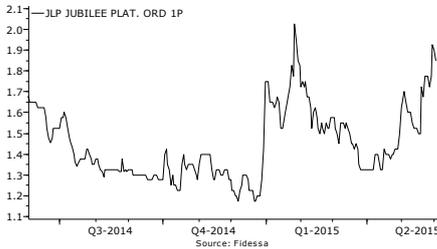


4 June 2015

Jubilee Platinum Ltd (JLP.L, JBL.J)



After patient capital growth, now pivot to PGE production

Dual-listed Jubilee Platinum is a South African Platinum production specialist, building supply chain capacity from 'Mine-to-Metal'. With a 63% share of an estimated 70 million ounce Platinum Group Element resource on the eastern limb of the Bushveld Complex, and exclusive access to a proprietary smelting technology, in the long run the company is attempting to build a mid-tier independent platinum producer.

Strategy: For the last decade JPL's stated strategy has been to achieve Mine-to-Metal production. Through the commodities crisis of confidence that strategy has produced a break-even Metals-to-Mine group achieved primarily through organic growth, and will shift again to leverage the group's assets and achieve platinum production.

Portfolio: JPL has all the building blocks it needs to reach its goal of independent production of metallic Platinum Group Elements, except the \$800m+ required to build a new deep mine.

Valuation: This is a long-term play currently trading at an option value. Until the grade and recovery for the mid-term tailings projects have been published, and the means of finance revealed, the market valuation is appropriate.

Risks: The risks of platinum mines on the Bushveld Complex of South Africa are well known in industrial, geological, metallurgical and macro-economic terms. Right now the primary risk for JPL is in sourcing capital at a sustainable cost.

Investment summary: The board has weathered the commodities storm so far, being paid in equity, leveraging intellectual property and grabbing opportunities in energy supply. However, JPL has always seen metals production from a geological resource as its raison d'être. The tailings projects are a halfway house to achieving primary mined production. In a capital-constrained market where no new PGE mines are being built, they represent a potential step-up in cashflow from the low millions of dollars pa, as a services company, to the order of \$10-20m per year as a tailings miner. This should throw off enough cash to advance the Tjate project at a speed that doesn't outstrip the market. This is a long play where management are using intellectual property to form the foundation to competitive advantage.

Jun Year End (£, millions)	FY10	FY11	FY12	FY13	FY14
Revenue	0.95	5.5	3.73	4.75	4.04
Operating Profit/(Loss)	-2.4	-6.51	-8.22	-7.08	-5.15
Net Interest	0	0.65	0.58	0.27	0.43
Profit Before Tax	-2.23	-7.01	-8.55	-7.33	-5.57
Profit After Tax	-2.23	-7.59	-7.88	-7.47	-5.55
Revenue per Share (p)	0.58	2.15	1.33	1.47	0.95
Earnings per Share (p)	-1.35	-2.67	-2.43	-2.41	-1.27
Net (debt)/cash	18.91	0.5	-2.01	-1.39	-1.84
P/E (x)	n/a	n/a	n/a	n/a	n/a

Price: 1.80p
12m High 2.22p
12 m Low 1.02p
Mkt cap £13.17m
Shares 750m

Sector Mining
Market London (AIM)

Brokers Daniel Stewart & Co PLC
Beaufort Securities Limited

Website www.jubileeplatinum.com

Description: Jubilee is a junior platinum miner with access to proprietary mineral processing and refining technologies. Through a mixed strategy of tailings reprocessing, toll treatment and sales of excess energy it hopes to leverage its skills and build a mid-tier vertically integrated platinum group specialist.

Strategy

Jubilee Platinum's stated strategy is to become a vertically integrated platinum group element (PGE) producer. This means that it wishes to exert cost control over all aspects of the production of PGEs "From Mine to Metal", including intermediate processing to semi-refined mixed metal products and downstream refining into high purity metals.

In order to achieve this, really quite tough job, over the last decade Jubilee has acquired proprietary smelting and refining processes that it hopes to prove up technically then combine commercially when it eventually does reach deep mine production.

The technical and economic proving of the ConRoast smelting process is currently on-going with ores and tailings from various sources being toll-treated as a means to test the technology's performance envelope. The process has started relatively simply with ferrochrome production, but will advance in complexity (and potential profit) through the addition of PGEs to the ore stream and their concentration in the semi-refined alloy or 'matte' product.

ConRoast has significant environmental advantages over current processing technologies, in terms of emissions and total energy use, but additionally its potential use in remediating historic acid-generating tailings is under on-going development. This initially involves the design and implementation of a concentrator (see announcement 11 Feb 2015) to beneficiate the tailings to a grade where ConRoast can be profitably employed.

The company's Middleburg smelter complex, currently housing 3 Plasma-ARC furnaces, is self-powered by the company's subsidiary 11MW power plant directly connected to a SASOL-owned gas pipeline. The size of the power plant and the intermittent nature of commercialisation operations mean that the power plant is being used to power the smelters and provide excess energy to the South African National Grid. During smelter downtime the power plant feeds all its available energy to the grid, helping to alleviate some of the national power quality and continuity issues. In addition to ConRoast testing, JPL has been running a successful ferro-silicon production line out of Middleburg, a business that it has grown into an expected profit-maker by the end of this year.

Both the environmental advantages of ConRoast and the energy sales are strongly supported by government, as is the vertical integration strategy, as SA fights to retain its position as the home of platinum production.

Making hay while it rains

JPL was unlucky in its timing (as were most miners of this generation), but instead of changing tack towards another commodity or region, it has stuck with its convictions; that PGEs will remain in demand in the long term and that the Intellectual Property (IP) that underlies the ConRoast patents represents a solution to the next logical stage of PGE mining in South Africa. Everything that it has done since 2008 should be seen through these two lenses and judged on whether the action has perpetuated or advanced the cause.

Some background;

PGEs have been mined from The Bushveld Complex for around 80 years and for most of that time the shallower and less mineralogically complex Merensky Reef was the dominant source of ore. Deeper in the stack of cumulate lithologies lies the UG2 reef, whose higher chrome concentrations cause difficulties when metallurgists try to smelt the ore in the same equipment as the Merensky material.

The underlying problem is the melting point of the ore. In the Merensky the PGEs are mainly found in mixed sulphide phases, with a relatively low melting point but high emissions of acidic gases. In the UG2 and other, deeper, cumulate chromite reefs the PGEs are more difficult to shake loose as they are hiding in solid solution with the chrome of the mineral chromite.

In the past miners have preferentially extracted and processed shallower material from the Merensky, leaving the deeper chromite cumulates for later work. As time passed individual miners have exhausted their mines of Merensky material and attempted to substitute the chrome-rich UG2 ore. This has not been an over-whealming success. The higher melting point of the ore required more energy and more cooling, necessitating furnaces using higher cost materials and costing more to maintain.

So the South African government sponsored mineral processing research organisation, Mintek, developed a way to blend mineral concentrates such that the melting point, the environmental emissions and energy cost were all addressed to a very large degree. ConRoast, as a process, required a fifth of the arc furnace volume to produce a similar tonnage of metal and in doing so generates less than a twentieth of the acid gas emissions, when processing UG2 material compared with the same arc furnaces processing conventional blends of Merensky Reef material.

The question is then; given the current platinum industry is processing roughly 55% UG2 to 45% Merensky ore, and the patent for the process was being offered for free, why did no-one else pick up ConRoast ?

There are two relatively straightforward answers to that. The current industry participants were already invested in processing plants 5 times the size of a ConRoast plant and the ConRoast process still carried (and still does carry) some execution risk as it was considered pre-commercial when released from the lab.

PGEs as Critical & Strategic Minerals

Some macro-economics and resource politics.

Those who follow natural resources policy around the world will have heard these terms and know that every major industrial economy has listed PGEs as '*critical*' to their economy by virtue of their use as petrochemical catalysts. Some individual platinum group metals are also listed as '*strategic*' by some international players, depending on their distinct industrial bias and military requirements.

However, it is important to state that neither '*criticality*' nor strategic importance implies a shortage of resources. The world is not short of PGEs. At

last count in 2014, the US Geological Survey estimated that known and 'undiscovered' resources of PGEs stood at around 150,000t, with global demand of around 470t pa. Known PGE resources in South Africa stand at around 65,000t (138 years' supply).

The concern being expressed by designating PGEs as *critical* or *strategic* is not then absolute availability, it is that the supply chain is so concentrated in South Africa, Zimbabwe and Noril'sk in Russia, with only minor resources known outside these three mega deposits.

So on this front there is no global, macro-economic argument for adding new PGE mining capacity in South Africa, except from those within the country who have explicitly expressed the wish to remain the dominant force in upstream PGE supply and, equally, extend their supply chain further into value-added refining and beyond. This would be mainly at the expense of the UK's Johnson Matthey (JMAT.L), Anglo-American (AAL.L) and a very few other long-term industry participants.

Of course China remains a player in African resources and its lack of a substantial onshore PGE resource means that it is seeking to plug that gap in its own portfolio, as it has with many other mineral commodities, but with prices static and surface stockpiles absorbing volatility, there is no great pressure to act in building new mines, except as a means to secure individual value-added supply chains (such as by an auto maker or fuel-cell developer).

It could easily be five years before mine plans are revisited and as much as a decade before new production capacity comes on-stream.

Mid-term Market Weakness vs. The Long Game

Whilst there is still Merensky ore to be dug and processed, ConRoast, though it has been shown to work, is seen as being the riskier option within what has always been a high capital corner of the mining business.

We have gone past the point where 50% of virgin ore processed in South Africa comes from the chromite-rich cumulate reefs such as the UG2, so we are definitely on the downslope away from the Merensky. Or if you want to put it in Hubbertian terms we are past 'Peak Merensky' and approaching the tipping point where new mines and plants are more economic if designed to mine UG2-type mineralogies as their primary sources of ore. In fact if the South African government took a German (or even Chinese) approach to energy and environmental legislation it could accelerate the existing economic push towards the UG2 through implementation of more aggressive energy efficiency and emissions control. The release of the ConRoast patents into the market could easily be seen in those terms.

Make no mistake, those push factors already exist with political pressure for the mining industry to help clean up a century of mine wastes and for it to actively help in the national energy supply problems, its just the time-scale over which change happens that legislation could influence.

Discussion

There is an obvious argument for the application of new, cleaner, cheaper technology in the platinum industry. Unfortunately the geology of The Bushveld works against the rapid uptake of all but the most trivial of inventions. The sheer size of the deposits and the economic momentum behind their extraction means that the platinum industry is amongst the slowest to implement change across the mining sector.

There is a strong argument that the industrial unrest seen in South Africa in recent years is a symptom strongly influenced by those the same geological and economic factors, and that the 'ownership' debate is actual a co-symptom rather than a primary cause of dispute in this specific commodity group.

Seen under this lens you could then argue that reprocessing waste tips or processing virgin ore from chromite-rich cumulates, both of which could be dug from very risk averse, near or at surface workings, bypasses the high risk deep mine environment that appears to be the ultimate source of industrial dispute in the platinum sector of South Africa.

Putting that general argument aside, JPL has found a means to advance towards its stated aims that does not currently require a deep mined source of ore and could easily produce enough profit to advance the Tjate deep mine project at a pace that fits into the macro-economic environment.

It has built a successful ferro-alloy production capacity (the Middleburg smelter) and it has built a successful energy supply business linked to that infrastructure. Moreover, it has spent time and effort to convince the wider industry of the technical merits of ConRoast at a fully commercial scale.

Its next step is to become the miner it always wanted to be. Following that it will need to put its investor's money where its mouth is and demonstrate ConRoast for PGEs at scale.

It has plans to do this by selling the majority of two businesses that it built (whilst retaining preferential terms of course) to part-fund the building of two tailings processing plants. The company estimates annual combined production of around 40koz 4PGE from those two projects, with production starting end 2015/early 2016, and ramping to the annual rate depending on how quickly the processing plants can be financed and built.

It also plans to continue with the commercialisation of ConRoast. This is likely to be either in partnership or through licensing agreement. A relatively small smelter dedicated to ConRoast could replace a district-scale smelter operating in the conventional manner, so it is not outside the bounds of probability that JPL could build yet another stand-alone business within the same envelope of IP.

The revenue from the sales of concentrate from those tailings, and any other opportunistic business, can then be used to advance the Tjate project. In the retained rights to the ConRoast patents, it has the technical means to build a world-leading processing plant, rather than adding to SA's energy and environmental problems. And with 63% ownership of a 70Moz 4PGE resource JPL certainly has the potential to meet its stated goals of an unbroken Mine-to-Metal production capacity.

Investment Conclusion

Investment in Jubilee Platinum is a long game. It is not without substantial political risk and it's primary geological asset, the 70 Moz Tjate project, is at a relatively early stage of development (positive PFS notwithstanding). It has weathered the worst of the storm in commodities by taking opportunities that were presented at the time, but it will now take more time before the industry will start building new deep mining capacity again.

How long JPL will be a specialist tailings re-processor before it starts to spend on advancing it's deep mine once more and under what terms, will define how its board approaches the matter of long term shareholder returns. We probably won't know that until both tailings plants are on-line, likely to be in mid-2016.

We understand that the life-span of the tailings projects should be around 8-10 years each, on current estimated tonnage, but that there are substantial amounts of further tailings that could be of interest. A sustained production of 40koz pa, at \$1250/oz of platinum, is likely to provide a substantial uplift in revenue, but without terms agreed for either the sale of the smelter and energy supply businesses or the building of the tailing re-processing plants we are not able to provide an earnings estimate.

Financial Analysis

At this stage it is not possible to produce forward estimates due to lack of data regarding toll treatment contracts, mineral recovery performance and mineral grades. The company is at the point of switching between business models, from service company to tailings re-processor, so the predictive capacity of the financial data shown below is limited.

Summary Financial Data					
Income Statement (£ m)	30-Jun-10	30-Jun-11	30-Jun-12	30-Jun-13	30-Jun-14
Continuing Operations					
Revenue	0.95	5.50	3.73	4.75	4.04
Operating Profit/(Loss)	-2.4	-6.51	-8.22	-7.08	-5.15
Net Interest	0	0.65	0.58	0.27	0.43
Profit Before Tax	-2.23	-7.01	-8.55	-7.33	-5.57
Profit After Tax	-2.23	-7.59	-7.88	-7.47	-5.55
Attributable to:					
Minority Interests	0.00	0.77	1.10	-0.29	0.19
Equity Holders of Parent Company	-2.23	-6.82	-6.78	-7.76	-5.37
Earnings per Share - Basic	-1.35p	-2.67p	-2.43p	-2.41p	-1.27p
Earnings per Share - Diluted	-1.35p	-2.67p	-2.43p	-2.41p	-1.05p
Balance Sheet (£ m)	30-Jun-10	30-Jun-11	30-Jun-12	30-Jun-13	30-Jun-14
Assets					
Property, Plant & Equipment	0.11	12.45	11.88	8.54	5.99
Intangible Assets	80.71	88.22	81.92	73.24	65.41
Other Non-Current Assets	0.00	2.91	0.00	0.00	0.00
Total Non-Current Assets	80.82	103.58	93.8	81.78	71.40
Current Assets					
Inventories	0.68	0.83	0.26	0.00	0.00
Trade & Other Receivables	8.36	3.12	1.44	1.24	1.23
Cash at Bank & in Hand	13.00	2.01	1.06	0.74	0.75
Total Current Assets	22.04	5.96	2.76	1.98	1.98
Total Assets	102.86	109.54	96.55	83.76	73.37
Liabilities					
Borrowings	0.00	-0.98	-3.04	-1.11	-1.11
Other Current Liabilities	-3.13	-4.48	-1.73	-2.26	-2.71
Total Current Liabilities	-3.13	-5.46	-4.76	-3.37	-3.82
Net Current Assets	18.91	0.5	-2.01	-1.39	-1.84
Non-Current Liabilities					
Borrowings	0.00	-2.50	-1.16	-1.00	0.00
Provisions	-16.58	-17.72	-17.5	-16.58	-15.44
Total Liabilities	-19.71	-25.69	-23.43	-20.95	-19.26
Net Assets	83.15	83.85	73.12	62.81	54.12
Capital & Reserves					
Share Capital	2.55	2.57	64.43	69.69	73.43
Share Premium Account	56.98	57.6	0.00	0.00	0.00
Other Reserves	36.58	42.86	35.74	27.76	20.93
Retained Earnings	-12.95	-21.06	-27.84	-35.06	-40.43
Shareholders Funds	83.15	81.96	72.33	62.39	53.94
Minority Interests/Other Equity	0.00	1.89	0.80	0.43	0.18
Total Equity	83.15	83.85	73.12	62.81	54.12

Ratios - based on IFRS

	30-Jun-10	30-Jun-11	30-Jun-12	30-Jun-13	30-Jun-14
Continuing Operations					
PE Ratio - Adjusted	-20.56	-8.15	-4.17	-2.44	-1.20
PEG - Adjusted	n/a	n/a	n/a	n/a	n/a
Revenue Per Share	0.58p	2.15p	1.33p	1.47p	0.95p
Pre-Tax Profit per Share	-1.37p	-2.74p	-3.06p	-2.27p	-1.31p
Operating Margin	-252.21%	-118.30%	-220.62%	-149.08%	-127.37%
Return on Capital Employed	-11.71%	-37.78%	-61.75%	-85.46%	-97.79%
Net Asset Value per Share (exc. Intangibles)	0.96p	-2.44p	-3.33p	-3.06p	-2.19p
Net Gearing	-15.63%	1.80%	4.34%	2.19%	0.67%

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