K+S Aktiengesellschaft SDF s

November 02, 2019 - 7:25pm EST by puppyeh

			2019	2020
Price:	13.00	EPS	0	0
Shares Out. (in M):	191	P/E	0	0
Market Cap (in \$M):	2,500	P/FCF	0	0
Net Debt (in \$M):	3,100	EBIT	0	0
TEV (in \$M):	6,800	TEV/EBIT	0	0
Borrow Cost:	Genera	l Collateral		

Description

Thesis summary

K+S (SDF, listed in Germany), is a great mid-term structural short, because it is the highest-cost producer of scale in a global commodity market (potash) that is likely entering a multi-year downturn, all while being saddled with an incredibly levered balance sheet (4.5x net/6.5x adjusted) and burning cash. The sources of its uncompetitiveness are largely structural and unfixable (high-cost legacy assets), and it not unlikely up to 80% of SDF's producing potash assets today are made permanently obsolete if or when disruptive new potash capacity comes online in another 5-6 years. Furthermore, SDF will face the first meaningful maturity wall in its debt structure - 835mm of bonds maturing in 2021 - likely during a period of potash market weakness and ongoing negative cashflow, as the company is effectively committed to brownfield expansion at its new potash mine in Canada, in a late attempt to pivot the business away from its highcost German assets. If potash prices fall 15% and stay there for 1+ years, I think there is a decent chance SDF equity is fully impaired (probably through massive dilution to recap the balance sheet). If potash falls more modestly, I think the stock still gets rerated lower due to a confluence of the above factors, and the stock could still trade down 60% in my view. And even if potash stays where it is or makes a recovery, you are still short the highest-cost player - in an industry where the cost curve is shifting downwards - with an unsustainable leverage burden, at >30x free cash flow, meaning any broader economic contraction or change in credit market attitudes should catalyze substantial downside too.

SDF has a 2.5bn EUR market cap, is listed on the DAX (in Germany), is a GC borrow, and trades 20mm+ EUR a day, so this is actionable for all accounts. It has been written up once before, as a short, by Biffins in 2016 – that writeup was EXCELLENT and gives a great summary on the history of the potash market. I am writing it up again now because: a) after three or so strong years, the potash market appears to be entering a correction; b) that writeup focused much more on the global commodity drivers, while this will focus more on the idiosyncratic company issues facing SDF; and c) much has changed since 2016 re SDF's balance sheet and the company faces its first real maturity wall test upcoming, making a revisit now most topical.

This write-up is ordered as follows:

The current situation in the potash market;

The legacy of SDF's high-cost German operations;

SDF's pivot to Canada and the Bethune mine;

Downside optionality in the BHP Jansen project decision;

Quick overview of SDF's Salt business;

Balance sheet, leverage, and how the short wins from here.

Current situation in the Potash market

While Biffins gives an excellent summary of the history of the potash market in his writeup, perhaps a few introductory remarks are in order. Potash is one of three major crop fertilizers (the other being nitrogenderived urea; and phosphates) which are used globally to increase crop yields. All three are generally used in conjunction, though potash has particularly strong usage with cereals (corn/wheat/soybeans/rice/palm oil), which collecticely consume about 60% of global potash. The variables driving potash demand are many and varied, ranging from crop prices; to farmer incomes; to harvest quality; to global inventories; and, particularly, to where we are in the potash cycle. This last point is important because, unlike nitrogen fertilizers, potash do not need to be used every year or every harvest – the potassium generally remains in the soil for multiple seasons, and so after a couple of strong years, it is not unusual to see potash application slow as farmers often cut potash usage before that of other fertilizers.

The global market in potash production is fairly concentrated, with a few large producers controlling most of the global output. Global production capacity is around 80mt a year, while demand (according to Nutrien, the entity formed through the merger of Potash Corp and Agrium) is around 66-68mt, meaning the industry is operating in the low 80s% utilization. Given outages/maintenance/some unreliable production, this picture is fairly balanced; over the medium term, supply and demand have roughly grown together at around 2-3% a year. Note also that these main producers used to be organized into a cartel, comprising BPC (the Russian and Belarussian producers) and Canpotex (the Canadian producers), with K+S, the German odd man out, enjoying the higher-than-marginal-cost-implied prices that resulted from this arrangement. Biffins covered the reasons for the cartel break (in 2013) and the underlying dynamics very well in his writeup, so I won't repeat him here. Suffice to say that today, three things are true about the potash market:

There is still some legacy supply-side discipline, but this is in no sense a cartel anymore;

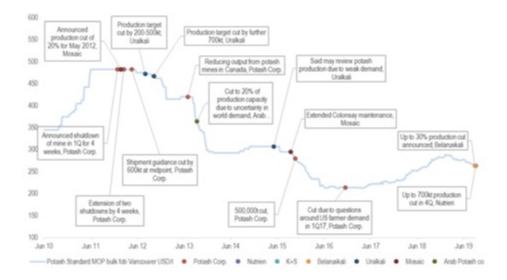
Potash prices are still quite elevated by historical standards (as well as versus the marginal cost of brownfield expansion tons at the low-cost producers); and

K+S is by far the most expensive producer of scale on the curve

It goes without saying that you can't have a bearish take on a name like SDF without a bearish outlook on the broader potash market. In this vein, I believe potash is riding hard for a fall. From 2016 thru 2018, global potash prices (using Brazil muriate of potash, or MOP as a broad benchmark), rallied consistently, rising from \$220/t to near \$350/t on the back of a confluence of factors. On the demand side, potash consumption surprised to the upside in 2017, with global demand topping 8%, due to stronger than expected emerging market demand (China, India) and healthy farmer incomes. At the same time, new supply from operators like Eurochem (a Russian producer) and SDF did not come online as scheduled, due to cost overruns/teething problems/execution issues. In early 2019, most market pundits expected further strength in potash this year, given still tightish supply, reasonable farm incomes, and ongoing organic demand growth in EM.

However, prices began falling after 1Q, and by mid-year prices had corrected 4-5% from the recent highs. There were likely a few reasons for this: a variety of potash crops in key markets (Brazilian corn; Malaysian palm oil; Chinese rice; Chinese soybeans) had been in fairly extended downturns; and as mentioned, potash demand had surprised to the upside for the previous two years, leading to the building of substantial inventories in key markets like Brazil and China. By late summer, global potash prices had fallen 6-7% from their 1Q peaks, and the China contract – typically a leading indicator for next semester's potash pricing – was delayed, apparently because of elevated Chinese port inventories. This situation has continued to the present (the China contract has still not been signed, and port inventories remain close to 3x normal levels). There are additional reports that inventories in Brazil (another key global market) are well above normal levels as well.

In the face of 4-5 months of (relative) weakness, we have begun to see producer actions to reduce supply, with first Belaruskali, then Nutrien, and finally even SDF cutting production heading into 4Q. Cumulatively, perhaps 2.5-3mt of annualized production has or will be taken offline during 4Q, perhaps signaling a temporary respite. The problem, however, is twofold. Firstly, in prior downturns, you also saw producers attempt to stem the tide by initially cutting production – only to see prices continue to fall for subsequent years. In general, I am loathe to lift a chart from a sell-side report, but this one captures what has happened historically quite well:



This example would appear to suggest we will still have a multi-year correction even in the face of attempted corrective behavior early in the cycle (and indeed most potash corrections are multi-year in length, not a 5 months in length, as we shall see).

The second issue with the 'short downturn' argument is that new supply continues to ramp despite these temporary cuts. Thus, for example, Belaruskali announced the opening of a new 1.5mtpa mine, at the same time as announcing temporary cuts at other mines; and similarly, SDF is cutting 300kt of production across its portfolio into 4Q, but is still suggesting they will ramp production at Bethune next year, as they had previously planned, by >300ktpa. Meanwhile, Eurochem's long-delayed new plants look finally to be coming online, adding an incremental 1mt per year each year, starting this year, over the next 3-4yrs; and Uralkali is still scheduled to add incremental capacity in the coming years as well, such that global supply that was meant to come online a couple of years ago is finally making it back onto the market in earnest. In the face of (at least) mid-single digit supply growth (at much lower cost levels, say \$130-150/t versus spot still in the high \$200s) and very low single digit growth, if that, it seems quite likely that prices will remain under pressure for most if not all of 2020.

So, if we are still in the early innings of a potash downturn, what could it ultimately look like? Well, the last three downturns – 2009, 2011-2014, and 2014-16 – generally last 2yrs on average, and prices fell 60% (in 2009), 40% (2011-14), and 30% (2014-16), peak-to-trough. Currently potash prices are ~15-16% below recent highs and the downturn has lasted less than 6 months, so judging from history we should have at least 18months more, and potentially another 15% in pricing downside at minimum, to go. While this is not my base case scenario, even a much more muted decline (say 5-8%) would see SDF miss next year's consensus EBITDA by a wide margin – since consensus, at 830mm EBITDA in 2020, is essentially pricing in a modest rebound in potash prices from current levels. Even in a relatively benign scenario, I think this is far too bullish; on the other hand, a deeper trough in potash prices next year would be disastrous for SDF.

Let's now turn to SDF's specific situation.

The German operations

In many ways the current problems facing SDF are directly derivative from their German potash operations. Of the ~6.8mt of potash SDF will produce in 2019, about 80% comes from Germany. SDF's predecessor companies have been mining and processing potash there since the mid-1800s, and whilst there are some natural advantages to the quality of potash (it is sulfur rich and thus able to be formed into SOP, of added value to European farmers and commanding a premium to spot MOP prices) there are some obvious deficiencies with the German business. A large part is due to the age of the mining works

and the potash mineral body itself (slowly declining in K20 content, ie less nutrient-rich and so effectively less mining yield over time); another part is simply the reality of mining in Germany – where environmental permitting and regulation are particularly strict – and a final part is due to the exact location of SDF's operations. That is to say, the Werra plant – which encompasses the three main operating mines and heart of the German operations – is reliant for its wastewater output on the Werra river, which in recent years has suffered from extremely low water levels due to low rainfall and drought. This is an especial problem for potash manufacturing (which is extremely water-intensive): if the water level of the waste disposal tributary (in this case, Werra) is not high enough and not flowing at a reasonable speed, you simply cannot discharge the salty waste brine into it. This happened throughout 2018, taking much of the German ops offline, and costing the company up to 80mm in lost EBITDA. While current water levels are not quite as extreme, and in the meantime the company has achieved permissions to deposit waste elsewhere (for example, in unused excess mining works underground), this remains an ever-present downside wildcard to what are already structurally high cost operations (principally because they are so old and deep).

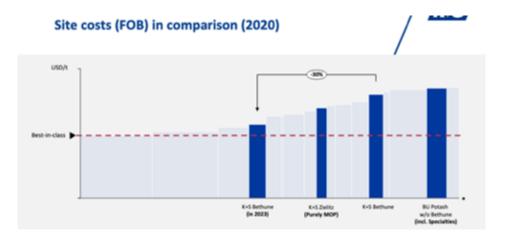
Bethune

In an effort to pivot the business away from the high-cost German assets, SDF acquired a Canadian company (Potash One) in 2010 whose potash exploration tenements grew into the 'Legacy Project': a 3bn EUR greenfield potash mine in the global potash heartland (Saskatchewan) that will apparently deliver up to 2.7mt of potash a year at reasonably competitive cash costs (middle of the curve, around \$150/t) once fully ramped (that is, in another 4+ years). The project initially envisaged delivering first production in 2016, but there were more than a few teething problems. The feasibility study went through a change in scope that added ~\$900mm to the budget (2011); then a crystallizer – a massive (30mm x 10mm) piece of cylindrical equipment that comprises the bulk of the mining apparatus – fell into the open shaft during construction, destroying everything beneath it. Production eventually began in 2017; 60% of volumes are railed to the West Coast for export (to Brazil, 40%, at spot rates; and China, 20%, on contracts negotiated annually or semi-annually); and the other 20% gets sold to American farmers via the spot market.

Today, Bethune is still very much in the 'ramp' phase and – before recent guidance cuts – was scheduled to produce ~1.3-1.4mt of potash (ie <50% of final capacity) at a cash cost of ~\$200/t or a bit higher. Getting Bethune to production was the main source of SDF's negative cashflow in recent years (SDF has spent ~3.3bn EUR of capital on the project thus far), and to be fair the mine has the potential to, one day, be a decent and productive asset – assuming the potash cost curve stays where it is and there aren't

further project hiccups.

The issue, however, is that operations at Bethune are still in the Primary Mining phase, and at much lower volumes that dictate, for now, still a high cost-curve position. In order to get to a median cost curve position via Secondary Mining (essentially using the trapped waste heat and the borehole infrastructure from Primary Mining to collect potash from the brine on top of an underground lake, instead of extracting potash directly from underneath the lake), capex related to the ramp needs to be spent – meaning SDF still faces the prospect of multiple years of cash-consumptive investment – almost independent of potash fundamentals. The company described the progression through the cost curve at their analyst day with the below slide – note that a even a second quartile position is only achievable from 2023:



This becomes an issue as the potash market enters a correction (as we are now seeing), because it means SDF will continue to consume cash through a combination of mandatory ongoing investment in Bethune, and declining cash margins in its mature German operations, in concert with the gargantuan leverage burden already weighing on the company. And if BHP goes ahead with the Jansen project in the coming 15 months, things could get really ugly for SDF in a hurry.

BHP's Jansen project

The BHP Jansen project constitutes some added juicy downside optionality for the SDF short because it introduces existential risk for all of SDF's potash assets, both German and Canadian. BHP, the world's

largest miner, has long had ambitions to develop a potash business. Of course they attempted to buy Potash Corp (which later merged with Agrium to form Nutrien) in 2012, but was rebuffed by the Canadian government over national interest concerns. That did not stop them from staking their own claim in Saskatchewan, which they did via the Jansen project, a greenfield mine plan whose feasibility study in 2011 suggested they could ultimately produce up to 8mt of potash a yr at a cash cost of \$100/t (ie, bottom first quartile). BHP has already spent >\$3bn on the project, and has even sunk a couple of shafts – but it has not progressed to FID, and has continually put off the decision for many years. The reason is simple: when the mine was first contemplated, potash prices were much higher; and the further capital cost of the project (at least another \$4-5bn for phase one, assuming around \$1000/t capital cost) is significant; and the miner is now being run more conservatively than in the good old adventuring days.

Nevertheless, they have set a date for the board to finally decide to go ahead or not – Feb 2021 – and there exists a reasonable non-zero chance they go ahead with the project. For one, they are much more bullish on potash longer-term than many other participants (given the growing need for food); strategically, they need to diversify their business away from iron ore and coal; and they have, after all, already sunk at least \$3bn, and maybe closer to \$3.5bn by 2021, into the project. Still, the odds on it going ahead in today's environment are probably low.

But *if* BHP gives the go-ahead to Jansen, we are likely to see a reckoning in the potash market unlike anything seen previously outside of the breaking of the cartel in 2013. While of course it would take half a decade to see first production, the simple size of the project – 15% of global capacity coming online at theoretically the bottom of the cost curve – would immediately disrupt not just SDF (the highest cost player) but essentially 2/3 of the entire curve. You would likely see all players accelerate brownfield expansion en masse in a classic 'race to the bottom.' Many of the leading producers – especially Nutrien and ICL – have very low-cost brownfield expansion options that they have hitherto minimized, to maintain industry discipline (of a sort) – but a BHP FID of this magnitude would simply open the floodgates.

In that scenario, it is quite likely that SDF's German facilities – still 80% of group production today – are fully impaired; a good chunk of the invested capital in Bethune would likely be written off too. But even in the more plausible scenario where BHP does not go ahead, I don't think that is great for potash generally or SDF specifically – because it would simply mean potash prices will have been under pressure for the next year and change. To me, the equation seems to be, if potash goes up, BHP will go ahead with Jansen; if potash goes down, BHP won't. Either way, the high cost producer that is massively levered – that is, SDF – should be under immense pressure.

Salt

Outside of potash, SDF's other business is salt. Salt comprises about half of the group's revenues, but only 1/3 of the group's assets; the revenue split, however, was much closer to 50/50 last year (before SDF confusingly merged all their reporting segments), demonstrating Salt's relatively superior asset-level returns. Partially through acquisition (SDF acquired the Morton Salt business from Dupont in 2009), SDF is the world's largest producer of salt products, controlling 31mt of capacity and with leading positions across de-icing (40-50% of volumes and sales, depending on the year), industrial salts (around 1/3 of sales), and food grade salts (the balance). I will not spend too much time on Salt because, while it is a decent business, it doesn't move around nearly as much and I don't think much drives the stock.

The salt business is largely regional and – as you might expect – difficult to disintermediate given the low value/weight ratio of the product (and thus high freight/transportation cost). It has generated OK if not great returns – around 8-10% returns on invested capital through the cycle, though with significant volatility year to year related to winter de-icing demand. Indeed, the volatility of the earnings around winter weather variations – which can compound inventory buildups locally as there is no alternate use for de-icing salt if it is not consumed on the roads – more than offsets the natural strengths of the business. It is not unusual, for example, to see SDF's salt EBITDA contribution swing +/- 60-70mm YoY purely on the occurrence (or not) of heavy winter snow and rain. A through-the-cycle average EBITDA for SDF's salt business might be 275-300mm EUR; this is not really growing (indeed it is more likely in secular decline due to environmental change); but it is nevertheless capable of generating 110-120mm in sustainable (unlevered) free cash flow.

K+S paid 6x EV/EBITDA for Morton Salt back in 2009; today the best comp is Compass Minerals, another listed name that trades around 8x EV/EBITDA (but also has a fertilizer business) and to me looks very expensive. On a simple comparative basis, the Salt business is theoretically worth at least 2.4bn, implying >20x FCF for a pure commodity, weather-impacted, potentially secularly-challenged business earning around its cost of capital. That seems crazily expensive, and I doubt K+S could really ever sell the business (given concentration issues and what it would do to their residual equity valuation) – but that I suppose is a decent placeholder for the value of the Salt business.

Balance sheet, cash flow and how the short wins

Let's take a quick look at the capital structure as it stands. At 13 EUR per share today SDF has a market cap of 2.5bn; on top of that you have 2.9bn of net financial debt (though they will likely burn 200mm+ of cash in 2H, so call it 3.1bn of net debt), then 1bn of mining reclamation provisions, and 200mm of pension liability – against my estimate of 700mm EUR EBITDA for this year. So the business today is 4.5x net levered just through the financial debt (using my year end numbers) and, fully accounting for provisions (basically unfunded) and pensions, >6x net levered on an adjusted basis.

OK, you may say, that is quite levered but it was even more levered in 2016/2017 (about 5.5x through the debt/7.5x adjusted) and the credit markets didn't care, so why will it really matter now? Well, there are a number of important differences now:

Back then (2016-18) potash was going through an upcycle, and even though SDF was burning cash, the strong potash market suggested that once growth capex + idiosyncratic issues were overcome, the company could quickly deleverage and repair their balance sheet. Clearly, markets were much more forgiving of the high debt burden during than upcycle than they are likely to be during a downcycle, which is now upon us;

SDF did not have any large upcoming maturities despite the high leverage, back then. However now, SDF has 835mm in bonds due in 2021, and significant maturities thereafter, which should exert more pressure on the company, even if credit markets remain accommodative;

If potash surprises to the downside in 2020, it is quite conceivable that SDF could return to those outsized leverage numbers just in time for potential disruption to the potash status quo (that is, the BHP Jansen decision) and/or broader economic weakness.

The sensitivity to changes in spot MOP on the company's leverage position is really quite important. If my call on the potash cycle is even only partially correct, and potash prices correct just a further 10% that would imply about a \$25-30/t change in the MOP price, which I believe translates into at least an 80mm EUR hit to SDF EBITDA (adjusting for some fixed pricing in China/India; and the effect of selling higher value SOP at a premium to MOP on a portion of their volumes). All else equal – and note I think volumes are more likely to surprise to the downside than upside in this scenario, given production shut-ins already announced and a likely slower ramp at Bethune – and even giving credit for some cost cuts (the company

is running another 'improvement program') I could still see group EBITDA being closer to 650mm next year if not lower. Note that consensus EBITDA for next year is 830mm...

In this scenario, SDF enters 2021 – a month before the BHP Jansen decision and facing ~850mm of maturing debt over the next 12mos – levered 5.2x through the debt and >7x on an adjusted basis – ie, basically up near peak leverage yet in a much worse place in both the potash cycle, with regard their own maturity schedule, and – in my view – the capital markets more broadly. Furthermore, the company will still be burning cash: I estimate capex will run at least 500mm for the next 3+yrs due to ongoing Bethune-related spend (and assuming no further overruns); and interest expense won't be lower than 100mm/yr even with credit markets as generous as they currently are. And this of course presupposes no further recurrence in idiosyncratic operational issues (which the company has demonstrated can occur without notice).

Since broader fertilizer and potash names trade around 8-9x forward EV/EBITDA today, and none are anywhere close to as levered as SDF – while most all possess superior cost bases and are not burning cash – I really think SDF equity has a chance at being fully impaired. Perhaps this is not how it plays out – all the debt today is unsecured and there is still clearly value in Morton Salt and the Bethune assets, even if not at stated book. But simply the specter of equity impairment could and should derate SDF much lower, perhaps in concert with broader potash and/or market/economic concerns. Personally, I think 8x consolidated EV/EBITDA – basically in line with comps even as it still burns cash – would be quite generous in this downside scenario and that still implies a stock price on my FY20E numbers of <3 EUR/share, or 78% downside from current. Even if earnings hold up a bit better than this, I could see the name being re-rated to the bottom end of peer group purely on the recurrence of leverage/balance sheet concerns in a down market. At 7x a less penal 2020E EBITDA of 750mm, I still think there is substantial equity downside to around 5.5 EUR/share (60%).

I do not hold a position with the issuer such as employment, directorship, or consultancy.

I and/or others I advise hold a material investment in the issuer's securities.

Catalyst

Earnings announcement upcoming next week Ongoing potash price declines thru 2020 Lower announced Chinese contract prices Potential refinancing risk from 2H'20 Potential balance sheet impairment at YE20

Messages

Subject	Nutrien cuts potash guidance
Entry	11/05/2019 09:38 AM
Member	puppyeh

last night Nutrien - the market leader in potash globally - cut their expectation for potash demand worldwide for 2019 to 64-65mt (though they estimate a quick rebound to 67-69mt next year). Of course they think this is just a blip and an 'temporary correction' due to the buildup of excess inventories because of adverse weather events in parts of the world that have shortened the fall application season. the further cut another 1mt of production for 4Q to support the market.

On the one hand you could suggest that this shows further supplier discipline; on the other it suggests there is still a very substantial inventory position in key markets (South America; China; the US) that need to be worked through. the recovery in 2020 seems predicated on a) recovering crop prices globally (some of this is happening, esp Malaysian palm oil, Brazilian soybeans) along with strong farm demand (this is to be proven and seems hopeful at best for now).

SDF reports next week (though they have already cut guidance so I don't expect any major fireworks in the release).

SubjectDebt and Equity QuestionEntry11/07/2019 03:36 PMMemberMassifGood analysis, interesting idea.

Do you know who owns the debt and who the major equity holders are?

SubjectRe: Debt and Equity QuestionEntry11/07/2019 03:57 PMMemberpuppyehthanka the equity is almost 100% free fleet with

thanks. the equity is almost 100% free float, with no large investors of note (the largest disclosed are DB wealth management at 5.6%, then Dimensional at 3%. It is basically an open register.

Re the debt, at least half of it is Schuldschein (a form of German retail bond, meaning mostly German retail and/or private wealth investors); otherwise I am not sure who owns the regular bonds, probably a variety of your usual fixed income real money types. Like all German/European corporate debt, it trades at insanely irrational yields (despite the BB- rating) because of the ECB effect.

Subject	3Q update - another production cut, return to cash burn
Entry	11/14/2019 07:19 AM
Member	puppyeh

SDF announced fairly lacklustre results this morning. Despite the ongoing (through most of 3Q) firm YoY prices, SDF burnt 131mm in FCF (mostly due to ongoing Bethune related capex). More importantly, they cut EBITDA guidance for FY19 much more than expected, to 650mm EUR (vs the recent cut in mid-Sept to an implied 700mm EUR or so). The cut is driven by a further 200kt in production cuts, from the German potash business (in addition to 300kt cuts that were mainly at Bethune, announced in mid-Sept). SDF is still guiding to FCF generation this year, but having generated 204mm net thru 9m, this suggests to me they are quite likely to burn another 100-150mm in 4Q.

A number of other producers (Nutrien, and Mosaic) have announced further potash cuts but the outlook remains soft. China has still not settled their 2020 contract given elevated port inventories (and there is some sell-side speculation they may not set one at all for 1H 2020). The Indian contract priced a little better than expectations (at \$280/t vs \$290/t last yr) but Brazil is apparently quite weak too. And the US corn harvest looks quite weak as well (weather effects) suggesting little farmer buying power for the next couple of quarters.

All told I think 2020 consensus numbers are still way too high. The main risk appears to be production curtailments - across the market - are needed for longer and as these numbers make clear even smallish cuts have a big impact on SDF's FCF-generating power (high cost marginal assets needing high utilization). I am tentatively still at 650mm EUR for 2020 (worse potash, better salt) but I will have a think and update the board as these numbers go lower.

The stock has fallen on these numbers and is now at 11.8, or a 2.3bn mkt cap, with 3.4bn of net debt, 1bn of mining liabilities and 0.3bn of pension. So on FY19E new guidance its levered 5.2x through the debt and 7.2x adjusted. On a flattish EBITDA profile YoY and still burning cash (perhaps 300mm minimum next year) adds another 0.5x of leverage, heading into needed refinancing of a large amount of paper. Of course this presupposes no further shut-ins of production, operational issues, etc in 1H 2020. Needless to say I still think the stock is a great short.

SubjectNew BHP CEO -> higher probability Jansen goes aheadEntry11/23/2019 11:20 AMMemberpuppyeh

Last week Mike Henry was named the new BHP CEO, due to take the post from Jan next year. He formerly ran the Australian operations of BHP (responsible for 80% of BHP EBIT); has been at BHP since '03 (so 'old school' BHP guy); and is Canadian. The appointment was not a surprise - a highly qualified internal candidate seen as a safe pair of hands - but in my view the likelihood of Jansen being approved has gone up considerably. He has been on the Executive Committee improving the ongoing spend on the Jansen shafts (and which just approved the additional \$350mm to get Jansen to FID by Feb '21). Jansen was seen as something of the pet project of the outgoing CEO (MacKenzie), Henry's kingmaker, and BHP has already sunk \$3.5bn into the project. To the extent BHP has had a longer-term more bullish view on potash market fundamentals than the market, Henry has been a part of sanctioning that view (given his seat on the EC and long executive tenure with the company throughout its potash adventures). And remember that the outlay required to get Jansen to phase 1 production (around 4.5mtpa, still 7-8% of the global potash market) is not large in BHP terms (call it \$5-5.5bn over 5yrs, vs \$25bn of annual BHP EBITDA). They may of couse sell down a minority stake too if/when they move to FID, reducing capex needs further. While I still think approval is <50% chance, I do think you would need a further major correction in potash prices to really take approval off the table (clearly disastrous for K+S either way).

To recap why this is terrible for K+S - if Jansen goes ahead, it opens the floodgates for all the other low-cost producers who have been idling capacity to support prices. If you are Nutrien or BPC (Russia/Belarus), why would you hold back when BHP is coming in 4+yrs to drive prices lower in perpetuity? Nutrien alone has 5mt of capacity idled (with a FOB cash cost <\$100/t) that they planned to bring to the market slowly over 5yrs anyway; they also have brownfield capacity they can develop for another 5mt+ at \$500-700/t (vs BHP greenfield cost, from here, budgeted at \$1250/t). BPC is in a similar boat (though with less size in capacity), and Israel (ICL) has expansion options in the Dead Sea at extremely low cost levels too apparently. All these brownfield projects - with much shorter lead times to market than BHP's greenfield - get greenlit if BHP moves ahead with FID, and prices would kneejerk lower.

In the context of K+S' high-cost legacy assets and the unsustainable leverage, to me Jansen approval and its consequences represent very much an existential risk for SDF equity. This could be why management has shown more openness to fixing the balance sheet much sooner post the recent 3Q earnings announcement.

Subject	Anglo buying Sirius = more supply coming	
Entry	01/08/2020 06:09 AM	
Member	puppyeh	
https://www.ft.com/content/03093aae-31e8-11ea-9703-eea0cae3f0de		

I did not think the Sirius project would get funded so i didnt speak about it in the writeup. If this goes ahead - and seems likely it will now if Anglo funds it - this is really bad for SDF. Polyhalite - what Sirius will produce - competes directly against SDF's specialty SOP product. This product only ships 1.5-2mpta (out of total potash market >65mtpa) but Sirius wants to sell 10mt per year. They have already lined up buyers for most of this production (assuming they can build the mine) at much lower prices than the current SOP market (<\$150/t vs the current SOP product that prices at a big premium to MOP, which is currently \$270-300/t). Clearly this will obliterate SDF's premium margins, if the product does come to market.

Meanwhile everyone else - including BHP at Jansen - is probably looking at this and thinking they need to accelerate low cost production to beat this product to market. So its just another domino likely pushing the market out of discipline and into a freefall supply escalation scenario (much like I thought/think Jansen could also do in a couple of yrs).

SubjectRe: Anglo buying Sirius = more supply comingEntry01/08/2020 12:10 PMMembersnarfyWouldn't that be awful for CMP?

SubjectRe: Re: Anglo buying Sirius = more supply comingEntry01/08/2020 01:22 PMMemberpuppyeh

yes. anyone who relies on the SOP > MOP premium, including CMP. But SDF is a similar/better trade bec they have a ton more leverage, and have worse legacy commodity potash assets. Also it is larger and more liquid.

 Subject
 Re: Re: Re: Anglo buying Sirius = more supply coming

 Entry
 01/08/2020 02:08 PM

 Member
 Teton0321

You need 2.5x the amount of polyhalite to get the potassium equivalence of SOP. So on a potassium equivalent basis, polyhalite is more expensive than SOP. Polyhalite is also not very solulable. ICL owns the only polyhalite mine (Cleveland) in UK and it doesn't compete with SOP. It seems that row crop farmers don't even want polyhalite because they can't afford it on a nutrient equivalent basis. Bottom line, I'm not sure that there will be demand at much of a margin even if this project ever does produce something. Does anyone have a divergent view to this?

From my understanding, the Sirius mine is actually located under the North Sea and that the shaft is on land and then need to tunnel under the sea to get to the deposit. It seems incredibly risky. Do you all know whether it's even feasible?

I get why Anglo wants it. They've been in ferts before. It's a call option and a small % of their EV. They are desparate to diversify from thermal coal.

Subject	Re: Re: Re: Anglo buying Sirius = more supply coming
Entry	01/08/2020 03:57 PM
Member	puppyeh
hi Teton - man	y thanks for the comments. I found this analysis from CRU - it seems to suggest polyhalite is quite similar to SOP in
nutrient conter	nt. This certainly doesn't seem 1/3 the potassium content versus products in the market; am I missing something?

https://www.crugroup.com/knowledge-and-insights/spotlights/2018/will-polyhalite-disrupt-the-fertilizer-industry/

It looks like ICL's product, and Sirius' theoretical product, are both lower-chloride and higher sulfate than K+S' product. My understanding is that particularly European soil is lacking in sulfates so that is key, which theoretically polyhalite could provide. Of course the solubility issue is a valid point and one that needs to be proven out in the market. But lookng at the take or pay counterparties they have signed - ADM, Wilmar, Cibra, etc - these are generally pretty high quality counterparts and they have signed to take significant volumes (11.7mpta if Sirius can produce them) so you would think these guys can find a market for it, whether versus SOP or just displacing MOP or NPK.

Your points re the viability of the mine are of course valid. I never thought this project would get funded, and it still may not. But it highlights the risks to the still cartelish nature of the potash market from non-traditional entrants - whether Anglo or BHP - who are desperate to diversify and may have different motivations than potash price maximization. As this continues to unfold the pressure on the low cost players to monetize high prices now will only increase.

Subject	Re: Re: Re: Re: Anglo buying Sirius = more supply coming
Entry	01/09/2020 09:44 AM
Member	Teton0321

I've talked to industry participants on the potassium issue. But check this article as an example: https://www.reuters.com/article/britain-fertiliser-sirius/future-of-fertiliser-or-fantasy-uk-company-bets-on-new-mineral-idUSL6N0FS16H20130722

If they're willing to fund the project, it's structurally viable, and they're willing to sell at a loss, then it would clearly be bad for the industry.

Subject	BHP CEO comments re Jansen	
Entry	02/18/2020 05:02 PM	
Member	puppyeh	
seems to suggest they are leaning towards going aheaddespite Anglo/Sirius getting financed		

https://www.ft.com/content/e719cece-5269-11ea-8841-482eed0038b1

for what it's worth, I added to my short above 9. since the China inventory position is one of the major overhangs on potash, it is hard to see how - post coronavirus - there is a big rebound in potash demand in China this year, with grave consequences for the potash price and of course SDF

Subject	Author Exit Recommendation	
Entry	02/28/2020 05:23 AM	
Member	puppyeh	
The author has recommended exiting the position		

Subject	exit
Entry	02/28/2020 05:28 AM
Member	puppyeh

i still have a smaller short but given the lack of interest on the board and the huge move thus far i am closing this on VIC and exited the bulk of my short at 7.15 today. not much has really changed - many of the risks highlighted in the writeup re the midterm picture; balance sheet risks; and near-term earnings trajectory. have simply become better understood by the sell side and the market since I posted. FY earnings (to be reported shortly in early March) will likely be abysmal and FY20 guidance will be cut but absent a complete disaster I don't think there's too much more near-term downside (maybe another 1 EUR or so from here) so there's better opportunities out there for me.

There is still clear impairment risk here on a 1-2yr view, especially as credit markets tighten up. i will update the board if i reinitiate a meaningful position.

since recommendation this short generated a 45% gross return vs the benchmark DAX of -9%, so gross alpha of 36%.

Subject	Re: exit	
Entry	02/28/2020 08:16 AM	
Member	rookie964	
Nicely done pup	ppyeh. I do have a question as to whether you have rotated your shorts into other ag/feet names. If so, I would be	
curious as to your thoughts.		

I think there is also a strong long term short case regarding the technological innovation of ag tech and the growing impact it will have on demand erosion for ag inputs.

Subject Re: Re: exit

Entry 02/28/2020 10:51 AM Member puppyeh

hi rookie thanks - afraid i havent recycled into any other ag shorts as this (SDF) was a pretty specific potash + balance sheet view for me. at the moment just too many other pressing things than the mid-term risks you mention (which sound valid and worth researching).

Subject	Update
Entry	03/09/2020 07:07 PM
Member	puppyeh

Given what happened in the oil market today its worth examining the consequences on the potash market. Last time the potash market imploded, there was a strong correlation b/w the Ruble and the price of MOP. This is because the ex-Soviet part of the cartel (Uralkali/Eurochem/Belaruskali) has RUB-denominated costs, which are of course strongly linked to oil - though like other global commods potash is traded in USD. Oil of course is also a large cost input (via energy prices) into potash production. This shows the correlation b/w potash prices and the RUB during the last crash (p2): http://www.mosaicco.com/documents/2-20161104-112010.pdf

The RUB is now 75, and Potash is around \$240/t (though the market is opaque). You can see that back in 2015-16 Potash printed closer to \$200/t in this scenario. Since the market is now as loose as it has been in a long time (still large excess inventories in China, probably in Brazil too), and with Corona likely crimping global demand, I think a sustainable price <\$200/t is very much in play - especially because post OPEC breaking down all the low-cost cartel members - Canpotex, BPC both have mine-head costs in the \$50-100/t range - must clearly be looking around the table wondering who blinks first. Remember all these players have multiple tons of excess idled production where the cash margin is still highly attractive even at \$150/t...see this interview here with the CEO of Nutrien:

https://www.afr.com/companies/mining/potash-giant-pours-scorn-on-bhp-project-20200303-p546ft

I think at \$200/t SDF burns >\$600mm a year, is close to 8x levered, and will rapidly become a solvency risk. The fact that NA/Europe had a mild winter is also extremely problematic for the Salt sale (as it means 2020 earnings are probably pretty weak, especially in a recession scenario where local governments are trying to save on costs). Of course the worse the cash burn in Potash gets the less likely it becomes they can sell much/any of salt (as it leaves the cash burn at the remainco far too high to be sustainable).

I plan on re-adding to my equity short today as I can't see how the equity isn't fully impaired in this scenario. I also think mid-term bonds are highly mispriced. The '23 unsecureds trade at 94 - 2.4% yield.