

Wheaton Precious Metals

Q419/FY19 results

In the right place at the right time

Metals & mining

23 March 2020

Price **C\$37.32**

Market cap **C\$17bn**

C\$1.4520/US\$

Net debt (US\$m) at 31 December 2019* 770.5

*Excluding US\$4.3m lease liabilities

Shares in issue 446.3m

Free float 100%

Code WPM

Primary exchange TSX

Secondary exchange NYSE

Attributable production of gold at Wheaton Precious Metals (WPM) reached a record in FY19, breaching the 400koz level for the first time ever. Record production begat record sales, although sales struggled to keep pace with production and, as a result, there was a slightly uncharacteristic (for the fourth quarter) increase in the number of ounces of metal produced but not yet delivered to WPM from its underlying streaming assets. From a financial perspective however, underlying net earnings during the quarter were within US\$1m of our prior forecasts, auguring well for FY20 in terms of both EPS and DPS.

Year end	Revenue (US\$m)	PBT* (US\$m)	EPS* (c)	DPS (c)	P/E (x)	Yield (%)
12/18	794.0	203.1	48	36	53.5	1.4
12/19	861.3	242.7	56	36	45.9	1.4
12/20e	937.8	289.2	65	42	39.8	1.6
12/21e	1,154.6	507.1	113	52	22.7	2.0

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

Q4 outperformance at 11 out of 19 mines

Out of 19 mines, production at 11 (and five out of eight major assets) was in excess of our forecasts in Q4, with the outperformance generally being attributed to higher grades. In addition, WPM provided estimated attributable production guidance of 390–410koz gold, 22.0–23.5Moz silver and 23.0–24.5koz of palladium in FY20 to result in gold equivalent production of c 685–725koz (see pages 5–6). For the five-year period ending FY24, the company has reiterated its average annual gold equivalent production guidance at 750,000oz pa.

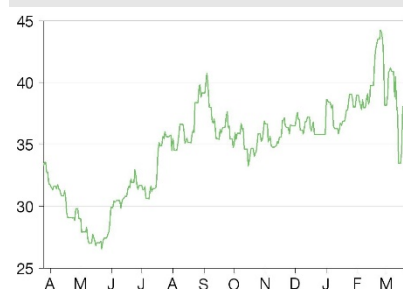
Minimum quarterly dividend in FY20 increased 11%

At the same time as declaring its financial results for Q419 and FY19, WPM declared a first quarterly dividend of US\$0.10/share for Q1, payable to shareholders of record on 26 March 2020. To minimise volatility in quarterly dividends, WPM has set a minimum quarterly dividend of US\$0.10/share for the duration of FY20, representing an 11% increase relative to FY19 (albeit remaining at the discretion of the board of directors).

Valuation: C\$48.47 per share in FY21

We have honed our EPS forecasts to 65c for FY20 and to 113c for FY21 in the wake of the recent turmoil in the precious metals markets. Assuming no material purchases of additional streams (which we think unlikely), we forecast a value per share for WPM of US\$33.38, or C\$48.47, in FY21. This valuation excludes the value of 20.2m shares in First Majestic held by WPM, with an immediate value of C\$150.2m, or US\$0.23 per WPM share. In the meantime, WPM's shares are trading on near-term financial ratios that are cheaper than those of its royalty/streaming 'peers' in at least 54% of financial measures considered in Exhibit 11, and the miners themselves in at least 26% of the same measures, despite being associated with materially less operating and cost risk.

Share price performance



% 1m 3m 12m

Abs (19.2) (2.9) 14.0

Rel (local) 22.3 40.2 55.5

52-week high/low C\$44.28 C\$26.56

Business description

Wheaton Precious Metals is the world's pre-eminent ostensibly precious metals streaming company, with 29 high-quality precious metals streaming and early deposit agreements relating to assets in Mexico, Peru, Canada, Brazil, Chile, Argentina, Sweden, Greece, Portugal and the US.

Next events

Q120 results May 2020

Q220 results August 2020

Q320 results November 2020

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[Edison profile page](#)

Wheaton Precious Metals is a research client of Edison Investment Research Limited

Investment summary

Company description: Pre-eminent precious metals streamer

Wheaton Precious Metals acquires the right to purchase streams of precious metals from producing or near-producing mines in return for a combination of a fixed upfront payment and an ongoing payment (in US\$/oz). Typically, it focuses on by-product precious metal streams as this offers the greatest arbitrage opportunity between the perceived value of the stream to the producer and the perceived value of the stream to WPM. Specifically, however, it seeks to build long-term value by entering streaming agreements with large, financially stable counterparties operating premium, high-margin projects in the lowest quartile (and certainly the lowest half) of the cost curve.

Valuation: Base case C\$48.47/share in FY21

Edison has honed its EPS forecasts to 65c for FY20 (from a range of 80-130c, depending upon precious metal prices assumed) and to 113c for FY21 (cf 115c previously). Excluding FY04, WPM's shares have historically traded on an average P/E multiple of 29.5x current year basic underlying EPS (cf 39.8x Edison or 28.9x consensus FY20e, currently). Applying this multiple to our long-term EPS forecast of US\$1.13 in FY21 implies a potential value for WPM shares of US\$33.38, or C\$48.47, in that year (cf US\$32.78, or C\$43.37, previously).

Financials: 12.7% financial leverage

As at 31 December 2019, WPM had US\$104.0m in cash and US\$874.5m of debt outstanding under its US\$2bn revolving credit facility, such that (including a modest US\$4.3m in leases) it had net debt of US\$774.8m after US\$131.9m of cash generated by operating activities in Q419. Relative to the company's balance sheet equity of US\$5,325.9m (cf US\$5,201.4m at end-Q3), this level of net debt equates to a financial gearing (net debt/equity) ratio of 14.5% (cf 16.6% at end-Q3) and a leverage (net debt/[net debt+equity]) ratio of 12.7% (cf 14.2% at end-Q3). It also compares with a net debt position of US\$865.5m as at end-September, US\$1,012.8m as at end-June, US\$1,057.7m as at end-March, US\$1,188.2m as at end-December 2018 and US\$1,261.1m as at end-September 2018. All other things being equal and subject to its making no further major acquisitions (which is unlikely in our view), on our current cash flow projections WPM will be net debt free late in FY21.

Growth potential

WPM has immediate growth potential in the form of its existing precious metal streaming agreements relating to the Salobo III mine expansion, Penasquito, Constancia, Pascua-Lama, Rosemont, Navidad, Keno Hill and Cotabambas to name a few. Aside from these, WPM estimates the size of the potential market open to it to be the lower half of the cost curve of the 70% of global silver production of c 856Moz in CY18 that was produced as a by-product of either gold or base metal mines (ie approximately 300Moz pa silver, compared with which WPM's silver production of 22.5Moz in FY19 represented a market penetration rate of only 7.5%). Inevitably, WPM's investible universe may be further refined by the requirement for the operations to be located in good mining jurisdictions, with relatively low political risk. Nevertheless, such figures serve to illustrate the fact that WPM's marketplace is far from saturated or mature.

Sensitivities: Metals prices $\pm 10\%$ changes EPS by $\pm 15c$ /share

Our financial forecasts for FY20 are conducted at precious metals prices of US\$12.00/oz Ag and US\$1,479/oz Au. A $\pm 10\%$ change in these prices results in a $\pm US\$0.15$ (23.1%) change in our EPS forecasts.

Q419 and FY19 results

With just one exception (Sudbury), all of Wheaton's major mines either met or exceeded our production expectations for Q419 and, to all intents and purposes, Wheaton's (see Exhibit 4). As a result, attributable production of gold at WPM reached a record in FY19, breaching the 400koz level for the first time ever. Record production begat record sales volumes of gold as well, although there was some evidence that sales volumes struggled to keep pace with production. Consequently, there was a (slightly uncharacteristic for the fourth quarter) increase in stocks of metals produced but not yet delivered. From a financial perspective however, underlying net earnings during the quarter were, once again, within US\$1m of our prior forecasts. Otherwise, readers should note that the difference between Edison FY19 underlying EPS forecast of US\$0.57 and the reported number of US\$0.56 could be explained purely in terms of rounding: the reported number coming to 56.498c, rather than Edison's 56.670c to three decimal places.

Exhibit 1: Wheaton Precious Metals underlying Q419 results vs Q319 and Q419e, by quarter*

US\$000s (unless otherwise stated)	Q418	Q119	Q219	Q319	Q419e	Q419a	Change *** (%)	Variance **** (%)	Variance **** (units)	FY19e	FY19a
Silver production (koz)	5,499	5,614	4,834	6,095	5,140	5,962	-2.2	16.0	822	21,683	22,562
Gold production (oz)	107,567	93,585	100,577	104,175	95,419	107,225	2.9	12.4	11,806	393,756	406,675
Palladium production (koz)	5,869	4,729	5,736	5,471	5,500	6,057	10.7	10.1	557	21,436	21,993
Silver sales (koz)	4,400	4,294	4,241	4,484	4,740	4,684	4.5	-1.2	-56	17,759	17,703
Gold sales (oz)	102,813	115,020	90,077	94,766	95,383	89,223	-5.8	-6.5	-6,160	395,246	389,086
Palladium sales (koz)	5,049	5,189	5,273	4,907	5,478	5,312	8.3	-3.0	-166	20,847	20,681
Avg realised Ag price (US\$/oz)	14.66	15.64	14.93	17.09	17.18	17.36	1.6	1.0	0.18	16.25	16.29
Avg realised Au price (US\$/oz)	1,229	1,308	1,320	1,471	1,472	1,483	0.8	0.7	11	1,389	1,391
Avg realised Pd price (US\$/oz)	1,137	1,443	1,381	1,535	1,721	1,804	17.5	4.8	83	1,522	1,542
Avg Ag cash cost (US\$/oz)	4.66	4.64	5.14	5.16	5.31	5.13	-0.6	-3.4	-0.18	5.07	5.02
Avg Au cash cost (US\$/oz)	409	417	420	424	421	426	0.5	1.2	5	420	421
Avg Pd cash cost (US\$/oz)	205	254	247	271	310	321	18.5	3.5	11	271	273
Sales	196,591	225,049	189,466	223,595	231,266	223,222	-0.2	-3.5	-8,044	869,376	861,332
Cost of sales											
Cost of sales, excluding depletion	63,598	69,214	60,957	64,624	67,092	63,764	-1.3	-5.0	-3,328	261,887	258,559
Depletion	67,844	68,381	61,404	63,396	66,665	63,645	0.4	-4.5	-3,020	259,846	256,826
Total cost of sales	131,442	137,595	122,361	128,020	133,756	127,408	-0.5	-4.7	-6,348	521,733	515,385
Earnings from operations	65,149	87,454	67,105	95,575	97,510	95,814	0.3	-1.7	-1,696	347,643	345,947
Expenses and other income											
- General and administrative**	16,597	16,535	12,249	14,028	9,250	11,695	-16.6	26.4	2,445	52,062	54,507
- Foreign exchange (gain)/loss	144	0				0	N/A	N/A	0	0	0
- Net interest paid/(received)	12,743	13,946	13,306	11,871	10,145	9,607	-19.1	-5.3	-538	49,268	48,730
- Other (income)/expense	581	(266)	(500)	(265)		814	-407.2	N/A	814	(1,031)	(217)
Total expenses and other income	30,065	30,215	25,055	25,634	19,395	22,116	-13.7	14.0	2,721	100,299	103,020
Earnings before income taxes	35,084	57,239	42,050	69,941	78,115	73,698	5.4	-5.7	-4,417	247,344	242,927
Income tax expense/(recovery)	(1,662)	(110)	(2,758)	(2,751)	250	(3,447)	25.3	-1,478.8	-3,697	(5,369)	(9,066)
Marginal tax rate (%)	(4.7)	(0.2)	(6.6)	(3.9)	0.3	(4.7)	20.5	-1,666.7	-5.0	(2.2)	(3.7)
Net earnings	36,745	57,349	44,808	72,692	77,865	77,145	6.1	-0.9	-720	252,713	251,993
Average no. shares in issue (000s)	444,057	444,389	445,769	446,802	446,802	446,802	0.0	0.0	0	445,941	446,021
Basic EPS (US\$)	0.08	0.13	0.10	0.16	0.17	0.17	6.3	0.0	0.00	0.57	0.56
Diluted EPS (US\$)	0.08	0.13	0.10	0.16	0.17	0.17	6.3	0.0	0.00	0.57	0.56
DPS (US\$)	0.09	0.09	0.09	0.09	0.09	0.09	0.0	0.0	0.00	0.36	0.36

Source: Wheaton Precious Metals, Edison Investment Research. Note: *As reported by WPM, excluding exceptional items. **Quarterly forecasts exclude stock-based compensation costs. ***Q419 vs Q319. ****Q419 actual vs Q419 estimate.

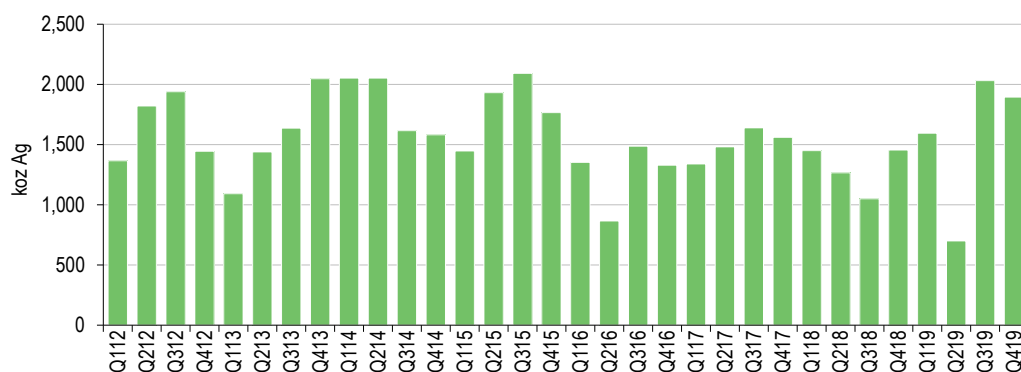
The only other significant departure from our expectations was the level of the general and administrative charge, albeit 36.4% of the total charge could be accounted for by equity settled stock-based compensation and performance share unit (PSU) accrual related to the anticipated fair value of the PSUs issued. Excluding these two factors, WPM's general and administrative cost for the year would have been below the guided range of US\$36–38m for the year as a whole.

Exhibit 2: WPM FY19 general and administrative expense (US\$000s)

Item	Q419	FY19
G&A excluding PSU* and equity settled stock based compensation	7,434	31,642
PSU*	2,830	17,174
Sub-total	10,264	48,816
Equity settled stock based compensation	1,432	5,691
Total general & administrative	11,696	54,507

Source: Wheaton Precious Metals, Edison Investment Research. Note: *Performance share units.

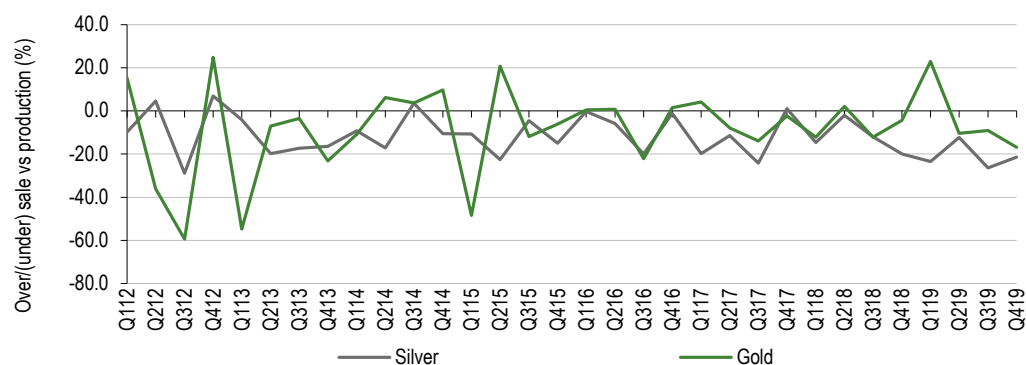
Out of 19 mines, production at 11 (and five out of eight major assets) was in excess of our forecasts in Q4, with the outperformance generally being attributed to higher grades (eg Penasquito, San Dimas and Antamina). Once again, Salobo reported an exceptionally strong quarter, contributing its fourth highest quarterly number of ounces ever to WPM, after Q418, Q417 and Q416, albeit 16,579oz of production remained unsold at the end of the quarter (cf 10,551oz in Q319). Newmont's Penasquito mine also reported one of its strongest production performances ever, made all the more impressive by the fact that the illegal blockade that began there on 15 September was only lifted towards the end of October:

Exhibit 3: Penasquito production attributable to WPM (koz Ag), Q112-Q419


Source: Edison Investment Research, Wheaton Precious Metals.

Ounces produced but not yet delivered – aka inventory

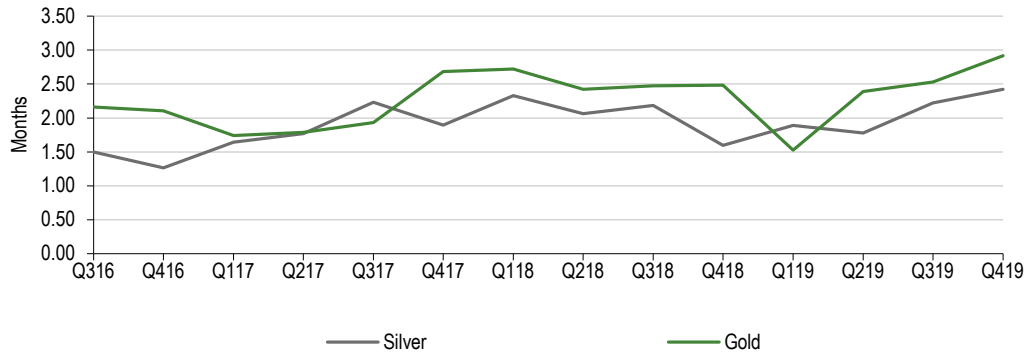
In contrast to 11 out of 19 mines outperforming our production expectations during the quarter, only five outperformed our sales expectations, with the result that there was a 16.8% under-sale of gold relative to production and a 21.4% under-sale of silver (cf long-term averages of 7.8% and 11.7%, respectively):

Exhibit 4: Over/(under) sale of silver and gold as a % of production, Q112-Q419


Source: Edison Investment Research, Wheaton Precious Metals. Note: As reported.

As at 31 December, payable ounces attributable to WPM produced but not yet delivered to WPM amounted to 4.5Moz silver and 98,626oz gold (vs a fractionally restated 4.1Moz silver and 85,335oz gold at end September). This ‘inventory’ equates to 2.42 months and 2.92 months of FY19 silver and gold production and compares to WPM’s target level of two months of silver and two to three months of gold and palladium production, respectively.

Exhibit 5: WPM ounces produced but not yet delivered, Q316–Q419 (months of production)



Source: Edison Investment Research, Wheaton Precious Metals. Note: As reported.

Note that, for these purposes, the use of the term ‘inventory’ reflects ounces produced by WPM’s operating counterparties at the mines over which it has streaming agreements, but which have not yet been delivered to WPM. It in no way reflects the other use of the term in the mining industry itself, where it typically refers to metal in circuit (among other things) and may therefore be considered to be a consequence of metallurgical recoveries in the plant.

Medium-term outlook

In FY20, WPM has provided more detailed estimated attributable production guidance of 390–410koz gold, 22.0–23.5Moz silver and 23.0–24.5koz of palladium to result in gold equivalent production of c 685–725koz (based on an assumed gold price of US\$1,500/oz, an assumed silver price of US\$18.00/oz and an assumed palladium price of US\$2,000/oz), which compares with (unsegmented) prior guidance of 750,000oz (albeit at different assumed gold, silver and palladium prices). For the five-year period ending in FY24, the company has maintained its average annual gold equivalent production at 750,000oz pa. These compare with WPM’s and Edison’s current and previous guidance/forecasts, as follows:

Exhibit 6: WPM precious metals production – Edison forecasts vs guidance

	FY19	FY20e	FY21e	FY22e	FY23e**	FY24e
Previous Edison forecast						
Silver production (Moz)	21.7	21.8	20.7	20.5	17.4	
Gold production (koz)	394	388	386	356	369	
Cobalt production (klbs)	0	0	2,100	2,100	2,100	
Palladium production (koz)	21	27	27	27	30	
Gold equivalent (koz)		691	781	744	716	
Current Edison forecast						
Silver production (Moz)		23.7	20.7	20.5	17.4	17.3
Gold production (koz)		388	386	356	369	423
Cobalt production (klbs)		0	2,100	2,100	2,100	2,814
Palladium production (koz)		23.75	27	27	30	30
Gold equivalent (koz)		624.4	767	731	701	768
Current WPM guidance						
Silver production (Moz)	*22.6	22.0–23.5				
Gold production (koz)	*406.7	390–410				
Cobalt production (klbs)	*0	0				
Palladium production (koz)	*22.0	23.0–24.5				
Gold equivalent (koz)		685–725	750	750	750	750
Previous WPM guidance						
Silver production (Moz)	21.0					
Gold production (koz)	390					
Cobalt production (klb)	0					
Palladium production (koz)	22					
Gold equivalent (koz)		750	750	750	750	

Source: Wheaton Precious Metals guidance, Edison Investment Research forecasts. Note: *Actual; **Edison forecast includes a contribution from Salobo III in FY23e.

While Edison's updated forecasts are within 1% of WPM's expected range in FY20, we believe that there is upside potential to its gold production forecast at Minto, in particular, and downside risk to its silver production forecast at Constancia owing to mine sequencing ahead of its (delayed) development of the high-grade Pampacancha satellite deposit (see below).

Otherwise, the major differences between Edison's gold equivalent production forecasts and Wheaton's can be attributed to the ratio of the gold price to the silver price. Whereas Wheaton assumes an 83.33x ratio (based on a gold price of US\$1,500/oz and a silver price of US\$18.00/oz), the current ratio is closer to 123x and Edison assumes that the ratio will revert to closer its long-term average of 61x from FY21. Note that, at WPM's prices, Edison's gold equivalent production forecast in FY20 is 704.5koz, rather than 624.4koz (which assumes a gold price of US\$1,479/oz for the balance of the year and a silver price of US\$12.00/oz). In addition, Edison is also expecting a production contribution from Salobo III from FY23 (albeit nothing from Rosemont).

In the medium term, silver output from Penasquito attributable to WPM is expected to recover back to its steady-state level of 7Moz as the Chile Colorado pit contributes to mill feed and grades improve once again at the main Penasco pit with mine sequencing through to 2021. It will also benefit from the development of the Pyrite Leach Project, which will add an additional 1.0–1.5Moz of silver attributable to WPM per year by recovering 48% of the silver that previously reported to tailings. At the same time, First Majestic has announced plans to increase production at San Dimas by restarting mining operations at the past-producing Tayoltita mine by the end of Q120 and expects to ramp up production to add another 300tpd (12%) to throughput by the end of FY20. In addition, it intends to install a new 3,000tpd high-intensity grinding mill circuit and an autogenous grinding mill in H220 in order to further improve recoveries and reduce operating costs. Production of palladium and gold at Stillwater mine will similarly increase into FY21 under the influence of the Fill-the-Mill and Blitz projects. By contrast, production is expected to remain at lower levels at Constancia, owing to delays in mining the Pampacancha satellite deposit (which hosts significantly higher gold grades than those mined hitherto). However, Hudbay reports that it has now secured the surface rights for the Pampacancha deposit and expects to begin mining ore from the satellite

deposit in late FY20. Nevertheless, in lieu of the delay, WPM is entitled to receive an additional 2,005oz gold per quarter from Hudbay during FY20 relative to its precious metals purchase agreement.

Longer-term outlook

Salobo

On 24 October 2018, Vale announced the approval of the Salobo III brownfields mine expansion, intended to increase processing capacity at Salobo from 24Mtpa to 36Mtpa, with start-up scheduled for H122 and an estimated ramp-up time of 15 months. According to its agreement with Vale, depending on the grade of the material processed, WPM will be required to make a payment to Vale in respect of this expansion, which WPM estimates will be in the range US\$550–650m in FY23, in return for which it will be entitled to its full 75% attributable share of gold production. Note: this compares to its purchase of a 25% stream in August 2016 for a consideration of US\$800m (see our note, [Silver Wheaton: Going for gold](#), published on 30 August 2016), the US\$900m it paid for a similar stream in March 2015 (when the gold price averaged US\$1,179/oz) and the US\$1.33bn that it paid for its original 25% stream in February 2013.

According to Vale's Q419 performance report, physical completion of the Salobo III mine expansion is now 40% complete (cf 27% at the end of Q3) and remains on schedule for start-up in H122.

Pascua-Lama

Wheaton's contract with Barrick provides for a completion test that, if unfulfilled by 30 June 2020, results in WPM being entitled to the return of its upfront cash consideration of US\$625m less a credit for any silver delivered up to that date from three other Barrick mines. At the current time it is, to all intents and purposes, impossible for Pascua-Lama to pass a completion test on 30 June 2020, as a result of which Edison had presumed that WPM would be the recipient of c US\$273.4m in FY20. Given the long-term optionality provided by the Pascua-Lama project however, Wheaton has indicated that it is unlikely to enforce the repayment of its entitlement and that it prefers instead to maintain its streaming interest in the project.

Rosemont

Another major project with which WPM has a streaming agreement is Rosemont copper in Arizona.

The proposed Rosemont development is located near a number of large porphyry-type producing copper mines and would be one of the largest three copper mines in the US, with output of c 112,000t copper in concentrate per year and accounting for c 10% of total US copper production. Total by-product production of silver and gold attributable to WPM will be c 2.7Moz Ag pa and c 16,100oz Au pa.

Rosemont's operator Hudbay has received both a Section 404 Water Permit from the US Army Corps of Engineers and a Mine Plan of Operations (MPO) from the US Forest Service. The Section 404 permit regulates the discharge of fill material into waterways according to the Clean Water Act and was effectively the final material administrative step before the mine could be developed. Subsequently, Hudbay indicated it would seek board approval to commence construction work by the end of CY19, which would have enabled first production 'by the end of 2022'. In the meantime, it commenced early works to run concurrently with financing activities (including a potential joint venture partner).

On 31 July however, the US District Court for the District of Arizona issued a ruling in the lawsuits challenging the US Forest Service's issuance of the Final Record of Decision effectively halting construction, saying that:

- The US Forest Service 'abdicated its duty to protect the Coronado National Forest' when it failed to consider whether the mining company held valid unpatented mining claims; and
- The Coronado Forest Service had 'no factual basis to determine that Rosemont had valid unpatented mining claims' on 2,447 acres and that the claims were invalid under the Mining Law of 1872.

In its reaction to the ruling, Hudbay said that it believed that the ruling was without precedent and that the court had misinterpreted federal mining laws and Forest Service regulations as they apply to Rosemont. It pointed out that the Forest Service issued its decision in 2017 after a 'thorough process of ten years involving 17 co-operating agencies at various levels of government, 16 hearings, over 1,000 studies, and 245 days of public comment resulting in more than 36,000 comments' and with a long list of studies that have examined the potential effects of the proposed mine on the environment. Hudbay also pointed out that various agencies had accepted that the company could operate the mine in compliance with environmental laws. In conclusion, it said that it will appeal the ruling to the Ninth Circuit Court of Appeals.

Edison estimates that Rosemont could contribute an average c US\$0.11 per share (12.6%) to WPM's basic EPS in its first nine years of operations from FY22–30 for an upfront payment of US\$230m (equivalent to US\$0.515/share) in two instalments of US\$50m and US\$180m (of which neither has yet been paid). Nevertheless, in the light of the uncertainty about the timing and development of the project we have, for the moment at least, removed any contribution from Rosemont from all of our forecasts.

Other potential future growth

WPM is ostensibly a precious metals streaming company (plus one cobalt stream). Considering only the silver component of its investible universe, WPM estimates the size of the potential market open to it to be the lower half of the cost curve of the 70% of global silver production of c 856Moz in CY18 (down from 894Moz in CY15) that was produced as a by-product of either gold or base metal mines (ie approximately 300Moz pa silver vs WPM's attributable production of 22.6Moz Ag in FY19). Inevitably, WPM's investible universe may be further refined by the requirement for the operations to be located in good mining jurisdictions, with relatively low political risk. Nevertheless, such figures serve to illustrate the fact that WPM's marketplace is far from saturated or mature.

As a consequence, WPM reports that it is busy on the corporate development front. Whereas potential deals in FY19 were generally reported to be with development companies in the US\$100–350m range, more recent overtures are reported to have been from producing companies looking to strengthen their balance sheets with mooted transactions in the >US\$1bn range, which WPM would fund, in the first instance, via the US\$1,125m available under its revolving credit facility, plus US\$104m in cash and its proposed ATM programme (see below).

While it is difficult, or impossible, to predict potential future stream acquisition targets with any degree of certainty, it is perhaps possible to highlight two that may be of interest to WPM in due course for which it already has strong, existing counterparty relationships:

- the platinum group metal (PGM) by-product stream at Sudbury; and
- the 50% of the gold output at Constancia that is currently not subject to any streaming arrangement.

Otherwise, WPM has streaming agreements with other potential producing mines, including (but not limited to) Navidad, Keno Hill and Cotabambas.

Precious metals prices

Gold is a traditional beneficiary of negative real interest rates (and therefore falling nominal interest rates, assuming constant inflation) and central bank expansion of balance sheets in the form of either quantitative easing or otherwise. From a recent high of US\$1,683/oz on 6 March 2020 however, the gold price has fallen approximately 12% as it has been caught between its traditional role as a safe haven in times of crisis and liquidation and profit taking in order to make margin calls in other sections of investors' portfolios. Its year-to-date performance of -2.7% so far during the coronavirus crisis nevertheless dwarfs the equivalent performances of its equity market rivals (eg Dow Jones -25% and FTSE100 Index -37% in US dollar terms) and it remains the only major financial and monetary asset that is not another counterparty's liability as well as being a credible store of value and, in extremis, medium of exchange.

Edison's nominal gold and silver price forecasts, set out in our report, [Portents of economic weakness: Gold – doves in the ascendant](#), published in August 2019, are as follows:

Exhibit 7: Edison gold price forecasts				
US\$/oz	2020e**	2021e	2022e	2023e
Nominal gold price forecast (US\$/oz)	1,635	1,509	1,560	1,421
Nominal silver price forecast (US\$/oz)	26.74	24.76	25.56	23.38

Source: Edison Investment Research. Note: *See *Portents of economic weakness: Gold – doves in the ascendant*. **Gold price forecast as published in 2019. Current FY20 estimate of US\$1,586/oz is year-to-date average plus spot for the rest of the year.

While the current gold price (which accounted for 60% of WPM's net earnings from operations in Q419) of US\$1,479/oz is within 10% of Edison's previous CY20 forecast, above, the silver price of US\$12.00/oz is at a 55.1% discount to our forecast (which assumes a normalisation of the gold/silver ratio in the foreseeable future). In common with Edison's stated practice, we use prevailing prices to generate our forecasts for the remainder of the current year, followed by long-term forecasts (above) thereafter.

General and administrative expenses

WPM has provided guidance for non-stock general & administrative expenses of US\$38–40m (or US\$9.5–10.0m per quarter) in FY20, compared to a range of US\$33–36m in FY19 (reduced from an earlier estimate of US\$36–38m), an actual FY19 outcome of US\$31.6m and guidance of US\$34–36m in FY18 of an actual outcome of US\$36.7m, including all employee-related expenses, charitable contributions, etc, but excluding PSUs and equity settled stock based compensation (see Exhibit 2). Investors should note that stock-based compensation costs and PSUs are excluded from our financial forecasts in Exhibits 8 and 12 owing to their inherently unpredictable nature.

FY20e by quarter

In our [update note](#) of 18 November 2019, we stated that, our FY20 EPS forecasts 'exist within a wide range depending on the metal prices assumed, from 80c (at spot prices) to 130c (at our higher long-term prices)'. Taking into account all of the aforementioned considerations, we have now been able to corral our forecasts for WPM for FY20, at updated metals prices to reflect the recent turmoil, by quarter, as follows:

Exhibit 8: Wheaton Precious Metals FY20 forecast, by quarter*

US\$000s (unless otherwise stated)	FY19	Q120e	Q220e	Q320e	Q420e	FY20e
Silver production (koz)	22,562	5,926	5,926	5,926	5,926	23,705
Gold production (oz)	406,675	97,105	97,105	97,105	97,105	388,419
Palladium production (koz)	21,993	5,938	5,938	5,938	5,938	23,750
Silver sales (koz)	17,703	5,926	5,926	5,926	5,926	23,705
Gold sales (oz)	389,086	97,068	97,068	97,068	97,068	388,274
Palladium sales (oz)	20,681	5,914	5,914	5,914	5,914	23,655
Avg realised Ag price (US\$/oz)	16.29	16.56	12.00	12.00	12.00	13.14
Avg realised Au price (US\$/oz)	1,391	1,566	1,479	1,479	1,479	1,501
Avg realised Pd price (US\$/oz)	1,542	2,238	1,713	1,713	1,713	1,844
Avg Ag cash cost (US\$/oz)	5.02	5.15	4.97	4.98	4.98	5.02
Avg Au cash cost (US\$/oz)	421	425	425	425	425	425
Avg Pd cash cost (US\$/oz)	273	413	355	355	355	370
Sales	861,332	263,401	224,810	224,810	224,810	937,831
Cost of sales						
Cost of sales, excluding depletion	258,559	74,133	72,521	72,562	72,562	291,778
Depletion	256,826	71,623	71,623	71,623	71,623	286,490
Total cost of sales	515,385	145,756	144,144	144,184	144,184	578,268
Earnings from operations	345,947	117,645	80,666	80,626	80,626	359,563
Expenses and other income						
– General and administrative**	54,507	9,750	9,750	9,750	9,750	39,000
– Foreign exchange (gain)/loss	0					0
– Net interest paid/(received)	48,730	7,830	7,830	7,830	7,830	31,320
– Other (income)/expense	(217)					0
Total expenses and other income	103,020	17,580	17,580	17,580	17,580	70,320
Earnings before income taxes	242,927	100,065	63,086	63,046	63,046	289,243
Income tax expense/(recovery)	(9,066)	250	250	250	250	1,000
Marginal tax rate (%)	(3.7)	0.2	0.4	0.4	0.4	0.3
Net earnings	251,993	99,815	62,836	62,796	62,796	288,243
Ave. no. shares in issue (000s)	446,021	446,802	446,802	446,802	446,802	446,802
Basic EPS (US\$)	0.56	0.22	0.14	0.14	0.14	0.65
Diluted EPS (US\$)	0.56	0.22	0.14	0.14	0.14	0.64
DPS (US\$)	0.36	0.10	0.12	0.10	0.10	0.42

Source: Wheaton Precious Metals, Edison Investment Research. Note: *Excluding impairments and exceptional items. **Forecasts exclude stock-based compensation costs. Totals may not add up owing to rounding.

Our basic EPS forecast of US\$0.65/share for FY20 is 27.0% below the consensus forecast of US\$0.89/share (source: Refinitiv, 19 March 2020) within a range of US\$0.80–1.05 per share – albeit we believe that this accurately reflects current circumstances in the market and, in particular, prevailing precious metals prices:

Exhibit 9: WPM FY20 consensus EPS forecasts (US\$/share)

	Sum Q1–Q4	Q1	Q2	Q3	Q4	FY20
Mean	0.88	0.22	0.22	0.22	0.22	0.89
High	1.07	0.29	0.28	0.25	0.25	1.05
Low	0.76	0.17	0.19	0.19	0.21	0.80

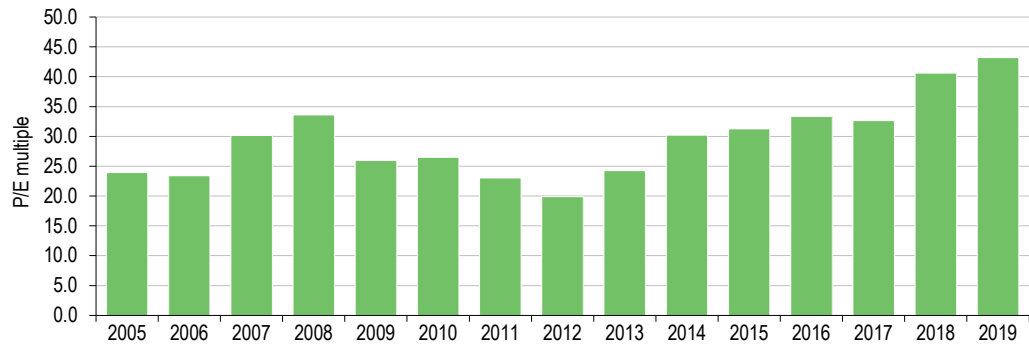
Source: Refinitiv, Edison Investment Research. Note: As at 19 March 2020.

Our US\$1.13 basic EPS forecast for FY21 (see Exhibit 12) compares with a consensus of US\$0.88 (source: Refinitiv, 19 March 2020), within a range of US\$0.76–1.15. This estimate is predicated on an average gold price during the year of US\$1,509/oz and an average silver price of US\$24.76/oz, which is more than double the current spot price. One of the central assumptions behind our silver price forecast is that it will, at some point, revert to the long-term correlation that it has exhibited with gold since the latter was formally demonetised in 1971. In the event that both metals remain at current levels however (US\$12.00/oz and US\$1,479/oz at the time of writing), we forecast that WPM would instead earn US\$0.57 per share in FY21.

Valuation

Excluding FY04 (part-year), WPM's shares have historically traded on an average P/E multiple of 29.5x current year basic underlying EPS, excluding impairments (vs 39.8x Edison or 28.9x Refinitiv consensus FY20e, currently – see Exhibit 11).

Exhibit 10: WPM's historical current year P/E multiples, 2005–19



Source: Edison Investment Research

Applying this 29.5x multiple to our updated EPS forecast of US\$1.13 in FY21 implies a potential value per share for WPM of US\$33.38, or C\$48.47, in that year (vs US\$32.78, or C\$43.37 previously). Note that this valuation excludes the value of 20.2m shares in First Majestic currently held by WPM, with an immediate value (19 March) of C\$150.2m, or US\$0.23 per WPM share.

In the meantime, from a relative perspective, it is notable that WPM is cheaper than its royalty/streaming 'peers' on at least 54% (13 out of 24) of the valuation measures used in Exhibit 11 and on multiples that are cheaper even than the miners themselves in at least 26% (21 out of 78) of the same valuation measures, despite being associated with materially less operational and cost risk (since WPM's costs are contractually predetermined) – although we believe that earnings forecasts for many of WPM's peers may not yet have caught up with current conditions in the marketplace and, in particular, prevailing precious metals prices.

Exhibit 11: WPM comparative valuation vs a sample of operating and royalty/streaming companies

	P/E (x)		Yield (%)		P/CF (x)	
	Year 1	Year 2	Year 1	Year 2	Year 1	Year 2
Royalty companies						
Franco-Nevada	45.3	44.9	0.9	0.9	26.6	25.6
Royal Gold	26.6	25.6	1.6	1.6	13.5	12.6
Sandstorm Gold	39.3	31.7	0.0	0.0	12.6	11.9
Osisko	33.2	26.8	2.0	2.0	13.4	12.0
Average	36.1	32.3	1.1	1.1	16.5	15.5
WPM (Edison forecasts)	39.8	22.7	1.6	2.0	18.0	14.1
WPM (consensus)	28.9	29.3	1.7	1.9	17.0	16.5
Gold producers						
Barrick	20.6	19.4	1.3	1.2	6.7	6.6
Newmont	20.6	18.1	2.3	2.5	8.6	8.2
Newcrest	14.4	13.5	1.4	1.4	8.0	6.7
Kinross	10.2	10.3	0.0	0.0	4.0	3.8
Agnico-Eagle	27.1	20.6	1.8	1.8	8.1	7.1
Eldorado	6.9	13.8	0.0	0.0	2.7	3.5
Yamana	19.2	17.1	1.5	1.5	4.6	4.2
Average	17.0	16.1	1.2	1.2	6.1	5.7
Silver producers						
Hecla	107.3	21.6	0.6	0.4	5.0	4.2
Pan American	17.4	9.9	1.1	1.4	5.7	4.7
Coeur Mining	192.0	13.2	0.0	0.0	4.2	3.0
First Majestic	26.2	25.0	0.0	0.0	11.0	6.9
Hochschild	7.4	7.0	4.0	4.3	2.4	2.2
Fresnillo	23.2	18.2	2.0	2.5	7.9	7.6
Average	62.3	15.8	1.3	1.4	6.0	4.8

Source: Refinitiv, Edison Investment Research. Note: Peers priced on 19 March 2020.

Financials: Solid equity base

As at 31 December 2019, WPM had US\$104.0m in cash (cf US\$151.6m at the end of Q319) and US\$874.5m of debt outstanding (cf US\$1,017.1m at end-Q319) under its US\$2bn revolving credit facility (which attracts an interest rate of Libor plus 120–220bp and now matures in February 2025), such that (including a modest US\$4.3m in leases) it had net debt of US\$774.8m (cf US\$865.5m at end-Q3) overall, after US\$131.9m of cash generated by operating activities during the quarter. Relative to the company's balance sheet equity of US\$5,325.9m (cf US\$5,201.4m at end-Q3), this level of net debt equates to a financial gearing (net debt/equity) ratio of 14.5% (cf 16.6% at end-Q3) and a leverage (net debt/[net debt+equity]) ratio of 12.7% (cf 14.2% at end-Q3). It also compares with a net debt position of US\$865.5m as at end-September, US\$1,012.8m as at end-June, US\$1,057.7m as at end-March, US\$1,188.2m as at end-December 2018 and US\$1,261.1m as at end-September 2018. Self-evidently, such a level of debt is well within the tolerances required by its banking covenants that:

- net debt should be no more than 0.75x tangible net worth; and
- interest should be no less than 3x covered by EBITDA (we estimate that it was covered 11.3x in FY19 and that it will be covered 19.4x in FY20).

All other things being equal and subject to its making no further major acquisitions (which is unlikely in our view), on our current cash flow projections WPM will be net debt free late in FY21.

At-The-Market Equity Programme

In addition to its results, WPM announced that it intends to initiate an at-the-market equity programme that would allow it to issue up to US\$300m of common shares from treasury to the public, from time to time, at the prevailing market price or other prices through the Toronto Stock

Exchange, the New York Stock Exchange or any other marketplace on which its shares are traded. The volume and timing of distributions under the programme, if any, will be determined at the company's sole discretion, subject to applicable regulatory limitations. At the moment, the programme remains subject to the negotiation of definitive agreements with Canadian and US agents, the filing of the prospectus supplement with Canadian securities regulators and the US Securities & Exchange Commission (SEC) and receipt of all of the appropriate regulatory approvals (the conditions of which are anticipated to be satisfied in April). WPM intends that the proceeds from the programme, if any, will be available as one potential sources of funding for stream acquisitions and/or other general corporate purposes, including the repayment of indebtedness. Details of the programme will be provided upon the filing of a prospectus supplement with the Canadian securities regulators and the SEC in early April and sales of shares via the programme, if any, will be made pursuant to the terms of an equity distribution agreement. Nevertheless, owing to inherent uncertainties as to price and size, for the moment, at least, Edison has excluded from its forecasts the assumption of any such issues of shares under the programme.

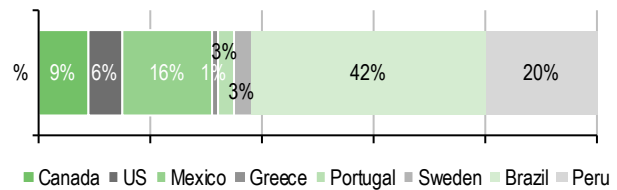
Exhibit 12: Financial summary

	US\$'000s	2012	2013	2014	2015	2016	2017	2018	2019	2020e	2021e
Dec		IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS											
Revenue		849,560	706,472	620,176	648,687	891,557	843,215	794,012	861,332	937,831	1,154,559
Cost of Sales		(117,489)	(139,352)	(151,097)	(190,214)	(254,434)	(243,801)	(245,794)	(258,559)	(291,778)	(288,135)
Gross Profit		732,071	567,120	469,079	458,473	637,123	599,414	548,218	602,773	646,053	866,424
EBITDA		701,232	531,812	431,219	426,236	602,684	564,741	496,568	548,266	607,053	827,424
Operating Profit (before amort. and except.)		600,003	387,659	271,039	227,655	293,982	302,361	244,281	291,440	320,563	520,201
Intangible Amortisation		0	0	0	0	0	0	0	0	0	0
Exceptionals		0	0	(68,151)	(384,922)	(71,000)	(228,680)	245,715	(165,855)	0	0
Other		788	(11,202)	(1,830)	(4,076)	(4,982)	8,129	(5,826)	217	0	0
Operating Profit		600,791	376,457	201,058	(161,343)	218,000	81,810	484,170	125,802	320,563	520,201
Net Interest		0	(6,083)	(2,277)	(4,090)	(24,193)	(24,993)	(41,187)	(48,730)	(31,320)	(13,098)
Profit Before Tax (norm)		600,003	381,576	268,762	223,565	269,789	277,368	203,094	242,710	289,243	507,103
Profit Before Tax (FRS 3)		600,791	370,374	198,781	(165,433)	193,807	56,817	442,983	77,072	289,243	507,103
Tax		(14,755)	5,121	1,045	3,391	1,330	886	(15,868)	9,066	(1,000)	(1,000)
Profit After Tax (norm)		586,036	375,495	267,977	222,880	266,137	286,383	181,400	251,993	288,243	506,104
Profit After Tax (FRS 3)		586,036	375,495	199,826	(162,042)	195,137	57,703	427,115	86,138	288,243	506,103
Average Number of Shares Outstanding (m)		353.9	355.6	359.4	395.8	430.5	442.0	443.4	446.0	446.8	446.8
EPS - normalised (c)		166	106	75	53	62	63	48	56	65	113
EPS - normalised and fully diluted (c)		165	105	74	53	62	63	48	56	64	113
EPS - (IFRS) (c)		166	106	56	(-41)	45	13	96	19	65	113
Dividend per share (c)		35	45	26	20	21	33	36	36	42	52
Gross Margin (%)		86.2	80.3	75.6	70.7	71.5	71.1	69.0	70.0	68.9	75.0
EBITDA Margin (%)		82.5	75.3	69.5	65.7	67.6	67.0	62.5	63.7	64.7	71.7
Operating Margin (before GW and except.) (%)		70.6	54.9	43.7	35.1	33.0	35.9	30.8	33.8	34.2	45.1
BALANCE SHEET											
Fixed Assets		2,403,958	4,288,557	4,309,270	5,526,335	6,025,227	5,579,898	6,390,342	6,123,255	5,838,765	5,533,541
Intangible Assets		2,281,234	4,242,086	4,270,971	5,494,244	5,948,443	5,454,106	6,196,187	5,768,883	5,484,393	5,179,169
Tangible Assets		1,347	5,670	5,427	12,315	12,163	30,060	29,402	44,615	44,615	44,615
Investments		121,377	40,801	32,872	19,776	64,621	95,732	164,753	309,757	309,757	309,757
Current Assets		785,379	101,287	338,493	105,876	128,092	103,415	79,704	154,752	558,998	1,139,401
Stocks		966	845	26,263	1,455	1,481	1,700	1,541	43,628	1,684	2,073
Debtors		6,197	4,619	4,132	1,124	2,316	3,194	2,396	7,138	2,569	3,163
Cash		778,216	95,823	308,098	103,297	124,295	98,521	75,767	103,986	554,745	1,134,165
Other		0	0	0	0	0	0	0	0	0	0
Current Liabilities		(49,458)	(21,134)	(16,171)	(12,568)	(19,057)	(12,143)	(28,841)	(64,700)	(81,684)	(81,325)
Creditors		(20,898)	(21,134)	(16,171)	(12,568)	(19,057)	(12,143)	(28,841)	(63,976)	(80,960)	(80,601)
Short term borrowings		(28,560)	0	0	0	0	0	0	(724)	(724)	(724)
Long Term Liabilities		(32,805)	(1,002,164)	(1,002,856)	(1,468,908)	(1,194,274)	(771,506)	(1,269,289)	(887,387)	(887,387)	(887,387)
Long term borrowings		(21,500)	(998,136)	(998,518)	(1,466,000)	(1,193,000)	(770,000)	(1,264,000)	(878,028)	(878,028)	(878,028)
Other long term liabilities		(11,305)	(4,028)	(4,338)	(2,908)	(1,274)	(1,506)	(5,289)	(9,359)	(9,359)	(9,359)
Net Assets		3,107,074	3,366,546	3,628,736	4,150,735	4,939,988	4,899,664	5,171,916	5,325,920	5,428,691	5,704,230
CASH FLOW											
Operating Cash Flow		720,209	540,597	434,582	435,783	608,503	564,187	518,680	548,301	670,550	826,082
Net Interest		0	(6,083)	(2,277)	(4,090)	(24,193)	(24,993)	(41,187)	(41,242)	(31,320)	(13,098)
Tax		(725)	(154)	(204)	(208)	28	(326)	0	(5,380)	(1,000)	(1,000)
Capex		(641,976)	(2,050,681)	(146,249)	(1,791,275)	(805,472)	(19,633)	(861,406)	10,571	(2,000)	(2,000)
Acquisitions/disposals		0	0	0	0	0	0	0	0	0	0
Financing		12,919	58,004	6,819	761,824	595,140	1,236	1,279	37,198	0	0
Dividends		(123,852)	(160,013)	(79,775)	(68,593)	(78,708)	(121,934)	(132,915)	(129,986)	(185,472)	(230,564)
Net Cash Flow		(33,425)	(1,618,330)	212,896	(666,559)	295,298	398,537	(515,549)	419,462	450,759	579,421
Opening net debt/(cash)		(761,581)	(728,156)	902,313	690,420	1,362,703	1,068,705	671,479	1,188,233	774,766	324,007
HP finance leases initiated		0	0	0	0	0	0	0	0	0	0
Other		0	(12,139)	(1,003)	(5,724)	(1,300)	(1,311)	(1,205)	(5,995)	0	0
Closing net debt/(cash)		(728,156)	902,313	690,420	1,362,703	1,068,705	671,479	1,188,233	774,766	324,007	(255,413)

Source: Company sources, Edison Investment Research

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Revenue by geography

Management team
President and chief executive officer: Randy Smallwood

Mr Smallwood holds a geological engineering degree from the University of British Columbia and is one of the founding members of WPM. Before joining the original Wheaton River group in 1993 as an exploration geologist, he worked for Homestake, Teck and Westmin Resources. In 2007, he joined WPM full time as executive vice president of corporate development, before being appointed president in January 2010 and CEO in April 2011.

Senior vice president and chief financial officer: Gary Brown

Mr Brown brings 25 years of experience as a finance professional to WPM and holds professional designations as a chartered accountant and a chartered financial analyst, as well as having earned a master's degree in accounting from the University of Waterloo. Prior to joining WPM in 2008, he was the chief financial officer of TIR Systems. He is a director of Redzone Resources and has held senior finance roles with CAE Inc, Westcoast Energy and Creo Inc among others.

Chairman: Douglas Holtby

Mr Holtby is the vice chairman of the board and lead director of Goldcorp. He is also a director of the BC Cancer Foundation and president and CEO of Holtby Capital Corporation, a private investment company. He has a long history of serving in a variety of senior board positions since 1982, including, among others, WIC Western International Communications, Canadian Satellite Communications Inc and Allarcom. He is a fellow chartered accountant and a graduate of the Institute of Corporate Directors – Director Education Program at the University of Toronto, Rotman School of Management.

Senior vice president, corporate development: Haytham Hodaly

Mr Hodaly is an engineer with a BSc in mining and mineral processing engineering and a master's in engineering, specialising in mineral economics. He brings over 17 years of experience in the North American securities industry to WPM. Prior to joining WPM, he was a director at RBC Capital Markets with responsibility for global mining research. Before that, he was co-director of research and senior mining analyst at Salman Partners Inc. During his tenure, he helped to establish Salman Partners as a leading independent, resource-focused and research-driven investment dealer.

Principal shareholders

	(%)
Franklin Resources Inc	18.11
BlackRock Inc	9.80
First Eagle Inv Mgt LLC	5.35
Van Eck Assoc Corp	5.24
The Vanguard Group Inc	2.87
FMR LLC	2.17
FIL Ltd	1.73

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