# Gemfields Group

Dazzling

Initiation of coverage

Metals & mining

**Gemfields Group Limited (Gemfields) provides investors with exposure to major producing coloured gemstone mines at Montepuez Ruby Mining (MRM – rubies) and Kagem Mining (Kagem – emeralds) with additional value upside from the potential turnaround of Fabergé and its investments in Sedibelo Platinum Mines (Sedibelo – platinum group metals) and Jupiter Mines (Jupiter – manganese). Our sum-of-the-parts (SOTP) valuation of Gemfields totals ZAR5.01/share.**

| Year end | Revenue (US$m) | PBT* (US$m) | EPS* (US$) | DPS (US$) | P/E (x) | Yield (%) |
|---|---|---|---|---|---|---|
| 12/17 | 81.7 | 55.8 | 0.04 | 0.0 | 3.1 | N/A |
| 12/18 | 206.1 | (22.5) | (0.02) | 0.0 | N/A | N/A |
| 12/19e | 211.9 | 21.3 | 0.00 | 0.0 | N/A | N/A |
| 12/20e | 225.0 | 24.8 | 0.00 | 0.0 | N/A | N/A |

Note: *PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments.

## Profitable and cash flow-generative core assets

MRM and Kagem are producing, profitable, cash flow-generative core assets and Gemfields' 2018 results demonstrate the strength of the investment proposition. The group generated EBITDA of US$58.9m (a 29% EBITDA margin) and free cash flow before movements in working capital of US$26.9m, ending 2018 with net cash of US$9.8m and US$41.4m of auction receivables. For 2019, we forecast EBITDA of US$47.8m, growing to US$53.9m in 2020, which puts Gemfields on a forecast 2020 EV/EBITDA of 2.8x against peer group diamond producers on an average of 3.7x.

## Significant longer-term EBITDA growth potential

Beyond 2019, we expect strong revenue and EBITDA growth driven by production increases at both Kagem and MRM, which drives our 10-year sales CAGR of 7% – a level we believe can be supported with reference to historic growth rates and which the gemstone market should be able to accommodate. The group expects Fabergé to turn to profitability within two to three years. By 2023, we forecast Gemfields' revenue of US$293m and EBITDA of US$99m, with only minor additional capital expenditure required to achieve that growth profile.

## Valuation: SOTP valuation ZAR5.01/share

We have valued Gemfields' interest in Kagem, MRM and Fabergé on the basis of discounted cash flow (DCF) valuations at a 10% real cost of capital. We adjust for the value of the group's investment in Sedibelo (based on resource multiples) and Jupiter (at the current share price of A$0.34/share), corporate overheads (US$197m) and net cash (US$10m), which gives us a total valuation of US$466m (ZAR5.01/share). MRM is the biggest contributor to the SOTP value at US$366m (ZAR3.94/share). Kagem also contributes significant value of US$153m (ZAR1.65/share), despite the recent introduction of a 15% export tax on gemstones in Zambia (subject to ongoing negotiations). Fabergé contributes US$59m (ZAR0.64) to our SOTP valuation.

**8 April 2019**

| | |
|---|---|
| **Price** | **ZAR1.75** |
| **Market cap** | **ZAR2,300m** |
| | US$/ZAR14.2; US$/A$1.41 |
| Net cash (US$m) at 31 December 2018 | 9.8 |
| Shares in issue (excl treasury shares) | 1,314m |
| Free float | 56% |
| Code | JSE: GML |
| Primary exchange | JSE |
| Secondary exchange | BSX |

### Share price performance


| % | 1m | 3m | 12m |
|---|---|---|---|
| Abs | (10.0) | 2.9 | (34.6) |
| Rel (local) | (13.1) | (7.1) | (36.8) |
| 52-week high/low | | ZAR2.99 | ZAR1.55 |

### Business description

Gemfields Group (Gemfields) is a world-leading supplier of responsibly sourced coloured gemstones. Gemfields owns 75% of the Montepuez Ruby Mining in Mozambique, 75% of the Kagem emerald mine in Zambia and the Fabergé jewellery business as well as investments in Sedibelo Platinum and Jupiter Mines.

### Next events

| | |
|---|---|
| Next Kagem auction | May 2019 |

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***Gemfields Group is a research client of Edison Investment Research Limited***

# Investment summary

## Company description: A leading coloured gemstone supplier

Following the acquisition of Gemfields plc in 2017, Gemfields Group Limited (previously Pallinghurst) owns and operates the world's single largest producer of emeralds (Kagem, 75%) and one of the most significant recent global ruby discoveries, the MRM ruby mine (75%) as well as the Fabergé jewellery house. Gemfields also holds investments in Sedibelo (platinum group metals) and ASX-listed Jupiter Mines (manganese). We believe Gemfields' current JSE listing is causing this opportunity to be overlooked by global investors.

## Valuation: Sum of the parts of US$466m (ZAR5.01/share)

We value Gemfields based on DCF valuations of the group's share in MRM, Kagem and Fabergé with our valuations reflecting the long-term potential of these assets given their expected long-term growth. We add the value of the group's investments in Jupiter Mines (at the current share price of A$0.34/share) and Sedibelo (based on resource multiples), and adjust for overheads and net cash, giving a SOTP value of US$466m (ZAR5.01/share).

- **MRM DCF valuation of US$366m (ZAR3.94/share).** Growth in production of premium rubies from Mugloto drives an increase in our forecast MRM auction sales to US$250m in 2028e, implying a CAGR of 7% from 2018 levels (vs 13% sales CAGR from 2014 to 2018).
- **Kagem DCF valuation at US$153m (ZAR1.65/share).** We expect growth in Kagem's high-quality emerald production to see total auction sales grow to US$119m in 2028e (implying a 7% CAGR in line with the 7% achieved from 2010 to 2018). Our forecasts take into account the introduction from 2019 of a 15% export tax on precious metals and gemstones; if revoked, this could add a further US$74m (ZAR0.82/share) to our valuation.
- **Our valuation of Fabergé is US$59m (ZAR0.64/share).** We see Fabergé achieving profitability in 2022e driven by strong growth in wholesale sales as it focuses on new regions.
- The Jupiter and Sedibelo values total US$75m and cash a further US$10m, but we subtract from our SOTP the discounted value of future corporate overheads (US$27.5m a year initially).

## Financials: Solid set of producing assets support growth ahead

Gemfields' core assets at MRM and Kagem are already profitable and cash flow generative and we expect that to remain the case, with strong EBITDA growth in the longer term.

- **2018 saw group EBITDA of US$58.9m (EBITDA margin of 29%)**. Gemfields ended 2018 with US$10m in net cash, having generated US$46 in free cash flow after capex (including proceeds from the sale of shares in Jupiter).
- **Strong EBITDA growth longer term.** We forecast 2019 EBITDA of US$47.8m (affected by the introduction of a 15% export tax on gemstones in Zambia) but thereafter expect EBITDA to grow strongly to US$99m by 2023, driven by strong growth in premium emerald and ruby production and sales as well as management's expectation of profitability at Fabergé by 2022.

## Sensitivities: Political, fiscal and market risk are key

- **Coloured gemstone market risk.** We forecast 7% CAGR in auction sales to 2028e, and while all signs point to a growing coloured gemstone market able to absorb that supply, this remains a key risk. Market demand is likewise a key risk for Fabergé growth.
- **Country and fiscal risk.** Gemfields' key assets are located in Mozambique and Zambia, and are subject to the political, security and fiscal risks associated with these jurisdictions.

## A leading global producer of coloured gemstones

Gemfields' focus is firmly on the coloured gemstone business. Its assets and investments comprise:

- **75% of Kagem emerald mine (Zambia).** Kagem is the largest single emerald mine in the world. In 2018 the mine produced 34Mcts and generated US$60m of revenue compared to cash costs and royalties totalling US$42m.
- **75% of MRM (Mozambique).** Montepuez has rapidly expanded to become one of the world's most important ruby mines and in 2018 the mine saw record auction revenues total US$127m (but cash costs and royalties just US$49m). The second washplant at MRM should see a further step up in the volume of ore processed from this year.
- **100% of Fabergé jewellery house (global).** Fabergé is an iconic name with an exceptional heritage promoting the use of coloured gemstones in high-end jewellery. Although it is not profitable, wholesale sales growth should drive future profitability and a turnaround plan is in place**.**
- **6% of Sedibelo Platinum Mines (South Africa).** Sedibelo produces 150koz of platinum group metals a year, and following the recent increase in the rand basket price should be cash flow generative.
- **145.8m shares (7.4%) in ASX-listed Jupiter Mines (South Africa)**, owner of 49.9% of South Africa's largest manganese mine, producing 3.5Mtpa of manganese ore.

### History

Pallinghurst Resources (PRL) acquired a 75% share of the producing Kagem emerald mine in Zambia in late 2007 and in June 2008, AIM-listed Gemfields plc bought Kagem from PRL through a reverse takeover, which gave PRL 33% of Gemfields plc. The focus was to build sufficient inventory to enable a consistent supply of emeralds into the market and in mid-2009, sales of emeralds from Kagem through the new Gemfields plc auction platform commenced. Since then, Kagem has expanded to become the world's largest emerald mine, producing from two pits. In June 2011 Gemfields plc acquired 75% in ruby exploration rights covering approximately 34,000 hectares in Mozambique and established MRM. Bulk sampling began in 2012.

PRL listed on the JSE in August 2008 as an investment holding company targeting investments in businesses that hold mines, smelters, refineries and processing plants, with a preference for brown-fields opportunities. In most cases, PRL invested alongside a number of co-investors. By December 2009, PRL and its co-investors held seven investments in four platforms: Fabergé, Steel Feed (Tshipi manganese, Jupiter iron ore), Coloured Gemstones (through AIM-listed Gemfields plc) and Platinum Group Metals (a share in the Pilanesberg Platinum Mine, PPM, majority owned by then AIM/TSX-listed Platmin, Magazynskraal and Sedibelo). During 2010, PRL's investment in Tshipi was sold into Jupiter, consolidating the group's two steel materials investments, and construction of the Tshipi manganese mine began in 2011, reaching production of over 1Mt of manganese ore by 2013. In March 2011, PPM, Magazynskraal and Sedibelo were consolidated through a series of transactions allowing these contiguous orebodies to be optimally mined. Ramp up at PPM was slower than expected but by 2013 the mine had achieved production of 150koz of platinum group metals.

In January 2013, Gemfields plc acquired Fabergé from PRL and its co-investors for US$90m (in shares) giving PRL a 49.5% stake in Gemfields plc (and PRL and concert parties a combined 75.6%). Bulk sample production from MRM continued to increase and the first auction of MRM rubies in June 2014 generated US$33.5m in revenue.

Between 2015 and 2017, MRM premium ruby production continued to grow steadily but Kagem faced a more challenging time with premium emerald production falling by more than 50% from

2015 levels – in part as a result of geological variability but also in part believed to result from a fall in recoveries (since addressed by reverting to the recovery of emeralds manually in the pit before ore is sent to the wash plant and slowing down processing speeds in the plant). This coincided with a period during which the coloured gemstone market struggled with the impact of Indian demonetisation.

In May 2017, PRL launched an all-share nil-premium offer for the shares in Gemfields plc that it did not already own, valuing Gemfields plc at approximately £211.5m. The acquisition was completed in August 2017.

In April 2018, Jupiter relisted on the ASX, placing a total of 600m existing shares with new investors. Pallinghurst received A$83.1m from the sale of 212m Jupiter shares following which Pallinghurst continued to hold 145.85m shares in Jupiter (7.4% of Jupiter's current share capital). In June 2018 PRL changed its name to Gemfields Group Limited.

## The coloured gemstone market

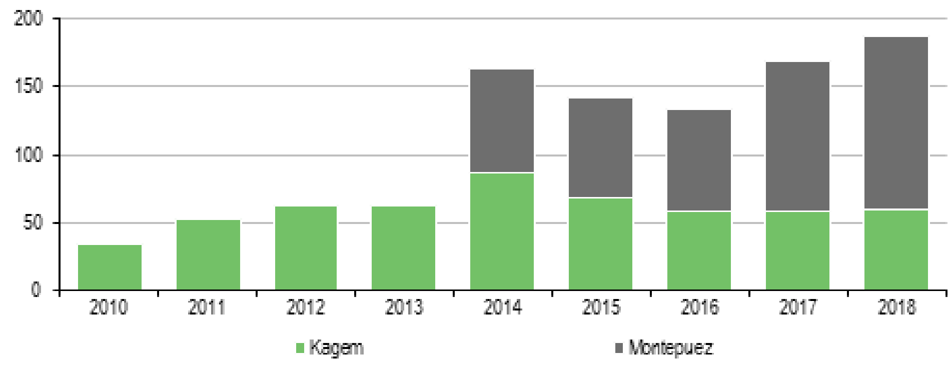
The coloured gemstone market is significantly smaller than the world diamond market. We estimate that some US$2–3bn of rough gemstones (excluding jade) are produced per annum compared to US$16bn of rough diamonds (De Beers, *Diamond Insight Report 2018*), testimony in part to the historical success of De Beers in marketing diamonds. One of the reasons the coloured gemstone market has struggled relative to diamonds is that production is dominated by artisanal miners (70–80% of global production), resulting in a fragmented market with few champions to promote coloured gemstones as luxury goods. Jewellery brands have also been historically reticent to design coloured gemstone ranges fearing the inconsistency of supply. However, perhaps contrary to public perception, data from Sotheby's and Christie's auctions show that per carat prices for emeralds and rubies can exceed white diamond prices.

Colombia, Brazil and Zambia are the primary producers of emeralds globally. Colombia has historically been the principal producer of fine-quality emeralds and still produces some 50% of the world's emeralds, but Zambia has become a more significant producer in recent years, with Zambian emeralds prized for their clarity and rich bluish-green colour, which means that Zambian emeralds require less treatment than emeralds from other sources. The US is the largest market for emeralds globally (around 40% of world demand) followed by China and Europe.

Mozambique is the largest producer of rubies globally, accounting for some 80% of production by volume, with MRM itself accounting for the bulk of that production. China is the largest market for rubies (around 50% of global demand) followed by the US and Europe.

Key to achieving value (ie stable and rising prices) from emerald and ruby sales is providing the market with a consistent supply of high-quality emeralds and rubies through regular auctions. In 2009, Gemfields developed a grading system for Kagem emeralds where emeralds and beryl are sorted against a reference set into 181 size, colour and clarity categories. This gives buyers more confidence in the quality and consistency of product. Kagem sells emeralds through one to two high-quality and one to two commercial-quality auctions each year (with beryl sold direct in India; less than 4% of revenue). A similar system has been implemented at MRM with a slight difference that at MRM all production is now sold at two mixed-quality auctions annually. Increasing production coupled with the success of the auction process has seen Gemfields' auction sales rise from US$34m in 2010 to US$188m in 2018, as shown in the chart below. Gemfields' 2018 auction revenue of US$188m gives it just under 10% of the world coloured gemstone market by value.

**Exhibit 1: Gemfields' auctions sales, US$m**




Source: Gemfields

As production from Kagem and MRM continues to grow, we forecast steady growth in Gemfields' auction sales, to reach US$253m by 2023e and US$369m in 2028e (a 7% CAGR). While firm data on the fragmented coloured gemstone market are limited, all available evidence including the trend in coloured gemstone prices at auctions points to increased demand and a strongly growing market (with some commentators seeing total market sales growth of >20% per annum). As such, we expect Gemfields to be able to achieve forecast levels of sales growth without an adverse market impact.

Fabergé aims to promote the use of coloured gemstones in jewellery, which forms an important pillar of Gemfields' marketing strategy. Gemfields also directly markets coloured gemstones through brand partnerships and advertising.

## Management

Gemfields' board and management team bring a combination of mining and finance experience.

- **CEO: Sean Gilbertson.** Sean Gilbertson is a mining engineer with experience of South Africa's deep-level gold and platinum mines. He worked as a project financier for Deutsche Bank in Frankfurt and London, specialising in independent power projects. In 1998, Mr Gilbertson co-founded globalCOAL, which played a central role in the commoditisation of the thermal coal industry. He also co-founded the Spectron eMetals trading platform for category I and II members of the London Metals Exchange.
- **Non-executive chairman: Brian Gilbertson.** Brian Gilbertson has extensive experience in the global natural resources industry. In his early career, he was managing director of Rustenburg Platinum Mines and then executive chairman of Gencor, with responsibility for Impala Platinum and Samancor. Important initiatives included the Hillside and Mozal aluminium projects and the purchase of Royal Dutch Shell's mining assets. In 1997, Gencor restructured its non-precious metals interests as Billiton and, with Mr Gilbertson as executive chairman, raised US$1.5bn in an initial public offering on the LSE. In late 2003, Mr Gilbertson led Vedanta Resources to the first primary listing of an Indian company on the LSE. He was chairman of Vedanta until July 2004. In 2004 he founded Incwala Resources, a pioneering Black Economic Empowerment group in South Africa. In 2004, Mr Gilbertson joined Sibirsko-Uralskaya Aluminum Company (SUAL), a Russian aluminium producer, and led it into the merger with RUSAL and Glencore's alumina assets. Mr Gilbertson is also the chairman of Jupiter.
- **Executive director and CFO: David Lovett.** David Lovett holds a bachelor of commerce focused on economics and marketing from Birmingham University's Business School. He worked for Grant Thornton in the UK across advisory and tax services, becoming a chartered

accountant with the ICAEW. Mr Lovett joined Gemfields' finance team in 2008, acting as a senior financial manager across a number of operating subsidiaries, including as CFO of Fabergé. Mr Lovett is a director of Gemfields and Fabergé.

- **Non-executive directors:** Dr Christo Wiese, Martin Tolcher, Lumkile Mondi, Carel Malan and Kwape Mmela.

## MRM – 75%

Since Gemfields began bulk sampling at MRM in 2012, the mine has rapidly developed into one of the leading producers of rubies globally. Gemfields owns 75% of MRM with the remaining 25% owned by local partner Mwiriti. MRM is located in Cabo Delgado province in north-eastern Mozambique, approximately 170km west of Pemba. The workforce totals approximately 1,100 people, of which approximately 450 are direct MRM employees and the remainder contractors.

### Geology, reserves and resources

Ruby and corundum mineralisation at MRM is found in two styles: namely, primary (amphibolitic rocks) and secondary (alluvial gravel beds). The most important reserves of rubies and corundum at MRM are the secondary deposits, although mining has also occurred from the primary mineralisation. Within the secondary gravels, the quality and quantity of rubies varies significantly. Rubies and corundum from the primary mineralisation are typically more fractured and included, and a lighter pink in colour than those found in the Mugloto secondary gravels.

SAMREC-compliant reserves at MRM total 21.6Mt of ore at an average grade of 9.2ct/t giving total contained rubies, corundum and sapphire of 197Mcts. However, within the reserve there are three distinct components that should be differentiated:

- Secondary mineralisation at Mugloto – totals 13.05Mt of ore at average gemstone grade of 3.04ct/t, giving 39.6Mcts total contained gemstones including 3.5Mcts of premium rubies.
- Primary mineralisation at Maninge Nice – totals 1.1Mt at average grade of 98ct/t giving 110Mcts contained gemstones but just 3kcts of contained premium rubies.
- Other secondary mineralisation (Glass and Maninge Secondary) – totals 7.4Mt containing 46.7Mcts of gemstones including 373kcts of premium rubies.

**Exhibit 2: MRM SAMREC-compliant resources and reserves**

| MRM resources | | kt | Premium ruby grade (ct/t) | Total gemstone grade (ct/t) | Contained (Mct) |
|---|---|---|---|---|---|
| Secondary | Indicated | 20435 | 0.20 | 4.2 | 86 |
| | Inferred | 39800 | 0.03 | 7.3 | 290 |
| Primary | Indicated | 1147 | 0.003 | 9.8 | 112.3 |
| | Inferred | 240 | 0.003 | 9.8 | 23.5 |
| **MRM reserves** | | **kt** | **Premium ruby grade (ct/t)** | **Total gemstone grade (ct/t)** | **Contained (Mct)** |
| Mugloto | Probable | 13,059 | 0.27 | 3.0 | 39.6 |
| Maninge Nice Primary | Probable | 1,131 | 0.003 | 97.9 | 110.7 |
| Maning Secondary | Probable | 526 | 0.013 | 56.6 | 29.8 |
| Glass Secondary | Probable | 6,914 | 0.05 | 2.5 | 16.9 |
| Total | Probable | 21,630 | 0.18 | 9.1 | 197.0 |

Source: SRK Competent Persons Report on MRM, November 2018

In addition to the SAMREC-compliant reserves and resources shown above, a total of 39.8Mt of potential additional resources have been identified where bulk sampling is required to verify grade. These additional resource areas could extend the MRM life of mine.

## Mining and processing

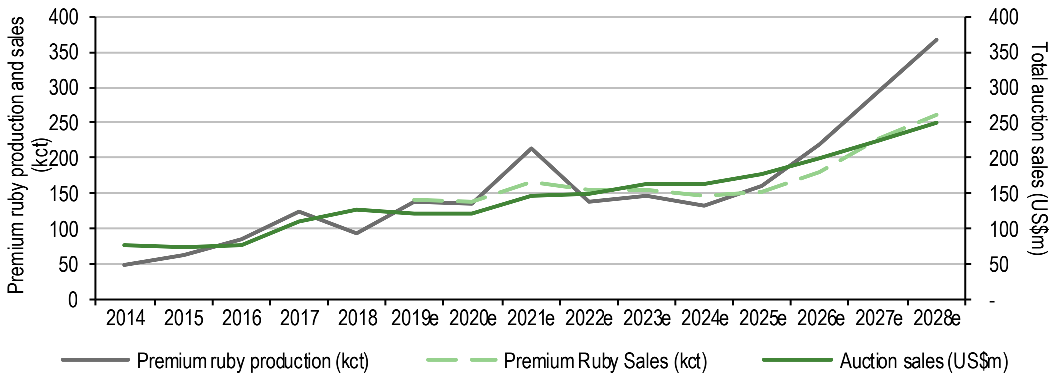
Rubies are mined at MRM from a series of shallow open pits: at Mugloto (five open pits mining secondary gravel beds), Glass (three open pits mining secondary gravels) and Maninge Nice (two open pits mining both primary and secondary mineralisation). Mining is a conventional open-pit gravel operation with excavators, loaders and trucks, and all material is free dig. Ore is stockpiled at the wash plant and then processed through a scrubber and dense medium separation plant (DMS), with the resulting gravity separation concentrate sorted in the recently commissioned, state-of-the-art recovery plant using automatic optical sorters in a hands-free, highly secure operating environment. Construction of a second washplant is underway, which should increase capacity to 1.5Mtpa. Final grading is done by hand.

## MRM production, costs and other key metrics

Over the life of mine at MRM we estimate that premium ruby sales will deliver 83% of total revenue despite making up just 2% of sales by volume, because premium rubies sell for c US$800/ct against other rubies at c $6/ct, and corundum and sapphire at less than US$0.10/ct. The key value driver for MRM (as for most gemstone mines) is thus the production and sales of premium rubies rather than total gemstones. Between 2016 and 2018 Gemfields made the decision to concentrate on production from the Mugloto gravels, which have a higher incidence of premium rubies but lower overall grade. This resulted in a sharp decrease in average gemstone grade from 29cpht in 2016 to just 4cpht in 2018 but an increase in the production of premium rubies from 83kct to 108kct. Our MRM production forecasts are based on SRK Consulting's CPR life of mine plan (excepting that we take a slightly more conservative view on the ramp-up of the new wash plant in 2019). This assumes only ore from Mugloto and Glass (secondary) is processed over the next three years with the grade averaging 2.35ct/t but premium rubies as a percent of total gemstone production ranging between 4.5% and 4.7%. Thereafter from 2022 through to 2026 the resumption of production from Maninge Nice adds a significant quantity of lower-value ruby and corundum but sees a decrease in the production of Mugloto premium rubies. The mine life (based on reserves) runs to 2033 with production sourced only from Mugloto in the latter years.

A key risk for MRM will be the market's ability to absorb the company's planned increase in premium ruby production over the next 10 years. We forecast an increase in total MRM auction sales to US$250m by 2028e from US$127m in 2018 (a CAGR of 7%, which we believe is a level that the ruby market can absorb without adverse price impact, noting that between 2014 and 2018 MRM auction sales grew at a 13% CAGR). As shown in the chart below, this sees our forecast premium ruby sales nevertheless fall short of production from 2025 with the inventory build unwound later in the mine life. Our forecasts assume a flat price of US$800/ct for premium rubies and US$6.25/ct for other auction rubies, in line with the SRK CPR, which is in turn based on the lower end of historical auction price ranges achieved in those categories as per management. The average price achieved overall varies considerably during the life of mine depending on the production and sales mix.

**Exhibit 3: Premium ruby production vs sales and total auction revenue**




Source: Gemfields, Edison Investment Research forecasts. Historical sales not published by ruby category.

Our cash cost forecasts are driven by the following assumptions (in line with the SRK CPR total costs per tonne, but adjusted for an assumed split between mining and processing costs):

- mining cost of US$2.0 per tonne of ore and waste mined,
- processing cost of US$8.5/t of ore processed, and
- on-mine administrative and overhead costs of US$5.75m per year.

We assume 1.0% real annual cost inflation on mining and processing costs to take into account cost pressures on wages (c 40% of mining and processing costs).

**Exhibit 4: MRM key metrics – historical and 10-year forecasts**

| | 2016 | 2017 | 2018 | 2019e | 2020e | 2021e | 2022e | 2023e | 2024e | 2025e | 2026e | 2027e | 2028e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ore treated - Mugloto (kt) | | | | 700 | 666 | 486 | 360 | 369 | 384 | 383 | 669 | 1,053 | 1,504 |
| Ore treated - other (kt) | | | | 600 | 838 | 1,013 | 1,140 | 1,131 | 1,120 | 1,117 | 830 | 447 | - |
| **Total ore treated (kt)** | **343** | **806** | **842** | **1,300** | **1,504** | **1,500** | **1,500** | **1,500** | **1,504** | **1,500** | **1,500** | **1,500** | **1,504** |
| Total waste mined (kt) | 2,950 | 3,956 | 3,874 | 4,993 | 5,007 | 4,993 | 4,993 | 4,993 | 5,007 | 4,993 | 4,993 | 4,993 | 5,007 |
| Strip ratio | 8.6 | 4.9 | 4.6 | 3.8 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 |
| Grade - Mugloto (ct/t) | | | | 2.8 | 2.1 | 4.0 | 3.2 | 3.5 | 2.9 | 3.5 | 3.3 | 3.2 | 3.0 |
| Grade - other (ct/t) | | | | 1.6 | 1.8 | 2.6 | 20.9 | 29.7 | 29.7 | 30.1 | 21.4 | 3.0 | 0.0 |
| Average grade (ct/t) | 28.9 | 6.2 | 3.4 | 2.2 | 1.9 | 3.0 | 16.6 | 23.2 | 22.9 | 23.3 | 13.3 | 3.1 | 3.0 |
| Production - Mugloto (kct) | | | | 1,925 | 1,423 | 1,957 | 1,145 | 1,295 | 1,110 | 1,322 | 2,180 | 3,327 | 4,585 |
| Production - other (kct) | | | | 956 | 1,489 | 2,584 | 23,823 | 33,570 | 33,289 | 33,632 | 17,773 | 1,344 | - |
| Production - total (kct) | 9,913 | 4,964 | 2,872 | 2,881 | 2,912 | 4,541 | 24,969 | 34,865 | 34,399 | 34,955 | 19,953 | 4,671 | 4,585 |
| **Premium ruby production (kct)** | **83** | **122** | **92** | **137** | **136** | **213** | **138** | **145** | **133** | **159** | **219** | **295** | **367** |
| Premium Ruby as % of total production | 0.8% | 2.5% | 3.2% | 4.7% | 4.7% | 4.7% | 0.6% | 0.4% | 0.4% | 0.5% | 1.1% | 6.3% | 8.0% |
| **Sales - premium ruby (kct)** | | | | **139** | **138** | **166** | **154** | **155** | **145** | **153** | **179** | **227** | **260** |
| Sales - other auction ruby (kct) | | | | 1,358 | 1,388 | 2,036 | 4,258 | 6,125 | 7,556 | 8,866 | 8,896 | 6,968 | 6,613 |
| Total auction sales (kct) | 2,610 | 1,510 | 1,246 | 1,497 | 1,526 | 2,202 | 4,413 | 6,280 | 7,700 | 9,019 | 9,076 | 7,196 | 6,874 |
| Price - premium ruby (US$/ct) | | | | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| Price - other auction sales (US$/ct) | | | | 6.25 | 6.25 | 6.25 | 6.25 | 6.25 | 6.25 | 6.25 | 6.25 | 6.25 | 6.25 |
| **Auction sales (US$m)** | **75** | **110** | **127** | **120** | **119** | **145** | **150** | **162** | **163** | **177** | **199** | **226** | **250** |
| Mining and processing cost (US$m) | | | | 24 | 26 | 26 | 27 | 27 | 27 | 27 | 28 | 28 | 28 |
| Administrative expeses (US$m) | | | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Cash operating costs (US$m) | 21 | 24 | 24 | 29 | 32 | 32 | 32 | 33 | 33 | 33 | 33 | 34 | 34 |
| Cash operating costs (US$/t processed) | 61.9 | 29.9 | 29.0 | 22.5 | 21.2 | 21.3 | 21.5 | 21.7 | 21.9 | 22.0 | 22.2 | 22.4 | 22.6 |
| Royalties (US$m) | 7 | 11 | 13 | 12 | 12 | 15 | 15 | 16 | 16 | 18 | 20 | 23 | 25 |
| Management and Auction Fees (US$m) | | | | 14 | 14 | 17 | 18 | 20 | 20 | 21 | 24 | 27 | 30 |
| Capex (US$m) | 11 | 17 | 14 | 20 | 18 | 8 | 12 | 14 | 20 | 8 | 12 | 12 | 17 |

Source: Gemfields, Edison Investment Research forecasts

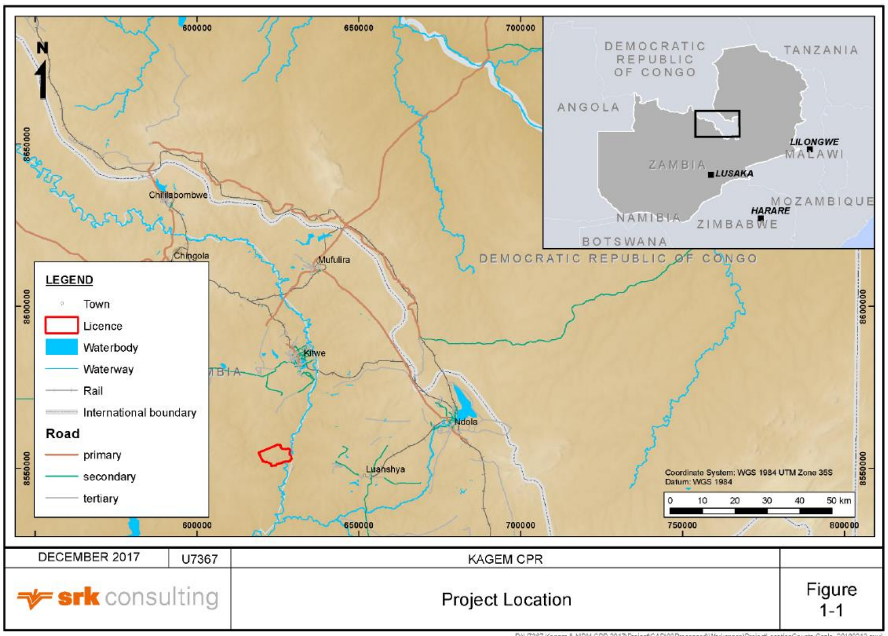
## Kagem (75%)

Kagem is the world's largest emerald mine, and accounts for just over a quarter of world production. Gemfields owns 75% of Kagem with the remaining 25% owned by the Industrial Development Corporation of Zambia.

Kagem is situated in the Ndola area in the Lufwanyama District, Copperbelt Province, Zambia, approximately 260km north of Lusaka and 31km south-southwest of the Copperbelt town of Kitwe. The 41 square kilometre licence area is located in the Ndola Rural Emerald Restricted Area. Two other operational commercial emerald mines are located nearby and Gemfields 100%-owned Mbuva-Chibolele licence adjoins Kagem.

Prior to being acquired by Pallinghurst, Kagem had been producing emeralds for nearly 30 years but was not performing well due to a combination of management issues, theft, shareholder conflicts and a lack of capital. Under Pallinghurst and then Gemfields, production at Kagem was increased due to fresh capital investment, a focus on professional management of all the activities of the mine, detailed plan for the life of the mine, and enhancing security by deployment of state-of-the-art CCTV systems.

**Exhibit 5: Location of Kagem**




Source: SRK Competent Person's Report on Kagem, March 2018

## Geology, reserves and resources

Mineralisation at Kagem presently comprises two main deposits: Chama and Fibolele. The bulk of current production is sourced from the Chama pit, but ore is also being sourced from the Fibolele pit.

Emerald mineralisation in the Kafubu area, including the Kagem deposits, belongs to a group referred to as 'schist hosted emeralds', relating to the interaction of beryllium-bearing fluids relating to pegmatoid dykes or granitic rocks, with chromium-rich mafic and ultramafic schists or weakly metamorphosed ultramafic rocks. The most historically significant and productive talc-magnetite schist (TMS) belt of the Ndola Rural Emerald Restricted Area is the Pirala Fwaya-Fwaya Belt, which extends roughly 8km east-north-east and includes both the Chama deposit and Gemfield Group's 100%-owned Chibolele deposit.

The defined emerald and beryl deposits at Kagem are hosted by the ultramafic TMS of the Muva Supergroup where they are intruded by steeply dipping discordant and locally concordant quartz-feldspar pegmatite (PEG) dykes and quartz-tourmaline veins with three main styles of mineralisation recognised:

- discordant reaction zone material adjacent to the PEG and quartz-tourmaline vein contacts;
- concordant reaction zone material along the footwall and rarely hanging wall contacts of the TMS; and
- discordant reaction zones hosted by brittle structures within the TMS unit distal to the PEG and quartz-tourmaline veins.

Kagem has a total of 3,498kt of SAMREC-compliant reserves at an average emerald and beryl grade of 250ct per tonne giving total emerald and beryl reserves of 873Mcts. The bulk of reserves are from the Chama pit where the grade averages 256ct per tonne emerald and beryl (75ct/t premium emerald and emerald only). The average strip ratio at the Chama pit within the SRK life of mine plan is 76:1 (a high strip ratio as only a small volume of high-value ore is processed). The average grade at Fibolele is 103ct/t Emerald and Beryl, far lower than at Chama but the strip ratio is also relatively lower (30:1 in part as stripping to uncover the ore included in reserves has already been undertaken).

**Exhibit 6: Kagem SAMREC resources and reserves**

| Kagem resources | kt | Premium emerald and emerald grade (ct/t) | Total beryl and emerald grade (ct/t) | Contained gemstones (Mct) |
|---|---|---|---|---|
| Measured | 700 | 83 | 283 | 198 |
| Indicated | 3840 | 87 | 297 | 1,140 |
| Inferred | 1620 | | 110 | 178 |
| Total Resources | 6160 | | 246 | 1,517 |
| **Kagem reserves** | **kt** | **Premium emerald and emerald grade (ct/t)** | **Total beryl and emerald grade (ct/t)** | **Contained gemstones (Mct)** |
| Proven | 749 | 73 | 249 | 187 |
| Probable | 2748 | 72 | 250 | 687 |
| Total Reserves | 3498 | 73 | 250 | 874 |
| Chama | 3354 | 75 | 256 | 859 |
| Fibolele | 144 | 22 | 103 | 15 |
| Total Reserves | 3498 | 73 | 250 | 873 |

Source: SRK Competent Person's Report on Kagem, March 2018

## Mining and processing

Kagem is an opencast mine producing from two main pits: Chama and Fibolele, with the bulk of production currently coming from the Chama pit. The Chama pit is 2.2km in strike length and is being mined to a depth of 140m.

The mining method comprises conventional open-pit operations: drill and blast, excavate and load and haul to in-pit backfill, waste rock dump locations and the various ex-pit stockpiles and a stockpile at the wash plant facility. However, unlike most opencast mines where all ore would report directly to the plant at Kagem when the TMS horizon has been reached in the pit, the visually identified high-grade zones are first chipped out manually and delivered directly to the sort house. Other selected reaction zone mineralised material is trucked to the wash plant.

At the wash plant rough stones are hand-picked from belts and delivered to the sort house. In the sort house, the rough stones (whether direct from the pit or from the wash plant) are tumbled and then chipped and cleaned manually, and sorted into 181 size and quality categories. The top 60 categories constitute Kagem's 'premium emerald' production, which contributes the bulk of revenue.

## Kagem production, costs and other key metrics

In 2015 as Kagem mined through a high-grade area of the Chama pit, production reached 34Mcts, and premium emerald production reached a high of 162kcts. However, in 2016 and 2017 production and particularly premium emerald production declined significantly. The company believes that the fall in production may in part have been as a result of a change in the mining methods whereby most reaction zone ore was sent directly to the wash plant rather than recovering emeralds manually in the pit. Subsequently the mine has returned to a system of manual recovery in the pit of visible emeralds from the high-grade zones, followed by processing of the remainder of the reaction zone ore through the wash plant (at slower speeds allowing for better recoveries).

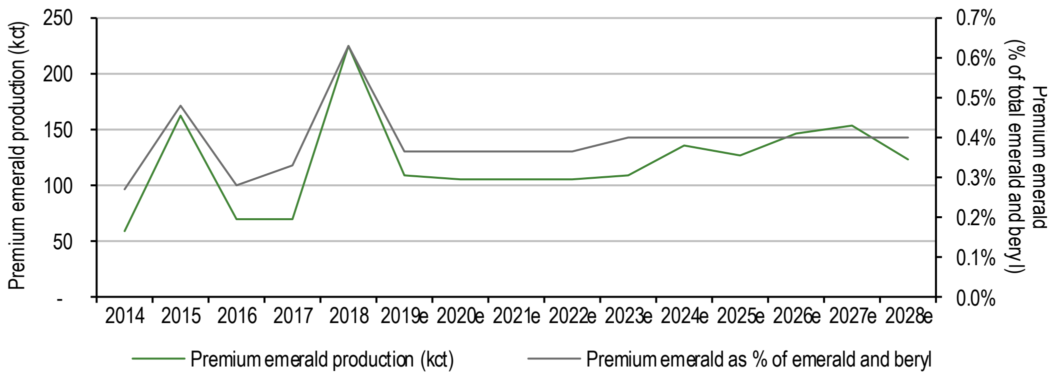
In forecasting future production, we have relied heavily on SRK's Competent Person's Report on Kagem (the SRK CPR) with the exception that we have made some minor adjustments to near-term forecasts to more closely align with the current status of activities on site. In particular we assume the mining and processing of Fibolele reserves early in the life of mine (as this is currently ongoing) whereas SRK assumed that Fibolele ore was mined towards the end of the life of mine. We forecast total emerald and beryl production averaging 28Mcts per annum for the next five years, rising to 34Mcts per annum for the following five years as the Chama pit mines through areas of higher grade. Thereafter production averages 33Mct a year until the end of the reserve life in 2044.

In addition to total emerald and beryl production, Kagem revenue is dependent on two key drivers:

- the proportion of premium emeralds recovered, and
- the proportion of emeralds that are sold at high-quality auction (determined in part by the quality of emeralds recovered and in part by the market).

Over the past five years the production of premium emeralds as a percentage of total emeralds and beryl production has varied between 0.3% and 0.7% with an average of 0.4% and we use this 0.4% assumption to determine forecast future premium emerald production (in line with the SRK CPR).

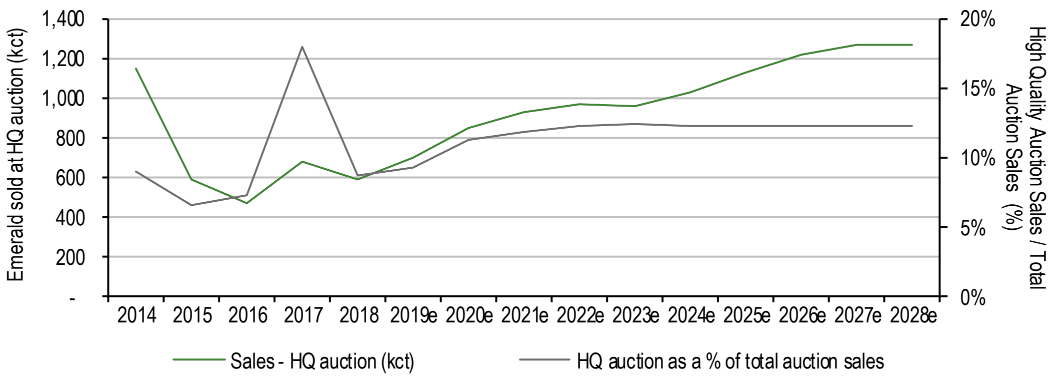
**Exhibit 7: Premium emerald production at Kagem (historical and forecast)**




Source: Gemfields, Edison Investment Research forecasts

In terms of future emerald prices achieved by Kagem, we assume that emeralds sold at high-quality (HQ) auctions achieve an average price of US$64.6/ct (in line with the average price achieved at HQ auctions over the past four years) and that emeralds sold at commercial-quality (CQ) auctions achieve an average price of US$4.19/ct (in line with the SRK CPR). Between 2014 and 2018, the proportion of HQ sales against total emeralds sold at auction averaged 9% (with 2017 anomalously high because only one CQ auction was held during the year). Management believes that there is scope to increase the proportion of emeralds being sold at HQ auction over time from the current 9% level to at least 12% in the medium term, and potentially beyond that in the longer term. Our forecasts assume an increase to 12% of auction sales to HQ auction by 2021. This gives us a blended average price for emerald and beryl of US$9.8/ct in 2019, increasing to US$11.4/ct by 2021. Kagem also generates US$2–3m a year from the sale of beryl direct to Indian manufacturers.

**Exhibit 8: Emeralds sold at HQ auction**




Source: Gemfields, Edison Investment Research forecasts

Our cash cost forecasts are driven by the following assumptions (in line with the SRK CPR total costs per tonne but adjusted for an assumed split between mining and processing costs):

- a mining cost of US$1.96 per tonne of ore and waste mined,
- a processing cost of US$77.6/t of ore processed, and
- on-mine administrative and overhead costs of US$3.06m per year.

We assume 1% real annual cost inflation on mining and processing costs to take into account local wage inflation (wages are 40% of costs). Our forecasts also take into account a 6% government royalty on sales (no longer tax deductible) and the 15% export tax on gemstones imposed since 1 January 2019. We note that the latter is the subject of ongoing negotiations between mining companies and the government. Any relaxation or revocation of this export tax would have a significant positive impact on Kagem's economics relative to our base case.

**Exhibit 9: Kagem key metrics – historical and 10-year forecasts**

| | 2016 | 2017 | 2018 | 2019e | 2020e | 2021e | 2022e | 2023e | 2024e | 2025e | 2026e | 2027e | 2028e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Production - Chama (kt) | | | | 150 | 135 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 |
| Production - other (kt) | | | | 24 | 30 | 30 | 30 | 30 | 0 | 0 | 0 | 0 | 0 |
| **Total ore production (kt)** | **127** | **145** | **174** | **165** | **160** | **159.9** | **159.9** | **129.8** | **130.0** | **129.8** | **129.8** | **129.8** | **129.0** |
| Total waste mined (kt) | 11,326 | 10,820 | 11,766 | 12,360 | 11,930 | 12,542 | 12,390 | 10,896 | 10,901 | 10,891 | 10,891 | 10,889 | 10,894 |
| Strip ratio | 89 | 75 | 68 | 75 | 75 | 78 | 77 | 84 | 84 | 84 | 84 | 84 | 84 |
| Grade - Chama (ct/t) | | | | 198 | 198 | 199 | 196 | 209 | 260 | 245 | 283 | 296 | 237 |
| Grade - other (ct/t) | | | | 103 | 103 | 103 | 103 | 103 | 103 | 103 | 103 | 103 | 103 |
| Average grade (ct/t) | 196 | 146 | 204 | 181 | 180 | 181 | 178 | 209 | 260 | 245 | 283 | 296 | 237 |
| Production - Chama (kct) | | | | 26,730 | 25,740 | 25,809 | 25,449 | 27,115 | 33,807 | 31,757 | 36,757 | 38,373 | 30,577 |
| Production - other (kct) | | | | 3,090 | 3,090 | 3,090 | 3,090 | - | - | - | - | - | - |
| Production - total (kct) | 24,981 | 21,107 | 35,576 | 29,820 | 28,830 | 28,899 | 28,539 | 27,115 | 33,807 | 31,757 | 36,757 | 38,373 | 30,577 |
| **Premium emerald produced (kct)** | **70** | **69** | **224** | **109** | **105** | **106** | **104** | **108** | **135** | **127** | **147** | **153** | **122** |
| Premium emerald as % of emerald and beryl | 0.3% | 0.3% | 0.6% | 0.4% | 0.4% | 0.4% | 0.4% | 0.4% | 0.4% | 0.4% | 0.4% | 0.4% | 0.4% |
| Sales - HQ auction (kct) | 470 | 680 | 590 | 700 | 853 | 933 | 969 | 960 | 1,031 | 1,124 | 1,224 | 1,264 | 1,264 |
| Sales - CQ Auction (kct) | 6,050 | 3,100 | 6,140 | 6,863 | 6,694 | 6,984 | 6,895 | 6,759 | 7,331 | 7,995 | 8,704 | 8,991 | 8,993 |
| Total auction sales (kct) | 6520 | 3780 | 6730 | 7563 | 7547 | 7917 | 7864 | 7718 | 8362 | 9118 | 9927 | 10255 | 10257 |
| HQ auction as a % of total auction sales | 7% | 18% | 9% | 9% | 11% | 12% | 12% | 12% | 12% | 12% | 12% | 12% | 12% |
| Price - HQ Auction (US$/ct) | 70 | 64 | 66 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 |
| Price - CQ Auction (US$/ct) | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Average price - emeralds sold (US$/ct) | 8.9 | 15.4 | 9.0 | 9.8 | 11.0 | 11.3 | 11.6 | 11.7 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 |
| **Auction sales (US$m)** | **58** | **58** | **60** | **74** | **83** | **90** | **92** | **90** | **97** | **106** | **116** | **119** | **119** |
| Cash operating costs (US$m) | 29 | 33 | 38 | 40 | 40 | 41 | 41 | 36 | 36 | 37 | 37 | 37 | 38 |
| Cash operating cost per carat (US$/ct) | 1.18 | 1.58 | 1.05 | 1.35 | 1.37 | 1.42 | 1.44 | 1.33 | 1.08 | 1.15 | 1.01 | 0.97 | 1.23 |
| Royalties (US$m) | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 |
| Export Levy (US$m) | - | - | - | 12 | 13 | 14 | 14 | 14 | 15 | 16 | 18 | 19 | 18 |
| Management and Auction Fees | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Capex (US$m) | 4 | 3 | 8 | 5 | 5 | 12 | 11 | 7 | 8 | 10 | 6 | 9 | 11 |

Source: Gemfields, Edison Investment Research

## Mbuva-Chibolele (100% Gemfields)

Gemfields' 100% owned Mbuva-Chibolele licence lies adjacent to Kagem. The deposit was mined by Gemfields until 2007 but following the acquisition of Kagem was placed on care and maintenance, and efforts focused on the expansion and optimisation of Kagem. In late 2017 bulk sampling operations were resumed at Mbuva-Chibolele with ore being processed through the Kagem wash plant. No sales have taken place from Chibolele since production resumed and all emeralds recovered are currently being held in stock. No compliant resource or reserve for Chibolele has been announced, although we understand that a resource estimation does exist internally.

Subject to approval from the Zambian government, there may be potential for Mbuva-Chibolele to be integrated into Kagem, providing an additional source of ore for the Kagem operations. Our forecasts currently exclude any production from Chibolele, and any such production could provide further upside to our base case forecasts and valuation.

# Fabergé

Fabergé's mission is to boost the global appeal and sales of precious coloured gemstones (rubies, emeralds and sapphires) through product development, marketing and expanding distribution. Gemfields' relationship with Fabergé began in 2007 when Pallinghurst acquired the trademarks, licences and rights relating to the Fabergé name. The vision was to re-establish Fabergé as one of the world's most exclusive and valuable names in luxury goods. The key steps to achieve this were taking back control of the brand by rationalising and exiting licences; the introduction of new contemporary masterpieces; and increasing distribution. The company established the Fabergé Heritage Council, which included members of the Fabergé family, in order to provide guidance on strategy and design of the new pieces, and a team of luxury specialists was recruited to implement the vision. In September 2009, Fabergé's first high jewellery collection since 1917 was launched. Since then, new product development has accelerated with regular launches of new collections, including modern-day interpretations inspired by the Imperial Easter Eggs, and Fabergé entered the timepiece market in 2011.

## Current business description

Distribution is via mono-brand boutiques (including a concession in Harrods, London), wholesale partners, the website www.Fabergé.com and direct relationships with clients. Following the expiry of the lease of the boutique in Mayfair, London, there is just one directly operated mono-brand boutique in Houston. In addition, there are two partner-operated mono-brand boutiques in Kiev and Dubai. At the end of December 2018, there were 65 wholesale locations such that across all physical locations, Fabergé has a presence in 28 countries. In 2018, the revenue split for the company was 50:50 between wholesale and what we refer to as 'direct' sales, ie retail, the website and direct customer relationships. It is difficult to accurately provide a geographic revenue split for the whole company given the presence of website and CRM sales, but within wholesale the split is roughly Middle East 50%, Europe 25%, Asia 15% and US 10%. In retail the split is roughly UK 50%, and the Middle East and US are roughly of similar size.

The majority of jewellery products sold have recommended retail prices (RRPs) between US$1,000 and US$25,000, with a blended average RRP per piece of around US$8,000. Fabergé entered the timepiece market in 2011, and these represented just over 10% of revenue in 2018. The long-term aspiration is for timepieces to represent 50% of revenue. Timepieces typically have a higher average RRP, starting at c US$17,000. In addition to the sale of the products in the collections, Fabergé offers bespoke pieces where prices can be significantly higher, ie greater than US$1m.

## Sourcing

Fabergé's products are manufactured by external workshops under multi-year (unspecified time limits) agreements. The individual workshops specialise in working with particular materials, eg enamel in Germany, gold in Italy and gem setting in Thailand. Fabergé negotiates a fixed price per unit upfront with the workshop, which will last for as long as possible so all of the short- and medium-term commodity price and currency risk is assumed by the workshop. Gemstones are not sourced directly from the parent company – Kagem and MRM sell rough emerald and beryl production at auction and neither Gemfields nor Fabergé is involved in the cutting and polishing of gemstones.

## Outlook and forecasts

With Fabergé having operated at a continuous operating loss, the management of Gemfields has set Fabergé the target of generating an operating profit and to be self-funding within the current five-year business plan. The management of Fabergé is targeting an operating profit in 2022. The ambition with respect to profitability thereafter is unquantified.

The medium-term move to break-even is expected from a combination of revenue growth and follows 12–18 months of cost cutting, during which SG&A and expenses fell by c 30% in 2018.

In our forecasts we focus on two revenue streams: 'direct', which includes those revenue streams directly controlled by the company (retail, CRM and the website) and wholesale. In general, the average price per piece is assumed to be constant.

In direct sales, there are no current plans to increase the number of retail outlets, therefore medium-term growth is expected from volume and mix. In 2019, retail will benefit from a full-year of the Dubai Mall and more appropriate space allocation in Harrods following refurbishment, but will suffer from the closure of the Mayfair boutique and no repeat of a significant one-off sale in Houston. As the company has looked to exploit the brand more fully, its own CRM sales, including bespoke pieces, have grown strongly, 30%+ in 2018, such that they already represent just under 15% of group revenue. These are expected to continue to grow strongly as they are a natural by-product of growth elsewhere in the business. The website www.Fabergé.com is at the very early stages of exploitation and management. The appointment of a dedicated website manager and greater focus on the content management is expected to drive strong growth.

The greatest contributor to revenue growth will be wholesale, due to expansion of the wholesaler base in most geographic regions. The company plans to add 15–30 new wholesale outlets per year such that it will expand from 65 locations in 2018 to c 300 by 2028. The focus on wholesale expansion versus directly operated stores differs to other luxury jewellers. In return for a lower capital cost of expansion, the company accepts lower gross margins and marketing costs. In addition to greater geographic exposure, management is confident of increasing average order size per store given the markets into which the company is expanding and with the maturing of relationships.

At the gross margin level, the relative growth rates of the different revenue streams will have an impact. CRM and website sales have a greater gross margin than retail, but wholesale has a lower gross margin. In addition, the non-recurrence of large one-off sales with low gross margin in FY18 will help and a general increase in volume should help over the long term.

We forecast SG&A expenses to increase by 10% in FY19 as advertising increases, and then to revert to more normalised growth of 5-6% thereafter. Per management, there is some flexibility in the cost base such that the target to achieve an operating profit in FY22 is achievable with lower revenue growth.

In aggregate, these assumptions produce revenue growth of c 10% in FY19 and c 30% in FY20 and result in EBITDA losses of US$4.3m in 2019e and US$2.5m in 2020e.

Below we highlight our forecast key metrics for Fabergé. Beyond 2024, we assume the growth rate for retail, CRM and website sales and revenue per wholesale location grow at 5–6% per annum. The incremental driver to revenue growth is the number of wholesale locations. Gross margins are held stable for each revenue stream and SG&A expenses at 5–6% per annum. The resulting EBITDA margin is similar to those reported by peers, as discussed in the valuation section of this report. Discounting the free cash flows from Fabergé at a 10% discount rate gives us a valuation of US$59m for Fabergé. Our DCF valuation of the Fabergé business does not take into account US$10.4m in inventory of ultra-fine jewellery pieces, which we have not included in our cash flows as the timing of potential sale is unknown. Sale of this inventory could add to valuation accordingly.

**Exhibit 10: Fabergé forecast key metrics and DCF valuation**

| US$m | | 2019e | 2020e | 2021e | 2022e | 2023e | 2024e | 2025e | 2026e | 2027e | 2028e | 2029e | 2030e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Revenue | | 14.9 | 19.4 | 24.4 | 30.0 | 36.7 | 42.6 | 47.2 | 52.9 | 59.0 | 64.2 | 69.7 | 75.7 |
| Growth y-o-y % | | | 30% | 26% | 23% | 22% | 16% | 11% | 12% | 11% | 9% | 9% | 9% |
| COGS | | -8 | -10 | -13 | -16 | -19 | -22 | -25 | -28 | -31 | -34 | -37 | -40 |
| SG&A | | -10.9 | -11.5 | -12.1 | -12.7 | -13.3 | -14.1 | -14.9 | -15.8 | -16.8 | -17.8 | -18.9 | -20.0 |
| Growth y-o-y % | | | 5% | 5% | 5% | 5% | 6% | 6% | 6% | 6% | 6% | 6% | 6% |
| **EBITDA** | | **-4.3** | **-2.5** | **-0.7** | **1.4** | **4.1** | **6.0** | **7.3** | **9.0** | **10.8** | **12.2** | **13.7** | **15.3** |
| Margin | | -28.5% | -13.1% | -2.8% | 4.7% | 11.2% | 14.1% | 15.4% | 17.0% | 18.3% | 19.0% | 19.6% | 20.2% |
| Tax | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.6 | -1.9 | -2.2 | -2.5 | -2.8 |
| Working capital | | 1.5 | -1.8 | -1.9 | -2.0 | -2.2 | -2.2 | -2.1 | -2.3 | -2.4 | -2.4 | -2.5 | -2.7 |
| Capex | | -0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| **FCF** | | **-3.0** | **-4.3** | **-2.6** | **-0.6** | **1.9** | **3.8** | **5.2** | **5.1** | **6.4** | **7.6** | **8.7** | **9.9** |
| Discount rate | 10.0% | | | | | | | | | | | | |
| Terminal growth rate | 3.0% | | | | | | | | | | | | |

Source: Edison Investment Research forecasts

## Other group assets

In addition to its core coloured gemstone business, Gemfields retains an interest in Jupiter, Sedibelo Platinum and other more minor non-core assets. While Jupiter and Sedibelo are not core to the group's current coloured gemstone focussed strategy, they remain important value contributors. Gemfields is seeking to realise value from both investments within the next 18 months. With the rand basket price for platinum group metals prices having increased significantly in recent months, Sedibelo should now be cash flow generative.

### Sedibelo Platinum (6.54%)

Following a series of transactions in 2011, the group's platinum interests were consolidated into a 6.54% interest in Sedibelo Platinum (previously Platmin), which owns the Pilanesberg Platinum Mine and contiguous Magazynskraal and Sedibelo deposits. Pilanesberg Platinum Mine comprises an operating open pit, a second open pit under development and a concentration plant, and concentrate is sent to Northam Platinum for smelting and refining. In the nine months to September 2018, Sedibelo produced 113koz of 4E platinum group metals. In the quarter to September 2018, Sedibelo generated revenue of US$45m and underlying EBITDA of US$0.3m. The rand basket price for South African PGM producers is currently 25% above Q318 levels and as such, assuming constant production levels of around 150koz per annum, we estimate that at current spot prices Pilanesberg Platinum Mines could be generating close to US$50m per annum in EBITDA and free cash flow of over US$30m. Sedibelo's SAMREC-compliant measured and indicated resources total 32.2Moz of 4E platinum group metals with a further 62.8Moz in inferred resources.

### Jupiter (7.4%)

Having reduced its stake in Jupiter in the April 2018 IPO, Gemfields now owns a remaining 7.4% stake in this ASX-listed company (145.8m shares). Jupiter owns 49.9% of the Tshipi-Borwa manganese mine in South Africa, which is currently the largest single manganese mine in South Africa and one of the five largest exporters globally. In the year ended February 2019, Tshipi-Borwa sold 3.5Mt of Manganese ore, generating revenue of US$872m and EBITDA of US$582m.– a 67% EBITDA margin. Jupiter also owns two iron ore projects in Australia. Gemfields intends to exit its stake in Jupiter within 18 months (the shares are subject to a lock-up until end October 2019).

### Kariba (50%)

Gemfields has agreed to sell its 50% stake in the Kariba amethyst mine in Zambia to ZCCM Investments Holdings for US$2.5m. The transaction is expected to close shortly.

## Ethiopian emerald exploration licences (75%)

Gemfields owns 75% of Web Gemstone Mining (WGM), a company that holds a 149km$^2$ emerald exploration licence in southern Ethiopia. Exploration activity began in June 2015 in an area to the north of the licence, called the Dogogo Block and results were promising. However, on 29 June 2018, a protest organised by local youth groups at the Dogogo South bulk sampling block escalated into a violent mob that attacked company staff and assets and completely overran the operations area, offices and campsites, resulting in the complete evacuation of the project area. Two of WGM's employees sustained minor injuries. On 31 July 2018, an armed mob attacked and breached the sort house and strong room, and looted all emerald stock stored within. The mob subsequently ransacked the campsites, offices and operations areas, destroying or looting all equipment and property that remained on site. Gemfields continues to engage with the authorities and local communities to find a way forward for this project.

# Sensitivities

Key risks for Gemfields are coloured gemstone and coloured gemstone jewellery market risk, political and fiscal risk in Ethiopia, Mozambique and Zambia (particularly in relation to the proposed introduction of a 15% tax on the export of precious metals and gemstones) and theft-related risks.

## Coloured gemstone market risk

The gemstone supply chain is fragmented and characterised by the presence of many small businesses and agents. Gemfields generates almost all of its revenue from Kagem and MRM through auctions held up to four times a year for Kagem (two high-quality and two commercial-quality auctions) and just twice a year for MRM (mixed quality). So in addition to the risk of fluctuations in demand for the end product (ie emerald and ruby jewellery), Gemfields is also exposed to the potential for problems and disruptions in the supply chain. This was evident in the aftermath of the 2016 Indian demonetisation, which had an impact on the financial liquidity of the mid-steam coloured gemstone value chain, which had tended to be characterised by a number of smaller producers operating on a cash basis. The risk for Gemfields is not only that the price of rubies and emeralds may fluctuate, but that if Gemfields' reserve prices at auction are not met then Kagem and MRM revenues may fall far short of expectations. As production grows there may be a need to restrict sales to limit any adverse impact on prices.

## Mozambique country risk and licence to operate

Following its emergence from civil war in 1992, Mozambique has rebuilt itself as a multi-party democracy with strong economic growth. Some tensions remain in the Zambezia, Sofala, Manica and Tete provinces, mainly between RENAMO's residual armed forces and state security forces, and there were sporadic attacks in these provinces for much of 2016. However, a truce was declared on 27 December 2016. Mozambique remains one of the poorest countries in the world with a population of 27 million, but GDP per capita of just US$1,200 in 2017 (source: CIA World Factbook). Corruption also remains a problem with Mozambique ranked 158th of 180 countries worldwide in Transparency International's Corruption Perception Index 2018.

Mozambique has a well-established and growing resources sector with a number of existing mining operations including Vale (coal), Syrah Resources (graphite) and Kenmare (mineral sands) in addition to MRM. The discovery of natural gas in 2011 has also seen companies including ExxonMobil, ENI and Anadarko become active in Mozambique. The current mining law dates from 2004 when it was updated with input from international best practice.

The largest social risk currently facing MRM will be the implementation of the resettlement programme in two years' time, requiring the resettlement of the 105 families in Nthoro village. A Resettlement Action Plan has been approved for this.

## Zambian country risk

Zambia has an active mining sector, which began in earnest with the development of its copper industry in the 1930s. However, nationalisation of the mines in the late 1960s saw copper production decline sharply and in 1996 the process of privatisation of the state's mining assets began. There followed a period of significant growth in the sector as the state encouraged new investment. However, in recent years the mining investment climate in Zambia has deteriorated as changes in the royalty and tax regimes have worried the investment community. Since 2014 Zambia's rank on the Fraser Institute's Investment Attractiveness Index has declined from 25th (of 122 jurisdictions) to 45th (of 83). In September 2018, Zambian Finance Minister Margaret Mwanakatwe announced a series of proposed changes to mining taxes (the 10th such tax change in 16 years), including an increase in all copper royalties as well as the introduction of a 15% export tax on precious metals and gemstones on 1 January 2019, and the replacement of VAT with GST on 1 July 2019. The mining sector continues to strongly oppose the changes.

Zambia has been a multi-party democracy since 1991, however recent elections have been characterised by allegations of irregularities and violence, and the breakdown of the recent national dialogue process to address these concerns does not bode well for a smooth result in 2021.

## Theft and artisanal mining

In diamond and gemstone mining theft is a key issue given the extent to which a significant proportion of the mine's production by value can be represented by just a handful of top-quality gemstones. The nature of the operations at Kagem and MRM are such that staff do come into direct contact with the emeralds and rubies, particularly at Kagem where a large proportion of its production is recovered by hand in the pit. Gemfields is well aware of the importance of security to the extent that almost 20% of the workforce at Kagem are security personnel.

In addition to the risk of internal collusion, there is a risk of theft by artisanal miners, particularly at MRM where the size of the licence area means that it cannot practicably be fenced off. Artisanal miners also present additional risks including significant and unmitigated environmental impact, social issues, criminality associated with gangs or syndicates, and the threat of violence against Gemfields' staff.

In January 2019 Gemfields settled for £5.8m, on a no-admission-of-liability basis, claims brought by English law firm Leigh Day on behalf of individuals living in the vicinity of MRM. The claims alleged the mistreatment of artisanal miners and the seizure of land without due process. In its voluntary statement dated 12 February 2018, Gemfields recognised that, in the past, instances of violence (typically requiring the involvement of Mozambican police and state forces) have occurred on and around the MRM licence area, both before and after Gemfields' arrival in MRM.

## Fabergé

Since Gemfields acquired the Fabergé brand in 2007, Fabergé has been loss making and has required additional funding from the group. In 2018 Fabergé made an operating loss of US$6m. The trend in sales has been positive, and we believe this business is well positioned to continue to grow sales across multiple channels, but there nevertheless remains a risk that in adverse luxury goods market conditions Fabergé may struggle to achieve its growth targets.

## Jupiter and Sedibelo are not controlled by Gemfields

Gemfields' investments in Jupiter and Sedibelo are minority stakes and Gemfields thus does not control the operations or strategic decisions of these entities. This may compromise the group's ability to realise full value from these investments.

# Valuation

We value Gemfields at US$466m (ZAR5.01/share) based on a SOTP of the group's assets and investments. Upside relative to the current Gemfields share price is also supported by an EV/EBITDA multiple approach, which sees Gemfields trading on 2020e EV/EBITDA of 3.0x against an average for listed diamond mining peers of 3.7x.

## A SOTP approach to valuation of Gemfields

Gemfields consists of a number of distinct parts, supporting a SOTP approach to valuation. We have valued Kagem and MRM on the basis of asset-level DCF analysis, and then added the value of Fabergé, Sedibelo and Jupiter, as well as the group's closing 2018 net cash balance but adjusted for corporate overheads.

- **Kagem (75%).** We value Kagem on the basis of a DCF analysis of Gemfields' share of Kagem's future cash flows based on its full reserve life of mine at a 10% discount rate. Our cash flow forecasts take into account royalties, corporate income tax (at 30%) and the 15% export tax on gemstones imposed from 1 January 2019, although we note that this is currently under negotiation with the government.
- **MRM (75%).** We also value Gemfields' 75% share in MRM using a DCF analysis at a 10% discount rate over the reserve life of mine, based on the forecasts described earlier in this report. Cash flows are calculated after royalties, corporate income tax (at 32%) and withholding tax on dividends (at 8%).
- **Fabergé.** Our DCF valuation of Fabergé (at a 10% discount rate) is US$59m. Peer group sales multiples would suggest a valuation in the range of US$31–50m (see page 22).
- **Jupiter Mines shares.** We value Gemfields' 145.8m shares in ASX-listed Jupiter Mines at the current share price of A$0.34/share.
- **Sedibelo.** In the absence of visibility on production and future costs for this unlisted company, we have valued Gemfields' stake in Sedbelo on the basis of an EV/resource multiple. Looking at comparable mid-tier South African PGM producers (Lonmin, Northam and Royal Bafokeng) at 28 March 2019 these companies traded on average EV of US$9.20 per 4E resource ounce. Applying that to Sedibelo's 95Moz resource would give a valuation of US$869m (US$57m attributable to Gemfields) but we apply a 30% liquidity discount giving us a valuation of US$40m for Gemfields' stake in Sedibelo. On nearer-term earnings multiples this valuation may look a little optimistic, but we expect continued recovery in the platinum price to underpin future value in this subsector.
- **Group overheads.** We forecast group overheads (excluding selling general and admin costs already included in asset valuations) at US$27.5m per annum for the next five years (2018: US$28m), declining to US$20m until 2033 and US$10m per annum thereafter. The discount value of corporate overheads reduces our SOTP value by US$197m.

## SOTP valuation of US$466m or ZAR5.01/share

Our analysis suggests a SOTP valuation for the Gemfields of US$466m or ZAR5.01 per share, based on the current exchange rate of US$/ZAR14.20. This suggests very significant upside from the current share price of ZAR1.75. Our valuation reflects our view of the long-term potential value of Gemfields' assets based on strong future production and sales growth at MRM and Kagem (where we forecast 7% CAGR in auction sales growth to 2028e) and also the expected turnaround of the Fabergé business.

**Exhibit 11: Gemfields SOTP valuation**

| | US$m | ZAR/share |
|---|---|---|
| Kagem (75%) | 153 | 1.65 |
| Montepuez Ruby Mining (75%) | 366 | 3.94 |
| Fabergé | 59 | 0.64 |
| Sedibelo (7.45%) | 40 | 0.43 |
| Jupiter shares | 35 | 0.38 |
| Corporate overheads | (197) | (2.12) |
| Net cash | 10 | 0.11 |
| **Sum of the parts valuation** | 466 | 5.01 |

Source: Edison Investment Research

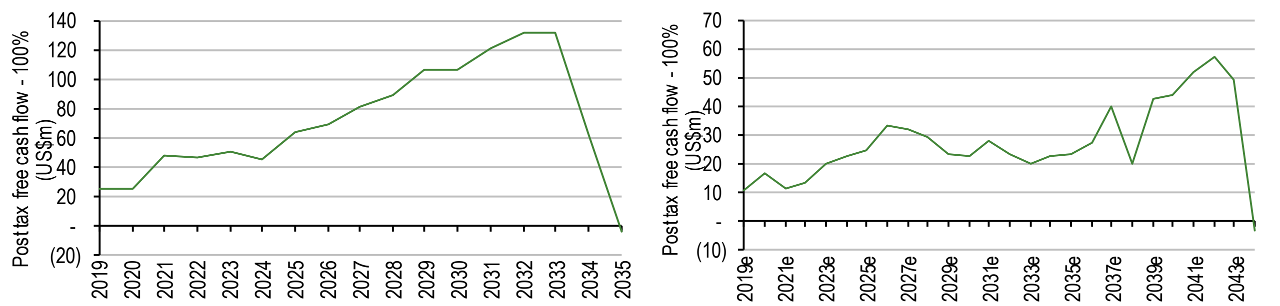
We have used a SOTP approach to value Gemfields given the distinct components of value within the group. However, using a group-level discounted dividend flow (DDF) valuation (based on group free cash flow after capex and debt servicing available for distribution to equity holders) would give us a valuation of ZAR4.90/share, which is within 2% of our SOTP.

## Valuation and sensitivity analysis: MRM and Kagem

The charts below show our forecast post-tax free cash flows for MRM and Kagem over their respective lives of mine. The strong cash flows towards the end of the period reflect a combination of a declining strip ratio near the end of the mine life and the sale of excess inventory built.

**Exhibit 12: Life of mine free cash flows**

**MRM** | **Kagem**




Source: Edison Investment Research analysis

As shown in the table below, a 10% increase in the average ruby price achieved at auction at MRM would move the valuation from our base case of US$366m to US$419m – an increase of 14%. Given that we forecast EBITDA margins in excess of 60%, the valuation is less sensitive to changes in cash cost assumptions.

**Exhibit 13: MRM DCF valuation sensitivity to price and cost forecasts (US$m)**

| | | Ruby prices | | |
|---|---|---|---|---|
| | | -10% | Edison forecast | 10% |
| **Cash costs** | -10% | 324 | 377 | 430 |
| | Edison forecast | 313 | **366** | 419 |
| | 10% | 302 | 354 | 407 |

Source: Edison Investment Research analysis

A 10% increase in the average emerald price achieved at auction at Kagem would move the valuation by 23%. Kagem's valuation is also less sensitive to changes in cash cost assumptions.

| Exhibit 14: Kagem DCF valuation sensitivity to price and cost forecasts (75%, US$m) | | | | |
|---|---|---|---|---|
| | | Ruby prices | | |
| | | -10% | Edison forecast | 10% |
| Cash costs | -10% | 134 | 170 | 205 |
| | Edison forecast | 117 | **153** | 189 |
| | 10% | 100 | 136 | 172 |

Source: Edison Investment Research analysis

Given the value impact of the 15% export tax recently introduced and subject to ongoing negotiations between the mining industry and government, we have run a sensitivity analysis on this key issue. The removal of the export tax would increase our valuation of Kagem to US$227m.

A key risk for both MRM and Kagem is whether the market can absorb the expected levels of sales growth over the next 10 years. Our base case forecasts assume a 7% CAGR in auction sales for both MRM and Kagem over the next 10 years. We have run a sensitivity analysis on sales growth where we have limited the CAGR in auction sales to 5% per annum for each mine. The results of this analysis are shown in the table below. At Montepuez, limiting the growth in auction sales to a CAGR of 5% would reduce value by 8% to US$337m attributable. At Kagem, the impact is more marked, leading to a 17% reduction in value to US$127m attributable.

| Exhibit 15: Sensitivity analysis on auction sales growth CAGR | | | |
|---|---|---|---|
| | Sensitivity | Base case | |
| | Auction Sales CAGR limit | 5-year CAGR | 10-year CAGR |
| **Montepuez – assumption** | **5%** | **5%** | **7%** |
| Montepuez – valuation (US$m) | 337 | 366 | |
| **Kagem – assumption** | **5%** | **8%** | **7%** |
| Kagem valuation (US$m) | 127 | 153 | |

Source: Edison Investment Research analysis

Given the location of the assets, some investors may be inclined to apply a discount rate other than our 10% standard rate for mining companies. We have run a sensitivity on this variable below.

| Exhibit 16: Sensitivity on discount rate | | | | | |
|---|---|---|---|---|---|
| | 8% | 9% | 10% | 11% | 12% |
| Montepuez (75%) – US$m | 430 | 396 | 366 | 339 | 314 |
| Kagem (75%) – US$m | 187 | 169 | 153 | 139 | 127 |

Source: Edison Investment Research analysis

## Valuation of Fabergé

Based on forecast cash flows for Fabergé set out earlier in this report and assuming a 3% terminal growth rate and a 10% discount rate gives our DCF valuation of US$59m. We note that Faberge also has US$10.4m in exceptional piece inventory, the sale of which is not captured in our DCF as the potential timing of sales is difficult to predict. If sold this could contribute additional value.

Given the company is not expected to be profitable until 2022, peer group valuation analysis is complicated beyond looking at sales multiples. Below we highlight the valuations, growth rates and margins for the quoted luxury jewellery and timepiece companies. Fabergé is expected to generate sales growth of c 10% in 2019 and c 30% in FY20, which is greater than that of Compagnie Financière Richemont, albeit it is loss making. Applying its FY1e and FY2e sales multiples of 2.1x and 2.0x to forecasts for Fabergé would produce a target EV of US$31–39m. Applying Tiffany's multiples would produce a target EV of US$40–50m.

**Exhibit 17: Faberge peer group comparable valuation metrics**

| | Year-end | Market cap (m) | EV/sales (x) | | EV/EBITDA (x) | | Sales growth | | EBITDA growth | | EBITDA margin | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CY19e | CY202e | CY19e | CY20e | FY1 | FY2 | FY1 | FY2 | FY1 | FY2 |
| Compagnie Financière Richemont | Sept | CHF37,010 | 2.1 | 2.0 | 10.3 | 9.6 | 26% | 15% | 18% | 11% | 20.5% | 21.1% |
| Swatch | Dec | US$11,830 | 1.6 | 1.5 | 8.1 | 7.3 | 4% | 4% | 6% | 8% | 19.9% | 20.6% |
| Tiffany | October | US$14,770 | 2.7 | 2.6 | 11.5 | 10.8 | 7% | 3% | 1% | 6% | 22.8% | 23.3% |
| **Average** | | | **2.1** | **2.0** | **10.0** | **9.3** | **12%** | **7%** | **8%** | **8.3%** | **21.1%** | **21.7%** |

Source: Refinitiv. Note: Priced at 2 April 2019.

## Group EV/EBITDA compared to listed gemstone peers

As a group Gemfields' closest peers are companies involved in the mining and processing of diamonds and/or coloured gemstones. However, in the absence of comparable coloured gemstones producers (other than TSX-listed Fura Gems, which is pre-production), we have benchmarked Gemfields predominantly against diamond miners. On an EV/EBITDA basis, Gemfields trades on 2020e EV/EBITDA of 3.0x against a peer group average of 3.7x (we have not adjusted the Gemfields EV for its investments in Jupiter and Sedibelo, which add further value but do not contribute to group EBITDA).

**Exhibit 18: Peer group comparable EV/EBITDA ratios**

| | Market cap (US$m) | 2019e | 2020e |
|---|---|---|---|
| Firestone Diamonds | 15 | 5.8 | 4.0 |
| Gem Diamonds | 170 | 2.2 | 1.8 |
| Petra Diamonds | 204 | 3.4 | 2.9 |
| Stornaway | 66 | 6.1 | 5.4 |
| Mountain Province | 189 | 3.5 | 3.2 |
| Lucara | 447 | 5.5 | 4.9 |
| **Average** | | **4.1** | **3.7** |
| Gemfields | 164 | 3.2 | 2.8 |

Source: Refinitiv. Note: Priced at 2 April 2019.

# Financials

## Solidly profitable with strong EBITDA growth forecast

Prior to the acquisition of Gemfields plc in August 2017, Pallinghurst Resources was categorised as a venture capital organisation and accounted for its investments as financial instruments at fair value through the P&L and not through equity accounting as associates. As such 2018 marks the first full year that the group has consolidated the results of Montepuez, Kagem and Fabergé. In 2018 Gemfields generated group revenue of US$206m and EBITDA of US$58.9m (a 29% EBITDA margin). This underlying profitability was offset by a US$22.6m write-down on Kagem following the introduction of the new export tax, as well as a negative US$47.6m valuation adjustment on the group's interest in Sedibelo but with gains from Jupiter of US$5.0m.

Beyond 2019, we expect strong growth in EBITDA to reach US$99m in 2023e (from US$58.9m in 2018) driven by growth in sales at Kagem and Montepuez and the turnaround of Fabergé.

**Exhibit 19: Income statement key metrics**

| US$m | 2018 | 2019e | 2020e | 2021e | 2022e | 2023e |
|---|---|---|---|---|---|---|
| Revenue - Kagem | 60.3 | 74.0 | 83.2 | 89.5 | 91.5 | 90.3 |
| Revenue - Montepuez | 127.1 | 119.7 | 119.3 | 145.5 | 150.1 | 162.4 |
| Revenue - Faberge | 13.4 | 14.9 | 19.4 | 24.4 | 30.0 | 36.7 |
| Revenue - other | 5.3 | 3.3 | 3.2 | 3.2 | 3.5 | 3.4 |
| **Total revenue** | **206.1** | **211.9** | **225.0** | **262.6** | **275.1** | **292.8** |
| Kagem cash mining and production costs | (38.1) | (56.6) | (57.6) | (60.5) | (61.0) | (55.6) |
| Montepuez mining and production costs | (34.1) | (41.3) | (43.7) | (46.6) | (47.3) | (48.8) |
| Faberge cash COGS | (8.1) | (8.2) | (10.4) | (13.1) | (15.9) | (19.3) |
| **Total cash mining and production costs** | **(80.3)** | **(106.1)** | **(111.8)** | **(120.2)** | **(124.2)** | **(123.7)** |
| Depreciation | (30.6) | (25.0) | (28.5) | (26.6) | (25.0) | (24.5) |
| Change in inventory | (12.6) | 0.9 | 0.4 | 21.9 | (7.1) | (4.7) |
| Total cost of sales | (123.5) | (130.2) | (139.9) | (124.8) | (156.4) | (152.9) |
| **Total selling, general and admin** | **(59.0)** | **(58.9)** | **(59.7)** | **(62.7)** | **(63.8)** | **(65.5)** |
| **EBITDA** | **58.9** | **47.8** | **53.9** | **101.7** | **79.9** | **98.9** |
| *EV/EBITDA, x* | *2.6* | *3.2* | *2.8* | *1.5* | *1.9* | *1.5* |
| Share based payments | (4.2) | (3.0) | (3.0) | (3.0) | (3.0) | (3.0) |
| Other income | 6.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Fair value and other gains | 11.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Unrealised fair value losses | (59.6) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Write-downs | (22.6) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Profit from operations, reported | (40.4) | 19.8 | 22.4 | 72.1 | 51.9 | 71.5 |
| Net finance income (cost) | (8.8) | (1.5) | (0.6) | (0.5) | 0.1 | 0.9 |
| **Profit Before Tax, reported** | **(53.9)** | **18.3** | **21.8** | **71.6** | **52.0** | **72.4** |
| Tax | (6.5) | (22.2) | (22.7) | (32.8) | (34.8) | (39.5) |
| Profit after tax | (60.4) | (3.8) | (0.9) | 38.9 | 17.2 | 32.9 |
| Minorities | (1.8) | (3.1) | (3.3) | (7.4) | (8.5) | (10.9) |
| Attributable profit | (62.2) | (6.9) | (4.2) | 31.5 | 8.7 | 22.0 |
| EPS, reported | (0.05) | (0.01) | (0.0) | 0.02 | 0.01 | 0.02 |
| *P/E, x* | *N/A* | *N/A* | *N/A* | *5.2* | *18.7* | *7.4* |

Source: Gemfields, Edison Investment Research forecasts

## Net cash position and cash flow generative

Gemfields ended 2018 with net cash of US$10m as well as US$41.4m in auction receivables. We expect the group to generate US$26m in free cash flow (operating cash flow less capex) in 2019, rising to US$36m in 2023. The group has not historically paid a dividend and we do not currently make any assumptions as to the future use of group cash, whether for dividends, buybacks or new investments.

## Exhibit 20: Financial summary

| $m | 2016 | 2017 | 2018 | 2019e | 2020e | 2021e | 2022e | 2023e |
|---|---|---|---|---|---|---|---|---|
| 31-December | IFRS | IFRS | IFRS | IFRS | IFRS | IFRS | IFRS | IFRS |
| **INCOME STATEMENT** | | | | | | | | |
| Revenue | 0.0 | 81.7 | 206.1 | 211.9 | 225.0 | 262.6 | 275.1 | 292.8 |
| Cost of Sales | 0.0 | (44.3) | (123.5) | (130.2) | (139.9) | (124.8) | (156.4) | (152.9) |
| Gross Profit | 0.0 | 37.3 | 82.5 | 81.7 | 85.0 | 137.8 | 118.6 | 140.0 |
| EBITDA | (5.9) | 30.5 | 58.9 | 47.8 | 53.9 | 101.7 | 79.9 | 98.9 |
| Normalised operating profit | (5.9) | 8.3 | 28.2 | 22.8 | 25.4 | 75.1 | 54.9 | 74.5 |
| Fair value gains (losses) | 50.4 | 49.5 | (41.9) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Exceptionals | 0.0 | 0.0 | (22.6) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Share-based payments | 0.0 | (2.7) | (4.2) | (3.0) | (3.0) | (3.0) | (3.0) | (3.0) |
| Reported operating profit | 44.5 | 55.1 | (40.4) | 19.8 | 22.4 | 72.1 | 51.9 | 71.5 |
| Net Interest | 0.0 | (2.0) | (8.8) | (1.5) | (0.6) | (0.5) | 0.1 | 0.9 |
| Joint ventures & associates (post tax) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Profit Before Tax (norm) | 44.6 | 55.8 | (22.5) | 21.3 | 24.8 | 74.6 | 55.0 | 75.4 |
| Profit Before Tax (reported) | 44.6 | 53.1 | (53.9) | 18.3 | 21.8 | 71.6 | 52.0 | 72.4 |
| Reported tax | (0.0) | (7.6) | (6.5) | (22.2) | (22.7) | (32.8) | (34.8) | (39.5) |
| Profit After Tax (norm) | 44.6 | 48.2 | (29.0) | (0.8) | 2.1 | 41.9 | 20.2 | 35.9 |
| Profit After Tax (reported) | 44.6 | 45.5 | (60.4) | (3.8) | (0.9) | 38.9 | 17.2 | 32.9 |
| Minority interests | 0.0 | (7.2) | (1.8) | (3.1) | (3.3) | (7.4) | (8.5) | (10.9) |
| Discontinued operations | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Net income (normalised) | 44.6 | 41.0 | (30.8) | (3.9) | (1.2) | 34.5 | 11.7 | 25.0 |
| Net income (reported) | 44.6 | 38.3 | (62.2) | (6.9) | (4.2) | 31.5 | 8.7 | 22.0 |
| Basic average shares outstanding (m) | 760 | 1,039 | 1,319 | 1,319 | 1,319 | 1,319 | 1,319 | 1,319 |
| EPS - basic normalised (c) | 5.9 | 3.9 | (2.3) | (0.3) | (0.1) | 2.6 | 0.9 | 1.9 |
| EPS - diluted normalised (c) | 5.9 | 3.9 | (2.3) | (0.3) | (0.1) | 2.6 | 0.9 | 1.9 |
| EPS - basic reported (c) | 5.9 | 3.7 | (4.7) | (0.5) | (0.3) | 2.4 | 0.7 | 1.7 |
| Dividend (c) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Revenue growth (%) | N/A | N/A | 152.4 | 2.8 | 6.2 | 16.8 | 4.7 | 6.5 |
| Gross Margin (%) | N/A | 45.7 | 40.1 | 38.6 | 37.8 | 52.5 | 43.1 | 47.8 |
| EBITDA Margin (%) | N/A | 37.3 | 28.6 | 22.6 | 24.0 | 38.7 | 29.1 | 33.8 |
| Normalised Operating Margin | N/A | 10.2 | 13.7 | 10.8 | 11.3 | 28.6 | 20.0 | 25.4 |
| **BALANCE SHEET** | | | | | | | | |
| Fixed Assets | 737.8 | 626.6 | 509.9 | 505.1 | 498.7 | 496.5 | 493.0 | 496.9 |
| Intangible Assets | 0.0 | 49.3 | 52.3 | 52.3 | 52.3 | 52.3 | 52.3 | 52.3 |
| Tangible Assets | 378.0 | 365.0 | 365.3 | 360.4 | 354.0 | 351.8 | 348.3 | 352.2 |
| Investments & other | 359.7 | 212.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 |
| Current Assets | 7.4 | 184.1 | 224.4 | 221.6 | 227.3 | 273.5 | 290.4 | 321.8 |
| Stocks | 0.0 | 118.8 | 99.2 | 101.5 | 103.2 | 129.0 | 122.5 | 118.7 |
| Debtors | 1.2 | 27.5 | 62.1 | 34.8 | 37.0 | 43.2 | 45.2 | 48.1 |
| Cash & cash equivalents | 1.2 | 37.8 | 63.0 | 85.2 | 87.0 | 101.4 | 122.7 | 154.9 |
| Other | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Current Liabilities | (0.2) | (37.0) | (60.6) | (61.6) | (63.1) | (67.2) | (68.6) | (69.4) |
| Creditors | (0.2) | (21.2) | (28.2) | (26.2) | (27.6) | (29.6) | (30.6) | (30.5) |
| Tax payable | 0.0 | (7.0) | (1.4) | (4.4) | (4.5) | (6.6) | (7.0) | (7.9) |
| Short term borrowings | 0.0 | (4.2) | (23.2) | (23.2) | (23.2) | (23.2) | (23.2) | (23.2) |
| Other | 0.0 | (4.6) | (7.9) | (7.9) | (7.9) | (7.9) | (7.9) | (7.9) |
| Long Term Liabilities | 0.0 | (169.6) | (123.4) | (123.4) | (123.4) | (123.4) | (123.4) | (123.4) |
| Long term borrowings | 0.0 | (59.3) | (30.0) | (30.0) | (30.0) | (30.0) | (30.0) | (30.0) |
| Other long term liabilities | 0.0 | (110.3) | (93.4) | (93.4) | (93.4) | (93.4) | (93.4) | (93.4) |
| Net Assets | 744.9 | 604.1 | 550.4 | 541.7 | 539.4 | 579.4 | 591.4 | 625.8 |
| Minority interests | 0.0 | 78.4 | 73.9 | 74.2 | 74.7 | 76.0 | 77.5 | 79.7 |
| Shareholders' equity | 744.9 | 682.5 | 624.3 | 615.9 | 614.1 | 655.4 | 668.9 | 705.5 |
| **CASH FLOW** | | | | | | | | |
| Op Cash Flow before WC and tax | (5.9) | 30.5 | 58.9 | 47.8 | 53.9 | 101.7 | 79.9 | 98.9 |
| Working capital | 0.5 | (9.7) | (29.7) | 26.1 | (2.4) | (27.8) | 5.9 | 1.6 |
| Exceptional & other | 5.0 | 0.4 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | ` |
| Tax | (0.0) | (7.6) | (24.4) | (22.2) | (22.7) | (32.8) | (34.8) | (39.5) |
| Net operating cash flow | (0.4) | 13.6 | 5.1 | 51.7 | 28.9 | 41.1 | 51.0 | 61.1 |
| Capex | 0.0 | (11.0) | (29.0) | (25.2) | (23.7) | (20.2) | (22.8) | (21.0) |
| Acquisitions/disposals | 0.0 | (17.9) | 77.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Net interest | 0.0 | (2.3) | (4.4) | (1.5) | (0.6) | (0.5) | 0.1 | 0.9 |
| Equity financing | 0.0 | (0.7) | (4.7) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dividends | 0.0 | (5.0) | (5.9) | (2.8) | (2.8) | (6.1) | (6.9) | (8.7) |
| Other | 0.0 | (3.4) | (2.9) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Net Cash Flow | (0.4) | (26.6) | 35.7 | 22.3 | 1.8 | 14.3 | 21.3 | 32.2 |
| Opening net debt/(cash) | 0.0 | (1.2) | 25.7 | (9.8) | (32.1) | (33.9) | (48.2) | (69.5) |
| FX | 0.0 | (0.3) | (0.1) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Other non-cash movements | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Closing net debt/(cash) | (1.2) | 25.7 | (9.8) | (32.1) | (33.9) | (48.2) | (69.5) | (101.8) |

Source: Gemfields, Edison Investment Research

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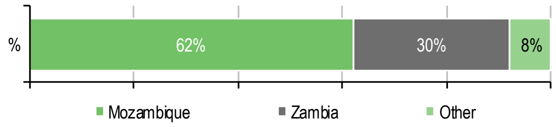
**Revenue by geography**




**Management team**

**Chief executive officer: Sean Gilbertson**

Sean Gilbertson is a mining engineer with experience in South African deep-level gold and platinum. He worked as a project financier for Deutsche Bank specialising in independent power projects and PPS. He co-founded globalCOAL, which played a central role in the commoditisation of the thermal coal industry.

**Chief financial officer: David Lovett**

David Lovett holds a bachelor of commerce in economics and marketing. He was previously with Grant Thornton (UK), working across advisory and tax services. He is a chartered accountant with ICAEW, and joined Gemfields' finance team in 2008.

**Non-executive chairman: Brian Gilbertson**

Brian Gilbertson is an experienced mining sector executive. He was previously executive chairman of Rustenburg Platinum, Gencor and Billiton; and chairman of Vedanta Resources, CEO of SUAL and founder of Incwala Resources.

| Principal shareholders | (%) |
|---|---|
| Dr Christo Wiese | 11.2 |
| NGPMR (Cayman) L.P. | 9.7 |
| Investec Pallinghurst (Cayman) L.P. | 9.1 |
| Gemfields Group (Treasury Shares) | 8.2 |
| Ophorst Van Marwijk Kooy Vermogensbeheer N.V. | 7.4 |
| Oasis | 6.6 |

**Companies named in this report**

BHP Billiton (BHPB.L), Firestone Diamonds (FDI.L), Petra Diamonds (PDL.L), Fura Gems (FURA.TO), Lucara (LUC.TO), Stornoway (SWY.TO), Mountain Province (MPVD.TO)

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