CLUSTER RISK IN MINING

why a portfolio approach makes sense

FEBRUARY 2023

Independent Capital Group

TABLE OF CONTENTS

INTRODUCTION

One speaks of a cluster risk when certain risks accumulate in a portfolio, e.g. when a large part of the capital is invested in shares of a single company, sector or region - especially in the commodities sector, this risk should be taken into account.

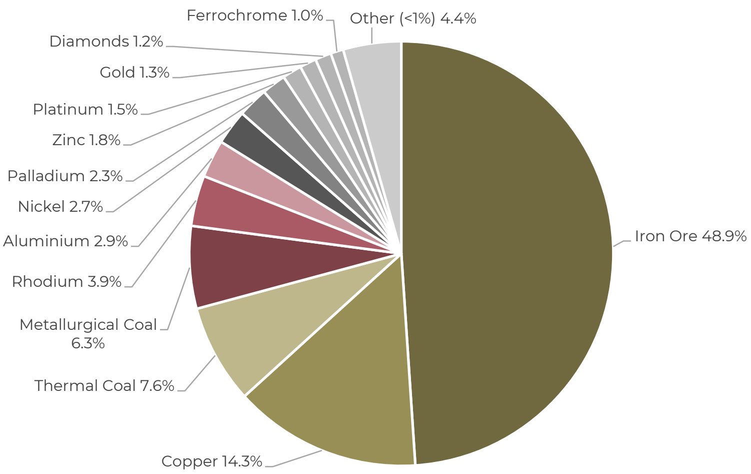
In the oil and gas sector, for example, with the majors such as BP or Shell an investor is not only geographically diversified, but also participates with these companies in the different business lines, i.e. from the upstream, midstream & downstream business, which follow different trends depending on the market situation and can smooth out corporate profits. Therefore, an investor gets a certain diversification though still exposed to company-specific risk.

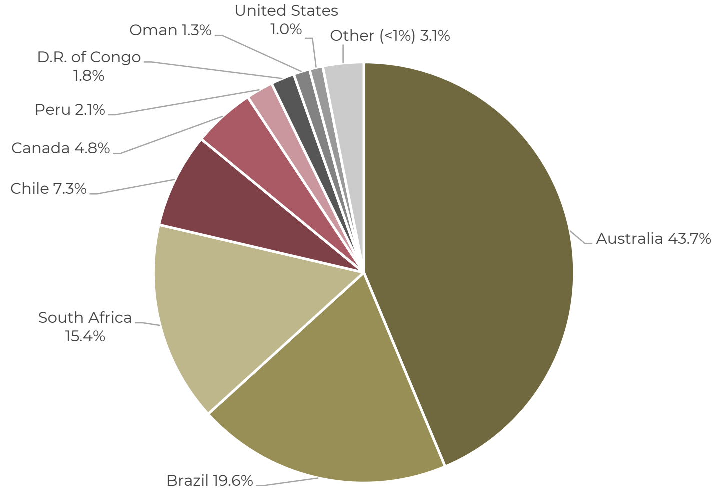
This is more difficult with metal producers. In this sense, there is no company analog to BP or Shell with which an investor obtains sufficient diversification on the product level as well as geographically.

We have examined this problem in more detail and compared different allocations at product level and geographically. For the analysis, an equally weighted portfolio of the largest 5 mining companies (BHP, Rio Tinto, Vale, Glencore and Anglo American) was compared to the iShares MSCI Global Metals & Mining Producers ETF (PICK) and Independent Capital Group's Industrial Metals Champions Fund (IMC).

We calculate all relevant data annually on a copper-equivalent basis. The following results are based on the publicly published 2021 and 2020 financials and are weighted values.

TOP 5 MINING COMPANIES



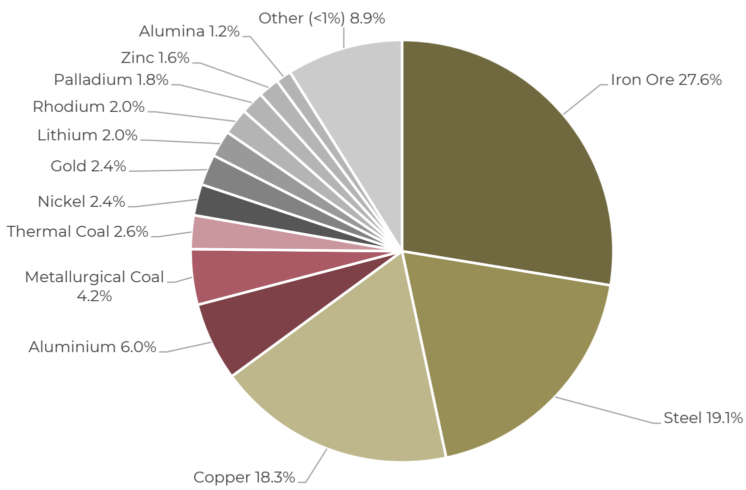


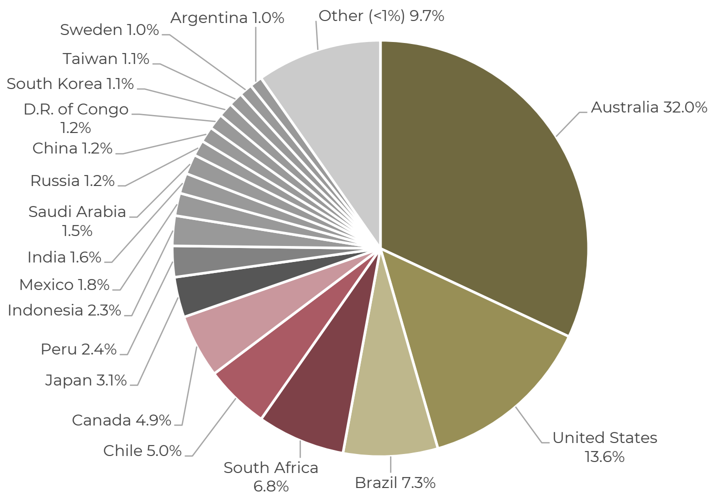
If an investor decides to cover the mining sector with the top 5, the portfolio would be particularly sensitive to price fluctuations of iron ore, copper and coal and would have a high geographical exposure to the Australian, followed by Brazilian and South African markets.

For ESG-sensitive investors, the exposure to coal (3rd & 4th largest commodity exposure) would certainly be a thorn in the side - although some companies have partially abandoned coal, BHP, Glencore and Anglo American still generate considerable sums with the product.

Both at the product level and from a geographical perspective, an investor with the top 5 mining companies is insufficiently diversified - 5 commodities contribute over 80% of sales, the top 5 countries even 90%.

ISHARE MSCI GLOBAL METALS & MINING PRODUCERS ETF (PICK)



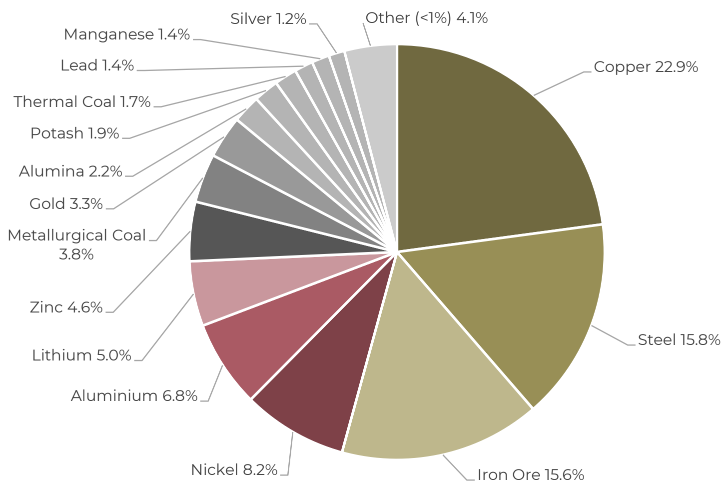


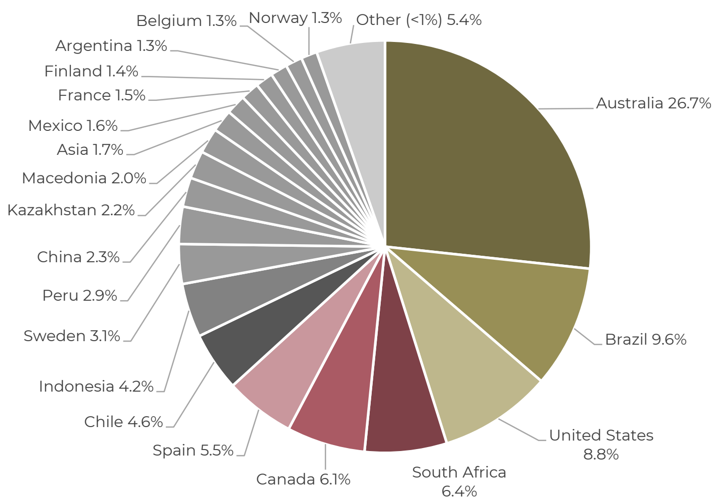
Through an exposure via the PICK ETF, an investor already receives a significantly better commodity mix. The top 5 products are made up of iron ore, steel, copper, aluminium and metallurgical coal and are weighted cumulatively at 75%. Geographically, the top 5 countries account for a good 65% of the total portfolio.

However, from our point of view, the portfolio construction is problematic - the top 10 positions are cumulatively weighted at over 53%, the top 25 at 70%, with 218 companies making up the remainder.

When analysing the holdings, we notice not only exotic holdings but also ones in Russia and China (H- and A-shares) - also pure-plays in the coal sector, “ultrasmall” caps and occasionally precious metal producers. Of course, one can argue with the low weighting in the portfolio context, but if one is confronted with certain restrictions as an investor (for example, no exposure to Russia or the like), even a low allocation can lead to undesirable positions.

INDUSTRIAL METALS CHAMPIONS FUND (IMC)





Although the IMC portfolio consists of only 25 stocks, an investor receives far better diversification than Top 5 and PICK, both at the product level and from a geographical perspective.

Here, too, it is noticeable that copper, steel and iron ore form the top of the portfolio, nevertheless, the cumulative weighting of the top 3 differs by over 10 percentage points compared to PICK. An investor receives a commodity mix of a total of 15 different commodities, which account for a minimum weighting of over 1% - at the country level even 20.

The equally weighted and actively managed portfolio focuses on producing, financially sound companies with a long track record. Using the “ICG Alpha Scorecard”, companies are favoured that show the best relative values based on the 6 pillars “Assets”, “Value”, “Sustainability (ESG)”, “Dividends”, “Balance Sheet” and “Behavioral Finance”. This approach means that, as a matter of principle, no companies in the exploration or development phase are selected. In addition, certain exclusion criteria are defined, for example no investments in pure play coal companies.

CRITICAL MINERALS INTENSITY

	TOP 5	PICK	IMC
Aluminium	2.9%	6.0%	**6.8%**
Cobalt	**0.8%**	0.4%	0.4%
Copper	14.3%	18.3%	**22.9%**
Graphite	0%	**0.1%**	0%
Iron Ore	**48.9%**	27.6%	15.6%
Lead	0.3%	0.3%	**1.4%**
Lithium	0%	2.0%	**5.0%**
Manganese	0.2%	0.3%	**1.4%**
Molybdenum	0.1%	**0.7%**	0.1%
Nickel	2.7%	2.4%	**8.2%**
Rare Earth	0%	**0.6%**	0%
Silver	0.5%	0.6%	**1.2%**
Steel	0%	**19.1%**	15.8%
Titanium	0%	0%	0%
Uranium	**0.1%**	0.1%	0%
Zinc	1.8%	1.6%	**4.6%**
Total	**72.5%**	**80.0%**	**83.5%**

In the context of the energy transition, some raw materials are particularly in focus. In order to manage the transition from the fossil present to a green future, immense quantities of industrial metals will be needed.

This long-term trend should be taken into account in the commodity mix of a portfolio. With regard to this topic, an investor also benefits from a more optimal exposure through PICK, or the Industrial Metals Champions Fund, compared to the "Top 5".

FINANCIAL METRICS

	Top 5	PICK	IMC
Price/Cash-Flow	**6.0x**	8.6x	7.2x
Price/Book	2.5x	2.6x	**1.8x**
Price/Earnings (23E)	**8.8x**	12.8x	9.2x
EV/EBITDA (23E)	**4.9x**	6.5x	5.2x
Net-Debt/Equity	19%	19%	**6%**
EBITDA Margin (23E)	**40%**	35%	34%
Free-Cash-Flow-Yield (23E)	**10.1%**	7.3%	9.2%
Free-Cash-Flow-Yield (24E)	9.4%	7.6%	**10.5%**
Dividend-Yield	**6.0%**	4.8%	4.7%

as per 31.01.23

Fundamentally, the financial metrics in the mining sector are very attractive, both at the valuation level and with a focus on profitability. Mining companies are currently in a sweet spot - thanks to low debt and historically high commodity prices, companies can pay record shareholder returns.

In comparison, the ratios are close to each other. The top 5, typically for majors, have higher dividend yields, while the Industrial Metals Champions Fund carries significantly lower debt.

CONCLUSION

The topic of commodities is often grouped together in asset allocation, even though each individual product follows its own fundamentals. Especially when commodities are allocated via equities, an optimal commodity mix is not possible with a single investment.

On the one hand, certain commodity resources are geographically concentrated (e.g. cobalt in Congo), on the other hand, mining is one of the most capital-intensive industries of all - the road from exploration to commercial production can take 10-20 years and cost billions of dollars. It is therefore unsurprising that many companies have a certain degree of concentration and are slow to diversify. For example, although larger companies are making acquisitions to diversify into the critical metals, for the time being these commodities are negligible in the overall mix and result in negligible exposure in the investor’s asset allocation.

Compared to the Top 5 and the PICK ETF, the Industrial Metals Champions Fund shows significantly better diversification both in terms of the commodity mix and geographically, without compromising on valuation parameters. The IMC portfolio is virtually debt-free, significantly reduces single-company risk compared to a Top 5 portfolio and is more focused compared to the PICK ETF.

CONTACT

Office Basel
Sternengasse 21
CH-4051 Basel

+41 61 975 85 85
independent-capital.com
research@independent-capital.com

Independent Capital Group Basel has been involved in commodity and energy investments for over 20 years - we are happy to help you with inputs on the markets, the companies and with tailor-made investment strategies along the “Road to Green” to find the commodity allocation you are looking for.

Thank you for your trust

INDEPENDENT CAPITAL GROUP

APPENDIX

This research paper used Bloomberg and ICG internal data based on the companies' respective 2021 and 2020 public disclosures. If you would like to see a specific dataset, please do not hesitate to contact us at research@independent-capital.com.

Disclaimer
The current document is intended for information purposes only and shall not to be used as an offer to buy and/or sell shares. The performance shown does not take account of any commissions and costs charged when subscribing to and redeeming shares. Past performance may not be reliable guide to future performance. This material has been prepared by Independent Capital Group AG, none of the registrar and transfer agent, the central administration or the custodian of the Fund has independently verified any information contained herein and no party makes any representation or warranty as to the accuracy, completeness, or reliability of such information.