

Equity Research

Metals

Precious metals Gold Miners Play

- The fundamentals of the gold sector look promising in the medium term. The gold sector demand and supply drivers seem to be supportive for better gold price performance in 2018, assuming the higher probability of weakening US dollar versus Euro and raising concerns of US stock market correction. The gold demand corrected down 10% YoY in 1H17, on weak ETF inflows following record hit in 1H16. In 3Q17, the physical gold demand went down QoQ to 899.7t compared to 941.8t in 2Q17; however, this level stays above 843.9t seen in 3Q16, based on GFMS data. The largest gold-consuming segment, Jewellery, demonstrated 4.9% YoY growth in 1H17, still maintaining upswing trend with 0.2% 7-year CAGR. Jewellery demand reduced 1.3% QoQ but raised 12.9% YoY in 3Q17. Central Banks decreased their demand by 3.2% YoY in 1H17, and down 7% QoQ in 3Q17. The technology segment demand stays flat. On the supply side, the gold mine output declined 0.3% YoY in 1H17 and overall supply reduced by 10.2% YoY. Gold miners are closer to the bottom of their investment cycle. There are not so many projects to be added beyond 2019. Investments in developments fell by 80% in 2016/17 compared to 2012. As a result, gold price expectations are as high as \$1300-1450/oz for 2018. We believe the current gold price at \$1260-1280/oz provides limited downside.
- We initiate coverage of two CIS gold producers Polymetal and Polyus, both with a Buy rating. Polymetal International (LSE:POLY) is a leading silver and gold industry player with an asset base in Russia, Armenia, and Kazakhstan. The company plans to achieve 1.8 moz GE production in 2020 up from 1.269 moz GE in 2016. Gold share represented 70% in total GE output in 2016, assuming to reach 80% by 2020. The completion of Kyzyl project with 7.7g/t average grade will also affect the cost curve with expected AISC at \$581-630/oz. Polymetal has good track record of delivering on target, and we believe that the growth profile will be well maintained over the next three years. We rate the company Buy with target price of GBp1040. Polymetal is one of leaders of ESG in Russian mining sector, well recognized for its sustainable ESG policy. Polyus, the largest Russian gold producer, came back to LSE last summer with c\$800mn placement. The company with 2.7 moz production in 2016, also targeting high growth profile for the next few years, following the Natalka mine launch in September 2017, after few years of exploration plan revision. The company's resource base is well secured with licenses for Olimpiada, Natalka and Sukhoi Log. The AISC was at \$610/oz in 1H2017, one of the lowest globally. We rate the company Buy with \$53.3 per DR 12-month price target.

Report date: 3 November 2017
Polymetal

Ticker / Main Exchange Target price / Rating MktCap, \$mn POLY / LSE GBp1040 / BUY 5,152

Ticker / Main Exchange Target price / Rating Current MktCap, \$mn PLZL / MOEX \$53 per DR / BUY 10.968

Description:

Polyus

Polymetal International is a leading silver and gold producer with assets in Russia, Armenia, and Kazakhstan. The company is listed on LSE and is a part of FTSE-250. Polymetal has an impressive pipeline of projects under developments and targets essential production growth in 2017-2020. The company meets high ESG standards, being top ranked among its peers by Sustainalytics, RobecoSAM and others.

Polyus is the leading Russian gold producer with long-life high-quality resource base. The company explores several production deposits, including world-class resources at Olimpiada, Natalkinskoye and Sukhoi Log. The stock trade on Moscow Exchange and LSE.

Marina Alekseenkova Research analyst +44 (0) 78527 00371 ma@hypothesisresearch.co.uk

Figure 1: Gold producers - YTD performance

Source: Thomson Reuters

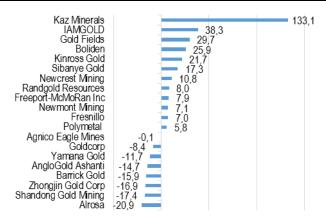
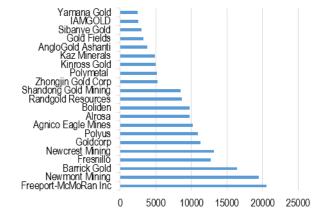


Figure 2: Largest gold peers by Mkt Cap, \$m



Source: Thomson Reuters, as of 2-November-2017

Important disclosures are at the end of this document. This research material is released by Hypothesis Research Ltd. Not for the distribution in the USA, Japan, Canada.

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Executive summary

The gold sector remains one of the major attractions for investors. The normalization of the investment gold demand in 1H17 following the boost in ETFs in 1H16 was one of the reasons for 2017 gold demand decline. Another variable, the demand of Jewellery segment demonstrated 12.9%YoY recovery in 3Q17, according to GFMS data. The progress of US tax reforms, a possible appointment of the next Federal Reserve chair and the following policy, as well as concerns about the prospects of the US stock market, make the US dollar weaker in short-term, pushing up the gold price. The longer-term demand is still associated with the purchasing power in China and India, together representing 52% of the global gold consumption in 2016. Both countries' demand per capita stays low compared to top-consuming-per-capita countries (less than one-tenth versus UAE, and less than a half of Turkey's level per capita). Central banks' diversification into gold will likely continue, driven more by political factors.

On the supply side, the gold mining sector comes to its lower capex cycle phase. Top 10 largest gold producers, including Barrick, Newmont, and others, reporting 80% reduction in the developmental capital spending since 2012. The estimated mine supply is to decrease by 6% by 2020. Current investments in exploration and new projects are below the level needed to sustain the current production level in the longer term. The gold reserves become depleted, as the current productive lifetime of underground reserves amongst leading gold mining companies has reduced by one third from the peak in 2013 after heavy investment. Our estimate for top-5 producers shows 14 average mine life of 2P reserves based on 2016 production. The investments of the largest gold producer Barrick cut from \$5bn to \$1.3-1.5bn guidance for 2017. Companies are working to optimize the new mines development; trying to achieve 2-3 year longer mines' life on existing mines.

The gold price performance will likely be supported by the higher cash costs/lower grades of producers as well as relatively good demand/supply balance. The gold price levels above \$1400/oz are achievable already in 2018 if the scenario of US stock market correction is realized. We believe the current \$1260-1280/oz level is sustainable and well supported by the current demand with limited downside, and the potential to reach \$1400/t by 2022 under the conservative scenario. We expect silver to follow the gold trend, with at least 10-15% price increase over the next three years.

We initiate coverage Polymetal and Polyus, two large gold producers with a primary gold resource base in Russia. Both companies have essential production growth profile due to new mines launched this year and next year. At the same time, both producers are well positioned on the cash curve and planning to achieve even lower AISC with their production units.

Polymetal International is one of the leading Russian gold and silver mining companies with production assets in Russia, Armenia, and Kazakhstan. The company's shares are listed on London Stock Exchange and Moscow exchange. Polymetal is a constituent of FTSE-250, FTSE Gold mines, RSX and Euromoney Global Gold indices. The company maintains high ESG standards, being now a part of STOXX Global ESG Leaders Index.

The investment case of Polymetal is based on the company's ability to deliver on its promises, maintaining strong production profile, high reporting standards, and a sustainable dividend policy. The growing output over the next few years will be the key performance driver, apart from the gold price. In 2014-2016, the company invested in Kyzyl gold project in Kazakhstan, acquired Kapan mine in Armenia, completed construction of Svetloye mine, and invested in smaller projects and in operational improvement projects on its existing mines. We positively view the company's ability to deliver sustainable production growth up to 1.8moz GE by 2020 up from 1.269 moz GE in 2016. The launch of Kyzyl project with the estimated grade of 7.7g/t and AISC of \$581-630/oz should positively affect the company's total cost curve and profitability. The company trades at 54-56% discount to global peer group based on P/E'17-19. We rate the company Buy with 12-month target price of GBp1040 per share.

Polyus is the largest Russian gold producer ranked #8 globally based on 2016 production figures. The company has listings on London and Moscow exchanges. The free float is 16%, and the principal shareholder Said Kerimov owns c 83% via Polyus Gold International. The long-life high-quality resource base, good position on the cost curve, and production optimization during the last several

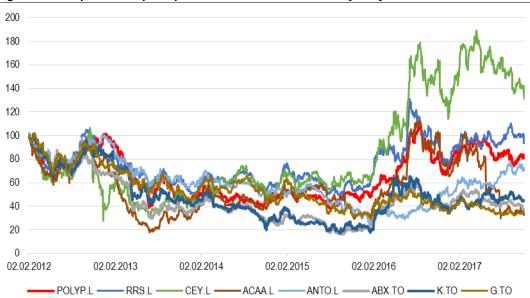
years make Polyus investment case attractive. The company trades at 57-66% discount to global peer group based on P/E'17-19. We rate the company Buy with 12-month target price of \$53.3 per DR.

Figure 3. Gold mining peer comparison (Thomson Reuters consensus estimates)

			P/E	P/E	P/E	EV/	EV/	EV/	EV/	EV/	EV/
	MktCap,		Fwd	Fwd	Fwd	EBITDA	EBITDA	EBITDA 3	Sales	Sales	Sales
Company	\$mn	EV, \$mn	1Y	2Y	3Y	1Y fwd	2Y fwd	fwd	1y fwd	2y fwd	3y fwd
Polymetal	5152	6734	13,3	10,8	9,1	9,0	7,6	6,6	3,8	3,4	3,0
Polyus	10968	14190	10,0	10,1	7,8	8,7	7,9	6,6	5,3	4,8	4,1
Alrosa	9742	10371	7,1	7,1	6,4	4,7	4,6	4,4	2,3	2,2	2,0
Gold Fields	3305	4792	18,2	20,0	15,1	4,3	4,4	3,8	1,8	1,7	1,5
Norilsk Nickel	30829	36557	13,2	11,1	10,4	8,8	7,6	7,1	4,0	3,6	3,4
Sibanye Gold	2983	4679	NaN	11,9	9,8	7,8	5,1	4,5	1,5	1,4	1,2
Barrick Gold	16466	22896	19,2	17,3	17,7	5,5	5,6	5,9	2,7	2,9	2,9
Agnico Eagle Mines	10229	10616	45,0	45,3	37,1	11,3	11,1	10,2	4,8	4,9	4,8
AngloGold Ashanti	3797	6023	46,0	11,5	11,1	5,1	3,8	3,7	1,4	1,4	1,4
Goldcorp	11335	14178	31,5	26,1	17,0	9,6	8,5	6,2	4,1	4,0	3,3
Kinross Gold	4966	5676	30,7	30,7	31,5	4,7	4,4	4,8	1,7	1,7	1,8
Newmont Mining	19456	21554	25,2	26,4	25,3	8,3	7,9	8,1	2,9	2,9	2,9
Yamana Gold	2466	4291	57,9	26,9	13,1	6,8	5,0	4,2	2,4	2,1	1,8
IAMGOLD	2594	2264	80,3	62,1	27,3	4,0	5,7	4,9	2,1	2,0	1,8
Newcrest Mining	13607	15163	31,3	18,9	17,1	9,9	7,8	7,7	4,0	3,6	3,6
Randgold				·							
Resources	8634	8343	28,8	24,7	25,0	12,2	11,6	11,8	6,5	6,5	6,5
Shandong Gold											
Mining	8511	10839	40,9	30,3	22,9	17,6	13,9	11,8	1,4	1,3	1,3
Zhongjin Gold Corp	5171	7658	66,0	44,3	33,1	15,6	14,0	13,3	1,2	1,2	1,1
Freeport-McMoRan			400		40.0				•	4.0	
Inc	20595	33677	12,9	8,7	13,0	6,0	4,7	6,2	2,1	1,9	2,2
Fresnillo	12756	12717	25,7	24,3	21,9	11,9	9,9	9,2	6,1	5,3	5,0
Kaz Minerals	4927	7372	10,8	8,4	7,4	7,4	6,0	5,7	4,2	3,4	3,3
Boliden	9750	10368	13,1	13,0	14,1	6,9	6,8	7,1	1,8	1,8	1,8
Global peer average			29,7	23,3	20,6	9,1	8,0	7,7	3,1	3,0	2,9
Russian peer average			14,9	14,8	14,1	6,7	6,1	5,7	3,3	3,1	2,8
Polymetal (discount)/	premium to	global	EE0/	5 40/	500/	40/	00/	4.40/	0.40/	4.407	00/
peers			-55%	-54%	-56%	-1%	-6%	-14%	21%	14%	6%
Polyus (discount)/pre	•	•	-66%	-57%	-62%	-5%	-1%	-14%	69%	61%	41%
Polymetal (discount)/	premium to	Kussian	100/	070/	250/	240/	0.40/	450/	4.40/	100/	00/
peers	mium to Dua	oion	-10%	-27%	-35%	34%	24%	15%	14%	10%	8%
Polyus (discount)/pre peers	mum to Rus	Sian	-33%	-32%	-44%	29%	29%	16%	59%	56%	44%
heera			-00 /0	-JZ /0	-44 /0	ZJ /0	ZJ /0	10 /0	JJ /0	JU /0	44 /0

Source: Thomson Reuters

Figure 4. Gold producers price performance in traded currency – 5 years



Source: Thomson Reuters

Figure 5. Gold price and FTSE / JSE Gold Mining Index

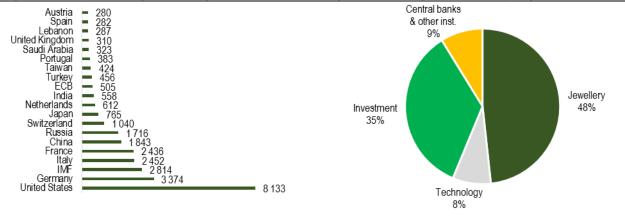


Source: Thomson Reuters

Gold Sector outlook

Gold has been held as an ultimate reserve currency to settle transactions and back liabilities for many years, under both Gold and Dollar standard. Since the US dollar became widely used internationally, followed by the US government obligations, the central banks and IMF began to reduce their gold holdings. Currently gold represent a portfolio investment rather than a currency. In 2007, the quantitative easing shook the status of US treasuries as a risk-free asset; the role of gold in the portfolio diversification has increased. Later, in 2014 with the introduction of sanctions against Russia, the Russian Central Bank even increased the proportion of gold in reserves reducing the legal and political risks of dependence from US government decisions. However, the portion of gold reserves in total reserves in Russia (17%) and China (2%) is well below the proportion for the USA (75%), Germany (69%), France (64%) and Italy (67%). The political uncertainty may drive the demand for gold as well as further diversification of CBs' reserves.



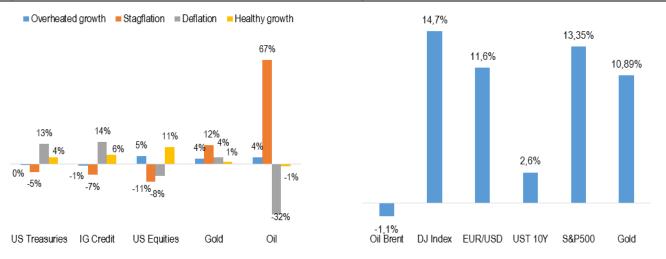


Source: IMF IFS, World Gold Council Source: World Gold Council

As an investment asset, gold has been used to protect an investment portfolio during the periods of high inflation. The current global economic situation with low-interest rates and concerns about the future of the USA equity market may attract more investors in gold in coming months.

Figure 8. Historical real return, 1967-2017

Figure 9. YTD return on assets classes, %



Source: IMF, WGC Source: Thomson Reuters

Figure 10. Gold price, \$/oz

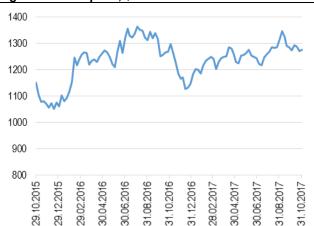
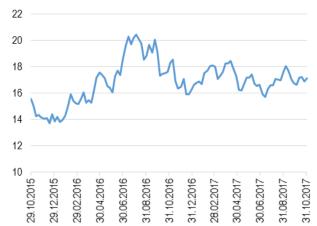


Figure 11. Silver price, \$/oz

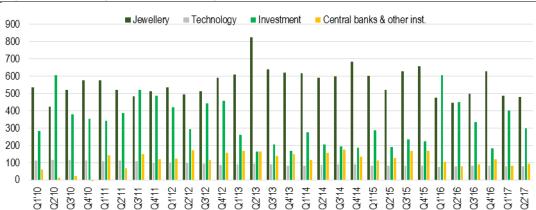


Source: Thomson Reuters

Source: Thomson Reuters

The demand for gold from ETFs reached record levels in 1H2016, being the essential driver for the gold price during 2016. Silver price followed the gold upswing in 2016 as well. In 2Q2017, the gold demand was at 953.4t, 10% lower YoY, while the 1H17 demand shrunk 14% to 2003.8t. The demand decrease was mainly due to correction of ETF demand to its normalized levels, and lower Central Bank net purchases. Meanwhile, gold held in European-listed ETFs reached an all-time high at 978t in 1H17.

Figure 12. Global gold demand by segment, t



Source: World Gold Council

Bar and coin investments increased 11% in 1H17 from 1H16. Jewellery demand was stronger YoY in 1H17, in particular, demand recovered in India. Technology demand was up 2% YoY to 81.2t due to development of wireless charging and development of features that use LEDs.

The overall gold demand may come below 2016 levels in FY2017 unless the investments in gold to recover soon.

Figure 13. Global demand and gold price (\$/oz)



Source: World Gold Council

The global demand and the gold price stay rather flat since 2013. The stable economic performance of US economy and balanced gold market with new capacities coming on stream during 2013-2017 created some pressure on the gold price. The potential price increase may be a reaction to deteriorating sentiment on US stock market performance that had been discussed over the past two years but had not been materialized. We also see a potential in growing costs of the major producers (AISC has been growing for majority of them) and reducing the life of reserves.

Figure 14. Global gold supply, t

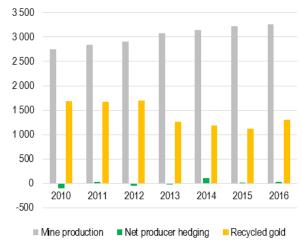
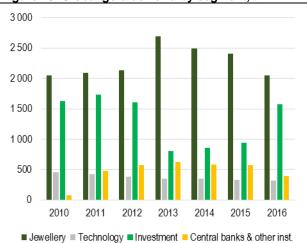


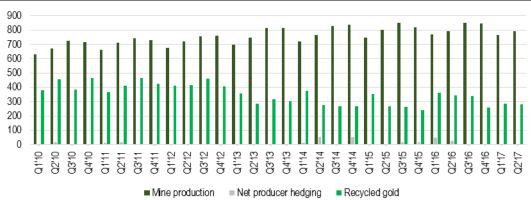
Figure 15. Global gold demand by segment, t



Source: World Gold Council Source: World Gold Council

The gold supply was mostly growing due to higher supply from mines in 2013-16. The recycled gold supply normalized around 300 t per quarter.

Figure 16. Global supply by segment, t

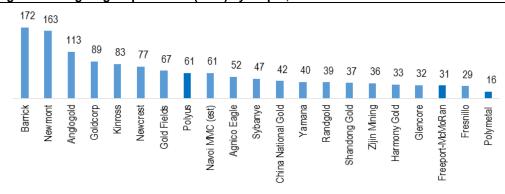


Source: Would gold council

New mines developments play an essential role for the future pricing as many producers had been allocating rather low investment capex into exploration and reserves base development.

The top-5 largest gold producers list based on 2016 figures include Barrick, Newmont, Anglogold, Goldcorp and Kinross. Polyus is ranked #8 and Freeport-McMoRan #19. Polymetal was outside top-20 with 0.89moz. However, it will likely enter top-20 in 2017 with the targeting production over 1.1moz of gold.

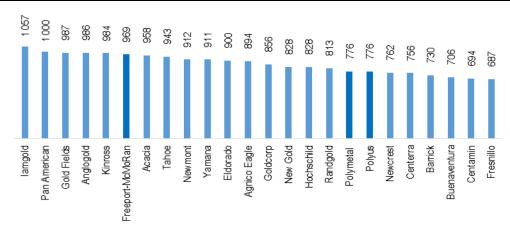
Figure 17. Largest gold producers (2016) by output, t



Source: Companies data

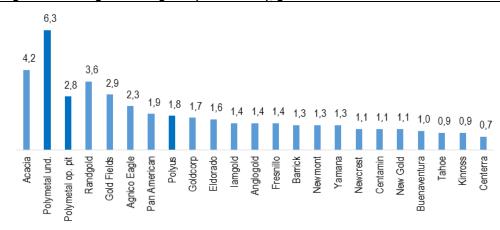
Top of the largest gold producers still have a sustainable cost below \$900/oz, and weighted by production volume AISC for top-10 producers with share 22% in the global supply was \$810/oz in 2016. Smaller producers have higher AISC and more exposed to local economic factors, including exchange rate differences. The current average AISC level provides stable operational economics for the current resource base but it makes the new exploration with low-grade reserves more economically challenging assuming gold price at c\$1200-1300/oz.

Figure 18. Gold producers All-in sustaining cost, \$/oz



Source: Companies data

Figure 19. Average reserve grade (2P reserves), g/t GE

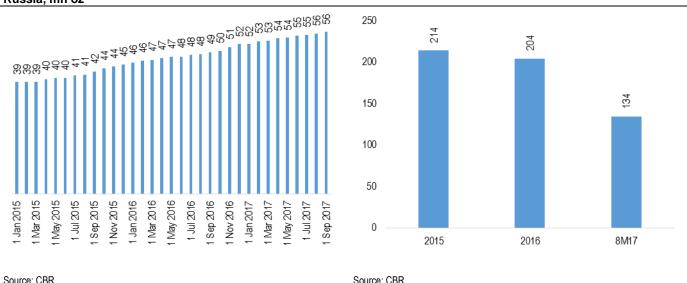


Source: Companies data

Supply and demand of gold in Russia

Russia is the third largest global producer of gold and the largest official purchaser. The Central Bank of Russia (CBR) bought 201 t of gold in 2016, more than other Central banks. The People's Bank of China with 80 t was the second, and the Bank of Kazakhstan with 36t was the third. Russia has the sixth largest official gold reserves in the world. Since the sanctions introduced by the US in 2014, the structure of the Russian Central Bank reserves changed in favor of gold as a protection against political risks.

Figure 20. Gold reserves reported by the Central Bank of Figure 21. Increase in gold reserves of CBR, tonnes Russia, mn oz



Outice. Obit

The demand for gold of the individual investors in Russia is still restricted due to unfavorable taxation. The individual and institutional investors can buy the gold bars paying 18% VAT, the highest rate globally, whereas it is VAT free for the government, the Bank of Russia and commercial banks. The cancellation of VAT for investors discussed in Russian Duma but not finally approved yet.

On the supply side, Russia (288t of gold output, 2016) ranked number three gold producer, after China (453.49t, according to the China Gold Association, targeting 550t in 2020) and Australia (298t). In the past ten years, Russia mined over 2000 t of gold, with annual production to exceed 300 t, and going up to 400 t by 2030, according to the Union of Gold Producers of Russia. Russia produced 288.55t of gold in 2016, down from 289.51t in 2015. The production includes 237.83t of mined gold in 2016 compared to 234.31t in 2015. The consolidation of the gold mining sector, with smaller producers taken over by large holdings, allowed implementing expansion and modernization programs over the last ten years. Five biggest producers Polyus, Polymetal, Kinross, Petropavlovsk and Nordgold produce more than 120 t a year, over 50% of gold production. The refinery capacity is still above the production level that allows raising gold output. Polyus launches Natalka in 2017 and Sukhoi Log on ten years horizon. Polymetal is developing deposits in Armenia and Kazakhstan, which will drive the company's production growth on 3-5 years horizon.

Polymetal International

Business overview

Polymetal International is one of the largest Russian gold and silver producers, listed on main board of the London Stock exchange (LSE: POLY). The company has mining, exploration and development projects in several Russian regions, in Armenia and Kazakhstan. The company produced 890 koz of gold and 29.2moz of silver, totaling GE of 1,269 koz in 2016. That is compared to 1,968 koz of gold produced by the largest Russian gold producer Polyus.

The operating assets of Polymetal include several production hubs around own processing facilities in several Russian regions, also in Armenia and Kazakhstan. The hub system helps to achieve synergies from exploration and development to mining operations, processing, selling, logistics and transportation and mining closure and rehabilitation. Polymetal also stated that it focuses on open-pit mines and sets appropriate thresholds on head grades in order to achieve a good return on investments. The company also uses Chinese smelters to process its products.

Figure 22. Polymetal International operating assets

Hub	Operating mines	Development projects	Key exploration projet	Processing
Dukat Hub	Dukat, Lunnoye, Goltsovoye, Arylakh		Perevalnoye, Primorskoye	1.6mt pa Dukat Concentrator, 400 kt pa Lunnoye Merrrill- Crowe plant
Omolon Hub	Birkachan, Sopka, Tsokol, Oroch, Olcha	Burgali	Yolochka, Irbychan, Nevenrekan	850kt pa Kubaka CIP and Merrill-Crowe plant
Amursk Hub				500tpd Amursk POX plant
Albazino	Albazino			1.6mt pa concentrator
Mayskoye	Mayskoye			850kt pa concentrator
Okhotsk Hub	Avlayakan, Ozerny, Svetloe		Kirankan, Khotorchan, Kundumi, Levoberezhny	600 kt pa Merrill-Crowe plant and Svetluye 1 mt pa Heap Leach plant
Voro	Voro		North Kaluga, Saum, Tamunier	950kt pa CIP and 900 kt pa HL
Varvara	Varvara, Komar		Tarutin	4.2mt pa float + leach
Kapan	Kapan	Lichkvaz		Fully mechanised underground mine with current capacity 400kt pa. Conventional 750kt pa flotation concentrator and various infrastructure facilities
Kyzyl		Kyzyl		Flotation + POX/concentrate offtake, first production 2H2018
Exploration				
Viksha			Viksha	
Nezhda			Nezhda	
Prognoz			Prognoz	

Source: Company data

The mineral resources of the company by 89% consist of gold and by 7% silver. Dukat has the largest silver operation in the Group with 74.6moz ore reserves, followed by Omolon, Okhotsk and Voro operations.

Figure 23. Polymetal mineral resources and ore reserves

	Tonnage, Mt	GE grade, g/t	Gold, Koz	Silver, Moz	Copper, Kt	GE, Koz	Value of resources, \$mn
Mineral Resources							
Measured	9,6	2,3	540	6	21	703	920
Indicated	37,5	3,5	3 342	36	76	4 167	5 368
Measured + Indicated	47,1	3,2	3 882	42	97	4 871	6 288
Inferred	89,3	4,8	12 683	51	109	13 799	17 735
Measured + Indicated + Inferred	120,9	4,8	16 566	93	207	18 671	24 024
Ore Reserves							
Proved	61,5	2,6	4 089	91	11	5 221	6 799
Probable	98,9	4,6	13 469	72	54	14 608	18 724
Proved + Probable	160,5	3,8	17 558	163	65	19 829	25 523

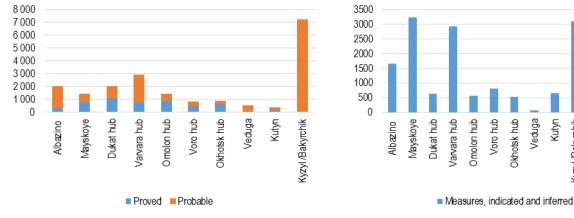
Source: Company data, Hypothesis Research estimates

Figure 24. Polymetal 2P reserves, koz GE

Figure 25. Polymetal Measures, Indicated and Inferred resources, koz GE

Nezhda

Kyzyl /Bakyrchik



Source: Company data Source: Company data

The essential portion of the potential production growth is provided with exploration project Kyzyl with 7.25moz of gold reserves in Kazakhstan and Armenian operations at Kapan and Lichkvaz. Polymetal has the grade at 3.8g/t for reserves (19.8 moz) and 4.2g/t for its resources (16 moz) in 2016. Higher grades for sizable reserves are at its Mayskoye, Albazino, and Kyzyl mines.

Polymetal essential strategy goals include sustainable "production growth without diluting its quality" and sustainable dividend payments through the commodity cycle.

Production

The investment case of Polymetal settled down on its ability to manage operational development and to deliver in line or above the guidance. The future growth is based on following developments:

- Ramp up at its Svetloye mine through 2017.
- Development and production growth at Kapan in Armenia and Komar near Varvara hub in Kazakhstan.

- Development of Nezhda project in Yakutia, and participation in Prognoz project (the company acquired 5% interest with an option to increase to 50% its stake) in Yakutia.
- Launch of Kyzyl project in Kazakhstan with 7.25 moz of gold reserves, and 7.7 g/t grade.

The company's production plan for 2017 includes the output of 1.4 moz GE, compared to 1.269 moz for 2016. The total cash cost should stay at \$600-650/GE oz, according to the company if no significant changes in oil price level and RUB/USD exchange rate. Polymetal plans to achieve its full capacity at Komar and Svetloye mines. In addition, the first gold should be received from Mayskoye open-pit crown pillar project, and some de-bottlenecking at Kapan will contribute to the production growth.

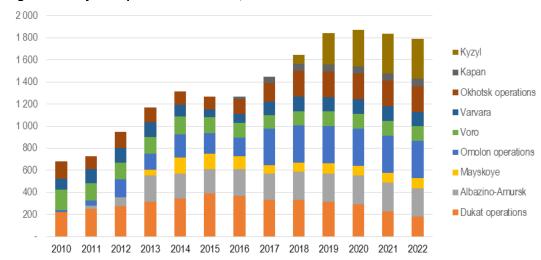


Figure 26. Polymetal production forecast, koz GE

Source: Company data, Hypothesis Research forecast

The medium-term production driver for Polymetal is its Kyzyl project. The project with the production target of 320 koz per year will be launched in 2H2018. The completion phase indicated by the company supported this timeline. The company will be producing on the open pit and will pass to underground production in seven years.

Financial forecast

Our financial forecast is based on the company's guidance for the production volumes, and our macroeconomic forecast and product price forecast presented in the figures below.

The macroeconomic environment in Russia is stabilized with 4% inflation target by the Central Bank of Russia and c 1.7-2% industrial growth for 2017-2018. We assume flat exchange rates for the Kazakh Tenge and Armenian Dram versus Ruble.

Figure 27. Macroeconomic forecast

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Real GDP growth	5,0%	4,3%	3,4%	1,3%	0,6%	-3,7%	-0,5%	1,3%	1,8%	2,2%	2,2%	2,2%	2,0%
Industrial Growth	7,3%	5,0%	3,4%	0,4%	1,7%	-3,4%	-0,6%	1,6%	1,9%	2,0%	2,0%	2,0%	2,0%
Oil price, Brent	73,0	107,6	110,5	108,4	98,8	48,8	47,5	50,0	50,0	52,0	52,0	52,0	52,0
USD/RUB at the end of year	30,5	32,2	30,5	32,7	61,4	72,9	60,7	60,0	58,0	58,0	58,0	58,0	58,0
USD/RUB average	30,4	29,4	31,1	31,8	38,6	61,0	67,0	58,0	58,0	58,0	58,0	58,0	58,0
PPI, average %YOY	14,9%	18,8%	5,1%	6,2%	5,4%	10,0%	2,0%	4,5%	4,5%	4,5%	4,5%	4,5%	3,5%

Source: Thomson Reuters, CBR, Hypothesis Research estimates

Our gold and silver price forecasts presented below. We use in the forecast conservative case with gold price average at \$1300/oz in 2018 going up to \$1407/oz by 2023. The silver price trend follows the gold price with the average price level to reach \$18.7/oz by 2023.

Figure 28. Gold and silver price forecast, \$/oz

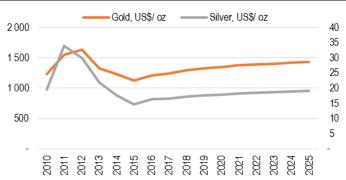
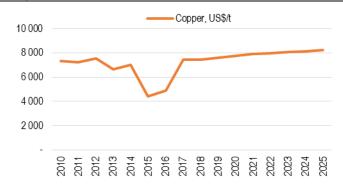


Figure 29. Copper forecast, \$/t

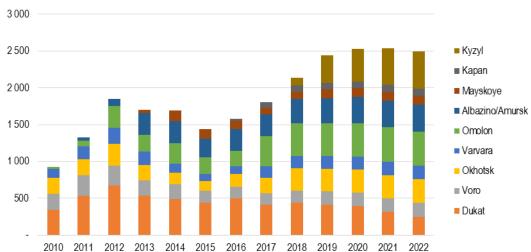


Source: Thomson Reuters, Hypothesis Research

Source: Thomson Reuters, Hypothesis Research

Our revenue forecast for Polymetal is presented below. The main driver for the revenue figures is the launch of Kyzyl and debottlenecking across Russian gold mines.

Figure 30. Polymetal revenue forecast, \$mn



Source: Company data, Hypothesis Research estimates

We expect some cost appreciation in 2017 compared to 2016. The launch of relatively low-cost Kyzyl in 1H18 should positively affect the company's margin starting from 2019, when the project will be operational. Our financial forecast for Polymetal is presented below.

Figure 31. Polymetal Income statement

\$mn	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Revenue	1852	1704	1689	1441	1583	1799	2133	2433	2514	2513	2527	2139
Cost of sales	-852	-1124	-1023	-766	-825	-1068	-1139	-1231	-1272	-1286	-1311	-1234
Write-down to net realisable value	-4	-153	39	-13	-21	0	0	0	0	0	0	0
Gross profit	998	429	706	662	737	731	994	1201	1242	1227	1216	905
General, administrative and selling expenses	-182	-168	-131	-127	-120	-145	-151	-158	-165	-173	-179	-151
Other expenses	-154	-88	-132	-51	-36	-43	-45	-47	-50	-52	-54	-45
Impairment of non-current assets	0	-201	0	0	0	0	0	0	0	0	0	0
Impairment of investment in associate	0	-12	0	0	0	0	0	0	0	0	0	0
Share of loss of associates and joint ventures	-2	-2	-7	-4	0	0	0	0	0	0	0	0
Operating profit	661	-43	436	480	581	542	797	996	1027	1003	983	708
Gain/Loss on disposal of subsidiaries	-11	-9	0	1	0	0	0	0	0	0	0	0
Gain on acquisition of remaining interest in joint venture	21	0	0	0	0	0	0	0	0	0	0	0
Foreign exchange loss, net	7	-74	-559	-133	65	0	0	0	0	0	0	0
Change in fair value of derivative financial instruments	0	0	0	0	0	0	0	0	0	0	0	0
Change in fair value of contingent consideration liability	-5	8	23	4	-22	0	0	0	0	0	0	0
Finance income	5	3	3	5	3	0	0	0	0	0	0	0
Finance costs	-27	-43	-41	-81	-63	-64	-78	-67	-46	-45	-50	-40
Profit/Loss before income tax	651	-158	-138	276	564	478	719	929	981	958	933	668
Income tax expense	-223	-40	-72	-55	-169	-119	-180	-232	-245	-239	-233	-167
Profit/Loss for the period	428	-198	-210	221	395	358	539	697	736	718	700	501
Earnings per share (US\$)												
Basic	1,1	-0,5	-0,5	0,5	0,9	0,8	1,3	1,6	1,7	1,7	1,6	1,2
Diluted	1,1	-0,5	-0,5	0,5	0,9	0,8	1,3	1,6	1,7	1,7	1,6	1,2

Source: Company data, Hypothesis Research estimates

Figure 32. Polymetal cash flow statement

\$mn	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Net cash generated by operating activities	541	462	518	491	530	634	751	937	985	966	951	680
Net cash used in investing activities	-407	-325	-526	-300	-401	-413	278	-698	-1019	-122	117	-527
Net cash generated by financing activities	-795	-105	135	-274	-134	-208	-677	-276	-93	-520	-633	-153
Net (decrease)/ increase in cash and cash equivalents	-656	34	127	-83	-5	13	352	-36	-126	324	435	0
Cash and cash equivalents at the beginning of the period	659	19	66	157	52	48	61	413	377	251	575	1010
Effect of foreign exchange rate changes on cash and cash equivalents	16	13	-36	-22	1	0	0	0	0	0	0	0
Cash and cash equivalents at the end of the year	19	66	157	52	48	61	413	377	251	575	1010	1010

Source: Company data, Hypothesis Research estimates

Figure 33. Polymetal Balance	sheet											
\$mn	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Property, plant and equipment, net	2206	2095	2021	1360	1805	1887	2042	2119	2128	2135	2142	2221
Goodwill	115	31	18	14	17	17	17	17	17	17	17	17
Investments in associates and joint ventures	30	16	2	2	25	34	34	34	34	34	34	34
Non-current loans	15	23	13	13	10	27	27	27	27	27	27	27
Deferred tax asset	58	88	62	57	38	48	48	48	48	48	48	48
Non-current inventories	99	53	114	99	113	146	156	169	174	176	180	169
Total non-current assets	2522	2306	2230	1544	2008	2160	2324	2414	2428	2437	2447	2516
Current inventories	841	727	469	353	493	638	680	736	760	768	784	738
Short-term VAT receivable	103	85	55	60	61	79	84	91	94	95	97	91
Trade and other receivables	108	45	56	39	70	80	94	108	111	111	112	95
Prepayments to suppliers	31	18	21	25	31	35	42	48	49	49	49	42
Income tax prepaid	14	8	9	8	18	13	19	25	26	25	25	18
Short term deposit	0	0	0	0	0	0	0	0	0	0	0	0
Cash and cash equivalents	19	66	157	52	48	61	413	377	251	575	1010	1010
Total current assets	1116	949	767	537	721	906	1333	1384	1291	1624	2077	1993
Total assets	3638	3255	2997	2081	2729	3065	3657	3798	3719	4062	4524	4509
Accounts payable and accrued liabilities	-312	-118	-161	-77	-133	-172	-184	-198	-205	-207	-211	-199
Current borrowings	-244	-81	-509	-287	-98	-114	-138	-119	-82	-80	-89	-71
Share purchase obligation	0	0	-276	0	0	0	0	0	0	0	0	0
Income tax payable	-63	-37	-38	-22	-8	-6	-9	-11	-12	-11	-11	-8
Other taxes payable	-72	-57	-44	-32	-34	-39	-46	-52	-54	-54	-54	-46
Environmental obligation	-2	0	-3	0	0	0	0	0	0	0	0	0
Current portion of contingent consideration liability	0	0	-2	-2	-14	0	0	0	0	0	0	0
Total current liabilities	-693	-294	-1033	-420	-287	-331	-376	-380	-352	-353	-366	-324
Long-term debt	-620	-1030	-814	-1063	-1280	-1307	-1582	-1355	-933	-916	-1015	-810
Derivatives	0	0	0	0	0	0	0	0	0	0	0	0
Contingent consideration liability	-25	-16	-18	-24	-62	-60	-60	-60	-60	-60	-60	-60
Deferred tax liability	-83	-63	-206	-50	-78	-89	-105	-120	-124	-124	-125	-105
Environmental obligations	-65	-65	-51	-33	-37	-37	-37	-37	-37	-37	-37	-37
Other non-current liabilities	0	0	-7	-5	-4	-4	-4	-4	-4	-4	-4	-4
Total non-current liabilities	793	-1174	-1095	-1175	-1461	-1496	-1788	-1576	-1158	-1141	-1241	-1017
Total liabilities	-1486	-1467	-2128	-1595	-1748	-1827	-2164	-1957	-1510	-1494	-1606	-1341
Net assets	2152	1787	869	487	981	1238	1493	1841	2209	2568	2918	3169
Stated capital account	1576	1664	1939	1969	2010	2031	2031	2031	2031	2031	2031	2031
Share-based compensation reserve	119	144	2	6	12	15	0	0	0	0	0	0
Translation reserve	-53	-207	-825	-1465	-1241	-1187	-1187	-1187	-1187	-1187	-1187	-1187
Repurchase obligation for shares issued for business acquisition	0	0	-219	0	0	0	0	0	0	0	0	0
Retained earnings	510	187	-29	-23	200	379	649	997	1365	1724	2074	2325
Total equity attributable to the parent	2152	1787	869	487	981	1238	1493	1841	2209	2568	2918	3169
Non-controlling interest	0	0	0	0	0	0	0	0	0	0	0	0
Total equity	2152	1787	869	487	981	1238	1493	1841	2209	2568	2918	3169
Total liabilities and shareholders' equity	3638	3255	2997	2081	2729	3065	3657	3798	3719	4062	4524	4509

Source: Company data, Hypothesis Research estimates

Valuation

We use DCF approach to value Polymetal. Our estimated WACC is 12.3%. We assume 2.5% terminal growth rate for the company, taking into account the potential to develop the existing resource base for at least 19 years. Our DCF-based 12-month target price is GBp1040 that is 16% upside for the stock. We rate the company Buy. The stock trades at 6-56% discount to its international peer based on P/E'17-19 and EV/EBITDA'18-19. We believe both price and volume will drive the company's performance in 2018-2019 when production will be added in Kyzyl and ramp-up will be completed in Svetloye and other mines.

Figure 34. Polymetal DCF valuation and WACC estimates

\$mn	2017	2018	2019	2020	2021	2022
EBIT	542	797	996	1027	1003	983
Less taxation	-119	-180	-232	-245	-239	-233
Tax adjusted EBIT	423	617	763	782	763	750
Depreciation	206	215	233	242	243	243
Less: Capex	-370	-310	-250	-250	-250	-253
Change in working capital	70	-3	8	8	5	8
Unleveraged free cash flow	328	519	754	781	761	749
WACC	12,3%					
Future cash flow growth rate	2,5%					
Terminal value	4 783					
Fair market capitalisation	5 859					
Fair value, \$	14					
Fair value, GBp	1 040					
WACC calculation						
Cost of equity	14,8%					
Cost of debt	4,5%					
Beta	1,2					
Rate of return on risk-free securities	3,5%					
Relative equity risk premium	7,0%					
WACC	12,3%					

Source: Hypothesis Research estimates

Corporate governance and social responsibility

Polymetal has well recognized ESG policy in place. In October 2017, the company reported its sustainability position in the 93rd percentile as an outperformer in the metals and mining industry. FTSE4Good Index awarded Polymetal 5/5 score in Corporate Governance and Anti-Corruption, with ESG Rating ICB Supersector Relative improved to 84/100 from 77/100 in 2016. WWF ranked the company 1st the Environmental management category and seventh overall in their environmental responsibility ratings for metals and mining companies in Russia. RobecoSAM awarded 61 points out of 100 that is above the industry average of 48, up 28% YoY.

Polymetal is a part of leading sustainability indices such as the Euronext-Video, STOXX Global ESG Leaders and supports Carbon Disclosure Project (CDP), UN Global Compact and Global Reporting Initiative.

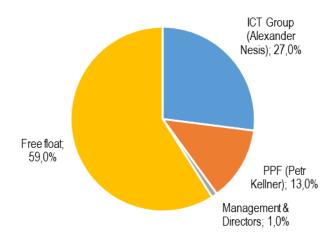
The company complies with the UK Corporate Governance Code. According to the requirement of the Code, the company's Board consist of the Chairman, one executive director (CEO) and seven non-executive directors including four independent directors. The Board has established four committees: an audit and risk committee, a nomination committee, a remuneration committee, and a safety and sustainability committee. The BoD includes following members.

Bobby Godsell, Chairman, Chair of the Nomination Committee	Mr Godsell has over 30 years of experience in the mining sector, including positions such as non-executive director at South African Industrial Development Corporation, Chairman of Eskom, CEO of AngloGold Ashanti, director of African Barrick Gold and Solar Capital, Chair of the board of Optimum Coal Holdings, Chairman of Business Leadership South Africa. He has been the Chairman of the Board since 2011.
Vitaly Nesis, Executive Director and Group CEO, Member of the Safety and Sustainability committee	Mr Nesis has been Polymetal's CEO since 2003, and the Group's CEO since 2014. He has been Executive Director and a member of the Board since September 2011.
Christine Coignard, Senior Independent Non-executive Director, Chair of the Remuneration Committee, Member of the Audit and Risk and the Nomination Committees	Ms Coignard has 27 years' experience in the banking industry and advisory services worldwide, including experience with such institutions as HCF International Advisors, Royal Bank of Canada, Societe Generale, and Citi. She has been a member of the Board since 2014.
Jean-Pascal Duvieusart, Non-executive director	Mr Duvieusart is a shareholder of PPF Group NV since 2010. He is a member of the Board since 2011. Before he has been at different roles, including Managing Partner at McKinsey.
Konstantin Yanakov, Non-executive director	Mr Yanakov is the Deputy Director General in charge of finance at ICT, Director of ICT Holding, member of the board of Greek Organization of Football Prognostics, O1 Properties Limited, Tiscali, and NPF Future. Before he held different positions at MDM Bank. He was CFO of Polymetal until 2004. He has been a member of the Board since 2011.
Marina Gronberg, Non-executive director, member of the Safety and Sustainability Committee	Ms Gronberg has been a member of the board since 2011, and before she was at Polymetal's BoD since 2008. She held different positions in banks and private equity firms. She is a board member of Waterstones, Hachette-Atticus, MIG Credit, Marenco Swiss Helicopters, PIK Group, and Nexwafe, A&NN Investments and Vitalbond, Charman of the investment committee of Alpha Trust.
Russell Skirrow, Independent non- executive director, Member of the Audit and Risk and Safety and Sustainability Committees	Dr Skirrow has been an independent member of the board since 2011 and was servicing before that at Polymetal board since 2008. He has 35 years' experience in the mining industry and investment banking with such organizations as Merrill Lynch, Dampier Gold, Gold Fields, Western Mining Corporation.
Jonathan Best, Independent non- executive director, Chair of the Audit and Risk Committee and Member of the Remuneration Committee	Mr Best has been an independent director since 2011, servicing before at Polymetal's BoD since 2006. He has more than 30 years' experience in the mining industry, including positions such as CFO of AngloGold Ashanti, Chairman of the Audit Committee of Gulf Industries, Chairman of Sentula Mining and Bauba Platinum, Chairman of GoldStone resources.
Leonard Homeniuk, Independent non- executive director, Chair of the Safety and Sustainability Committee, Member of the Remuneration and Nomination Committees	Mr Homeniuk has 35 years of experience in the mineral sector, including executive positions with Centerra Gold, Kumotor Gold, Cameco Corporation. He is an independent member of the Board since 2011. He was President, CEO of Centerra Gold in 2004-2008, and President and CEO of Polygon Gold in 2011-2014.

Shareholder structure and dividend policy

Polymetal is registered in England. The total number of shares outstanding is 430.112661mn. The stock of the company trades on the London Stock Exchange and is a part of the FTSE-250 index. The stock also included into FTSE Gold Mines, Stoxx600, Stoxx Global ESG, FTSE4GOOD, Vigeo EM 70, RTS. The free float accounts for 59% of the company's outstanding stock, including 14% held by high net worth individuals (HNWI) and 45% by institutional investors. The management and directors own 1% of the stock. Two largest strategic holders are Alexander Nesis with 27% stake and PPF group of Pert Kellner with 13% stake.

Figure 35. Polymetal shareholder structure



Source: Company data

Polyus

Business overview

Polyus is the leading Russian gold producer and ranked #8 global gold producer by output with the asset base located in several Russian regions, Including Krasnoyarsk, Sakha, Magadan, and Irkutsk regions. The company was founded in March 2006 as a result of the spin-off of gold assets from Norilsk Nickel, the Russian PGM producer. The company's shares are listed on the Moscow exchange. LSE listing was obtained in July 2017, following the placement of \$800mn among international investors.

Polyus built up a good resource base, which will help to maintain growing production profile for the next two years. The company launched the gold production on Natalkinskoye, one of the largest gold deposits globally, in September 2017. Another big exploration project is Sukhoi Log, the newly acquired deposit with four-year targeted feasibility study period.

Figure 36. Polyus main business units

Business Unit	Operating mines	Share in group output, % 2016	TCC, \$/oz 2016	Processing capacity
Polyus Krasnoyarsk	Olimpiada	48%	405	11.7mt per year
	Blagodatnoye	23%	290	8 mt per year
	Titimukhta	2%	414	
Lenzoloto	Alluvials	9%	598	9.4mt per year
Polyus Verninskoye	Verninskoye	9%	389	2.5mt per year
Polyus Aldan	Kuranakh	8%	499	4.5mt per year
Polyus Magadan	Natalka			10.1 mt per year
Exploration projects	Sukhoi Log			
	Chertovo Koryto			

Source: Company data

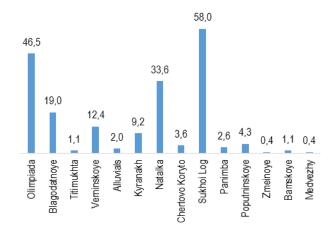
Polyus 2P reserves amount for 71 moz of gold with the average grade of 1.8g/t. the company has 193 moz of gold in measured, indicated and inferred mineral resources with the average grade of 1.8g/t. Most of Polyus resource base is at Olimpiada, Natalka and potentially in Sukhoi Log deposits.

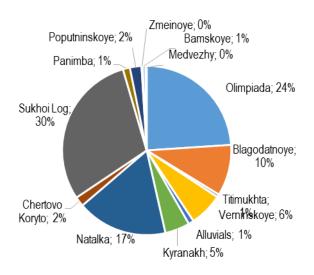
Figure 37. Polyus 2P reserves

		Proven			Probable			Total	
	Ore, mt	Grade, g/t	Gold, moz	Ore, mt	Grade, g/t	Gold, moz	Ore, mt	Grade, g/t	Gold, moz
Mineral reserves									
Olimpiada	6,5	2,5	1	309	3	30	316	3	30
Blagodatnoye	42,0	0,9	1	182	2	9	223	1	10
Titimukhta	5,3	1,6	0	7	3	1	12	2	1
Verninskoye	11,0	1,3	1	86	2	5	96	2	5
Alluvials				105	0	1	105	0	1
Kyranakh				136	1	5	136	1	5
Natalka	146,0	1,6	7	147	2	9	293	2	16
Development and exp projects	loration								
Chertovo Koryto	0,0	-	-	62	2	3	62	2	3
Total	210,0	1,4	9,7	1033	1,8	61	1243	1,8	71

Source: Company data

Figure 38. Polyus measured, indicated and inferred Figure 39. Polyus mineral resources structure by mine mineral resources, moz of gold





Source: Company data Source: Company data

Production

Currently, Olimpiada is the largest gold production unit for Polyus with share 48% in the total Polyus gold output in 2016. The Olimpiada mine has the capacity of 11.7mt of ore per year and produced 943 koz in 2016. With the launch of Natalka deposit and further ramp up to 10.1mt of ore by 2019, Polyus will be able to produce there 420-470 koz of gold per year that may account up to 20% of total Polyus' output. The investments in the development of Natalka amounted \$2bn during 2011-2016 and may account another \$503mn until 2020. Polyus started the development of Natalka more than 5 years ago. However, the project was suspended in 2013 due to problems with the development model. After the recalculation, the reserves of Natalka were reduced to 16moz and the new plan of development was finally settled in 2016. The processing facility at Natalka will be launched in 2017 and it should reach its capacity of 10.1mt of ore per year by 2019. The project is still loss-making in 2017. However, it should bring EBITDA above \$50mn in 2018 and above \$400 mn in 2019. Natalkinskoye has a relatively low gold grade in ore at 1.7g/t compared to 3g/t at Olimpiada.

Polyus total production may grow by 32-35% from 2.075-2.125moz in 2017 to 2.8moz due to the launch of Natalka by 2019, according to the company. In 1H17, the company produced 938 koz of gold, up 12% YoY from 839 koz. The main producing assets include Olimpiada and Blagodatnoye with production 445.3koz (48%) and 214 koz (23%) respectively.

Unit Production drivers

Olimpiada

Polyus completed the reconfiguration of Mill-1 at Olimpiada Mill in September 2016 and increased throughput capacity at Mill-1 from 2.4mt to 3mt. High-grade ore from Olimpiada will replace low-grade Titimukhta ore. The new capacity of BIO-4 of 74kt per year, in addition to BIO-1,2 and 3, will help the company to process the total amount of floatation concentrate in-house

Blagodatnoye	The company completed the reconfiguration project to process up to 8mt per year. Heap leaching of low-grade ore stockpiles may be feasible with a high and stable recovery rate, according to the company. Its completion is scheduled for 2019.
Verninskoye	In 2016, the project focused on 3-stage improvement of the Verninskoye Mill capacity up to 3mt per year was completed. The capacity will be reached in 2017-18. The recovery rate may reach above 88%.
Kuranakh	The expansion of the capacity to 5mt per year will be done in two stages. The first stage is completed and the capacity will reach 5mt in 2017. The heap leaching project for low-grade stockpiles accumulated at Kuranakh in the volume of 62mt with the grade of 0.6g/t is on the way to be completed in 2017.
Natalka	The company operates the 100kt pilot plan to produce 5koz of Dore gold in 2017. The project was resumed in 2016, and as the project was commissioned in September 2017. The target capacity should be reached by 2019.

Another large project for Polyus is Sukhoi Log, located in Irkutsk region just six kilometers away from Verninskoye. Sukhoi Log reserves estimate is at 930.9 mt of ore with the average grade of 2.1g/t or 62.8moz of gold per GKZ standards. This is the largest Russian and one of the world largest undeveloped gold deposits. Polyus and RT-Business Development (RT) jointly founded SL Gold Company, which won a development license in February 2017. The project's estimates investments are \$2.4b. The exploration stage is still to be completed. The feasibility study will take 4 years, after that the company is to decide on the further development plan.

3000 2500 ■ Natalka Zapadnove 2000 Kuranakh Alluvials 1500 ■ Veminskove 1000 Titimukhta ■ Blagodatnoye 500 Olimpiada 0 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

Figure 40. Polyus production forecast, koz

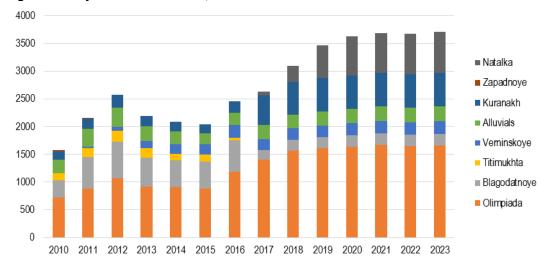
Source: Company data, Hypothesis Research estimates

Financial forecast

The Polyus financial forecast is based on several main assumptions. The company has production plan for Natalka that will drive the production volumes in 2017-2019. The recent production update from the company supports the production growth 16% YoY to 642.3koz in 3Q2017 and revenue increased 5% YoY to \$734mn. The revenue figure is expected to be driven by production volumes from Natalka in the medium term. We have not included Sukhoi Log in capex and production forecast.

We believe the company to announce main figures on terms and feasibility study in the next several months.

Figure 41. Polyus revenue forecast, \$mn



Source: Company data, Hypothesis Research estimates

Our financial forecast is presented below.

Figure 42. Polyus Income statement

\$mn	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Gold sales	2259	2197	2159	2429	2629	3092	3461	3630	3690	3671
Other sales	70	42	29	29	35	37	38	40	42	43
Revenue	2329	2239	2188	2458	2664	3128	3500	3670	3732	3714
Cost of gold sales	-1347	-1174	-876	-891	-1007	-1227	-1640	- 1811	-1864	-1908
Cost of other sales	-47	-33	-25	-28	-28	-29	-31	-32	-33	-35
Gross profit	935	1032	1287	1539	1629	1872	1829	1827	1835	1772
General, administrative and selling expenses	-226	-183	-143	-151	162	190	213	223	227	226
Other expenses	-15	-20	20	-27	-29	-34	-38	-40	-41	-41
Reversal of Impairment /(impairment losses)	-472	17	0	0	0	0	0	0	0	0
Operating profit	222	846	1164	1361	1761	2027	2003	2010	2020	1956
Foreign exchange loss, net	4	123	149	396	69	0	0	0	0	0
Change in fair value of derivative financial instruments	-5	-934	-125	119	68	0	0	0	0	0
Finance income	27	31	69	40	34	34	34	34	34	34
Finance costs	-14	-26	-45	-145	-145	-85	-91	-82	-68	-54
Profit/Loss before income tax	234	40	1212	1771	1787	1976	1947	1962	1986	1936
Income tax expense	-91	-222	-191	-326	-422	-486	-480	-481	-484	-469
Profit/Loss from continuing operations	143	-182	1021	1445	1365	1490	1467	1480	1502	1467

Source: Company data, Hypothesis Research estimates

Figure 43. Polyus balance sheet

Figure 43. Polyus balance sheet \$mn	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Property, plant and equipment, net	1506	950	2023	2938	3191	3768	4042	4196	4289	4356
Capital construction in progress	278	189	0	0	0	0	0	0	0	0
Mine under development	1573	1102	0	0	0	0	0	0	0	0
Exploration and evaluation assets	175	110	0	0	0	0	0	0	0	0
Derivative financial instruments and investments	2	172	411	57	57	57	57	57	57	57
Inventories	295	227	184	264	297	361	480	529	545	558
Assets classified as held for sale	0	0	0	0	97	0	0	0	0	0
Deferred tax asset	0	47	46	75	81	95	107	112	114	113
Other non-current assets	0	3	8	37	42	51	67	74	76	78
Total non-current assets	3829	2800	2672	3371	3766	4332	4753	4969	5082	5162
Current inventories	702	440	296	369	416	505	671	740	762	780
Derivative financial instruments and investments	0	0	205	10	10	10	10	10	10	10
Deferred expenditures	16	13	13	10	11	14	18	20	21	21
Trade and other receivables	27	11	23	58	63	74	83	87	88	88
Advances paid to suppliers and prepaid	28	16	17	19	25	28	28	28	28	27
expenses	20	10	17	19	23	20	20	20	20	21
Taxes receivable	250	48	59	89	100	122	162	178	184	188
Bank deposits	48	269	0	0	0	0	0	0	0	0
Assets held for sale	0	0	0	0	46	0	0	0	0	0
Cash and cash equivalents	809	1217	1825	1740	485	1302	1761	2220	2742	3307
Total current assets	1880	2014	2438	2295	1156	2054	2733	3283	3835	4422
Total assets	5709	4814	5110	5666	4921	6386	7486	8251	8916	9584
Trade and other payables	260	154	151	222	250	304	404	445	458	469
Borrowings	269	90	38	283	23	588	779	782	740	0
Derivative financial instruments	0	547	0	0	0	0	0	0	0	0
Taxes payable	53	36	29	93	120	139	137	137	138	134
Total current liabilities	582	827	218	598	393	1030	1319	1364	1336	603
Site restoration, decommissioning and	69	49	32	38	45	47	49	51	54	56
environmental obligations	09	43	32	30	45	41	43			
Borrowings	937	1723	2151	4698	2912	2524	2045	1563	1123	1423
Derivative financial instruments	0	423	509	456	472	472	472	472	472	472
Deferred revenue	0	0	0	76	78	0	0	0	0	0
Deferred tax liability	134	150	133	182	197	232	259	272	276	275
Other non-current liabilities	33	22	20	32	36	44	59	65	67	68
Total non-current liabilities	1173	2367	2845	5482	3695	3271	2835	2371	1938	2238
Total liabilities	1755	3194	3063	6080	4089	4302	4154	3736	3274	2841
Share capital	1	1	7	7	5	5	5	5	5	5
Additional paid-in capital	2152	2152	2273	2288	1933	1933	1933	1933	1933	1933
Treasury shares	0	0	0	- 3712	-109	-109	-109	-109	-109	-109
Cash flow hedge revaluation reserve	0	108	123	12	0	0	0	0	0	0
Translation reserve	-396	-2045	-2623	- 2720	-2744	- 2744	- 2744	- 2744	- 2744	- 2744
Retained earnings	1922	1258	2196	3617	1659	3000	4246	5431	6557	7658
Total equity attributable to shareholders of the company	3679	1474	1976	-508	744	2085	3331	4516	5642	6743
Non-controlling interest	275	146	71	94	89	0	0	0	0	0
Total equity	3954	1620	2047	-414	833	2085	3331	4516	5642	6743
Total liabilities and shareholders' equity	5709	4814	5110	5666	4921	6386	7486	8251	8916	9584

Source: Company data, Hypothesis Research estimates

Figure 44. Polyus condense cash flow statement

\$mn	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Net cash generated by operating activities	-175	-185	1103	1178	1467	1642	1602	1698	1762	1734
Net cash used in investing activities	-1020	-775	-688	-280	-776	-516	-416	-366	-346	-316
Net cash generated by financing activities	493	450	220	-1015	-2013	-308	-727	-874	-893	-853
Net (decrease)/ increase in cash and cash equivalents	-108	485	635	-117	-1323	817	459	458	523	565
Cash and cash equivalents at the beginning of the period	960	809	1213	1825	1740	485	1302	1761	2220	2742
Effect of foreign exchange rate changes on cash and cash equivalents	-43	-77	-35	32	68	0	0	0	0	0
Cash and cash equivalents at the end of the year	809	1217	1825	1740	485	1302	1761	2220	2742	3307

Source: Company data, Hypothesis Research estimates

Valuation

Our DCF model for Polyus is based on WACC of 11.0%. We assume 3.5% terminal growth rate for the company in view of the high potential of Sukhoi Log to be realized in the future. Our DCF-based 12-month target price is \$53 per depository receipt (DR) that represents 30% upside for the DR. We rate the company Buy. The stock trades at over 50% discount to its international peer based on P/E'17-19 and with 1-14% discount based on EV/EBITDA'17-19. The debt of \$4.5bn is relatively high for the global sector now. Polyus has ability to reduce the debt in the coming years, following Natalka launch. We believe deleverage, volume and price growth may drive the company's value.

Figure 45. Polyus DCF model

\$mn	2017	2018	2019	2020	2021	2022
EBIT	1761	2027	2003	2010	2020	1956
Less taxation	-422	-486	-480	-481	-484	-469
Tax adjusted EBIT	1339	1542	1523	1528	1536	1488
Depreciation	215	233	276	296	307	314
Less: Capex	-810	-550	-450	-400	-380	-350
Change in working capital	-80	-146	-266	-111	-35	-28
Unleveraged free cash flow	663	1079	1083	1313	1428	1423
WACC	11,0%					
Future cash flow growth rate	3,5%					
Fair market capitalisation, \$mn	14245					
Number of shares, mn	134					
Fair value per DR, \$	53.3					
WACC estimates						
Cost of equity	14,0%					
Cost of debt	5,3%					
Beta	1,0					
Rate of return on risk-free securities	3,5%					
Relative equity risk premium	7,0%					
WACC	11,0%					

Source: Hypothesis Research estimates

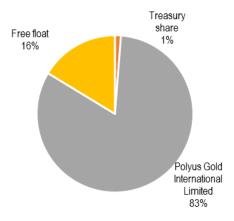
Corporate governance

Polyus Board of directors includes nine members with three independent members, three executives and three representatives of major shareholder Polyus Gold International. Two representatives of Kerimov family are included in the Board. It is planned to give one of those place to the new independent director Maria Gordon, who services as an independent director at Alrosa now. The company has four committees: Audit Committee, Nomination & Remuneration Committee, Strategy Committee and Operations Committee. Three independent directors are Edward Dawling, Kent Potter and William Champion. Edward Dawling's, experience includes positions such as the Chairman of the Board of Alacer Gold, a board member at Teck Resources and Detour Gold Corporation. Kent Potter has wide experience with Chevron, TNK-BP, SUEK, and LyondellBasell, and running as the board member of EuroChem now. William Champion has over 30 years of experience in mining industry with Rio Tinto, and Compania de Minas Buenaventura. Polyus has several policies of sustainable development in place and working to meet the global environmental, social and health & safety standards.

Shareholder structure

The major shareholder of Polyus is Polyus Gold, owned by Said Kerimov, the 22-years old son of Suleiman Kerimov. The company has registered GDR program for 35%. The current free float is 16.34%. In July 2017, Polyus Gold sold 9% of Polyus shares on LSE raising \$800mn to funds like BlackRock Gold Fund and Oppenheimer. The company's depository receipts traded in USD on LSE with ratio one DR per two common shares. In June 2017, Polyus signed an agreement with the consortium of Chinese investors led by Fosun. According to the agreement Chinese investors will buy 10% in Polyus at \$70,6025 per share or for \$886,9mn, and the option for another 5% in the company. The company did not pay dividends in 2013-2016.

Figure 46. Polyus shareholder structure



Source: Company data

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