



January 2019

# South32

## Market profile

Country	Australia
Sector	Basic Resources
Market cap (CHF m)	11'580
52-week high / low (CHF)	3.03 / 2.26
Price per share (CHF)	2.28

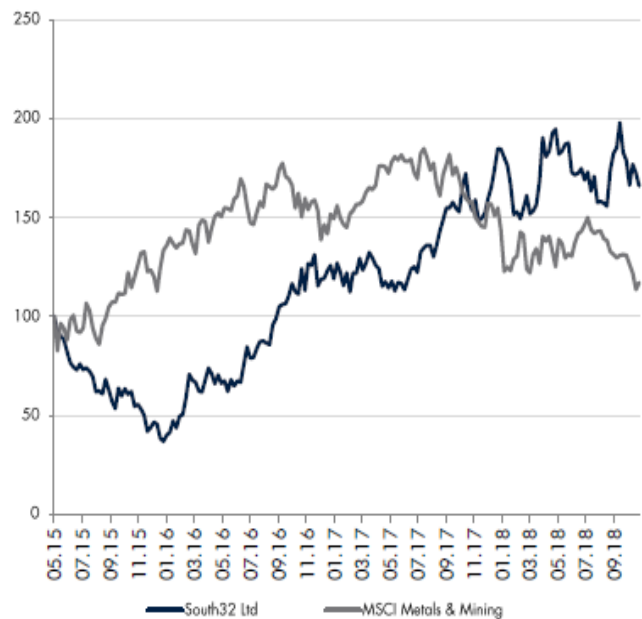
## Key metrics (CHF)

	2017	2018e	2019e
EPS	0.257	0.281	0.238
PE	8.89	8.12	9.59
EV/EBITDA	4.96	3.60	3.99
Dividend yield	4.6%	6.3%	5.1%

## Executive summary

South32 was spun out of BHP Billiton on 25th May 2015. Its name is a nod to the line of latitude upon which its major operations in South Africa and Australia are located. South32 is a globally diversified metals and mining company. It mines and produces bauxite, alumina, aluminum, energy and metallurgical coal, manganese, nickel, silver, lead and zinc. The group has productive assets in Australia, Southern Africa and South America. The company operates a regional model with an headquarter located in Perth, Australia, to supervise the Australian and South American operations and a regional office in Johannesburg, South Africa, to support the African operations. All marketing activities are managed from Singapore and London.

Evolution of stock price with respect to benchmark (rebased)  
Source: IAM



South32 is a well-capitalized mining company offering exposure to a wide range of commodities. In terms of cost structure, South32's assets are well positioned. This is firstly due to the quality of the assets, but also to a strict cost control and volume optimization strategies. Finally, in terms of capital allocation and return to shareholders, South32 has a very compelling track record. Since 2016, the company has committed to return 81% of its underlying earnings to shareholders, in the form of dividends of share buy-backs. The company will distribute a minimum of 40% of its underlying earnings as dividends. The current dividend yield, which is approximately 4.9%, is based on a payout of 40%, which is very low in comparison to other mining majors.

# South32

Olivier Aeschlimann, Senior Financial Analyst, Fund Manager

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## Company description

South32 was spun out of BHP Billiton on 25th May 2015. Its name is a nod to the line of latitude upon which its major operations in South Africa and Australia are located.

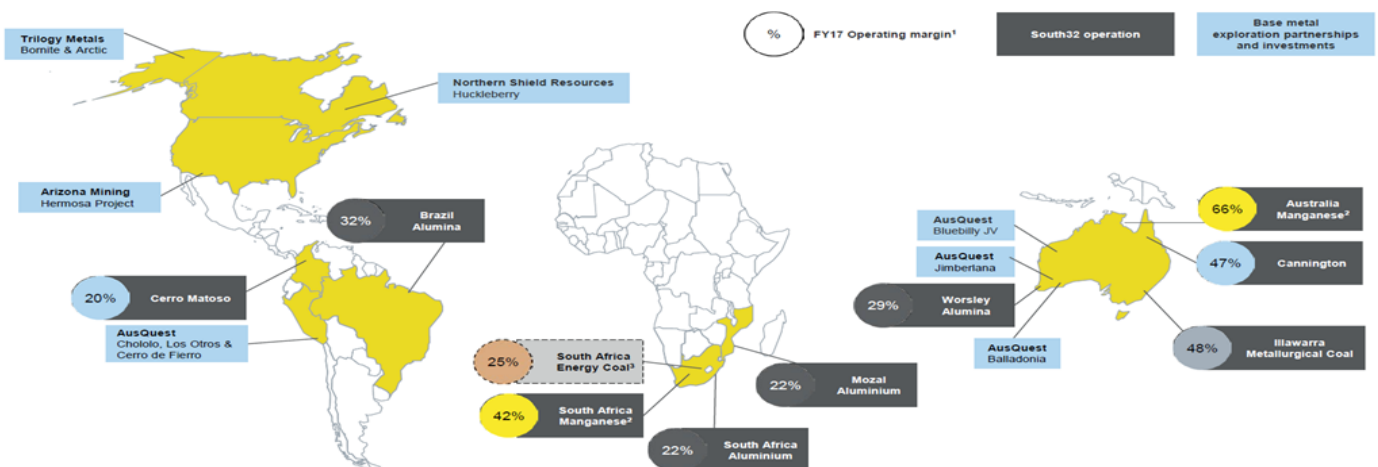
## Company's main assets

Worsley Alumina

Worsley Alumina, located in Australia is one of the largest and lowest cost bauxite mining and alumina refining operations in the world. South32 holds an 86% interest in Worsley Alumina, while Japan Alumina Association

Fig.1: Location of assets

Source: South32



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The company operates a regional model with a headquarter located in Perth, Australia, to supervise the Australian and South American operations, and a regional office in Johannesburg, South Africa, to support the African operations. All marketing activities are managed from Singapore and London. Securities for South32 trade under the listing code S32 on the Australian and London stock exchanges.

owns 10% and Sojitz Alumina Pty Ltd owns 4%. This asset has been mining bauxite and refining and exporting alumina since 1984.

Mozal Aluminium

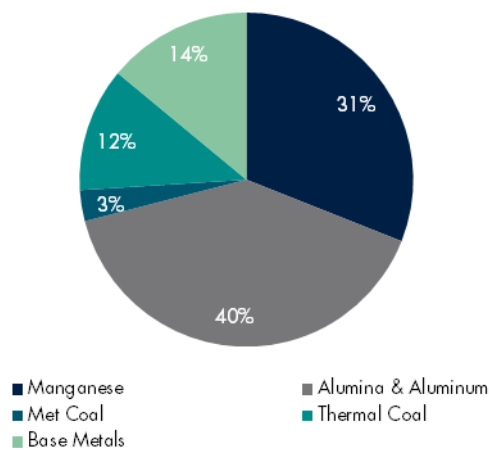
Mozal Aluminium is an aluminum smelter located in Mozambique. South32 has a 47.1% share of Mozal Aluminium, while Mitsubishi Corporation Metals Holding GmbH holds 25%, Industrial Development Corporation of South Africa Limited holds 24% and the Government of the Republic of Mozambique holds 3.9%. The smelter was established in 1998 and is the second largest aluminum smelter in Africa.

## Brazil Alumina

Brazil Alumina operations include the MRN mine in the Trombetas region, Para, and the Alumar refinery and smelter located at Sao Luis, Maranhao. South32's interests consist of the Mineracao Rio do Norte (MRN) mine (14.8%), the Alumar alumina refinery (36%) and the Alumar aluminum smelter (40%).

Fig.2: FY 2018 EBITDA by products

Source: South32



## South Africa Energy Coal

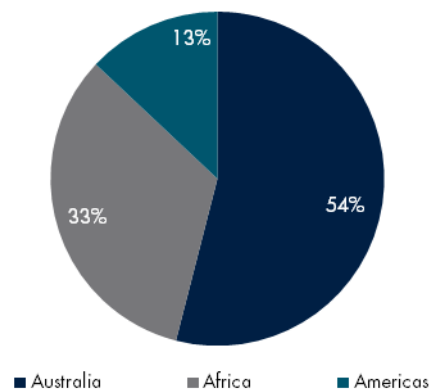
South Africa Energy Coal operations are located near Emalahleni and Middelburg in the coalfields of Mpumalanga. South32 owns 92% of South Africa Energy Coal, with the remaining 8% held by Phembani Holdings, a South African based industrial holding company. Energy coal operations consist of primary coal mining as well as three processing plants.

## South African Aluminum

South African Aluminum consists of the Hillside aluminum smelter located in Richards Bay in the South African province of KwaZulu-Natal. Hillside is fully owned and operated by South32. The operations produce high-quality primary aluminum ingots for the export market and supplies small portion of liquid metal to Isizinda Aluminum which, in turn, supplies aluminum stab to Hulamin, a local company that produces further beneficiated products for the domestic and export markets.

Fig.3: FY 2018 by regions

Source: South32



## Illawarra Metallurgical Coal

Illawarra Metallurgical Coal operations are located in the southern coal fields of New South Wales, Australia. Illawarra Metallurgical Coal is 100% owned by South32 and operates two underground metallurgical coal mines, Appin and Dendrobium, and two coal preparation plants, West Cliff and Dendrobium. Illawarra Metallurgical Coal also manages the Port Kembla Coal Terminal on behalf of a consortium of partners.

Fig.4: South African Aluminum logistics

South32



## Australia Manganese

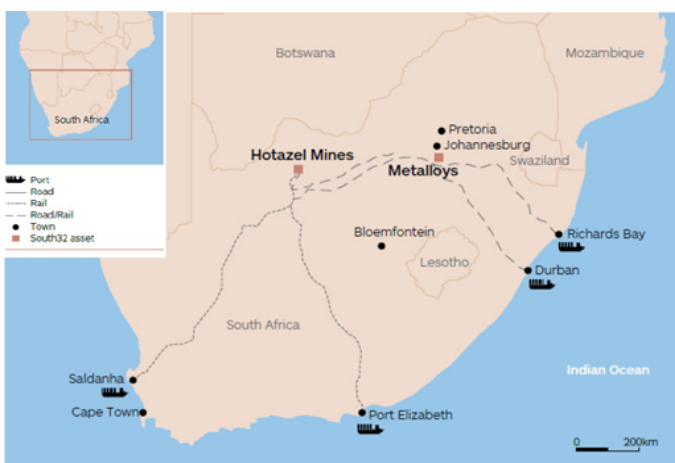
Australia Manganese Consists of Groote Eylandt Mining Company (GEMCO) and Tasmanian Electro Metallurgical Company (TEMCO). South32 owns 60% of GEMCO and Anglo American Plc holds the remaining 40%. TEMCO is wholly owned by GEMCO. GEMCO is an open-cut strip mining operation, producing high-grade ore and is located in close proximity to Asian export markets. Using mainly ore shipped from GEMCO, TEMCO produces high-carbon ferromanganese, silicomanganese and sinter, primarily using hydroelectric power.

## South Africa Manganese

South African Manganese comprises Hotazel manganese mines and Metalloys alloy smelter. South32 holds a 60% interest in Samacor Holdings and Anglo American Plc holds the remaining 40%. Samacor indirectly owns 74% of Hotazel Manganese Mines (HMM) which gives South32 its ownership interest of 44.4%. The remaining 26% of HMM is owned by BBE entities. South32 holds an effective 60% interest in Metalloys alloy smelter. HMM has two operations, the Wessels high-grade underground mine and the Mamatwan medium grade open-pit mine. The Metalloys alloy plant produces high-carbon ferromanganese and medium-carbon ferromanganese alloy and is integrated with HMM.

Fig.5: South African Manganese logistics

Source: South32



## Cero Matoso

Cero Matoso is an integrated nickel laterite mine and smelter located in the Cordoba area of Northern Colombia, consisting of a truck and shovel open-cut mine and a processing plant. South32 owns 99.94% of Cero Matoso. Current and former employees own 0.02% with the balance of shares held in a reserve account following a buy-back.

## Cannington

Cannington is 100% owned by South32 and is one of the world's largest producers of silver and lead. Cannington consists of an underground hard rock mine and surface processing facility, a road-to-rail transfer facility and a concentrate handling and ship loading facility at the Port of Townsville.

Fig.6: The Cannington Mine

Source: South32



## Company's products

### Bauxite

Bauxite is an aluminum ore found in deposits around the world. Once the ore is mined out of the ground, the red bauxite rock is crushed and dissolved into a white alumina powder, using what is known as the Bayer process. This alumina powder is then smelted into aluminum metal. Australia is the world's largest producer of bauxite. S32 mines at Worsley Alumina mine as well as at Alumina Mineracao Rio do Norte (MRN) mine in Brazil.



## Alumina

As mentioned above, mined bauxite is refined into alumina through what is known as the Bayer process. This process, discovered in 1887, extracts alumina from bauxite through crushing and dissolving it in caustic soda. Then, through filtration and an electrolytic process. A white powder, similar to table salt, called alumina, can then be smelted into aluminum metal which can be used in things like cars, packaging and consumer products.

Around two tons of alumina are required to produce one ton of aluminum. South32 produces about 5.3 k tons of alumina per year.

## Aluminum

Aluminum is lightweight, resistant to corrosion and can be easily recycled, making it useful in things like construction, packaging, power generation and machinery and consumer products like tin cans, coffee pods, screw caps, aerosol cans and tubes of cream ... It is also an alternative to steel and is used in casts to make vehicles lighter and more fuel-efficient. South32 operates in all the stages of aluminum production and is one of the world's largest producers of this widely used metal.

## Energy coal

Coal is a fossil fuel made from prehistoric vegetation and organic matter compressed for millions of years. Energy coal, which is used for power generation and cement manufacturing, accounts for around 40% of global electricity production. It is the world's second largest source of primary energy, largely because of its abundance and affordability for developing countries.

## Metallurgical coal

Metallurgical coal is used in steel production, making it a critical building material for the construction of high-rise buildings and infrastructures like bridges.

## Lead

Lead is a heavy metal that is mainly used in batteries. Lead-acid batteries are widely used in the automotive industry for starting cars, but increasingly it is also being

used as a source of power in electric vehicles. South32's Cannington mine in Australia, has grown to become the world's largest and lowest cost producer of lead. There, 7% of the world's lead is produced.

## Nickel

Nickel is a metal and its main use is in stainless steel. Stainless steel that includes nickel is used in the food processing, transportation and manufacture industries. As stainless is heat-resistant, hard to damage and easy to keep clean, it is commonly used in everyday household items, especially in the kitchen. The Cerro Matoso operations in Colombia are one of the largest nickel producers in the world.

## Manganese

Manganese is a metal with important industrial uses, particularly in steel. Manganese improves the strength of steel and can be added to aluminum for the same reason. High-rise buildings and major infrastructures, such as hospitals, office towers and bridges, use steel that contains manganese. South32 is the world's largest producer of manganese ore with operations in Australia and South Africa.

Fig.7: Manganese ore  
Source: South32



## Silver

Silver has been used to make coins for over 2000 years and today money still makes up the biggest demand for this precious metal. Silver is also used to make jewelry, medical appliances and electronics. It has recently found new industrial uses in things like solar panels and window coatings to improve insulation. The Cannington mine in Australia has grown to become the world's largest and lowest cost producer of silver. There, South32 produces 6% of the world's silver.

## Zinc

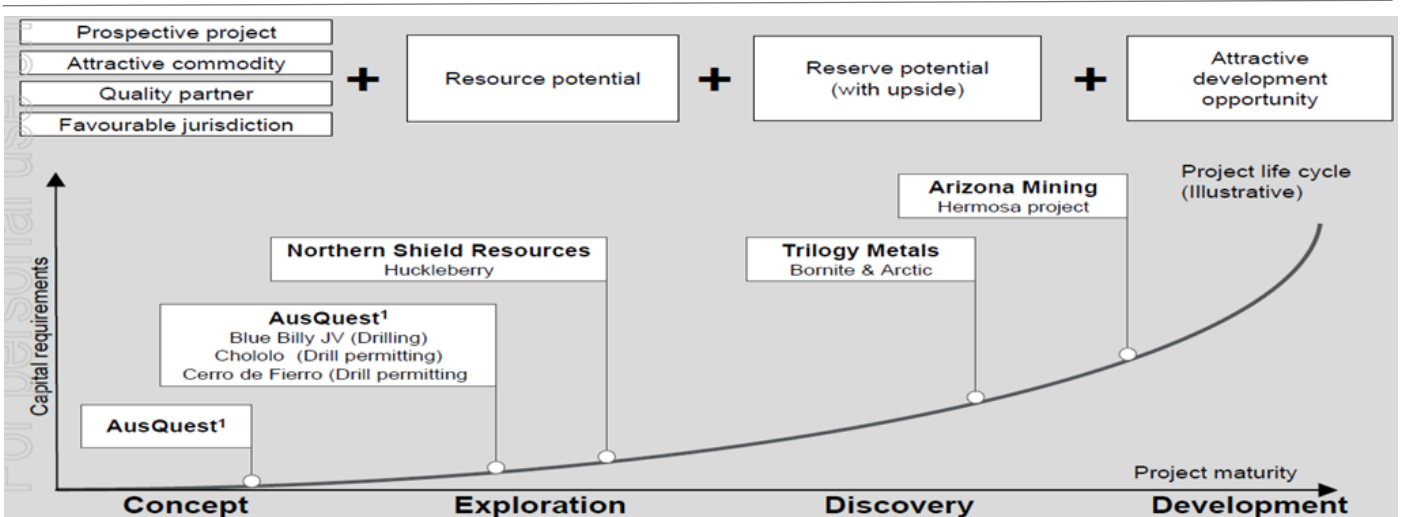
Zinc is a metal widely used for galvanizing iron and steel to protect against corrosion. Because of its special properties, zinc has long been used in construction. For example, steel street-light poles are coated in zinc to protect against corrosion. Zinc is produced at the Cannington mine in Australia. The process for extracting zinc from the ore involves grinding, floatation and leaching techniques that produces a high-grade, marketable metal.

## Competitive positioning and strategy

South32 is very well positioned on the cost curve of the commodities it produces. The Worsley Alumina mine and refinery in Australia are the lowest cost in the world. The company operates the world's largest and lowest cost lead and silver operations at the Cannington mine in

Fig.8: Strategy Implementation

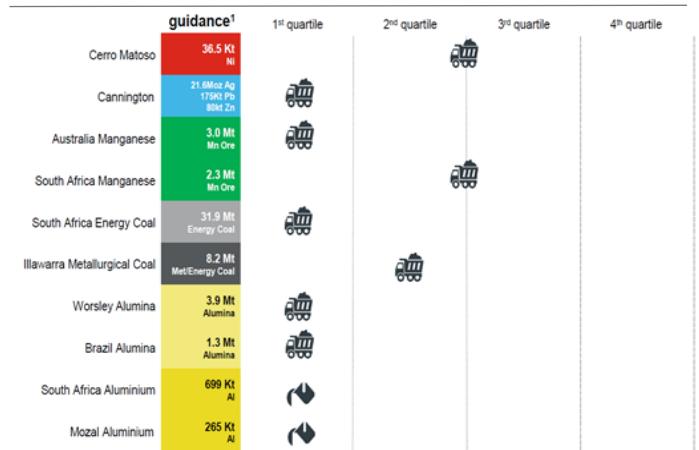
Source: South32



Australia. South 32 also is the world's largest producer of manganese.

Fig.9: Cost curve positioning

Source: outh32



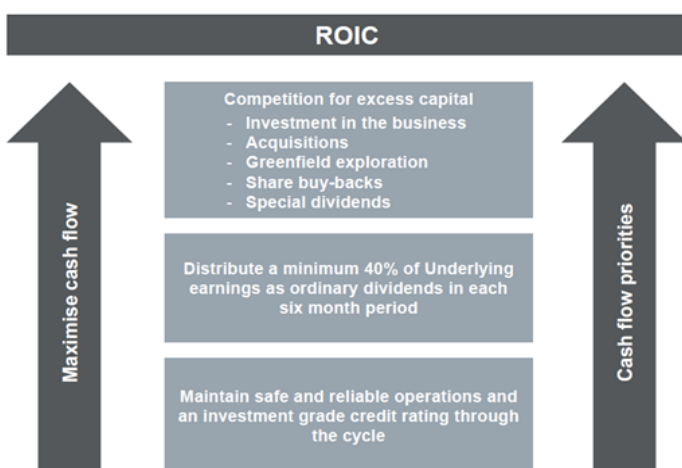
As a globally diversified metals and mining company, South32 has devised a simple strategy of investing in high-quality metals and mining assets to unlock the potential of its operations. The strategy is to: optimize the performance of existing operations, unlock their potential by converting high value resources into reserves, identify new opportunities to compete for capital within the South32 capital management framework.

The capital management framework has established priorities for cash flow spending in order to maximize the return of invested capital. The first use of cash will be to maintain safe and reliable operations (maintenance



capex) while insuring the company an investment grade credit rating through the cycle. Then, the second priority for using cash is the distribution of a minimum 40% of underlying earnings as ordinary dividend in each six month period. Finally there is a competition for the allocation of excess capital. This capital may be either reinvested in the business, for acquisitions or greenfield exploration, or returned to shareholders in the forms of share buy-backs or special dividends.

Fig.10: Capital allocation framework  
Source: South32

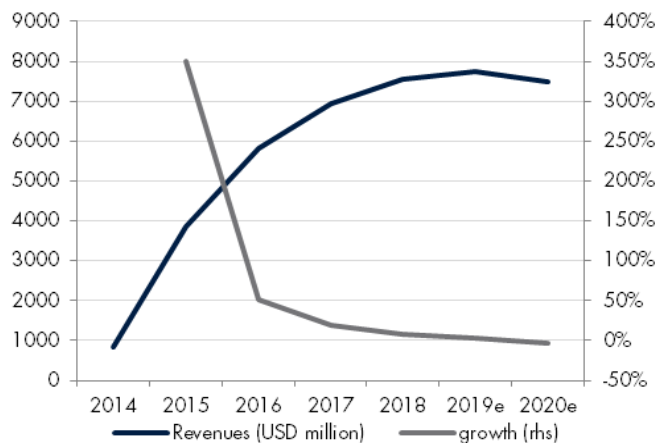


## Financial analysis

### Revenues

As South32 is a spin-off of BHP Billiton, we cannot have the company's financial results before 2014. This year corresponds to the bottom of the previous China-led cycle. Therefore, sales have markedly improved since South32 has started to report as an autonomous company. However, as the company now operates close to full capacity, the potential to increase sales in the short term has diminished. Longer term, South32's strong balance sheet may enable some M&A activities, provided an appropriate target would be available.

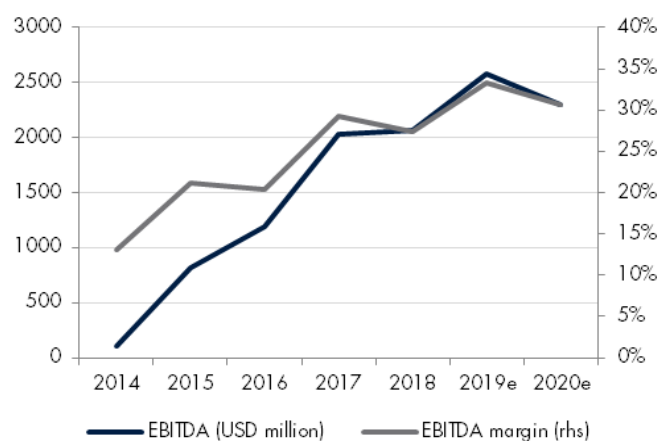
Fig.11: Evolution of revenues  
Source: South32



### EBITDA and EBITDA margin

In line with revenues, the company's EBITDA increased very quickly from 2014 to 2017. It should continue to progress in 2018 and 2019 albeit at a lesser pace. EBITDA margin should also continue to progress and reach the 35% landmark in 2019. The company has the objective to maintain EBITDA margin above 30% over the long run. Achieving this goal of course partly depends on the evolution of metal prices, which is beyond management control. However, enhancing productivity initiatives will also be instrumental to structurally improve the company's profitability.

Fig.12: Evolution of EBITDA  
Source: South32

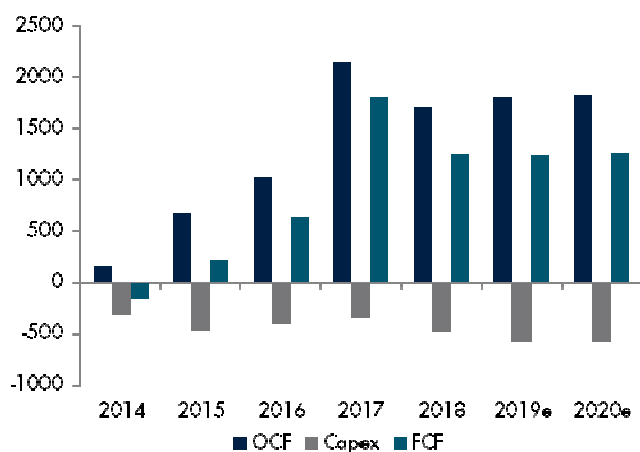


## Cash flows

Operating cash flows unsurprisingly show the same pattern as EBITDA. In 2014, the company did generate only USD 160 million of operating cash flow, but three years later, in 2017, the operations generated a record USD 2.1 billion. On the capex side, South32 was conservative but should start to increase its spending during the next few years. We expect capex to be in excess of USD 550 million per year through 2020. As a result, the company is and will probably continue to be extremely free cash-flow generative. From 2018 to 2020, we estimate the yearly free cash flow to range between USD 1.2 and 1.3 billion. Consequently, at current market capitalization, the free cash flow yield should reach 10% over the next few years.

Fig. 13: Evolution of cash-flows

Source: South32

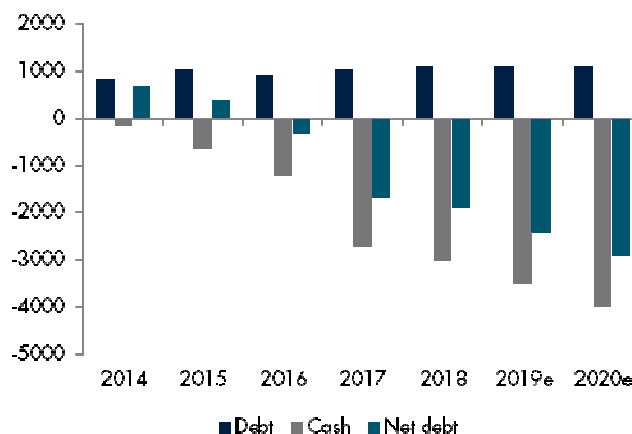


## Balance Sheet

One of the key strengths of South32 is the quality of its balance sheet. At the end of 2017, the company was net debt negative and was assigned a healthy BBB+ credit rating by Moody's and Standard&Poors. This strong liquidity position, fueled by an outstanding cash flow generation, enabled South32 to implement a generous dividend policy. As previously written, the payout ratio will equal to a minimum of 40% of the underlying earnings. At current market capitalization, this will translate into a 4.9% dividend yield.

Fig. 14: Evolution of net debt

Source: South32



## Investment case

South32 is a well-capitalized mining company offering exposure to a wide range of commodities. Many of those commodities are related to steel or aluminum. Manganese, coking coal, zinc and nickel are used to produce steel specialties, whereas bauxite and alumina are processed and smelted to produce aluminum. In terms of final demand, the market fundamentals for both steel and aluminum have markedly improved over the last few years. As a matter of fact, market conditions have passed from oversupplied to well-balanced. This is the consequence of the long-awaited curtailment in Chinese production. Finally, China decided to cut its unprofitable capacities and stopped to export its surpluses at terrible prices. As a result, the pricing environment has improved and steelmakers have turned to more value-added specialties requiring manganese, zinc or nickel.

In terms of cost structure, South32's assets are well positioned. This is firstly due to the quality of the assets, but also to a strict cost control and volume optimization strategies. Finally, in terms of capital allocation and return to shareholders, South32 has a very compelling track record. Since 2016, the company has committed to return 81% of its underlying earnings to shareholders, in the form of dividends or share buy-backs. The company will distribute a minimum of 40% of its underlying earnings as dividends. The current dividend yield (approximately



4.9%), is based on a payout ratio of 40%, which is very low in comparison to other mining majors.

To sum up the investment case boils down to the following points:

- A well-capitalized company operating top quartile assets.
- A favorable demand outlook for the company's main products.
- A shareholder-friendly policy ensuring an attractive and sustainable dividend.

## Risks

Developing mines in emerging markets is a risky business. Through its operations various countries of South America and Africa, South32 is exposed to a significant **political risk**. This could manifest in the form of increased resources nationalism, arbitrary rise in taxation or royalties, or difficulties to obtain permits. To develop its growth projects, the company has incurred a significant debt burden. Failure to meet covenants or to satisfy any debt-related obligations could expose the company to a severe **financial risk**. The company may also have to raise fresh equity, which would translate into dilution for existing shareholders. Some of the company's projects are early stage or of huge size and present many technical and engineering challenges. South32 is thus exposed to an important **operational risk**. Finally, as a miner, the company has no control over the price of the commodities it produces and is consequently exposed to **market risk**. If the price of manganese, lead, alumina or silver were to fall and stay below South32 production costs, the going concern assumption of the company would become questionable.