanket operations generated cash of US$23.1m and, after spending a total of US$19.9m on expansion projects and sustaining capital, the company increased its cash position at the end of the year to US$14.3m (2015:US$10.9m). This figure includes the drawdown of US$3m from a Zimbabwean bank debt facility after converting a US$5m overdraft facility into a two-year term loan.

The Blanket mine has resumed dividends and Caledonia has maintained an annual dividend of US5.5c/share.

The Blanket mine management committee, which is composed of officers from Caledonia and the indigenous partners, imposed a moratorium on dividends in 2015 to apply cash flow fully to the capital expansion programme. In the second half of 2016, the mine resumed paying dividends and thus Caledonia should start to grow its cash position again when capital spending starts to decline from next year.

In July 2016, the board of Caledonia increased the quarterly dividend by 22%, to US1.375c per share, and the company has maintained this level for annual aggregate dividends of US5.5c per share. Dividends paid in 2016 totalled US5.0c/share.

In January 2017, the company declared a quarterly dividend of US1.375c/share.

Good progress on the expansion plan

Mine

The Blanket mine is in the third year of a US$50m expansion programme, the major elements of which will be completed by 2018. The programme is designed to increase gold production to a budgeted 80koz by 2021 through exploitation of resources below the 750m level.

Blanket is funding the entire programme from cash resources.

Two elements of the expansion plan - the development of a decline from the 750m level to 780m in the AR South orebody and the continuation of the No. 6 winze, in the Blanket orebody – were completed in 2016 and have already been employed to access ore and increase production.

Shaft sinking is on budget and schedule

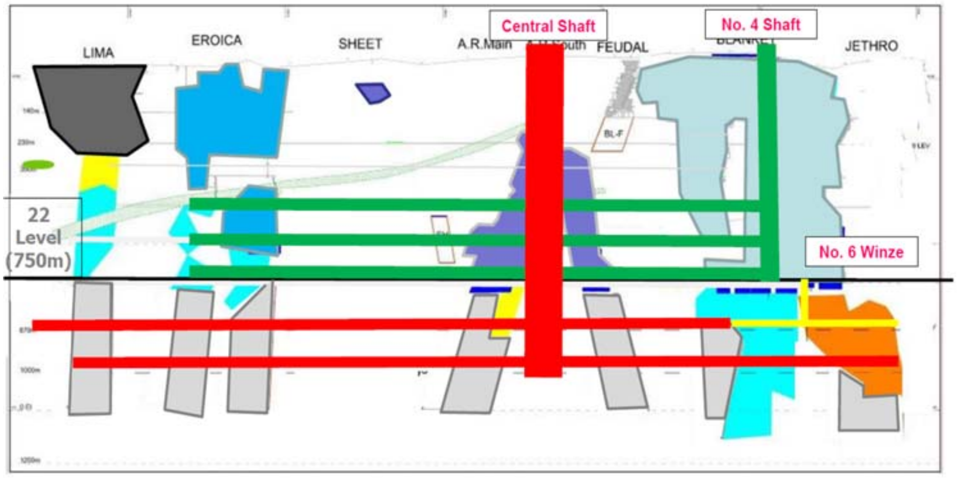
The third, and major, element, is the sinking of the new vertical Central shaft, which will not only increase ore-hoisting capacity, but will also facilitate better access to the deeper resources to the north and to the south along approximately 3km of strike length.

The shaft should be completed down to 1,080m in early 2018 and equipped and operational by June of that year. Although sinking was delayed slightly at the end of 2016 because of an unstable electricity supply from the national grid, the mine is installing equipment to regulate the incoming electricity supply in order to resolve this problem. Management is confident that the shaft will be operational on schedule.

Sinking of the Central Shaft had reached a depth of 633m at the end of February 2017.

Figure 3 shows a schematic of the Central shaft and other underground development.

Figure 3: Mine infrastructure expansion programme



Source: Caledonia Mining

Meanwhile, the company is extending the AR South decline to 870m (26 Level) below the surface and plans to complete a similar decline from 750m to 780m at the Blanket orebody.

Through these initiatives, the mine is on course to increase production capacity to 1,800t/d from 1,500t/d currently.

The mine and mill will have matched capacity capable of delivering the increased gold production targets

Processing plant

As well as increasing the mining capacity, the company has been increasing the capacity of the processing plant to match the mine output level in order to achieve the planned production target of 80koz/y by 2021.

In 2016, the company installed a new conveyor system from the secondary crushers to the new fine ore bin; installed and commissioned a new ball mill (No.8); and refurbished the CIL tanks, giving the mill a capacity of 650kt/y.

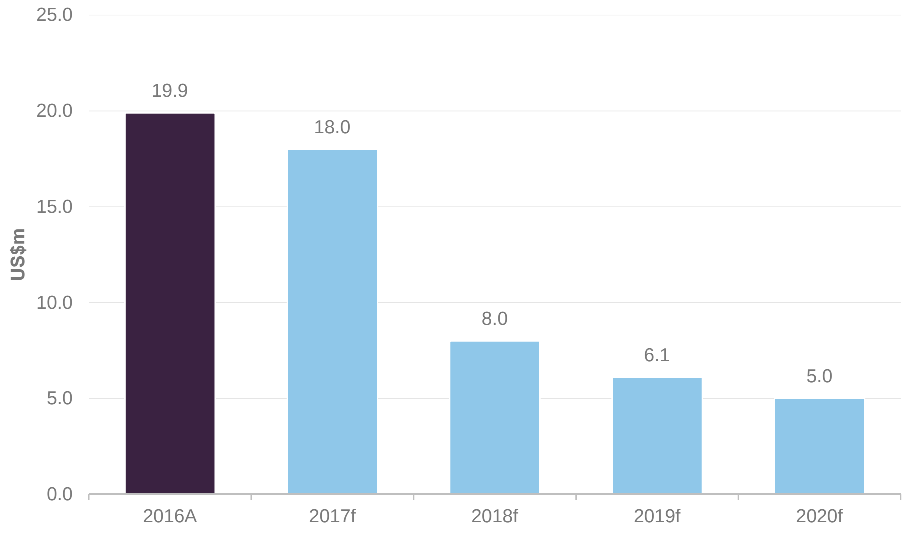
Additional upgrades in the current year include replacing the oxygen plant by mid-2017, to improve recoveries, and the commissioning of a larger cluster of cyclones over the regrind mill (to again improve recoveries by having a more consistent product being fed into the CIL plant).

Capital spending budget

2016 was the peak spending year for the expansion programme and capital expenditure is forecast to decline significantly after 2017. After the Central shaft is completed in 2018, management only anticipates sustaining capex.

Figure 4 shows annual capex (expansion and sustaining) budgets to 2020.

Figure 4: Capital spending budget, US$m (2017-2020)



Source: Caledonia Mining, Marten & Co

Exploration and resources

The company continues to drive on-mine exploration at depth, with an accelerated drilling programme, after commissioning new machines in 2016.

Blanket mine is continuing with its aggressive exploration campaign

The company completed 22,172m of deep level exploration drilling in 2016, a 55% increase on 2015.

Early in the second half of 2016, Caledonia announced an upgrade of 343kt of inferred resources to the indicated category and the addition of 1,276kt of new inferred resources, at grades significantly higher than the overall resource grades.

At 31 December 2016, M&I resources were 4.94Mt at a grade of 4.23g/t for 671koz of gold contained. Inferred resources add 604koz of gold at a grade of 4.99g/t.

At the same date, reserves were 2.86Mt at a grade of 3.66g/t for 336koz of gold contained.

Valuation increased significantly

We value Caledonia on a sum-of-the-parts NAV basis through a DCF analysis taking into account the after-tax NPV of the future dividend stream and repayment of facilitation loans from Blanket mine at a discount rate of 15%, which we feel is appropriate to reflect the risk in operating in Zimbabwe.

We use a long-term gold price of US$1,350/oz.

Updating our model for 2017 has increased the $NAV^{15\%}$ to 218.0p per share

This approach leads to a $NPV^{15\%}$ for Caledonia's share of Blanket mine dividends of 180.4p per Caledonia share and a NAV for the company of 218.0p per share, suggesting that Caledonia is currently trading in London at a discount of 48% to that NAV.

Our NAV for the company has increased mainly because of the declining capital spending programme against the background of increasing gold production and revenue, which leads to an increased NPV of future cashflows. A weaker GB pound against the US dollar also added 12p to our NAV estimate.

Blanket mine dividends are defined as free cash flow (i.e. after all expenses and capital) and we assume that 100% is paid out each year to the shareholders.

Caledonia will receive 77% of Blanket mine dividends until the vendor loans are repaid, which will be in 2022, according to the base case in our model

Despite only holding a 49% equity interest in the Blanket mine, through the mechanics of the indigenisation process completed four years ago, currently Caledonia receives over 77% of the dividend flow (including facilitation loan repayments) from the mine while the vendor loans it made are being repaid. We project that this should happen in 2022 in our base case. At the higher price-sensitivity analyses that we conducted, Caledonia's interest will revert to the basic 49% earlier as higher dividend payments facilitate faster loan repayment.

Our projected production growth, to 81koz by 2020, is based on exploitation of reserves and resources from existing infrastructure above the 750m level in the current mine plan, as well as inferred resources below the 750m level. Given the updated resources in 2016, we felt justified in extending the mine life by four years, to 2025.

Our annual production forecasts and cost projections have not altered materially since our initiation note. Forecast production for 2017 is approximately 61koz of gold (compared to the company's target of approximately 60koz) of which we expect about 42koz from above 750 m level and 18koz from recently upgraded resources below 750 m level.

AISC and AIC are projected to decline significantly as gold production increases, higher grade ore is mined at depth and the high capital spending programme tails off.

Our revenue forecast assumes that the company continues to enjoy the export credit incentive, which the government awarded, and paid, in 2016, at a rate of 3.5% of gold sales.

Our valuation is summarised in the table below.

Figure 5: Base case valuation model for Caledonia

	US\$m	£m	p/share
$NPV^{15\%}$ Blanket Mine dividends	117.1	95.2	180.4
$NPV^{15\%}$ Blanket Mine management fee	13.1	10.7	20.2
Net cash (31 Dec 2016)	11.3	9.2	17.4
NAV	141.5	115.1	218.0

Source: Marten & Co £/US$ exchange rate = 1.23

Sensitivity analysis

We have used a 15% discount rate in our base case modelling, but for comparison we show below NAV values at other discount rates.

Figure 6: Sensitivity of NAV at US$1,350/oz gold price to various discount rates

Discount rate	NAV (p/share)
8%	268.5
10%	252.1

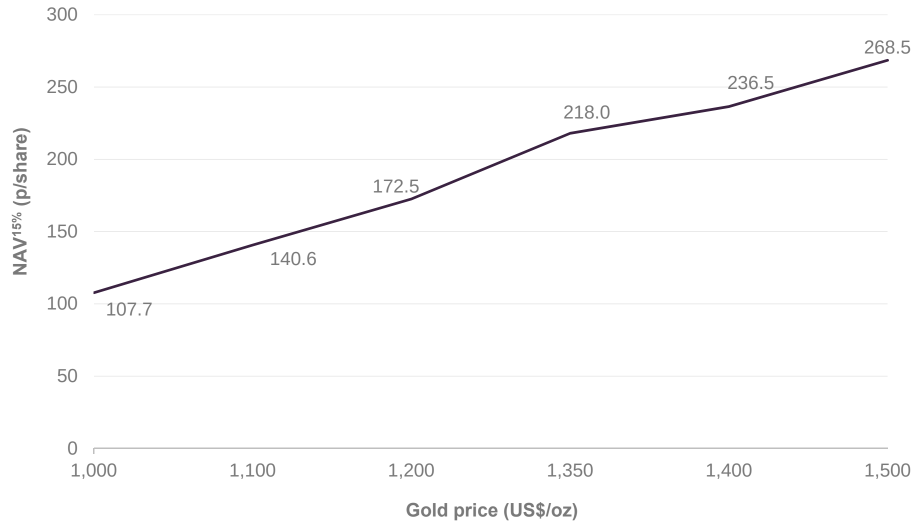
12%	237.3
15%	218.0
18%	201.3
20%	191.5

Source: Marten & Co

We have also stress-tested the project against volatility in the gold price, which is the most critical variable as far as profitability is concerned.

Figure 7 shows how the NAV varies with gold prices.

Figure 7: Caledonia NAV$^{15\%}$ at various gold prices (p/share)



Source: Marten & Co

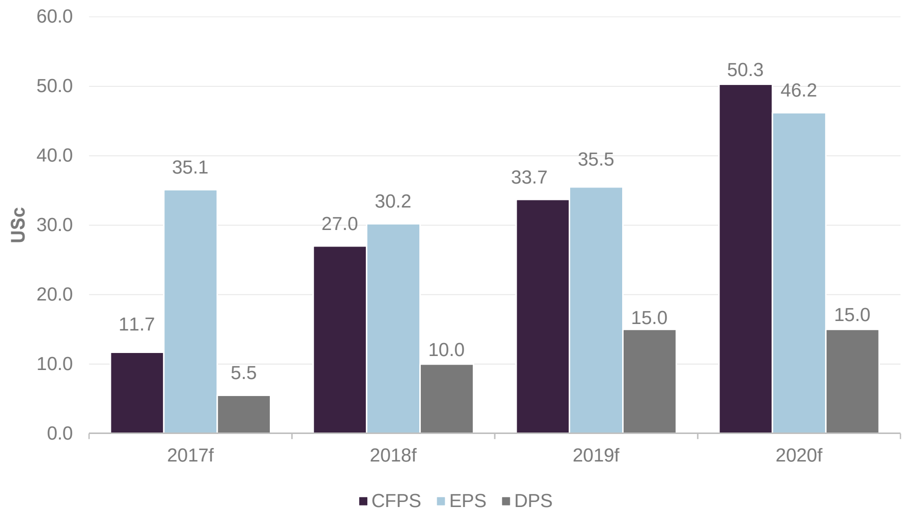
According to our modelling, the company offers significant value even at a long-term US$1,000/oz gold price as this would still imply an NAV$^{15\%}$ of 107.7p per share.

Cash flow, earnings and dividends forecasts

The company could increase dividends to US10c per share by 2018

Using our base case assumptions and forecasts, we project per share cash flow, attributable earnings and dividends for Caledonia, in US cents, as shown in Figure 8 below.

Figure 8: Cash flow, earnings and dividend forecasts (USc/share)



Source: Marten & Co

Note that projected EPS falls in 2018 as a result of a greater depreciation charge with the completion of the Central shaft.

Risk factors

Zimbabwean economic crisis?

In 2009, Zimbabwe adopted the US dollar as its currency after the Zimbabwe dollar lost all value and the country experienced hyperinflation.

The country's economy possibly faces a similar crisis now. With a limited supply of dollars in the banking system and spending on imports in 2016 leading to an outflow of dollars, the treasury's coffers are severely constrained.

In a move, somewhat reminiscent of 2009, although with a seemingly lower likelihood of a successful outcome, in late-2016 the government issued 'bond notes' pegged to the US dollar to act as currency and with a par value to the US dollar. Unfortunately, they cannot be used to pay for imports are thus losing value continually. Commercial banks have placed severe limitations on cash withdrawals in an effort to control the situation.

Caledonia receives payment for its gold sales in US dollars and is not materially affected by the introduction of the bond notes.

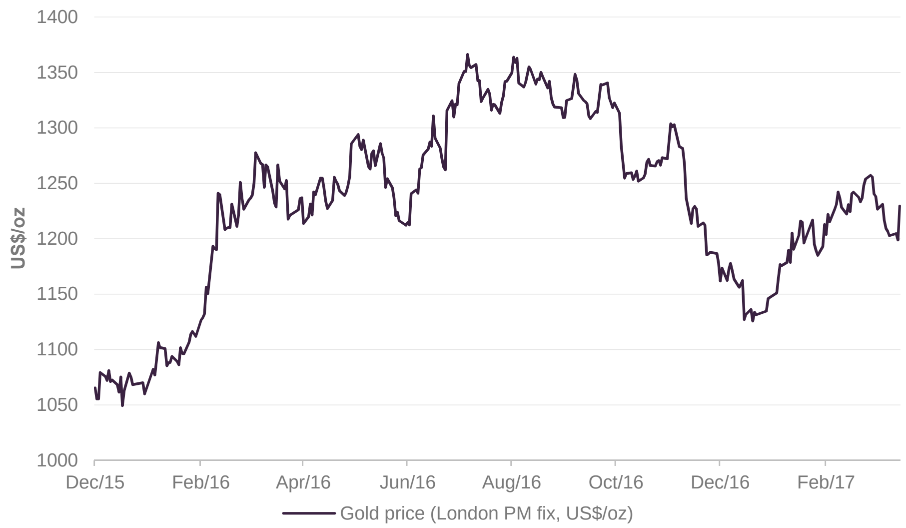
In fact, the government of Zimbabwe has been very supportive of Caledonia's plans to increase gold production (and thus exports). In 2016, it awarded the mine an export credit incentive of 2.5% on gold sales (increased to 3.5% in January 2017). The government also reduced the royalty rate applicable to large-scale gold producers in Zimbabwe from 5% to 3% for sales in 2016 that exceed the sales made in 2015.

Gold price

We have maintained our base case, long-term gold price at US$1,350/oz, pending a review in mid-2017. We have, however, adjusted our forecast 2017 price down slightly to US$1,300/oz. After starting the year at US$1,151/oz the gold price has averaged US$1,214/oz year-to-date.

In the long term, we believe that the price will be governed in the main by physical demand (in the form of jewellery and for investment purposes). Although demand in China and the Far East has proved to be relatively weak over the past year, ETF demand in the west has recovered strongly from 2015 and the underlying global macroeconomic factors remain bullish for gold. Figure 9 shows the gold price since December 2015.

Figure 9: Gold price (London PM fix, US$/oz)



Source: Bloomberg

In the short term, the gold price continues to be affected by monetary policy in the US. On 15 March, the Federal reserve (Fed) raised its benchmark interest rate by 0.25% (25 basis points) and gold rallied by 2.5% (to US$1,230/oz) over the next few days. Although the reaction at first seems counter-intuitive from an economics perspective, it confirms a pattern established with the previous two rate hikes. In December 2015, the Fed increased rates by 0.25% and gold subsequently rose 18% over the following three months. The December 2016 rate rise saw an 8% increase in the gold price over the next three months. At times during the gold bull market of the mid-2000s, the gold price surged on interest rate increases.

The Fed has confirmed three probable rate increases in 2017 and possibly the same number in 2018. The market perceived Fed Chairman Yellen's comments as 'dovish', thus the bounce in the price as the dollar weakened.

News that US CPI inflation ticked up to its highest level in five years effectively negates any interest-rate increase and maintains negative real returns on competing investments: another positive for gold.

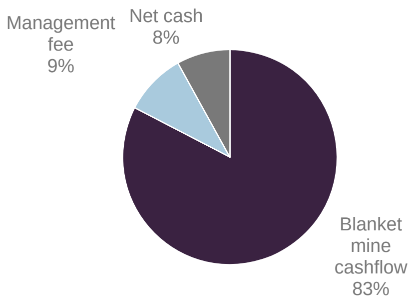
Yellen also expressed doubts that the US economy can grow much faster than 2% per annum over the next couple of years, which is more muted than President Trump's target of 4% growth per annum.

Overall, gold is performing quite well against a backdrop of an eight-year stock market bull run that has seen the Dow Jones reach record levels in recent weeks.

Figure 10: Caledonia Mining summary

Sum-of-the-parts DCF valuation March 2017	US$m	p/share
NPV[15%] of Blanket mine cashflow	117.1	180.4
NPV[15%] of Blanket mine management fee	13.1	20.2
Investments	0.0	0.0
Subtotal	130.2	200.6
Net cash	11.3	17.4
NAV	141.5	**218.0**

Asset valuation summary



CMCL share price (p/share)

NAV sensitivity analysis (p/share)

	Gold price (US$/oz)					
Disc. rate	**1,000**	**1,100**	**1,200**	**1,350**	**1,400**	**1,500**
8%	132.3	172.6	211.9	268.5	290.7	330.1
10%	124.3	165.4	199.1	252.1	273.1	310.1
12%	117.1	155.8	187.7	237.3	257.3	292.1
15%	107.7	140.6	172.5	218.0	236.5	268.5
18%	99.6	130.0	159.6	201.3	218.6	248.2
20%	94.8	123.8	151.9	191.5	208.1	236.2

Production summary

Gold reserves & resources (Dec 2016)	Tonnes (mt)	Grade (g/t)	Gold (koz)
2P reserves	2.86	3.66	336
M&I resources	4.94	4.23	671
Inferred resources	3.76	4.99	604

Y/E 31 December, all figures in US$m unless otherwise stated

Forecast assumptions	2016A	2017f	2018f	2019f	2020f
Gold price (US$/oz)	1,285	1,300	1,350	1,350	1,350

Production and costs summary	2016A	2017f	2018f	2019f	2020f
Production					
Above 750m level					
Tonnes milled (kt)	**N/A**	430	380	230	100
Gold grade (g/t)	N/A	3.30	3.30	3.30	3.30
Below 750m level					
Tonnes milled (kt)	N/A	160	215	390	550
Gold grade (g/t)	N/A	3.80	3.90	4.00	4.20
Total tonnes milled (kt)	**511**	**590**	**595**	**620**	**650**
Gold grade (g/t)	**3.30**	**3.44**	**3.52**	**3.74**	**4.06**
Recovery (%)	**93.0**	**93.0**	**93.0**	**93.0**	**93.0**
Gold production (koz)	**50.4**	**60.6**	**62.6**	**69.3**	**78.9**
Costs					
Minesite costs (US$/oz)	636	561	559	532	480
Total cash costs (US$/oz)	694	676	676	644	587
AISC (US$/oz)	**912**	**823**	**818**	**786**	**725**
AIC (US$/oz)	1,221	1,070	897	817	725

Profit & loss summary (consolidated basis)	2016A	2017f	2018f	2019f	2020f
Revenues	**62.0**	**77.8**	**83.4**	**92.4**	**105.2**
Cost of production	(32.1)	(36.9)	(37.9)	(39.8)	(40.8)
Royalty	(2.9)	(4.0)	(4.3)	(4.8)	(5.4)
Corporate G&A	(7.3)	(5.3)	(5.3)	(5.3)	(5.3)
EBITDA	**19.7**	31.6	35.9	42.6	53.7
Depreciation & amortisation	(3.5)	(4.2)	(7.8)	(8.6)	(9.5)
Interest	(0.2)	(0.5)	(0.5)	(0.5)	(0.5)
Other (net)	2.7	1.9	2.1	2.4	2.9
Taxation	(7.7)	(4.0)	(7.9)	(10.3)	(13.7)
Net income (consolidated)	**11.1**	22.8	19.8	23.2	30.0
Average shares outstanding (m)	52.3	52.8	52.8	52.8	52.8
EPS (US$) (consolidated)	**21.4**	43.3	37.5	43.9	56.9
EPS attributable to Caledonia shareholders(US$)	15.9	35.1	30.2	35.5	46.2
Dividend (USc per share)	**5.0**	5.5	10.0	15.0	15.0

Abridged balance sheet Y/E (consolidated basis)	2016A	2017f	2018f	2019f	2020f
Cash & equivalents	14.3	20.5	30.2	35.5	46.2
Fixed assets	64.9	78.7	78.9	75.4	69.5
Total assets	90.6	110.5	125.1	140.3	162.5
Current liabilities	9.8	9.5	9.5	9.5	9.5
Long-term debt	3.0	3.0	3.0	0	0
Other long-term liabilities	19.4	19.4	19.4	19.4	19.4
Total liabilities	31.3	28.9	28.9	28.9	28.9
Shareholders' equity	59.3	81.6	96.2	111.4	133.6

Cash-flow summary (consolidated basis)	2016A	2017f	2018f	2019f	2020f
Cash from operations	23.0	27.1	27.6	31.8	39.5
Capital expenditure	(19.9)	(18.0)	(8.0)	(5.0)	(3.2)
Cash from investing activities	(19.9)	(18.0)	(8.0)	(5.0)	(3.2)
Dividends	(2.9)	(2.9)	(5.3)	(7.9)	(7.9)
Cash from financing activities	0.4	(2.9)	(5.3)	(7.9)	(7.9)
Cash at end	14.3	20.5	34.7	52.5	79.1

Profitability	2016A	2017f	2018f	2019f	2020f
EBITDA margin (%)	32%	41%	43%	46%	51%

Note that financial tables above are summaries and totals may not always agree

Source: Caledonia Mining, Marten & Co

Previous research publications

Readers interested in further information about Caledonia may wish to read our initiation note, *A golden opportunity,* published on 28 July 2016, and our update note, *Expansion boosts bottom line*, published on 15 August 2016. The contents pages have been reproduced below. You can read them by clicking below or by visiting our website.

Figure 11: Marten & Co. previously published research on CMCL

Title	Note type	Date
A golden opportunity	Initiation	28 July 2016
Expansion boosts bottom line	Update	15 August 2016

Source: Marten & Co.

A golden opportunity – 28 July 2016

4	**Glossary of terms**	
5	**Introduction**	
5	**Investment case**	
5		Earnings set to jump
5		High dividend yield
6		Increasing production
6		Figure 1: Longitudinal section of Blanket mine
7		Costs declining; margin increasing
7		Figure 2: Forecast AISC and AIC
7		Tight capital structure
8		Supportive partners
8		Resource expansion potential
9	**Valuation**	
10		Figure 3: Base case valuation model for Caledonia
10	**Comparative valuation**	
10		**Figure 4: Comparative valuation for African gold producers**
11	**Sensitivity analysis**	
11		Figure 5: Sensitivity of NAV to discount rates
11		Figure 6: Caledonia NAV at various gold prices
12	**Blanket mine**	
12		Location
12		Figure 7: Map of Zimbabwe showing location of Blanket mine
12		Figure 8: No 4 Shaft and plant at Blanket mine
13		Ownership and indigenisation
14		Brief history
14		Geology and mineralisation
15		Figure 9: The Gwanda Greenstone Belt and Blanket mine's claims
15		Reserves and resources
15		Figure 10: Reserves and resources

16	Mining
16	Processing
17	Figure 11: Blanket mine processing flowsheet
17	Production and costs
18	Figure 12: Historic ore and gold production
18	Figure 13: Historic unit costs for Blanket mine
19	Figure 14: Gold mining industry cost curve
19	Gold sales
20	Expansion plan
20	Central Shaft
20	Figure 15: Central Shaft at Blanket mine
21	Figure 16: Longitudinal section of Blanket mine showing planned infrastructure
21	750 m level decline
21	No 6 winze extension
22	**Exploration**
21	On-mine exploration
22	Exploration on satellite deposits
22	GG prospect
22	Figure 17: Exploration shaft at GG prospect
23	Mascot
23	**Production forecasts and mine modelling**
24	Figure 18: Model assumptions and parameters
24	Figure 19: Capital spending schedule
25	Figure 20: Breakdown of expansion capital spending
25	Figure 21: Modelled ore milled from upper and lower sections
26	Figure 22: Forecast gold production and AISC
26	**Cashflow, earnings and dividends forecast**
26	Figure 23: CFPS, EPS and DPS forecasts
27	**Capital structure**
27	Figure 24: Major shareholders
27	**Directors and management**
27	Directors
27	Management
28	**The gold market**
28	Figure 25: Long-term monthly average gold price
29	Figure 26: 2016 YTD daily gold price
29	The ‘fear’ trade is driving gold
30	Figure 27: Supply and demand estimates for gold
31	Figure 28: Gold ETF holdings
31	**Zimbabwe**

31	Political situation
32	Economic situation
33	Figure 29: Real GDP growth forecasts for Zimbabwe
34	Gold production
34	Figure 30: Zimbabwe's gold production
35	**Risks**
35	Country risk
35	Technical risk
35	Power supply problems
35	Single asset
36	Exchange rates
36	Gold prices
37	Figure 31: Caledonia Mining summary
38	**Appendix 1: Blanket mine's dividends explained**
38	Figure 32: Worked example of the Blanket mine dividend payout
39	**Appendix 2: Explanation of unit costs of production**
39	Figure 33: Simplified unit cost guidance for 'XYZ gold mine
40	**Appendix 3: Definition of reserves and resources**

Expansion boosts bottom line – 15 August 2016

1	**Valuation summary**
2	**Key investment points**
2	**H1 2016 results**
3	Figure 1: Historic tonnes milled and grade
4	Figure 2: Gold unit costs (US$/oz gold sold)
4	**Increase in resources…**
4	Figure 3: Reserves and resources
5	Figure 4: Resource expansion from December 2015 (koz contained gold)
5	**…leads to an extension of mine life**
5	**Progress on expansion plan**
6	Exploration
6	Board and management additions
7	**Valuation increased significantly**
7	Figure 5: Base case valuation model for Caledonia
8	**Sensitivity analysis**
8	Figure 6: Sensitivity of NAV at US$1,350/oz gold price to discount rates
8	Figure 7: Caledonia NAV15% at various gold prices (p/share)
8	**Cash flow, earnings and dividends forecasts**
9	Figure 8: Cash flow, earnings and dividends forecasts (USc/share)
	Figure 9: Caledonia Mining summary

MARTEN & CO

Authorised and regulated by the Financial Conduct Authority

123a Kings Road, London SW3 4PL
0203 691 9430

www.martenandco.com

Registered in England & Wales number 07981621,
2nd Floor Heathmans House
19 Heathmans Road, London SW6 4TJ

Resource sales:

Edward Marten
(em@martenandco.com)

Christopher Bunstead
(cb@martenandco.com)

Research contacts:

Resources analyst - Paul Burton
(pb@martenandco.com)

James Carthew
(jc@martenandco.com)

Matthew Fernley
(mf@martenandco.com)

Matthew Read
(mr@martenandco.com