

Endeavour Mining

Full-year results

Q419 and FY19 results ahead of expectations

Fourth quarter adjusted EPS at Endeavour of US\$0.336 was materially ahead of both our (US\$0.188) and consensus (US\$0.21–0.27) forecasts, despite all operations being affected by an extension of the traditional Q3 rainy season into Q4. The positive performance was driven by a close control of all-in sustaining costs (AISC), which were US\$819/oz for the quarter (cf our forecast of US\$884/oz and a consensus of US\$869/oz). Production (which was already known) was exactly in line with our prior expectations, albeit it was better at Houndé and Agbaou and worse at Karma. We have now updated our forecasts to reflect FY20 guidance and (in the aftermath of the recent turbulence) a lower gold price. Although this has entailed a reduction in our FY20 estimates – in part owing to a continuation of higher total cash costs for longer – they are nevertheless inherently conservative in their assumptions surrounding Kari Pump (see page 6) and remain materially higher than FY19, reflecting Endeavour's evolution from a cash consumer to a cash generator.

Year end	Revenue (US\$m)	EBITDA (US\$m)	PBT* (US\$m)	Operating cash flow per share (US\$)	Capex (US\$m)	Net debt** (US\$m)
12/18	752.0	264.8	70.5	2.33	486.5	518.6
12/19	886.4	355.7	106.9	2.75	254.9	535.9
12/20e	1,029.3	444.0	186.2	3.45	244.1	447.2
12/21e	1,063.2	576.8	314.5	3.75	93.5	173.3

Note: *PBT and EPS are normalised, excluding amortisation of acquired intangibles and exceptional items. **Includes restricted cash.

US\$1.10/share quarterly cash flow from operations

Other highlights of the fourth quarter were operating cash flow of US\$120.4m, or US\$1.10/share, and a US\$79.2m reduction in net debt to US\$535.9m (Edison calculation) – very close to our prior forecast of US\$526.8m. As such, net debt has now fallen by US\$117.3m in the last two quarters alone.

Production guidance +4.6–13.8%, AISC +3.3–9.4%

Endeavour's guidance for FY20 is for production of 680–740koz gold at an AISC of US\$845–895/oz. Edison's forecasts assume production of 702.6koz gold at US\$901/oz, although this assumes no contribution from Houndé's high-grade Kari Pump deposit (which management assumes will begin in Q320).

Valuation: US\$32.74/share (double the share price)

In valuing Endeavour, we have opted to discount potential cash flows to shareholders back over four years from FY19 and then apply an ex-growth, ad infinitum terminal multiple of 10x (consistent with a discount rate of 10%) to the forecast cash flow in that year (FY22). In the wake of Q419/FY19, our estimate of Endeavour's cash flow in FY22 has decreased marginally to US\$3.96 per share (cf US\$4.20/share previously), on which basis our terminal valuation of the company at end-FY22 is US\$39.62/share (cf US\$41.99/share previously), which (in conjunction with forecast intervening cash flows) discounts back to a value of US\$32.74/share in FY20 (cf US\$32.30/share in FY19 previously).

Metals & mining

20 March 2020

Price **C\$23.58**

Market cap **C\$2592m**

C\$1.4520/US\$

Net debt (US\$m) at end December 2019 535.9

Shares in issue (000s) 109,925

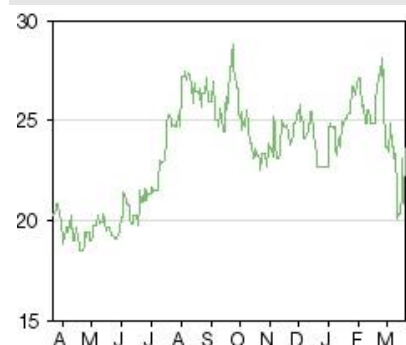
Free float 70.1%

Code EDV

Primary exchange TSX

Secondary exchange US OTC

Share price performance



% 1m 3m 12m

Abs (11.2) 0.3 23.5

Rel (local) 30.8 40.7 64.3

52-week high/low C\$28.79 C\$18.51

Business description

Endeavour Mining is an intermediate gold producer, with four mines in Côte d'Ivoire (Agbaou and Ity) and Burkina Faso (Houndé and Karma) and one major development project in Mali (Kalana), all in the highly prospective West African Birimian greenstone belt.

Next events

Kari West and Center maiden reserve Q220

Houndé and Ity updated mine plans Q220

Fetekro PEA Q220

Kalana updated feasibility study H220

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[Edison profile page](#)

Endeavour Mining is a research client of Edison Investment Research Limited

Investment summary

Company description: Specialist West African gold miner

Endeavour is an intermediate gold producer, with four mines in Côte d'Ivoire (Agbaou and Ity) and Burkina Faso (Houndé, Karma) and two major development projects (Fetekro and Kalana) in the highly prospective West African Birimian greenstone belt. Although not restricted to a particular geography or mode of operation, Endeavour has a preference for operating in francophone West Africa and for owner-operated (rather than contractor) mining. Its target is for all of its mines to have operational lives (on average) in excess of 10 years at an AISC below US\$850/oz.

Valuation: US\$32.74 rising to US\$39.62 in FY22

In valuing the company, we have opted to discount potential cash flows back over three years from end-FY19 and then to apply an ex-growth, *ad infinitum* terminal multiple of 10x (consistent with using a standardised discount rate of 10%) to forecast cash flows in that year (FY22). In the normal course of events, exploration expenditure would be excluded from such a calculation on the basis that it is an investment. In the case of Endeavour, however, we have included it in our estimate of FY22 cash flows on the grounds that it may be a critical component of ongoing business performance in its ability to continually extend the lives of the company's assets. Our estimate of Endeavour's potential cash flow is US\$3.96 per share in FY22, in which case our terminal valuation of the company at end-FY22 is US\$39.62/share, which (in conjunction with forecast intervening cash flows to shareholders) discounts back to a value of US\$32.74/share at the start of FY20 (cf US\$32.30/share in FY19 previously).

Sensitivities and risks

In qualitative terms, the principal risks to which Endeavour's projects are immediately exposed are geographical/sovereign, geological, metallurgical, engineering, financing and management risk. For its mines that are successfully in production, most of these technical risks will be perceived to have been mitigated and others, such as commercial, commodity price and global economic risks will have taken their place. For its projects that have yet to enter production (Kalana and Fetekro), the whole suite of risks may be summarised as execution risk, ie management's ability to bring the projects to account within their geographical jurisdictions and the required technical parameters. However, these risks are also mitigated by management's proven track record in successfully bringing mines into production on time and on budget (eg Ity CIL). In the meantime, while 'gains/(losses) from financial instruments' are excluded from our forecasts, at the current gold price, we estimate Endeavour's gold price protection programme to June 2020 potentially represents up to a c US\$19.215m (US\$0.175/share gross of tax) risk to our FY20 earnings forecasts (see Exhibit 8).

Financials: Net debt free by H122

Endeavour had US\$216.8m in net debt at end FY17 and US\$535.9m at end FY19, after having embarked on a major capital expenditure throughout FY18 and H119 relating to the development of the Ity CIL project, which saw net debt peak at US\$653.2m at end-Q219. The current level of net debt equates to a gearing (net debt/equity) ratio of 74.7% and a leverage (net debt/[net debt + equity]) ratio of 42.7%. With capital expenditure relating to the Ity CIL project having now been completed, Endeavour has no major capex commitments in the future until the development of either Kalana or Fetekro. Cash flows were strongly positive in Q419 and we expect them to remain so into the foreseeable future, such that we are forecasting that the company will have net debt of c US\$447.2m as at end-FY20 and be net debt-free in mid-FY22 (notwithstanding any capex related

to Kalana and/or Fetekro), at which point it will potentially be able to make dividend distributions to shareholders.

Note that a net debt figure of US\$535.9m reconciles with Endeavour's Q419 balance sheet; it differs from the figure of US\$528.2m quoted in some of the company's other materials on account of the fact that the latter is calculated on the basis of the value of the minimum equipment finance obligations discounted back to present value, whereas the former is presented on an undiscounted basis.

Q419 and FY19 results

Fourth quarter adjusted EPS at Endeavour of US\$0.336 (bottom line of Exhibit 1) was ahead of both our (US\$0.188) and consensus (US\$0.21–0.27) forecasts. Production (which was already known via the company's preliminary results statement of 23 January) was exactly in line with our prior expectations, albeit it was better at its Houndé and Agbaou mines and worse at Karma, in particular (see Exhibit 1). All-in sustaining costs (AISC) of US\$819/oz for the quarter were similarly lower than both our forecasts (US\$884/oz) and also consensus (US\$869/oz), although total cash costs were higher (see Exhibit 1), as all four mines were affected to a greater or lesser extent by the continuation of the disruption of the rainy season in Q3 into Q4, which necessitated them continuing to process ore from low-grade stockpiles – the divergence between AISC and total cash costs being accounted for by a more than halving of sustaining capital expenditure in Q4 versus Q3, especially at Houndé and Agbaou. The continuation of the rains into Q4 affected operations at Houndé in particular, where the ramp up at the high-grade Bouéré deposit was delayed until late Q4/early Q1 and the stripping ratio therefore remained high.

Financial results were distorted by the inclusion of a US\$127.4m impairment charge relating to Endeavour's Karma asset in Q4 (and its related deferred tax liability written off). Note that these have been excluded in the two columns marked 'Underlying' in Exhibit 1, below. Other ostensibly one-off adverse effects on earnings included US\$12.2m in 'Other expenses' and US\$4.6m in 'Acquisition etc costs', which both reflect (effectively) exceptional legal costs relating to Endeavour's merger/takeover approach to Centamin in December 2019 until January 2020. However, these are anyway excluded in the company's calculation of adjusted net earnings attributable (the penultimate row of Exhibit 1). In addition, the marginal tax rate remained high at all of Endeavour's operations with the exception of Ity.

Other highlights of the period were:

- Operating cash flow increased to US\$120.4m (cf US\$96.4m in Q3 and US\$62.2m in Q219).
- Operating cash flow per share increased to US\$1.10/share (cf US\$0.88 in Q319 and US\$0.57 in Q219) compared with consensus estimates in the range US\$0.86–0.96/share.
- Return on capital employed increased to 14% (H219 annualised – company calculation).
- Net debt reduced by US\$79.2m (cf US\$38.1m in the previous quarter – Edison calculation) to US\$535.9m – very close to our prior forecast of US\$526.8m (see 'Financials' section, below).
- Capex remained at low levels with sustaining plus non-sustaining capex amounting to no more than US\$25.5m (cf US\$24.3m in Q3) during the quarter across the company's four mines.

A detailed analysis of Endeavour's financial and operational performance, relative to both the previous quarter and our prior expectations (as set out in our note, [Endeavour Mining: Forecasts up; valuation up](#), published on 11 November 2019) is shown in Exhibit 1, overleaf:

Exhibit 1: Endeavour Mining earnings, by quarter, Q319–Q419

(US\$000s unless otherwise indicated)	Q319	Q419e	Q419a	Q419 (underlying)	Q4/Q3 Change (%)	*Q4a/Q4e Variance (%)	FY19e	FY19a	FY19 (underlying)
Houndé production (koz)	54.7	50.2	55.0	55.0	0.5	9.6	218.5	223.3	223.3
Agbaou production (koz)	36.1	29.5	35.0	35.0	-3.0	18.6	132.0	137.5	137.5
Karma production (koz)	26.2	35.7	27.2	27.2	3.8	-23.8	105.0	96.5	96.5
Ity production (koz)	63.8	62.2	60.4	60.4	-5.3	-2.9	195.0	193.1	193.1
Total gold produced (koz)	180.8	177.6	177.6	177.6	-1.8	0.0	650.5	650.4	650.4
Total gold sold (koz)	185.3	177.6	171.9	171.9	-7.2	-3.2	654.5	648.8	648.8
Gold price (US\$/oz)	1,443	1,474	1,445	1,445	0.1	-2.0	*1,365	*1,367	*1,367
Mine level cash costs (US\$/oz)	613	633	678	678	10.6	7.1	634	646	646
Group level AISC (US\$/oz)	803	884	819	819	2.0	-7.4	835	818	818
Revenue									
– Gold revenue	267,292	255,905	248,398	248,398	-7.1	-2.9	893,878	886,371	886,371
Cost of sales									
– Operating expenses	114,599	112,395	124,707	124,707	8.8	11.0	418,675	430,987	430,987
– Royalties	14,480	14,138	13,638	13,638	-5.8	-3.5	48,639	48,139	48,139
Gross profit	138,213	129,373	110,053	110,053	-20.4	-14.9	426,565	407,245	407,245
Depreciation	(54,509)	(58,757)	(54,608)	(54,608)	0.2	-7.1	(201,368)	(197,219)	(197,219)
Expenses									
– Corporate costs	(6,166)	(8,221)	(3,250)	(3,250)	-47.3	-60.5	(25,591)	(20,620)	(20,620)
– Impairments	0	0	(127,380)	0	N/A	N/A	0	(127,380)	0
– Acquisition etc costs	0	0	(4,552)	(4,552)	N/A	N/A	0	(4,552)	(4,552)
– Share based compensation	(5,238)	(5,333)	(8,819)	(8,819)	68.4	65.4	(17,556)	(21,042)	(21,042)
– Exploration costs	(3,858)	(1,271)	0	0	-100.0	-100.0	(11,164)	(9,893)	(9,893)
Total expenses	(15,262)	(14,825)	(144,001)	(16,621)	843.5	12.1	(54,311)	(183,487)	(56,107)
Earnings from operations	68,442	55,790	(88,556)	38,824	-229.4	-30.4	170,885	26,539	153,919
Interest income	0	0	0	0	N/A	N/A	0	0	0
Interest expense	(14,170)	(13,345)	(11,591)	(11,591)	-18.2	-13.1	(44,820)	(43,066)	(43,066)
Net interest	(14,170)	(13,345)	(11,591)	(11,591)	-18.2	-13.1	(44,820)	(43,066)	(43,066)
Loss on financial instruments	(49,528)	0	2,194	2,194	-104.4	N/A	(60,162)	(57,968)	(57,968)
Other expenses	(673)	0	(12,219)	(12,219)	1,715.6	N/A	3,704	(8,515)	(8,515)
Profit before tax	4,071	42,446	(110,172)	17,208	-2,806.3	-59.5	69,608	(83,010)	44,370
Current income tax	16,917	17,479	29,661	29,661	75.3	69.7	61,719	73,901	73,901
Deferred income tax	10,699	0	(31,151)	(9,446)	-391.2	N/A	11,006	(20,145)	1,560
Total tax	27,616	17,479	(1,490)	20,215	-105.4	15.7	72,725	53,756	75,461
Marginal tax rate (%)	678.4	41.2	1.4	117.5	-99.8	185.1	104.5	(64.8)	170.1
Profit after tax	(23,545)	24,966	(108,682)	(3,007)	361.6	-112.0	(3,118)	(136,766)	(31,091)
Net profit from discontinued ops.	0	0	(4,394)	(4,394)	N/A	N/A	0	(4,394)	(4,394)
Total net and comprehensive loss	(23,545)	24,966	(113,076)	(7,401)	380.3	-129.6	(3,118)	(141,160)	(35,485)
Minority interest	8,654	7,932	4,487	4,487	-48.2	-43.4	26,003	22,558	22,558
Minority interest (%)	(36.8)	31.8	(4.0)	(60.6)	-89.1	-290.7	(834.1)	(16.0)	(63.6)
Profit attributable to shareholders	(32,199)	17,034	(117,563)	(11,888)	265.1	-169.8	(29,121)	(163,718)	(58,043)
Basic EPS from continuing ops (US\$)	(0.293)	0.155	(1.030)	(0.068)	251.5	-144.0	(0.265)	(1.451)	(0.489)
Diluted EPS from continuing ops (US\$)	(0.293)	0.150	(0.999)	(0.066)	241.0	-144.1	(0.257)	(1.451)	(0.489)
Basic EPS (US\$)	(0.293)	0.155	(1.069)	(0.108)	264.8	-169.8	(0.265)	(1.491)	(0.529)
Diluted EPS (US\$)	(0.293)	0.150	(1.038)	(0.105)	254.3	-170.0	(0.257)	(1.491)	(0.529)
Norm. basic EPS from continuing ops (US\$)	0.158	0.155	0.151	(0.047)	-4.4	-130.1	0.283	0.278	0.081
Norm. diluted EPS from continuing ops (US\$)	0.158	0.150	0.146	(0.045)	-7.6	-130.2	0.274	0.278	0.081
Adj net earnings attributable (US\$000s)	33,155	20,673	36,890	36,890	11.3	78.4	57,437	73,654	73,654
Adj net EPS from continuing ops (US\$)	0.302	0.188	0.336	0.336	11.3	78.5	0.523	0.671	0.671

Source: Endeavour Mining, Edison Investment Research. Note: Company reported basis; *Compares Q419 (Underlying) with Q4e.

Items included in the reconciliation between adjusted net earnings attributable and total net and comprehensive earnings are losses from discontinued operations, deferred income tax effects, gains/losses on financial instruments, other expenses, share-based compensation and acquisition costs (all shown independently in the table above), plus the tax impact of adjusting items, non-cash and other adjustments and the minority interest attributable to the adjusting items (not shown independently). A full reconciliation of adjusted net earnings from continuing operations with total net and comprehensive earnings/(loss) is provided in Table 26 on page 32 of Endeavour's

Management Discussion & Analysis (MD&A) report for the three and 12 months ended 31 December 2019 and 2018.

While the minority interest charge during the quarter of US\$4.5m may appear high within the context of the company's consolidated group accounts' US\$7.4m total net loss, it equates to a much more credible 7.4% of aggregate post-tax earnings from mine operations (ie excluding all centralised expenses) and 15.2% of aggregate post-tax earnings from mine operations if deferred tax effects are excluded. Nevertheless, it is worth noting that this number has always exhibited significant volatility, historically, on a quarterly basis.

FY20 guidance vs Edison forecasts

Historically, Endeavour has a good record of meeting its production and cost guidance targets and FY19 was the seventh year in succession in which the company achieved its production and AISC cost targets.

In general, the first half of FY20 in particular is anticipated to be an extension of circumstances in Q419. **Ity** will continue to mine into harder fresh ore at Daapleu, which will restrain recoveries before a degree of improvement in H220. However, its CIL plant should naturally be less affected by the uncertainties of the Q3 rainy season than its historical heap leach operation. In addition, the second lift of its tailings storage facility is reported to be progressing well and management believes that the mine, which is located in an area of acknowledged high rainfall, is now better prepared for the FY20 wet season than in previous years. Performance at **Houndé** will depend largely on its ability to mine Kari Pump in H220, for which a permit is expected to be received in Q2/Q3. In the meantime, it will continue to mine predominantly hard ore at a relatively high stripping ratio in H120, although this will be somewhat mitigated by its plant continuing to operate at or above nameplate capacity throughout the year. Readers should note that the difference between Edison's cost and production forecasts for FY20 and company guidance may be explained by the timing of operations at Kari Pump. Whereas management expects a contribution from Kari Pump's materially higher grade ore in H220, Edison's forecasts assume that there is no such contribution until FY21, with the result that our cost forecasts in particular are slightly above the top of the guidance range for FY20 (and are therefore inherently conservative). At **Agbaou**, harder ore is expected to be mined, while the overall stripping ratio is anticipated to decrease slightly and throughput and recovery rates to decrease marginally owing to the harder ore blend. In the meantime, tonnes stacked at **Karma** are projected to increase as a result of the installation of the new stacker system and grades and recoveries to remain consistent with Q419 (albeit to improve upon FY19, which was adversely affected by maintenance downtime related to the installation and commissioning of the tripper conveyor in addition to the heavy rains, which resulted in an increase in unit mining costs, among other things).

With due regard for the above factors and considerations, Endeavour's production and cost guidance for FY20, compared with Edison's forecasts, is as follows:

Exhibit 2: Endeavour production and AISC cost guidance, by mine, FY20 vs Edison forecast

Mine	Production (koz)			AISC (US\$/oz)		
	FY20e guidance (koz)	Edison FY20e forecast (koz)	FY19 (koz)	FY20e guidance (US\$/oz)	Edison FY20e forecast (US\$/oz)	FY19 (US\$/oz)
Houndé	230–250	234.4	223.3	865–895	921	862
Agbaou	115–125	111.2	137.5	940–990	1,073	796
Karma	100–110	107.6	96.5	980–1,050	1,018	903
Ity CIL	235–255	249.5	*193.1	630–675	671	616
Group total	680–740	702.6	650.4	**845–895	**908	**818

Source: Endeavour Mining, Edison Investment Research. Note: *Ity production is Ity CIL and residual Ity heap leach operation combined in FY19; Ity AISC is CIL only; **Includes corporate general & administrative costs.

FY20 financial forecasts by quarter

On the basis of the above guidance and forecasts, Edison's financial and operational forecasts for Endeavour for FY20, by quarter, are as follows:

Exhibit 3: Endeavour Mining FY20 earnings forecasts, by quarter

(US\$000s unless otherwise indicated)	FY19 (underlying)	Q120e	Q220e	Q320e	Q420e	FY20e (current)	FY20 (previous)
Houndé production (koz)	223.3	50.0	52.7	58.5	73.1	234.4	210.3
Agbaou production (koz)	137.5	24.1	29.7	24.1	33.4	111.2	100.1
Karma production (koz)	96.5	27.8	27.8	24.0	27.8	107.6	116.5
Ity production (koz)	193.1	59.5	61.9	59.7	68.5	249.5	279.7
Total gold produced (koz)	650.4	161.4	172.0	166.3	202.8	702.6	706.6
Total gold sold (koz)	648.8	161.4	172.0	166.3	202.8	702.6	706.6
Gold price (US\$/oz)	1,367	1,566	1,479	1,479	1,479	*1,465	*1,537
Mine level cash costs (US\$/oz)	646	720	702	665	605	670	530
Mine level AISC (US\$/oz)	796	990	914	859	750	871	669
Revenue							
– Gold revenue	886,371	246,590	248,506	240,106	294,047	1,029,250	1,085,812
Cost of sales							
– Operating expenses	430,987	116,324	120,760	110,651	122,736	470,470	374,677
– Royalties	48,139	13,558	13,546	13,268	16,277	56,649	59,043
Gross profit	407,245	116,708	114,201	116,187	155,035	502,130	652,092
Depreciation	(197,219)	(51,245)	(53,410)	(51,454)	(55,054)	(211,163)	(200,189)
Expenses							
– Corporate costs	(20,620)	(5,957)	(5,957)	(5,957)	(7,943)	(25,814)	(25,814)
– Impairments	0	0	0	0	0	0	0
– Acquisition etc costs	(4,552)	0	0	0	0	0	0
– Share based compensation	(21,042)	(5,333)	(5,333)	(5,333)	(5,333)	(21,332)	(21,332)
– Exploration costs	(9,893)	(2,750)	(2,750)	(2,750)	(2,750)	(11,000)	(6,880)
Total expenses	(56,107)	(14,040)	(14,040)	(14,040)	(16,026)	(58,146)	(54,026)
Earnings from operations	153,919	51,423	46,751	50,694	83,955	232,822	397,877
Interest income	0	0	0	0	0	0	0
Interest expense	(43,066)	(11,656)	(11,656)	(11,656)	(11,656)	(46,625)	(45,834)
Net interest	(43,066)	(11,656)	(11,656)	(11,656)	(11,656)	(46,625)	(45,834)
Loss on financial instruments	(57,968)					0	0
Other expenses	(8,515)	0	0	0	0	0	0
Profit before tax	44,370	39,766	35,094	39,037	72,299	186,197	352,042
Current income tax	73,901	14,867	13,795	14,772	21,731	65,165	100,951
Deferred income tax	1,560	0	0	0	0	0	0
Total tax	75,461	14,867	13,795	14,772	21,731	65,165	100,951
Marginal tax rate (%)	170.1	37.4	39.3	37.8	30.1	35.0	28.7
Profit after tax	(31,091)	24,899	21,300	24,265	50,567	121,031	251,092
Net profit from discontinued ops.	(4,394)	0	0	0	0	0	0
Total net and comprehensive loss	(35,485)	24,899	21,300	24,265	50,567	121,031	251,092
Minority interest	22,558	6,765	6,278	6,718	9,942	29,703	46,029
Minority interest (%)	(63.6)	27.2	29.5	27.7	19.7	24.5	18.3
Profit attributable to shareholders	(58,043)	18,134	15,022	17,547	40,625	91,328	205,062
Basic EPS from continuing ops (US\$)	(0.489)	0.165	0.137	0.160	0.370	0.831	1.865
Diluted EPS from continuing ops (US\$)	(0.489)	0.159	0.131	0.153	0.355	0.799	1.810
Basic EPS (US\$)	(0.529)	0.165	0.137	0.160	0.370	0.831	1.865
Diluted EPS (US\$)	(0.529)	0.159	0.131	0.153	0.355	0.799	1.810
Norm. basic EPS from continuing ops (US\$)	0.081	0.165	0.137	0.160	0.370	0.831	1.865
Norm. diluted EPS from continuing ops (US\$)	0.081	0.159	0.131	0.153	0.355	0.799	1.810
Adj net earnings attributable (US\$000s)	73,654	22,018	18,783	21,403	44,910	107,114	222,484
Adj net EPS from continuing ops (US\$)	0.671	0.200	0.171	0.195	0.409	0.974	2.024

Source: Endeavour Mining, Edison Investment Research. Note: Company reported basis. *Includes adjustment for Karma stream.

We note that forecasting on a quarterly basis is prone to large variations between actual and forecast numbers (as demonstrated, not least, by the variances observed between Q419 actual figures and Q419 estimates in Exhibit 1, above). To this end, it is worth noting that the top end of

Endeavour's production guidance is 37.4koz gold (5.3%) above our forecast for the year, which is worth a material US\$52.3m in additional revenue to the company (net of royalties) and therefore has the ability to increase our estimate of Endeavour's FY20 profit before tax by 28.1% (all other things being equal). As such, the exhibit above should be regarded as indicative, rather than prescriptive, particularly with respect to individual quarters. Within that context a comparison between Edison's FY20 adjusted net EPS from continuing operations estimates and consensus estimates, by quarter, is as follows:

Exhibit 4: Edison adjusted net EPS from continuing operations estimates vs consensus, FY20, by quarter (US\$)

(US\$/share)	Q1	Q2	Q3	Q4	Sum Q1-Q4	FY20
Edison forecast*	0.200	0.171	0.195	0.409	0.974	0.974
Mean consensus forecast	0.320	0.310	0.430	0.450	1.510	1.520
High	0.500	0.530	0.660	0.630	2.320	1.860
Low	0.130	0.150	0.290	0.350	0.920	0.800

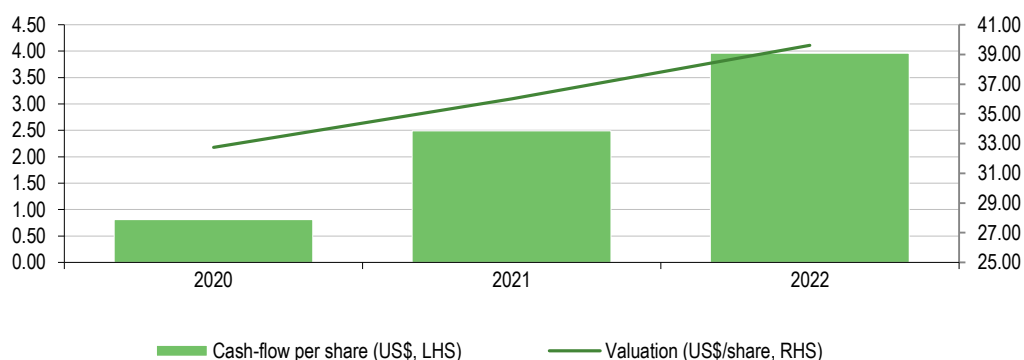
Source: Refinitiv, Edison Investment Research. Note: *As per Exhibit 3.

Absolute valuation

Endeavour is a multi-asset company that has shown a willingness and desire to trade assets to maintain production, reduce costs and maximise returns to shareholders (eg the sale of Youga in FY16, Nzema in FY17 and Tabakoto in FY18). Rather than our customary method of discounting maximum potential dividends over the life of operations back to FY20, therefore, we have opted to discount potential cash flows back over three years from FY20 and then to apply an ex-growth terminal multiple of 10x (consistent with using a standardised discount rate of 10%) to forecast cash flows in that year (ie FY22). In the normal course of events, exploration expenditure would be excluded from such a calculation on the basis that it is an investment. In the case of Endeavour, however, we have included it in our estimate of FY22 cash flows on the grounds that it may be a critical component of ongoing business performance in its ability to continually expand and extend the lives of the company's assets.

Compared with our last note, our estimate of Endeavour's cash flow in FY22 has reduced by a modest 5.7% to US\$3.96 per share (cf US\$4.20/share previously), which should be credible in the context of its having generated US\$1.10/share in cash flow from operations in Q419 alone. On this basis, our terminal valuation of the company at end-FY22 is US\$39.62/share (cf US\$41.99/share previously), which (in conjunction with forecast intervening cash flows) discounts back to a value of US\$32.74/share at the start of FY20 (cf US\$32.30/share at the start of FY19 previously).

Exhibit 5: Endeavour forecast valuation and cash flow per share, FY20–22e (US\$/share)



Source: Edison Investment Research

Relative valuation

Endeavour's valuation on a series of commonly used measures, relative to a selection of gold mining majors and international peers, is as follows:

Exhibit 6: Endeavour valuation relative to peers							
Company	Ticker	Price/cash flow (x)			EV/EBITDA (x)		
		Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
Endeavour (Edison)	EDV	4.2	3.8	3.2	4.8	3.5	2.9
Endeavour (consensus)	EDV	3.7	3.2	3.3	4.5	4.0	4.0
Majors							
Barrick	ABX	6.7	6.6	7.1	7.0	7.4	7.6
Newmont	NEM	8.6	8.2	8.3	7.6	7.3	7.7
Newcrest	NCM AU	8.0	6.7	7.1	6.4	6.1	6.3
Kinross	K	4.0	3.8	3.4	4.0	3.9	3.5
Agnico-Eagle	AEM	8.1	7.1	7.1	7.8	6.9	7.0
Eldorado	ELD	2.7	3.5	3.9	3.0	4.1	4.4
Average		6.3	6.0	6.1	6.0	6.0	6.1
International peers							
Alamos Gold	AGI	6.9	5.2	4.3	5.8	4.3	3.6
B2Gold	BTO	4.0	4.4	4.2	3.4	3.9	3.9
Centamin	CEY LN	8.5	5.9	6.2	3.8	2.7	2.9
Centerra Gold	CG	3.9	2.7	2.7	3.7	2.7	2.6
Iamgold	IMG	2.7	2.6	3.0	1.6	1.6	1.4
Kirkland Lake	KL	5.3	5.1	5.3	4.3	4.1	4.2
New Gold	NGD	1.6	1.4	1.3	3.6	3.3	3.1
Northern Star	NST AU	10.8	8.4	8.0	8.0	5.5	5.3
OceanaGold	OGC	2.9	1.9	1.7	3.4	2.2	2.0
Perseus Mining	PRU AU	4.6	4.0	2.6	3.9	3.4	2.1
Pretium Resources	PVG	5.4	5.3	4.5	7.0	6.6	6.2
Resolute Mining	RSG AU	2.8	2.5	2.6	3.6	3.3	3.2
Roxgold	ROXG	2.6	2.5	2.5	2.2	2.5	2.1
Semafo	SMF	1.9	1.7	2.0	2.1	1.6	1.9
SSR Mining	SSRM	5.5	4.7	4.4	3.8	3.1	3.5
Teranga Gold	TGZ	3.1	2.2	2.0	3.9	3.0	2.6
Yamana Gold	YRI	4.6	4.2	5.0	4.7	4.6	5.3
Average		4.5	3.8	3.7	4.0	3.4	3.3

Source: Edison Investment Research, Refinitiv. Note: Priced at 19 March 2020.

Of note is the fact that Endeavour's valuation is materially cheaper than the averages of the majors on 100% of measures, regardless of whether Edison or consensus forecasts are used. On an individual basis, it is cheaper than the majors on at least 83% (30 out of 36) of valuation measures. Relative to its peers, it is cheaper on at least 39% (40 out of 102) of valuation measures.

Financials

Endeavour had US\$535.9m in net debt on its balance sheet at end-Q419 (vs US\$615.1 at end-Q319, US\$653.2m at end-Q219, US\$615.3m at end-Q119 and US\$517.5m at end-Q418), after US\$40.2m in net capex during the quarter (vs US\$32.8m in Q319, US\$66.1m in Q219, US\$103.9m in Q119, US\$87.1m in Q418 and US\$110.8m in Q318). This level of net debt equates to a gearing (net debt/equity) ratio of 74.7% (vs 74.4% at end Q319, 76.5% at end Q219, 72.4% at end Q119, 60.3% at end-Q418 and 52.1% at end-Q318) and leverage (net debt/[net debt + equity]) ratio of 42.7% (vs 42.7% at end-Q319, 43.3% at end-Q219, 42.0% at end-Q119, 37.6% at end-Q418 and 34.3% at end-Q318). Note that US\$535.9m reconciles with Endeavour's Q419 balance sheet; it differs from the figure of US\$528.2m quoted in some of the company's other materials on account of the fact that the latter is calculated on the basis of the value of the minimum equipment finance

obligations discounted back to present value rather than being presented on an undiscounted basis.

With capital expenditure relating to the Ity CIL project now having been, to all intents and purposes, completed, Endeavour has no major capex commitments in the future until the development of either Kalana and/or Fetekro. In the new gold price environment, cash flows were strongly positive in Q419 and we expect them to remain strongly positive into the foreseeable future, such that we are forecasting that the company will have net debt of c US\$447.2m as at end-FY20, which will equate to a gearing ratio of 53.8% and a leverage ratio of 35.0%. Thereafter, net debt should decline rapidly such that we estimate the company will be net debt-free in mid-FY22 (cf late FY21 previously) notwithstanding any capex related to the Kalana project, at which point it will potentially be able to make dividend distributions to shareholders.

Risks and sensitivities

Gains/(losses) on financial instruments

During the year ended 31 December 2019, Endeavour put in place a gold revenue protection programme in order to maximise cash flow certainty during its debt reimbursement phase. Similar to the strategy it put in place during its recent construction phases, this comprises a deferred premium collar strategy using written (sold) call options and bought put options to (effectively) create a synthetic short position. The programme began on 1 July 2019 and will end on 30 June 2020 and covers a total of 360,000oz (approximately 50% of Endeavour's total estimated production over the period), with a floor price of US\$1,358/oz and a ceiling price of US\$1,500/oz. As at end-Q419, 210,000oz remain outstanding under the collar derivative liability, implying that call options over 150,000oz of gold were exercised by counterparties in Q3 and Q419.

Edison's short- to medium-term gold price forecasts are those set out in our recent report, [Portents of economic weakness: Gold – doves in the ascendant](#), published on 14 August 2019, expressed in both nominal and real terms, below:

Exhibit 7: Edison gold price forecasts* (US\$/oz)				
US\$/oz	2020e	2021e	2022e	2023e
Nominal gold price forecast (US\$/oz)	1,635	1,509	1,560	1,421
Real gold price forecast (US\$/oz)	1,572	1,395	1,387	1,350
Source: Edison Investment Research. Note: *See Portents of economic weakness: Gold – doves in the ascendant.				

At US\$1,479/oz at the time of writing, the gold price is currently 9.5% below Edison's price forecast for CY20. In common with Edison's stated practice, however, we use prevailing prices to generate our forecasts for the remainder of the current year (see Exhibit 3), followed by long-term forecasts thereafter (Exhibit 7).

While it is tempting to assume that a gold price above US\$1,500/oz will automatically result in losses on Endeavour's gold revenue protection programme, recent history would suggest that this is not a foregone conclusion. Exhibit 8, in particular, details Edison's estimates of the (losses)/gains incurred by the programme during the past two quarters within the context of the gold price movement during the quarters and the extent of potential (losses) in Q120 and Q220, assuming that all remaining ounces covered by the revenue protection programme are exercised in Q120 and Q220:

Exhibit 8: Gain/loss on gold revenue protection programme (US\$000s)

	Q220e	Q120e	Q419	Q319	Q219
Realised gain/(loss) on gold revenue protection strategy programme			(4,426)	(1,633)	
Unrealised gain/(loss) on gold price protection strategy			7,229	(6,505)	
Gain/(loss) on gold revenue protection programme			2,803	(8,138)	
Gold price at end of period (US\$/oz)	1,479	1,479	1,514	1,485	1,409
Gold price change during period (%)	0.0	-2.3	+2.0	+5.4	
Maximum gold price during period (US\$/oz)		1,683	1,517	1,546	
Gold price difference relative to US\$1,500/oz (US\$/oz)	-21	*183	*17	*46	
Estimated ounces in programme exercised (oz)	105,000	105,000	75,000	75,000	
Estimated potential realised loss (US\$000s)	0	(19,215)	(1,275)	(3,450)	

Source: Endeavour Mining, Edison Investment Research. Note: *Based on maximum gold price during period.

Self-evidently, the extent of actual losses realised depends on, among other things the timing and the exact price of gold when the contracts are exercised. Nevertheless, while the extent of the potential realised losses on the gold revenue protection programme in Q120 could not be considered trivial, it is worth noting that, historically, gains (or losses) on the gold revenue protection programme have not always been the largest constituent part of total gains (or losses) on financial instruments as in Q319, as a case in point, below:

Exhibit 9: Endeavour Q3 and Q4 gain/(loss) on financial instruments (US\$000s)

Item	Q419	Q319
Gain/(loss) on other financial instruments	(982)	(1,307)
Change in value of receivable relating to sales of Tabakoto and Nzema	35	(22,389)
Gain/(loss) on gold revenue protection programme	2,803	(8,138)
Unrealised gain/(loss) on convertible senior bond derivative	3,930	(14,168)
Gain/(loss) on foreign exchange	(3,592)	(3,526)
Total gain/(loss) on financial instruments*	2,194	(49,528)

Source: Endeavour Mining. Note: Totals may not add up owing to rounding; *As disclosed in Exhibit 1.

As a result of the inherent uncertainties surrounding gains (or losses) from financial instruments, they have been excluded from our forecasts in Exhibits 3 and 10. While the gold price protection strategy programme is a limited one therefore, investors should nevertheless be aware that the remaining contracts outstanding potentially represent a US\$19.215m (US\$0.175 gross of tax) risk to our FY20 earnings forecasts (albeit not our normalised or adjusted earnings forecasts).

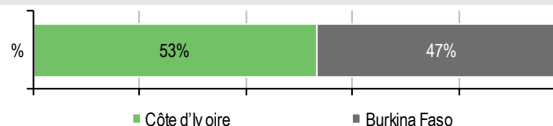
Exhibit 10: Financial summary

	US\$'000s	2016	2017	2018	2019	2020e	2021e	2022e
December		IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS								
Revenue		566,486	652,079	751,957	886,371	1,029,250	1,063,175	1,079,514
Cost of Sales		(376,794)	(597,528)	(487,119)	(662,613)	(585,265)	(486,391)	(477,512)
Gross Profit		189,692	54,551	264,838	223,758	443,985	576,784	602,002
EBITDA		213,916	201,166	264,838	355,690	443,985	576,784	602,002
Operating Profit (before amort. and except.)		127,981	70,379	95,769	158,471	232,822	359,180	530,627
Intangible Amortisation		0	0	0	0	0	0	0
Exceptionals		(36,272)	(149,942)	8,035	(189,900)	0	0	0
Other		(1,989)	(2,242)	(1,558)	(8,515)	0	0	0
Operating Profit		89,720	(81,805)	102,246	(39,944)	232,822	359,180	530,627
Net Interest		(24,593)	(18,789)	(23,671)	(43,066)	(46,625)	(44,715)	(17,331)
Profit Before Tax (norm)		101,399	49,348	70,540	106,890	186,197	314,464	513,296
Profit Before Tax (FRS 3)		65,127	(100,594)	78,575	(83,010)	186,197	314,464	513,296
Tax		(27,643)	(32,945)	(61,515)	(53,756)	(65,165)	(101,165)	(114,874)
Profit After Tax (norm)		73,756	16,403	9,025	53,134	121,031	213,299	398,422
Profit After Tax (FRS 3)		37,484	(133,539)	17,060	(136,766)	121,031	213,299	398,422
Net loss from discontinued operations				(154,795)	(4,394)	0	0	0
Minority interests				7,121	22,558	29,703	54,361	75,219
Net profit				(137,735)	(141,160)	121,031	213,299	398,422
Net attrib. to shareholders contg. businesses (norm)				(8,100)	30,576	91,328	158,938	323,203
Net attrib. to shareholders contg. businesses				(65)	(159,324)	91,328	158,938	323,203
Average Number of Shares Outstanding (m)		80.6	98.5	107.7	109.8	109.9	109.9	109.9
EPS - normalised (\$)		(0.38)	(0.06)	(0.08)	0.28	0.83	1.45	2.94
EPS - normalised and fully diluted (\$)		(0.38)	(0.06)	(0.08)	0.28	0.80	1.39	2.83
EPS - (IFRS) (\$)		(0.83)	(1.59)	(1.34)	(1.49)	0.83	1.45	2.94
Dividend per share (c)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Margin (%)		33.5	8.4	35.2	25.2	43.1	54.3	55.8
EBITDA Margin (%)		37.8	30.8	35.2	40.1	43.1	54.3	55.8
Operating Margin (before GW and except.) (%)		22.6	10.8	12.7	17.9	22.6	33.8	49.2
BALANCE SHEET								
Fixed Assets		1,073,562	1,331,745	1,594,202	1,476,753	1,509,681	1,385,528	1,349,646
Intangible Assets		29,978	6,267	4,186	5,498	5,498	5,498	5,498
Tangible Assets		1,039,529	1,317,952	1,543,842	1,410,274	1,443,202	1,319,049	1,283,167
Investments		4,055	7,526	46,174	60,981	60,981	60,981	60,981
Current Assets		283,536	361,766	327,841	396,038	546,174	862,887	1,302,902
Stocks		110,404	141,898	126,353	168,379	197,933	204,457	207,599
Debtors		36,572	95,212	74,757	37,770	69,582	105,926	107,269
Cash		124,294	122,702	124,022	189,889	278,660	552,504	988,034
Other		12,266	1,954	2,709	0	0	0	0
Current Liabilities		(149,626)	(241,185)	(248,420)	(268,015)	(308,715)	(266,645)	(272,356)
Creditors		(145,311)	(223,527)	(224,386)	(238,584)	(279,284)	(237,214)	(242,925)
Short term borrowings		(4,315)	(17,658)	(24,034)	(29,431)	(29,431)	(29,431)	(29,431)
Long Term Liabilities		(246,811)	(451,705)	(729,290)	(788,279)	(788,279)	(788,279)	(788,279)
Long term borrowings		(146,651)	(323,184)	(618,595)	(696,383)	(696,383)	(696,383)	(696,383)
Other long term liabilities		(100,160)	(128,521)	(110,695)	(91,896)	(91,896)	(91,896)	(91,896)
Net Assets		960,661	1,000,621	944,333	816,497	958,860	1,193,492	1,591,914
CASH FLOW								
Operating Cash Flow		164,522	244,092	274,938	367,882	444,652	513,177	603,227
Net Interest		(19,626)	(15,212)	(26,734)	(35,413)	(46,625)	(44,715)	(17,331)
Tax		(10,625)	(22,301)	(24,018)	(65,997)	(65,165)	(101,165)	(114,874)
Capex		(212,275)	(441,396)	(486,498)	(254,948)	(244,091)	(93,452)	(35,492)
Acquisitions/disposals		32,098	(37,332)	33,179	3,422	0	0	0
Financing		174,702	116,536	(6,231)	676	0	0	0
Dividends		(2,612)	(5,177)	(1,956)	(6,154)	0	0	0
Net Cash Flow		126,184	(160,790)	(237,320)	9,468	88,771	273,845	435,530
Opening net debt/(cash)		152,856	26,672	218,140	518,607	535,925	447,154	173,310
HP finance leases initiated		0	0	0	0	0	0	0
Other		0	(30,678)	(63,147)	(26,786)	0	0	0
Closing net debt/(cash)		26,672	218,140	518,607	535,925	447,154	173,310	(262,220)

Source: Company sources, Edison Investment Research. Note: EPS normalised from 2018 to reflect continuing business only. 2017 shown as originally reported (ie not restated). *Excludes restricted cash.

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Revenue by geography

Management team
President and CEO: Sébastien de Montessus

Previously, Mr de Montessus was group deputy CEO of France's nuclear parastatal, AREVA, CEO of AREVA Mining (uranium) and on the board of ERAMET from 2010–12. Before joining AREVA in 2002, he was an investment banker at Morgan Stanley in London (M&A and Equity Capital Markets) and is a graduate of the ESCP-Europe Business School in Paris. During Mr de Montessus's tenure as CEO of the La Mancha Group, the company doubled its production such that the Sawiris family was able to become the main shareholder in both Evolution Mining in Australia and also Endeavour Mining in Canada.

Executive VP and CFO: Louis Irvine

Mr Irvine is a qualified chartered accountant and was appointed CFO of Endeavour in July 2019, bringing with him more than 24 years of experience in the mining industry with extensive expertise in finance, accounting, treasury, strategy and business development. Prior to joining Endeavour, Mr Irvine held a number of executive finance roles at leading international mining companies including BHP Billiton, Xstrata and, more recently, Anglo American where he served as Executive head of strategy and business development for base metals for six years and, before that, as the CFO of its copper division.

Chairman: Michael E Beckett

Mr Beckett has more than 40 years of experience in the mining sector and he has been involved in the development of some of the world's largest gold mines in Africa and Papua New Guinea, some of the largest iron ore mines in West Australia and some of the world's largest platinum mines in South Africa as well as industrial minerals in Ukraine, Russia and Indonesia. As a former chair of Ashanti and a former managing director of Consolidated Gold Fields, he has extensive knowledge of mining in Africa. He is also a non-executive director of International Hotels Investment, Northam Platinum, Orica, Petroamerica Oil Corporation and The Egypt Trust.

COO: Mark Morcombe

Mr Morcombe holds a degree in mining engineering from the Western Australian School of Mines and joined Endeavour in May 2019, bringing with him more than 25 years of experience in the mining industry, specialising in safety, the environment, mine planning, cost and productivity initiatives. Prior to joining Endeavour, Mark was COO of Centamin and, before this, he held the same role at Acacia Mining. Between late 2010 and April 2016, he held several senior roles at AngloGold Ashanti, including senior vice president, planning & business development and senior vice president Ghana, during which he led the Obuasi gold mine turnaround project.

Principal shareholders

	(%)
La Mancha	30.02
BlackRock Inc	14.52
Van Eck Associates Corp	9.85
Federated Hermes Inc	4.57
Royal Bank of Canada	2.65
Investec PLC	2.63
Elliott Management Corp	2.59

Companies named in this report

African Barrick Gold, Acacia Mining, La Mancha, Evolution Mining, AREVA, ERAMET, Orange, Bull, Ashanti, Consolidated Gold Fields, Northam Platinum, Ampella, Ausenco, Barrick, Newmont, Newcrest, Kinross, Agnico-Eagle, Eldorado, Alamos, B2Gold, Centamin, Centerra Gold, Iamgold, Kirkland Lake, New Gold, Northern Star, OceanaGold, Perseus Mining, Pretium Resources, Resolute Mining, Roxgold, Semafo, SSR Mining, Teranga Gold, Yamana Gold.

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