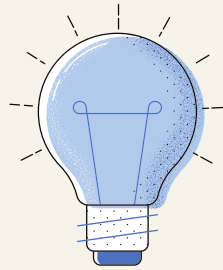


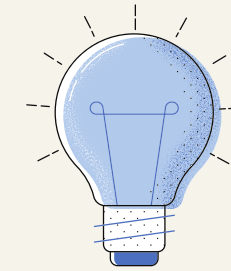
ANALYSIS OF THE AUSTRALIAN STOCK EXCHANGE MARKET

PERIOD 2014 - 2023

**Presented By: Trupti Radadiya - Project Manager, Mason Seifaddini,
Hao (Frank) Nguyen, Uthpalie Thilakaratna-Attygalle**



PROJECT OBJECTIVES

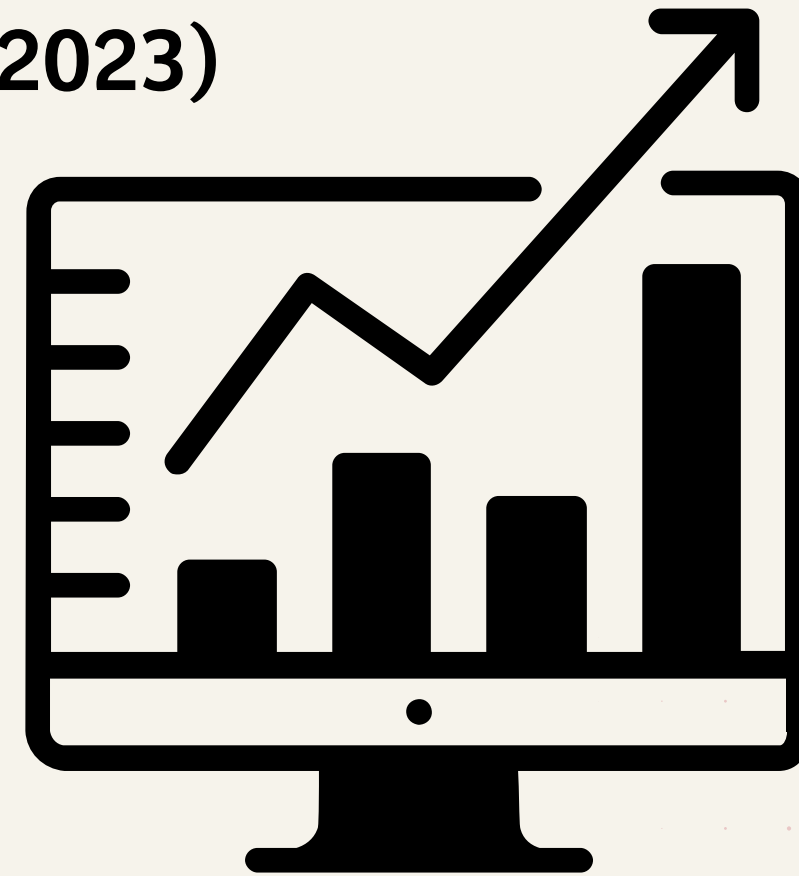


- **To provide insights into the performance of Australian stocks over the past 10 years**
- **Key Points**
 - **Identification of top-performing stocks**
 - **Understanding movement trends**
 - **Highlighting top-performing industries within the stock market**
 - **Analysis of how COVID-19 impacted the stock market**



ANALYSIS POINTS

1. Top and Bottom Performing Stocks (2014-2023)
2. Movement Trends Analysis
3. COVID-19 Impact
4. Top-Performing Industries



DATA COLLECTION AND CLEANING

1. Data Sources:

- **Market Index:** Historical stock data obtained from Market Index.
- **Marketstack API:** Splits and dividends data fetched using the Marketstack API.

2. Data Cleaning:

- **Removal of stocks with inconsistent entries over the past ten years to ensure data consistency.**
- **Retention of only stocks categorized as "Equity" for analysis purposes.**
- **Removal of ambiguous stock entries to maintain data accuracy.**
- **Retention of stocks with available industry information for further analysis.**

HYPOTHESIS

- **Null hypothesis: Covid has no impact on Stock Performance**

1. Paired t-test Results:

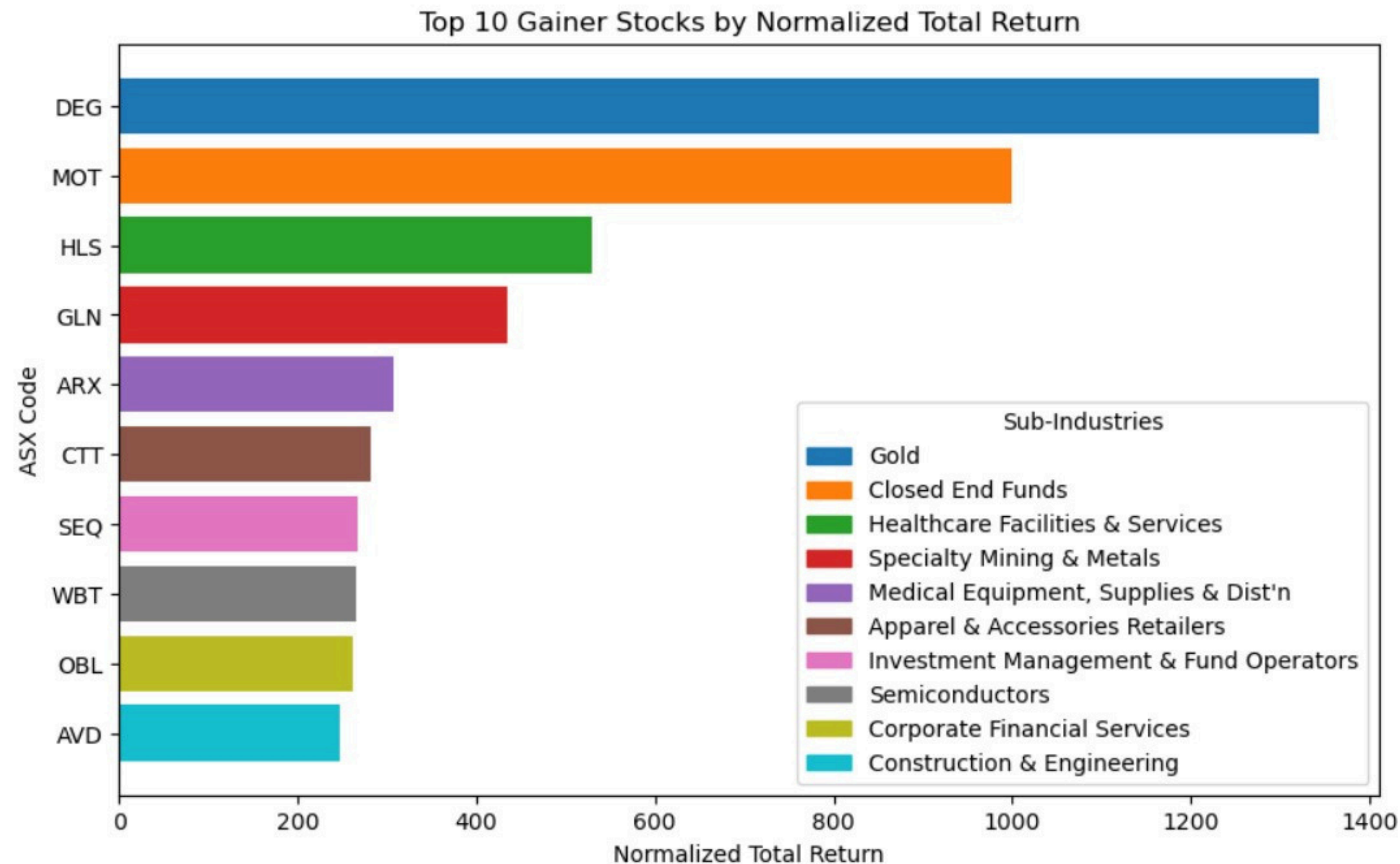
- **T-statistic: 3.0209**
- **P-value: 0.0026**

2. Independent Samples t-test Results:

- **T-statistic: 3.4477**
- **P-value: 0.0006**



WHICH 5 ASX STOCKS HAVE OUTPERFORMED OTHERS IN THE LAST 10 YEARS?

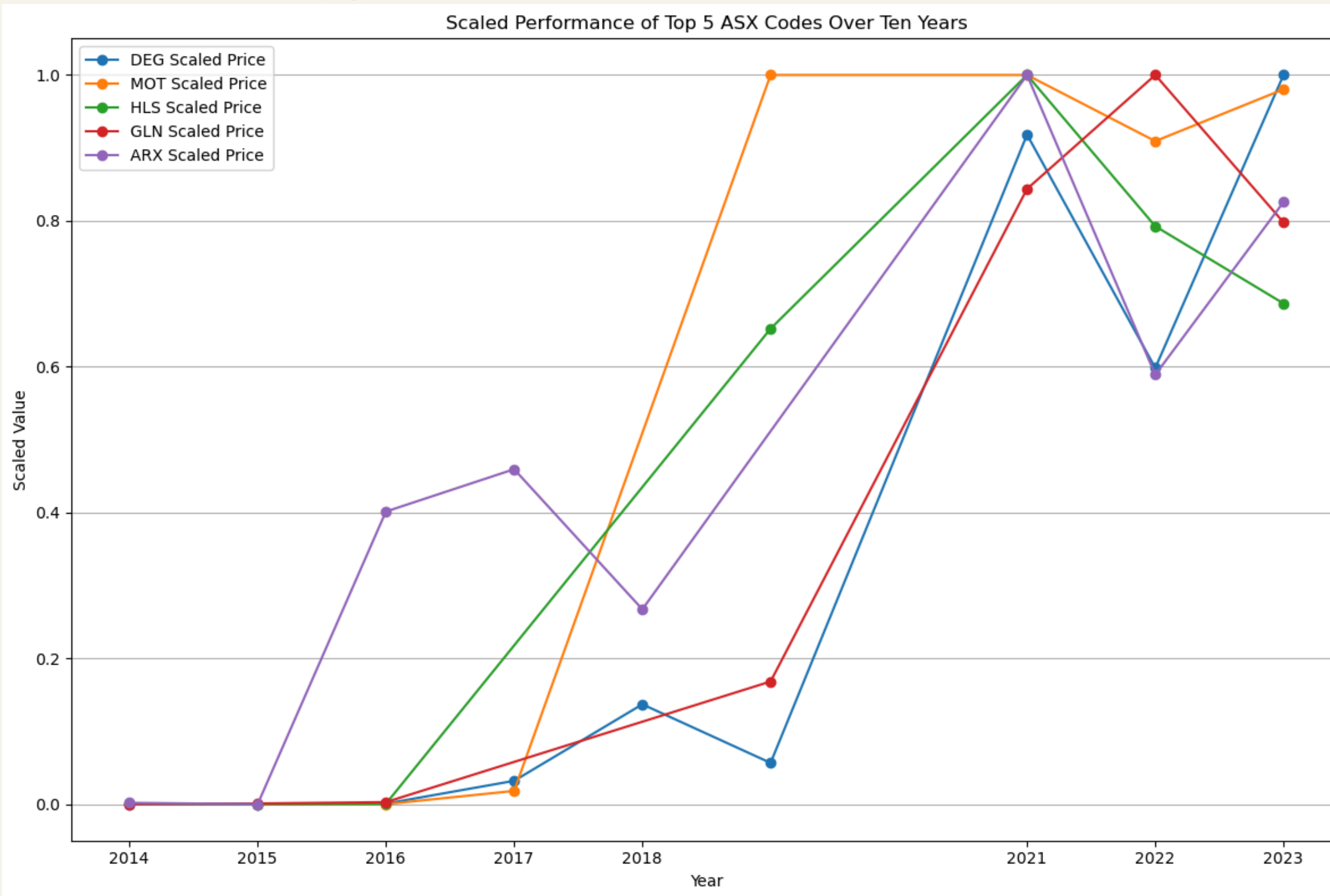


Observations

Top 5 performers were:

De Grey Mining Limited
Metrics Income Opp Trust
Helius Limited
Galan Lithium Limited
ARC Biosurgery Limited

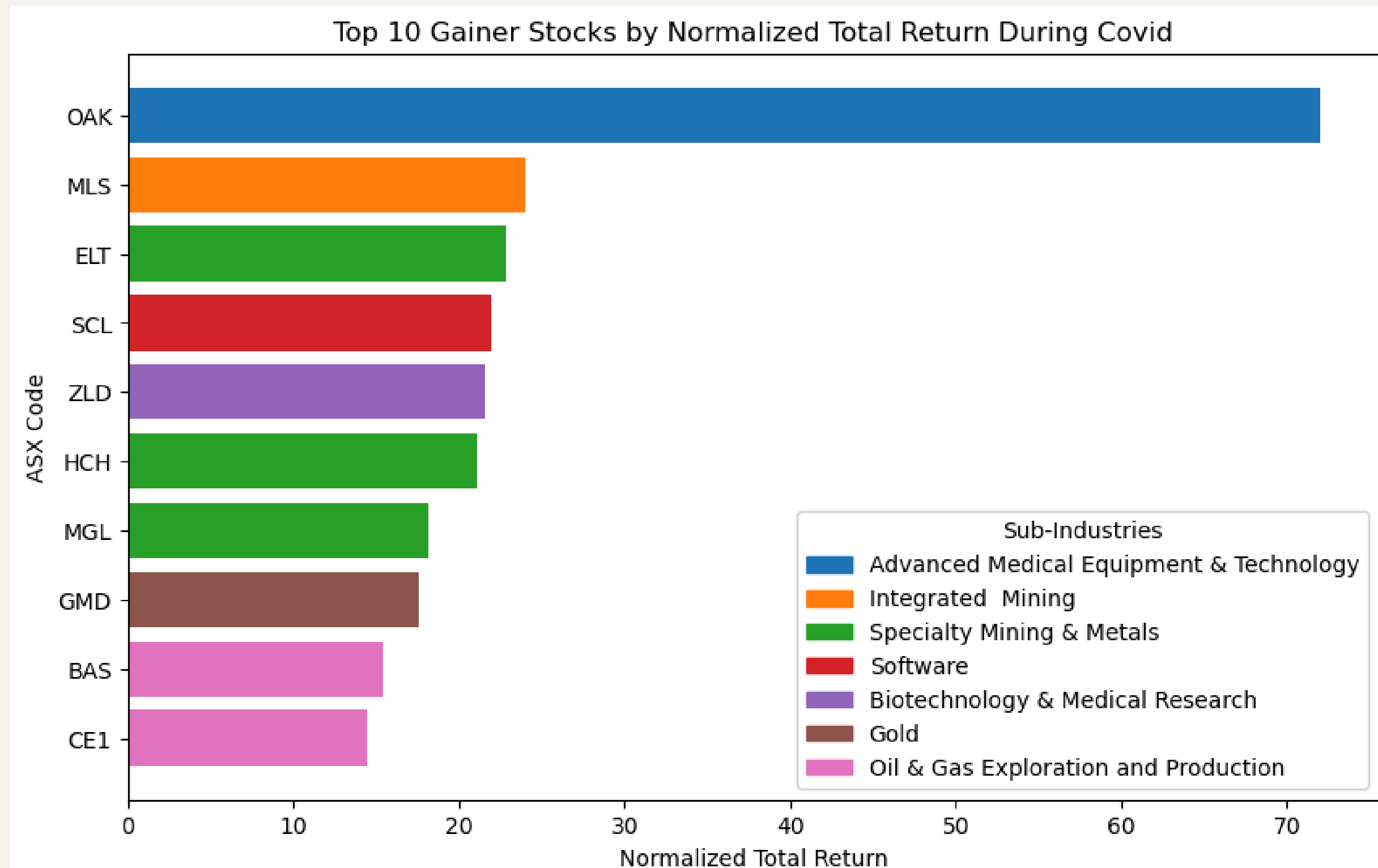
TOP 5 PERFORMERS OVERALL



ANALYSIS

- All top-performing stock share values dipped in 2022 (during the COVID period), with GLN an exception (Specialty Mining & Metal). However, their share value has noticeably dropped in 2023.
- With the GLN and HLS stocks as exceptions, the share price of the other top performers started picking up from 2023.

WHICH 5 ASX STOCKS PERFORMED BETTER DURING COVID (2020-2022)?



Observations

Top 5 performers:

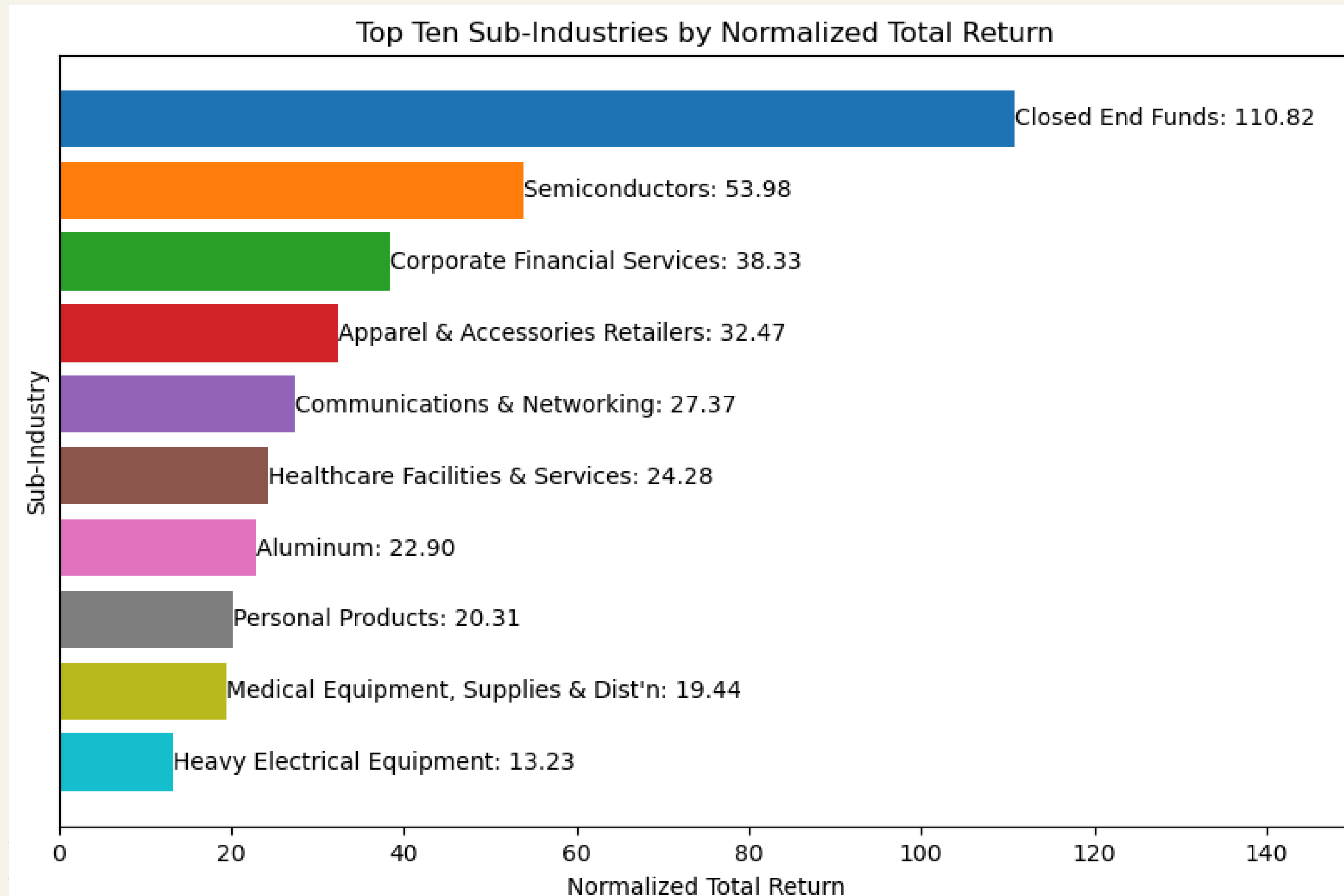
Oakridge International Ltd
Metals Australia Ltd
Elementos Limited
SCHROLE Group Limited
Zelira Theruapeutic Limited

ANALYSIS

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- **Top performing stock during COVID are not the same as top performing stock overall. Looking at the performance percentages of stock the top performing company OAK on an yearly average return, still didn't do as well as overall top 5 performing companies on an yearly average return.**
- **Analysis of the COVID period indicates the Advance Medical Equipment & Technology and Biotechnology and Medical Research sectors saw more gains. The Software industry also made noticeable gains during COVID.**
- **Interestingly, the Specialty Mining & Metals and Gold industries maintained their top status even during the COVID period.**

TOP 5 INDUSTRIES WITH SIGNIFICANT GAINS OVER THE LAST 10 YEARS



Observations

Top 5 Industries:

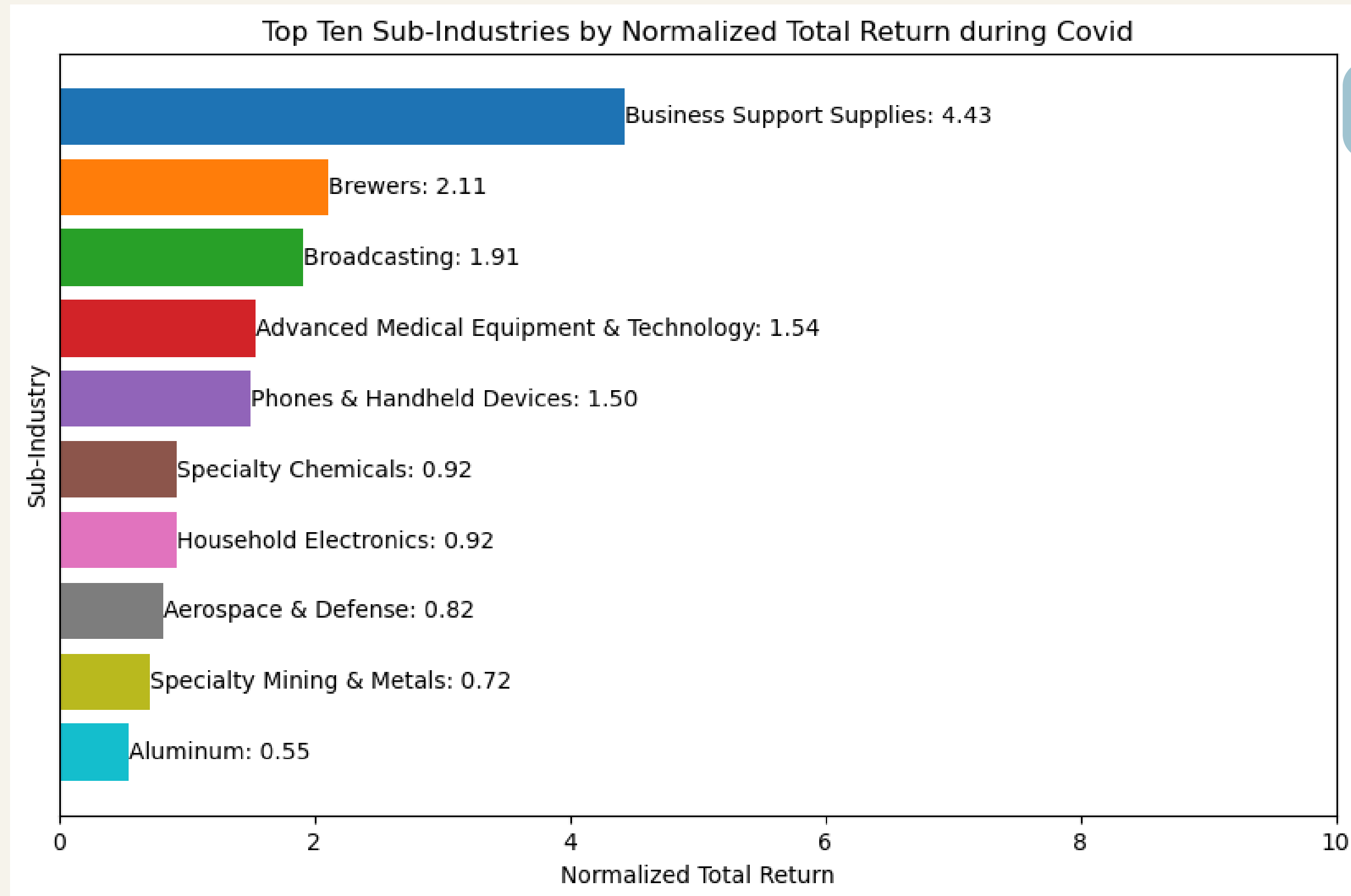
Closed End Funds
Semiconductors
Corporate Financial Services
Apparel & Accessories Retailers
Communication & Networking

ANALYSIS

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- **Closed End Funds stand out as the top-performing sector over the past decade, commanding a substantial lead over competitors.**
- **The Semiconductors industry exhibited remarkable growth over the past decade, reflecting its pivotal role in technological advancement and innovation.**
- **Other notable high-performing sectors include Corporate Financial Services and Apparel and Accessories Retailers, demonstrating robust growth and market resilience.**

TOP 5 INDUSTRIES THAT GAINED DURING COVID



Observations

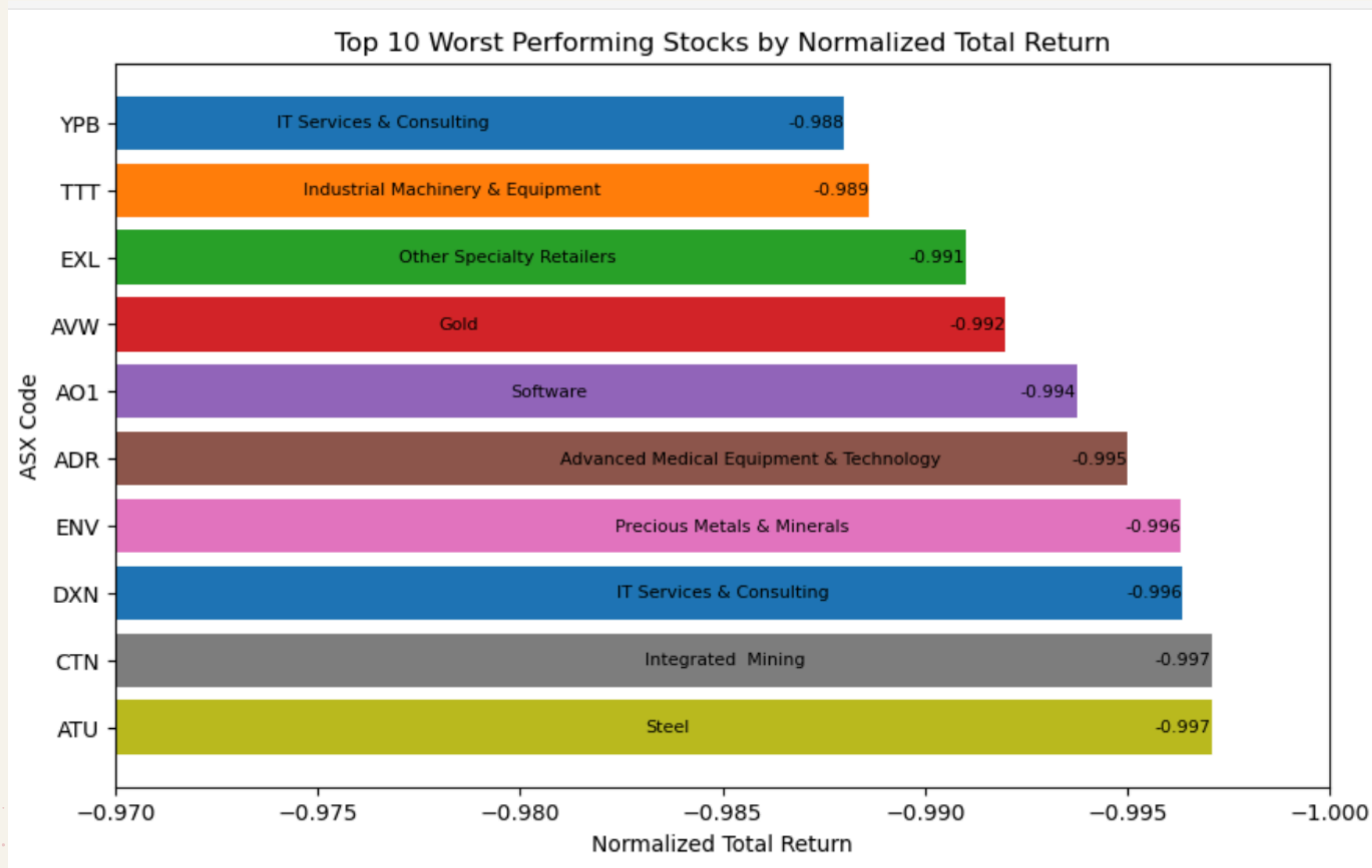
Top 5 Industries:

Business Support Supplies
Brewers
Broadcasting
Advance Medical
Equipment & Technology
Phones & Handheld
Devices

ANALYSIS

- Amid the challenges of the COVID period, Business Support Supplies emerges as the top-performing industry, showcasing significant gains.
- Both the Brewers & Broadcasting industries showed gains, reflecting comparable growth trends between the two sectors.
- Significant growth was also evident in both the Advanced Medical Equipment & Technology and Phones & Handheld Device industries, with the two sectors closely trailing one another in progress.
- Additional noteworthy industries showing substantial gains encompass Specialty Chemicals, Household Electronics, Aerospace & Defense, Specialty Mining & Metals, and Aluminium.

IDENTIFYING THE BOTTOM 5 ASX STOCKS BASED ON PERFORMANCE DURING THE PAST TEN YEARS

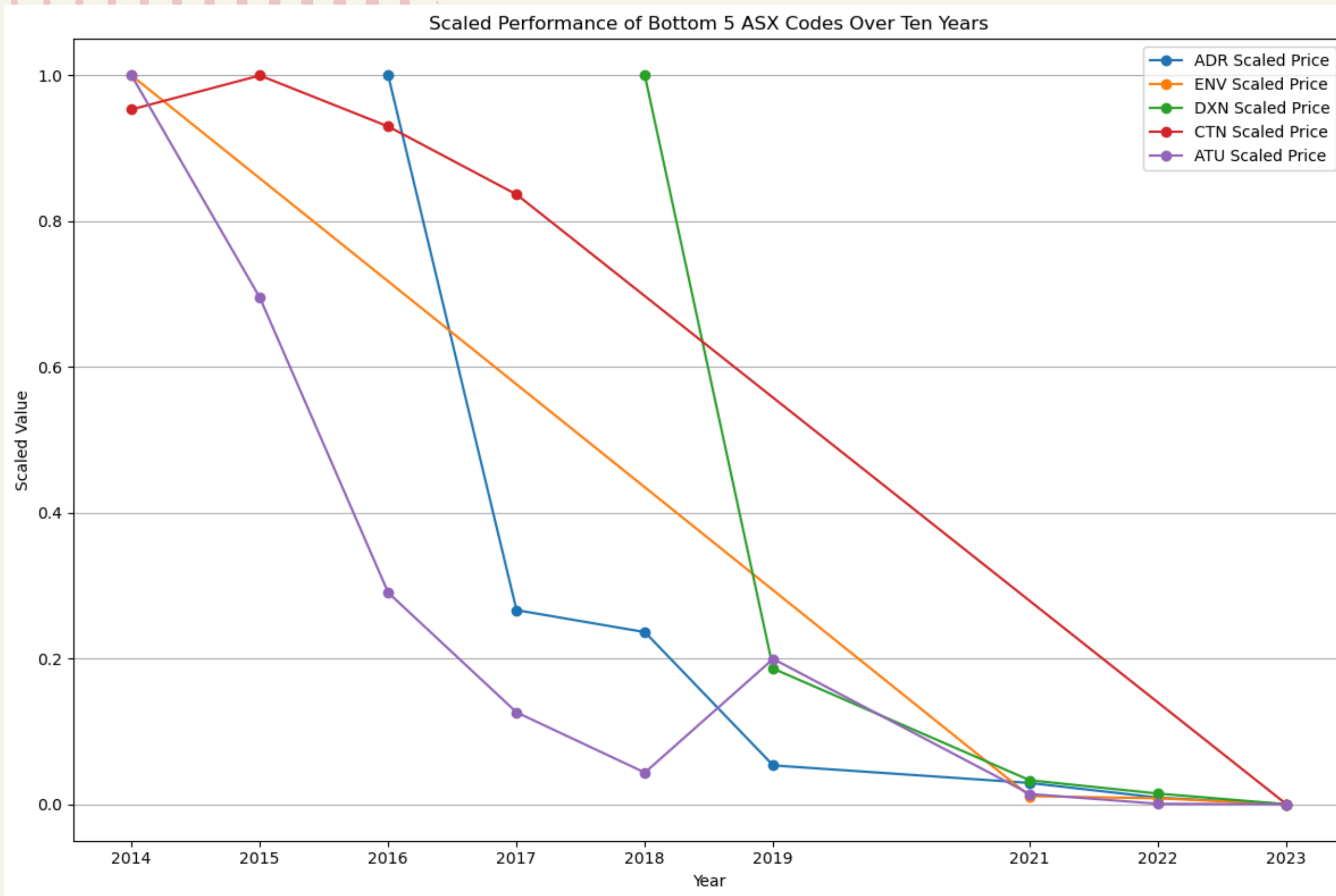


Observations

Five Lowest Performers:

- 1-Atrium Coal Limited (-99%)
- 2-Catalina Resources Limited(-99%)
- 3-DXN Limited(-99%)
- 4-Enova Mining Limited(-99%)
- 5-Adherium Limited(-99%)

BOTTOM 5 PERFORMERS OVERALL

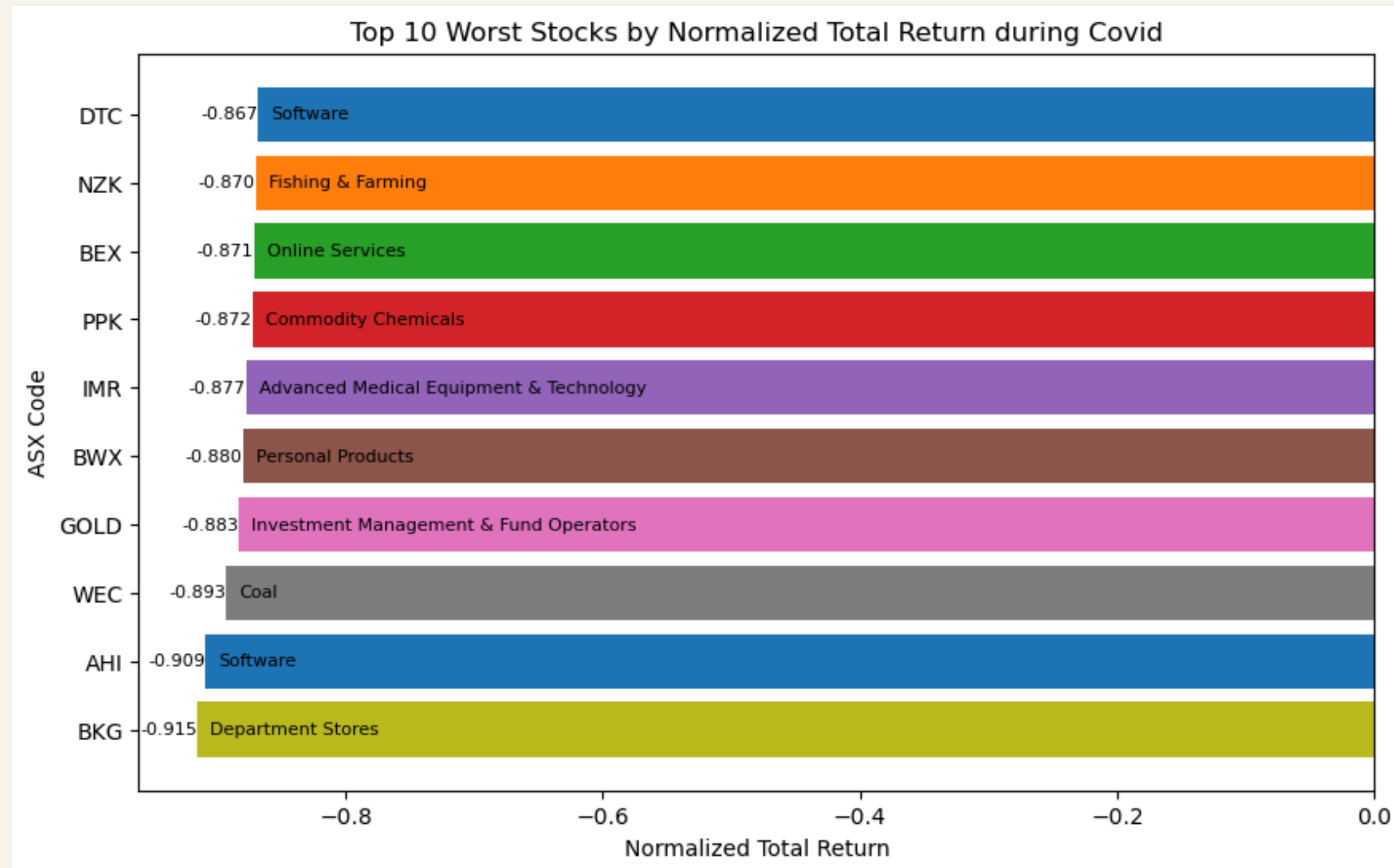


ANALYSIS

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- The ASX stocks 'ATU' and 'CTN' claimed the top spots, both exhibiting a normalized total return of -0.997, closely followed by others with returns of -0.996 and -0.995 respectively.
- Upon closer examination, distinctive patterns emerge in the performance trajectories of these stocks. 'ATU' experienced a notable decline in share price at the onset of its period, followed by a brief recovery before encountering another sharp drop during the COVID-19 period. This suggests a significant impact of the pandemic on 'ATU's' performance.
- Similarly, stocks 'CTN' and 'ENV' demonstrated a consistent downward trend in share price from the beginning of their periods to their current levels.
- Conversely, 'DXN' and 'ADR' experienced a sharp drop in share price for a brief period, followed by a more gradual decline to their current levels.

IDENTIFYING THE BOTTOM 5 ASX STOCKS BASED ON PERFORMANCE DURING THE COVID-19 (2020-2022)



Observations

Five Lowest Performers:

- 1-Booktopia Group Limited (-91%)
- 2-Advance Health Intelligence Limited(-90%)
- 3-White Energy Company Ltd(-89%)
- 4-Global X Metal Securities AU(-88%)
- 5-BWX Limited(-88%)

ANALYSIS

- Among the lowest-performing companies during the COVID-19 pandemic, sectors such as Department Stores, Personal Products, and Investment Management & Funds experienced notable losses.
- Additionally, our observation highlights the presence of a software company within this group, suggesting either a lack of relevance in the software produced during the pandemic period or an inability to adapt to changing market demands.
- Examining the performance of these bottom performers beyond the context of COVID-19 could offer valuable insights into their overall market performance and potential factors contributing to their underperformance

CONCLUSIONS & RECOMMENDATIONS

Our analysis revealed:

- **Contrary to our initial hypothesis, there was a significant difference in ASX stock performance before and during the COVID-19 pandemic.**
- **Top 5 companies showed distinct shifts in performance during the pandemic compared to the decade.**
- **Certain industries, like Medical Technology and Software, performed well during COVID-19, while others, such as Department Stores, suffered losses.**
- **Investing carries inherent risks, as evidenced by the presence of consistently low-performing stocks.**
- **In conclusion, investors must remain adaptable and diversify their portfolios to navigate market volatility effectively.**

Q&A

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THANK YOU