Driving Profit with Purpose:

Integrating ESG Concepts into Business Decisions

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Event: International Forum on Circular Fashion and UNSDGs
          in the fashion and textile industry
Date: July 26, 2023

Some professional services and industry engagement activities.

- Dr S H Ho Professor of Banking and Finance since 2021
- Directors of the Research Centre for ESG (CESG) and Research Institute for Business (RIB)
- Business Studies Assessment Panel member for Competitive Research Funding Schemes (Self-financing sector) of the RGC (2022 –2024)
- Business Studies Panel (Joint Research Schemes) member of the RGC (2016-20)
- Member of the Investment Committee of the Hospital Authority Provident Fund Scheme (2016-22)
- Advisor for Bhutan's Green Bond initiative and consultant of United Nations
- Professor of Finance (2010-20) & Director of the Center for Economic Sustainability and Entrepreneurial Finance (CESEF) (2018-20), PolyU
- Council member & Trustee of the Pension Fund of the PolyU (2011-13)
- Member of the Examination Board of the Institute of Financial Planners of Hong Kong (IFPHK).
- Served as a project consultant for various organizations including:
  - UN ESCAP, Securities and Futures Commission (SFC), Mandatory Provident Fund Scheme Authority (MPFA), Hong Kong Exchanges (HKEx), Investor Education Centre (IEC)
  - Bank of China (HK) Private Banking, Agricultural Bank of China (HK) Private Banking, Value Partners, Fubon Bank, Bank Consortium Trust Hong Kong, Charles Schwab (US)

Driving Profit with Purpose:
Integrating ESG Concepts into Business Decisions

1   **Understanding ESG**

2   **ESG integration and making profit**

3   **ESG integration for various business areas**

4   **Looking forward: Understanding alternative data and ESG applications**
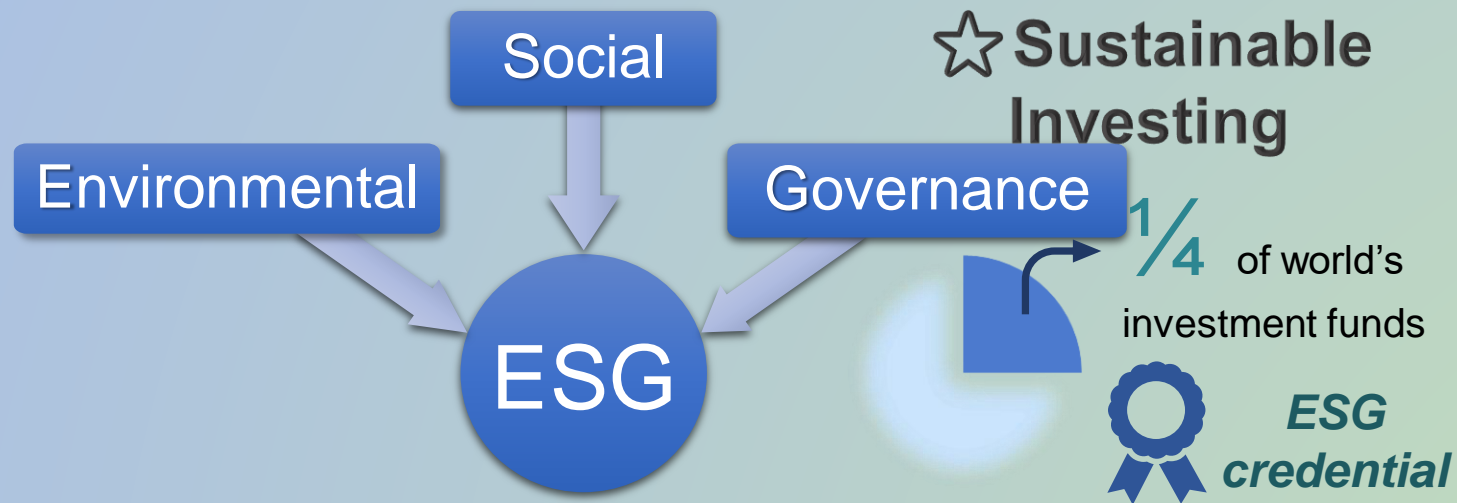
Understanding ESG

ESG 1-2-3

ESG DEFINITION

United Nations Framework Convention on Climate Change

CSR 1992

PRI | Principles for Responsible Investment

ESG 2006

☆ **Sustainable Investing**

Social

Environmental

Governance

ESG

¼ of world's investment funds

ESG credential

Socially responsible investment (SRI) has been around for over 90 years, but Environmental, Social and Governance (ESG) is relatively new. ESG became prominence in 2006 with the launch of the UN PRI (Principles for Responsible Investment).

ESG 1-2-3   **ESG materiality analysis: airlines as example**

E   Greenhouse gas emissions

S   Labor practices

Accident & safety management

G   Competitive behavior

Materiality

E pillar

S pillar

G pillar

ESG: Firm operation

SUSTAINABILITY

ESG integration life-cycle

ESG Fully Integrated

Directly invest capital towards companies which provide solutions to ESG issues and affect real world outcomes.

➤ *Best-in-class*

Investors actively invest in a sub-set of the best practitioners in a sector.
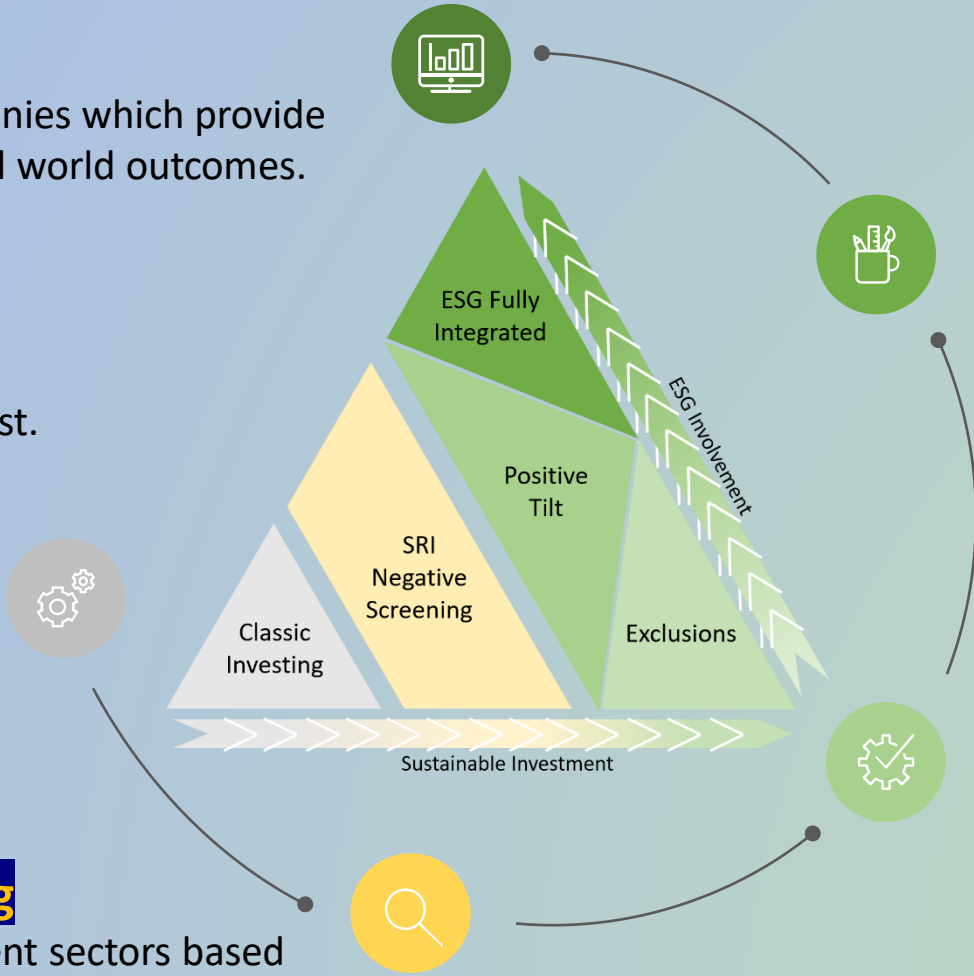
➤ *Thematic*

Investors often follow themes to invest.

Classic Investing

Investment involves little ESG-related issues.

SRI Negative Screening

Passively excluding investment sectors based on ethical and religious values.

ESG Positive Tilt

With the intention to generate measurable and beneficial societal impacts alongside a financial return.
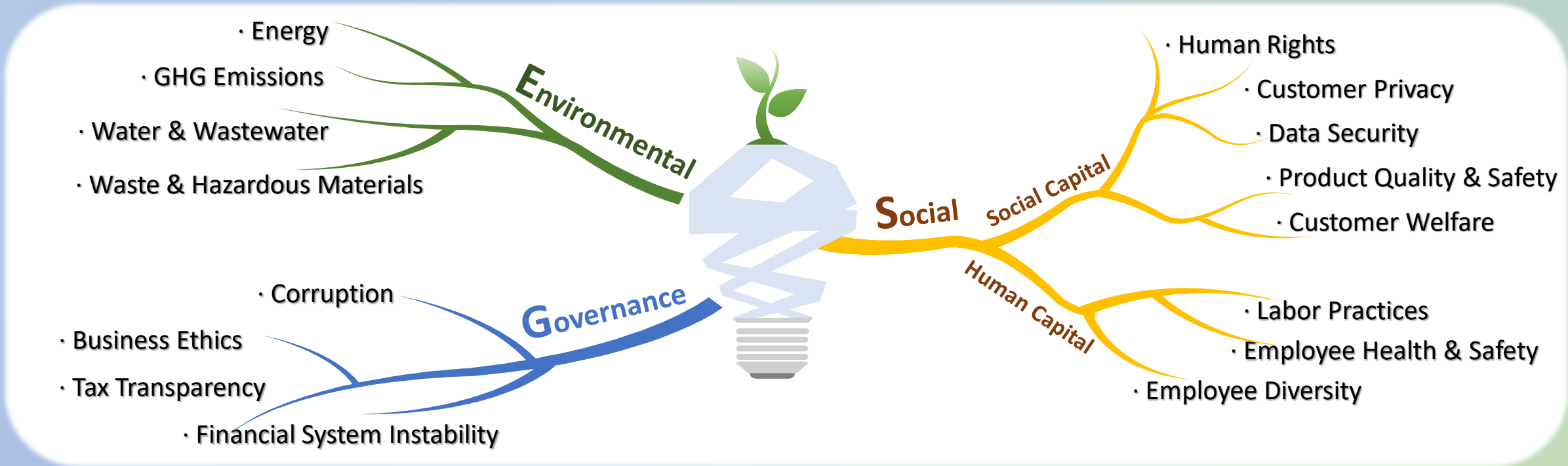
ESG Exclusions

Excluding the companies or sectors based upon low ESG factors.

ESG Fully Integrated

Positive Tilt

SRI Negative Screening

Classic Investing

Exclusions

ESG Involvement

Sustainable Investment

ESG Pillars and Major Issues

➢ Promote **Environmental x Social (ES)** initiatives in your class through lecture and projects

· Energy

· GHG Emissions

· Water & Wastewater

· Waste & Hazardous Materials

Environmental

· Human Rights

· Customer Privacy

· Data Security

· Product Quality & Safety

· Customer Welfare

Social

Social Capital

Human Capital

· Labor Practices

· Employee Health & Safety

· Employee Diversity

· Corruption

· Business Ethics

· Tax Transparency

· Financial System Instability

Governance

ESG integration and making profit

Investment Return Adopting ESG Integration in China

Cumulative raw return for industry neutral high vs low ESG groups evolving over time (20150701-20200331)

This figure plots the cumulative raw return for industry neutral high vs low ESG groups trend evolving over time. As the end of Mar 2020, we sort stocks into high vs low portfolios based on their sample median ESG total scores every six months period, and track their cumulative raw return, starting from Jul 1, 2015.
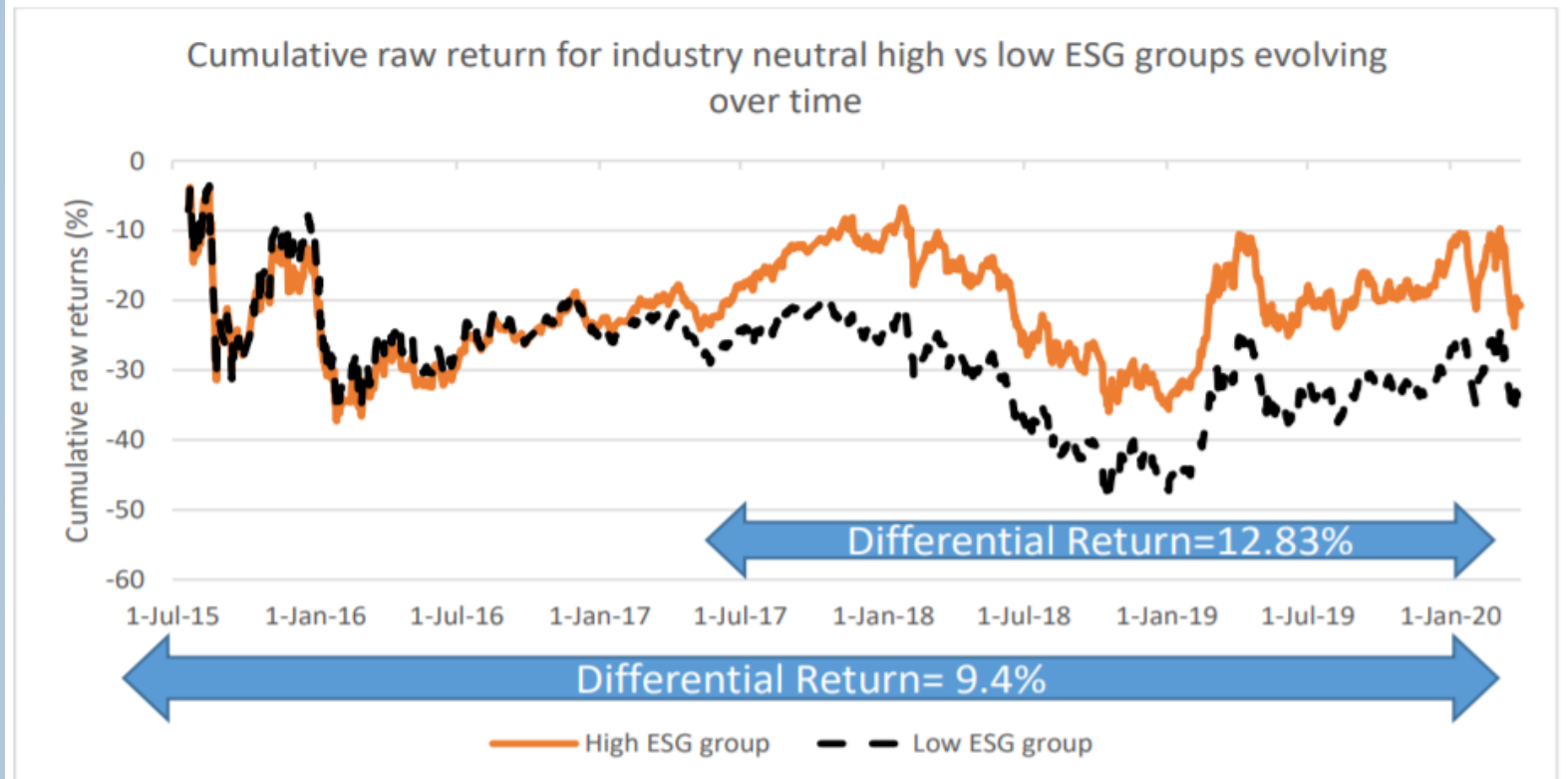
Reference: David C. Broadstock, Kalok Chan, Louis T.W. Cheng, Xiaowei Wang. "The role of ESG performance during times of financial crisis: Evidence from COVID-19 in China", Finance Research Letters, Volume 38, 2021.

The Happiness Dividend by BlackRock: An Example of Social Pillar Engagement

Return of firms scoring in the top quintile for employee satisfaction versus those scoring in the bottom quintile

Source: BlackRock's Scientific Active Equity Group, February, 2015. These are cumulative specific returns for owning names in the top and bottom quintiles of employee sentiment in the MSCI ACWI IMI Index, as determined by SAE. The names in these quintiles are not static and change through time. This is a frictionless simulation (i.e., no transaction costs are applied).

ESG integration for various business areas

1. Finance
- 1a) Corporate Finance: firm level ESG performance and maximizing shareholders' wealth: a short-term debate or long-run contradiction?
- 1b) Investments: Asset allocation and alpha generation using ESG integration

2. Accounting
- 2a) ESG reporting, disclosure, and transparency
- 2b) Carbon accounting

3. Marketing
- 3a) ESG performance and marketing orientation
- 3b) Brand value of green marketing

4. Management
- 4a) Sustainability (ESG) leadership and entrepreneurship
- 4b) Management preference on ESG and risk management

5. Supply Chain
- 5a) ESG performance and supply chain resilience
- 5b) ESG and suppliers' concentration

Key Observations of ESG Integration Development in Asia

Drivers:
- Risk Management (56.52%)
- Client Demand (43.48%)
- Regulation (41.3%)

Barriers:
- Limited understanding of the ESG issues and/or ESG integration (45.65%)
- Lack of comparable and historical ESG data" (41.3%)
- Concerns about negative returns, tracking error and underperforming a benchmark" (39.13%)
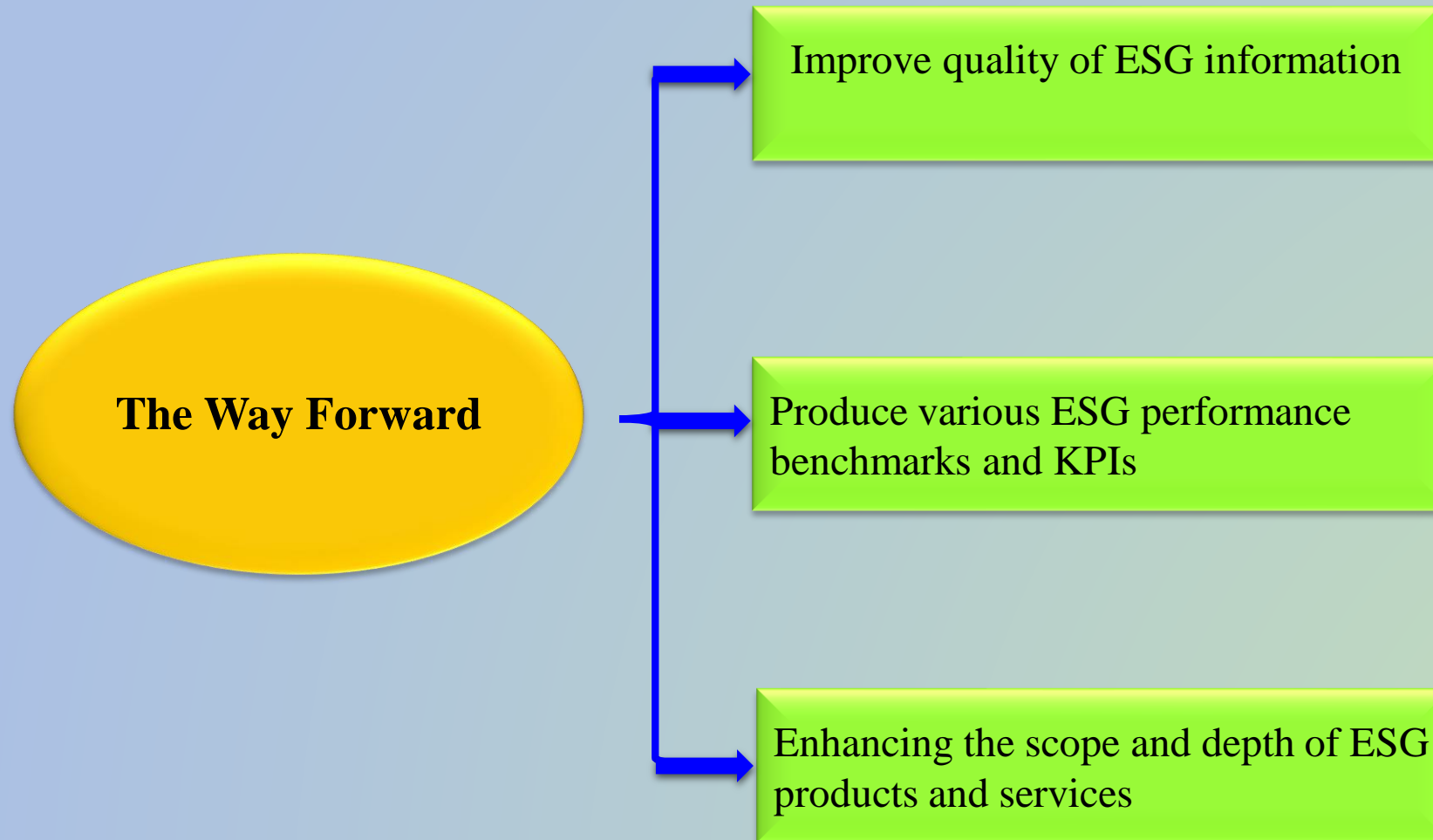
Conclusion:

The ESG landscape for more mature ESG stakeholders
- For more mature asset management managers, asset owners, and listed firms, *corporate governance practice* and *management buy-ins* lead to the emphasis of risk management based on ESG channels. As long-term risk mitigation is commonly regarded as an obvious benefit of E, S, and G factors.

The ESG landscape for early-stage ESG stakeholders
- For early-stage ESG market participants, regulation is named as a top driver. However, this driver may imply a sense of compliance as a driving force.
- The knowledge gap between the ESG services providers and the clients lead to the current problem of *lacking a check-and-balance* for these ESG activities.

Improve quality of ESG information

The Way Forward

Produce various ESG performance benchmarks and KPIs

Enhancing the scope and depth of ESG products and services
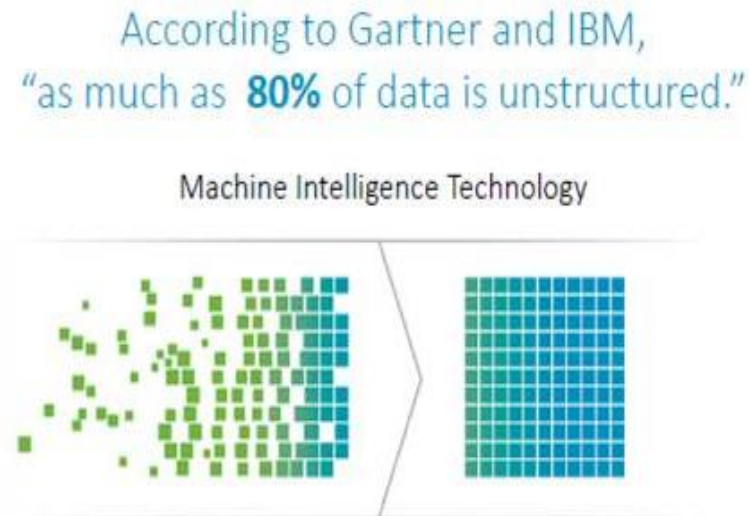
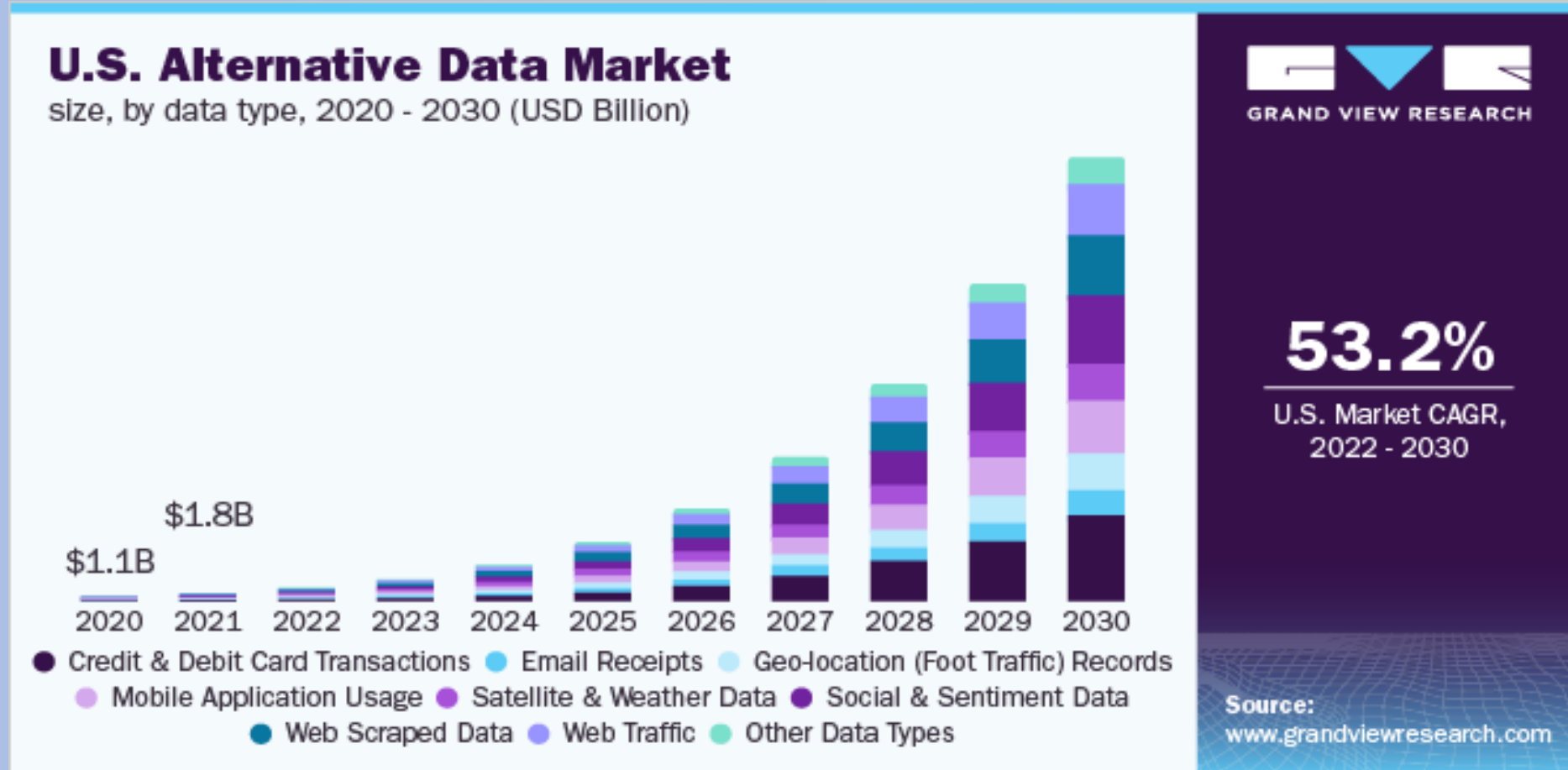# AI Investments

ALTERNATIVE DATA ON THE RISE

Non-traditional, unstructured data can be leveraged to gain insights on financial markets and allow investors to better manage risk and find alpha.

- Over **60% of asset managers and nearly 75% of hedge funds** are currently using **"alternative data"** as part of their investment process and this number is expected to continue to grow.*

- Opimas estimates that investors are spending about **$5bn a year on alternative data,** and expect the **industry to grow 30% annually** in the coming years.**

According to Gartner and IBM, "as much as **80%** of data is unstructured."

Machine Intelligence Technology

Big Spenders: Money Managers Are Ramping Up Spending on Alternative Data

The global alternative data market size was valued at USD 2.7 billion in 2021 and is expected to expand at a compound annual growth rate (CAGR) of 54.4% from 2022 to 2030. The key drivers attributed to market expansion include the significant increase in the types of alternative information sources over the last decade. While web scraping and financial transactions are the most common sources, the emerging sources, including mobile devices, social media, satellites, sensors, IoT-enabled devices, and others, are gaining wider popularity. As such, the companies are actively expanding their offering by gathering information from all such sources.

U.S. Alternative Data Market
size, by data type, 2020 - 2030 (USD Billion)

GRAND VIEW RESEARCH

53.2%
U.S. Market CAGR, 2022 - 2030

$1.8B
$1.1B

2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030

● Credit & Debit Card Transactions ● Email Receipts ● Geo-location (Foot Traffic) Records
● Mobile Application Usage ● Satellite & Weather Data ● Social & Sentiment Data
● Web Scraped Data ● Web Traffic ● Other Data Types

Source:
www.grandviewresearch.com

Source: https://www.grandviewresearch.com/industry-analysis/alternative-data-market

NEW DATA SETS NOW AVAILABLE

ESG HOLDINGS INTELLIGENCE	SOCIAL MEDIA SENTIMENT	ETF REFERENCE DATA
FINANCIAL SYSTEMIC EXPOSURE	GLOBAL NEWS EXPOSURE	SUPPLY CHAIN NETWORK EXPOSURE

PREVIOUSLY-LAUNCHED DATA SETS

MULTI-FACTOR LONG	MULTI-FACTOR LONG WITH HEDGE	CENTRAL BANK COMMS	CORPORATE EARNINGS
TWITTER SENTIMENT	PREMIUM SHORTS	CORPORATE FILINGS	TECHNICAL INDICATORS

Nasdaq

INSIDE NASDAQ: BJORN SIBBERN, GLOBAL INFORMATION SERVICES, NASDAQ *(2 Feb,2017)*

- Nasdaq Information Service is one of the company's largest business units by revenue (22%) with 120 employees.
- ……technology is changing the way we think about data …..experimenting with **advanced analytics** and **machine learning** techniques to develop products that help customers glean stronger insights to make better decisions.
- our **Innovation Lab** – designed to help traders better understand how they perform in the market……

Big Data x ESG = Innovation

Using Machine Learning to Measure ESG Sentiment through Media

Project title: Fostering Big Data Applications and Innovation to Reflect Corporate ESG Performance through Media and Social Listening (GSP/033/22) (Funded by: The General Support Programme of the Innovation and Technology Fund.)

Why we engage in this project?

Big Data analytics can be used easily but the quality of the generated alternative data to support decision requires content expertise. Currently, listed firms related to ESG mainly focuses on annual reporting and ESG reporting to showcase their sustainability efforts and achievement. One major problem of ESG communication (from the IR team and top management to stakeholders including investors and clients) is that the ESG performance is only reported once a year in the annual reports. But in fact, there are ESG related events occurring every day.

Our solution: Through newspapers, TV, online media and social media, stakeholders learn about the ESG events related to the companies and they form an opinion on the ESG performance of the firms. The Research Centre aims to promote big data analytics through a technology-driven ESG performance-based sentiment indicator using social listening measures for listed companies in Hong Kong. The project will provide a publicly available ESG performance-based sentiment indicator for listed companies to illustrate Big Data analytics in an innovative manner.

Using ESG Performance Rating and Sentiment Data to Measure ESG Intelligence. Our visualization reflects i-Score universe as the z-axis with RavenPack sustainability sentiment score (RP Sustain Net Senti) as the x-axis, and the Youjivest net ESG score (YJV ESG Net Senti) as the y-axis.

2022 i-Score vs Peers Performance based on GICS1 Industry Classification

GICS1, i-Score_or_not
- Industrials, i-Score
- Industrials, Peers
- Utilities, i-Score
- Utilities, Peers
- Real Estate, i-Score
- Real Estate, Peers
- Financials, i-Score
- Financials, Peers
- Communication Services, i-Score
- Communication Services, Peers
- Health Care, i-Score
- Health Care, Peers
- Consumer Discretionary, i-Score
- Consumer Discretionary, Peers
- Consumer Staples, i-Score
- Consumer Staples, Peers
- Information Technology, i-Score
- Information Technology, Peers
- Materials, i-Score
- Materials, Peers
- Energy, i-Score
- Energy, Peers

Figure 1A.i-Score Entity 02269.HK's Performance

2022 i-Score Universe Performance

GICS1=Health Care
RP Sustain Net Senti=0.1678917
YJV ESG Net Senti=0.15
2022 i-Score=5.254001
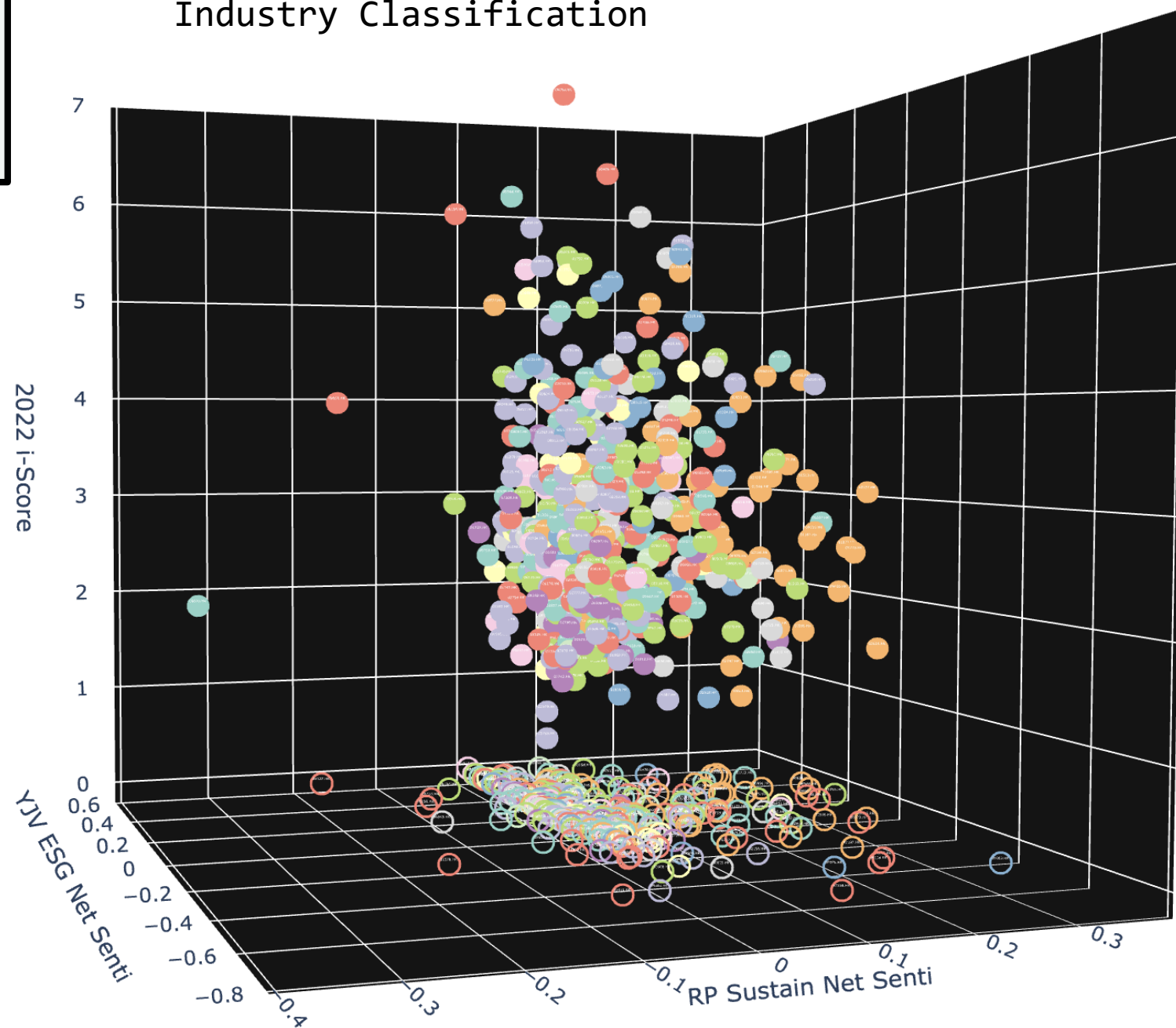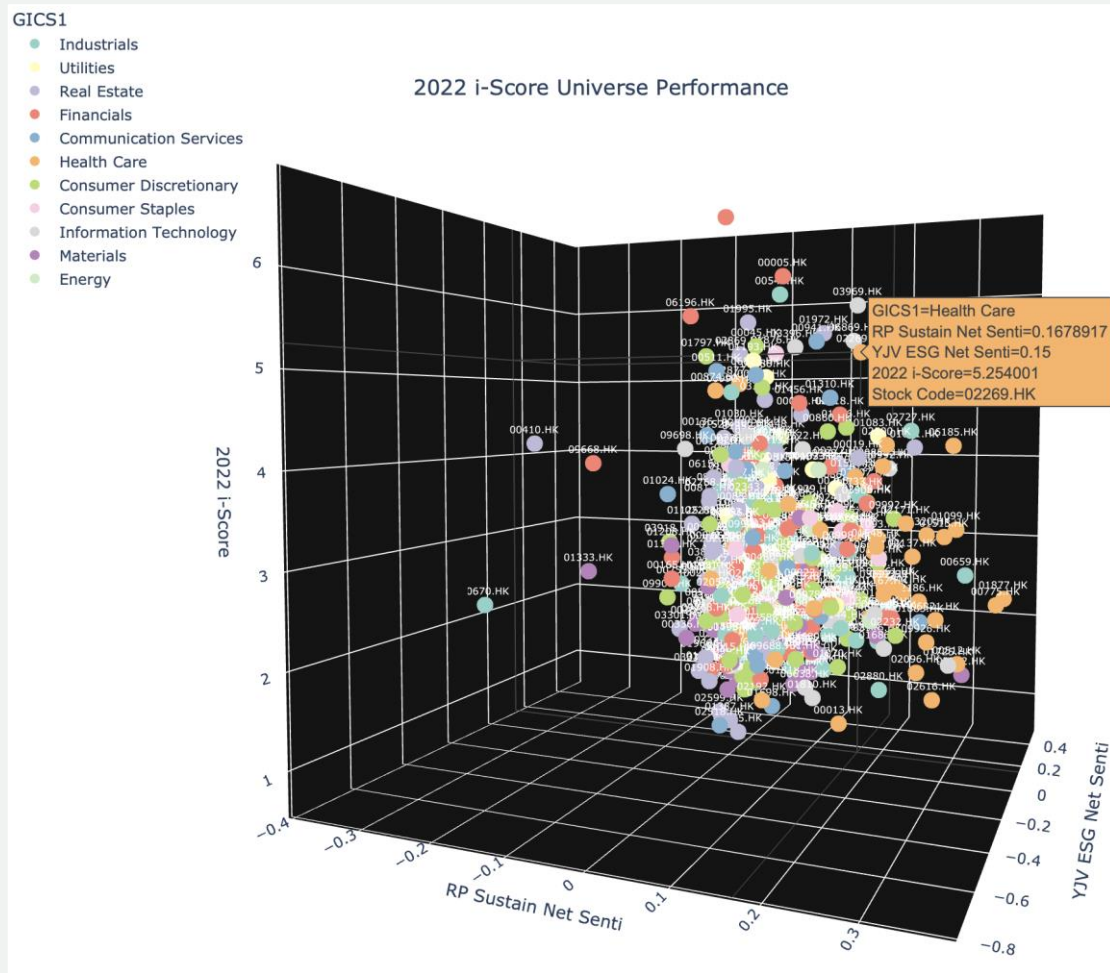Stock Code=02269.HK

Figure 1A implies most of 2022 i-Score entities lie in the positive zone of RavenPack sustainability sentiment average score and Youjivest net ESG score. In addition, we showcase stock (02269) which has superior performance in all three dimensions.

Figure1B.i-Score Entity 01797.HK's Performance

2022 i-Score Universe Performance

GICS1=Consumer Discretionary
RP Sustain Net Senti=−0.008048193
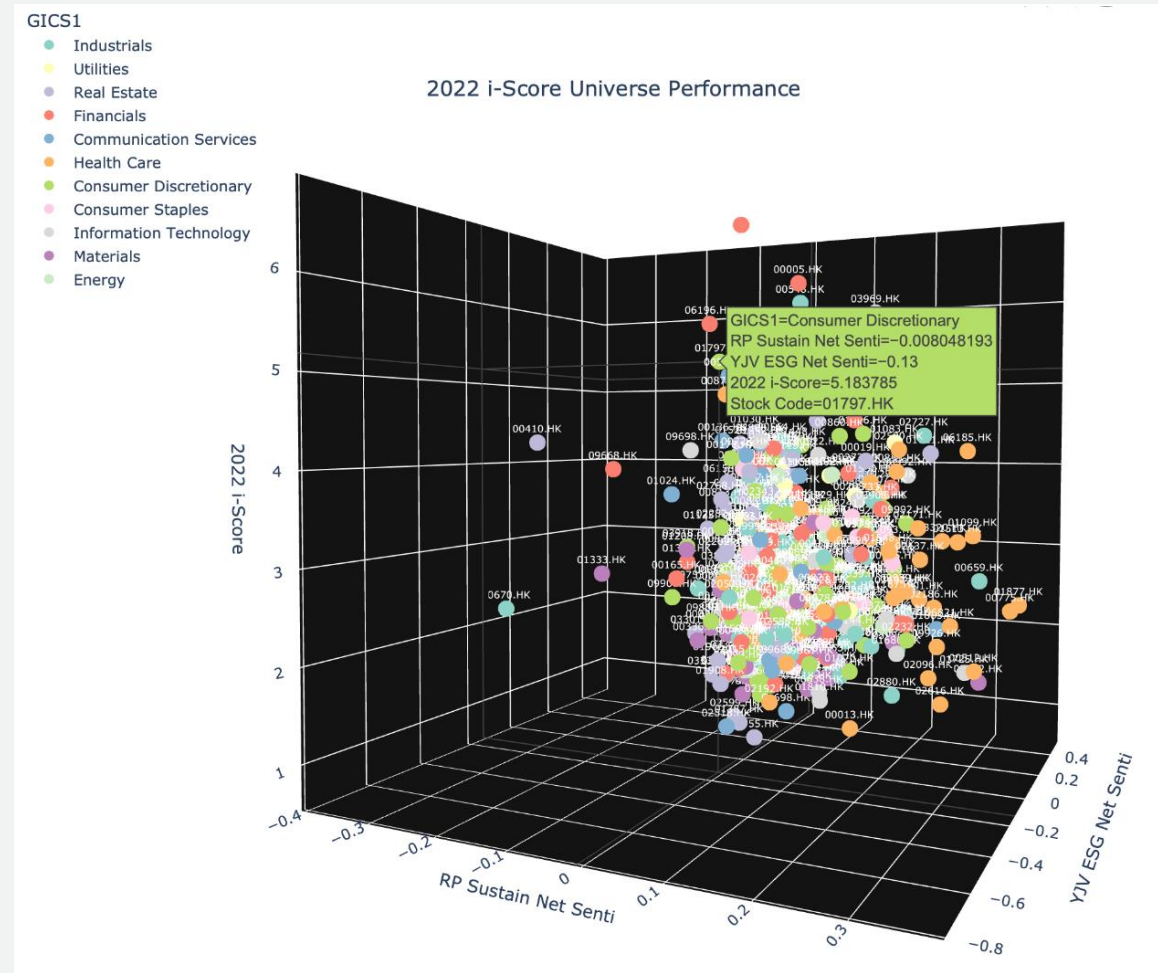YJV ESG Net Senti=−0.13
2022 i-Score=5.183785
Stock Code=01797.HK

Figure 1B shows the i-Score universe with the same format for the three dimensions. However, we choose stock (01797) to reflect that high i-Score performance does not always mean better sentiment performance.

Figure 2 shows the 2022 i-Score universe entities' (circles colored by 3 different market cap groups, **511 entities**) performance distribution including i-Score and 2022 non i-Score entities' (peer entities which mkt cap>HKD 2bn at the end of 2022, hollow circles colored by 3 different market cap groups, **334** entities).

(Large-cap entities are market cap larger than HKD100 billion, mid-cap entities are market cap lies in between HKD 10 billion to HKD 100 billion, and small-cap entities are market cap smaller than HKD 10 billion.)

Figure 2 reflects that i-Score covers most of the large-cap entities. These large-cap entities are more condense in the positive zones of RavenPack sustainability net sentiment and Youjivest ESG net sentiment score than mid-cap and small-cap entities. In addition, the percentage of small-cap entities lie in the negative zone of RavenPack sentiment and Youjivest sentiment is higher than those under large-caps and mid-caps.
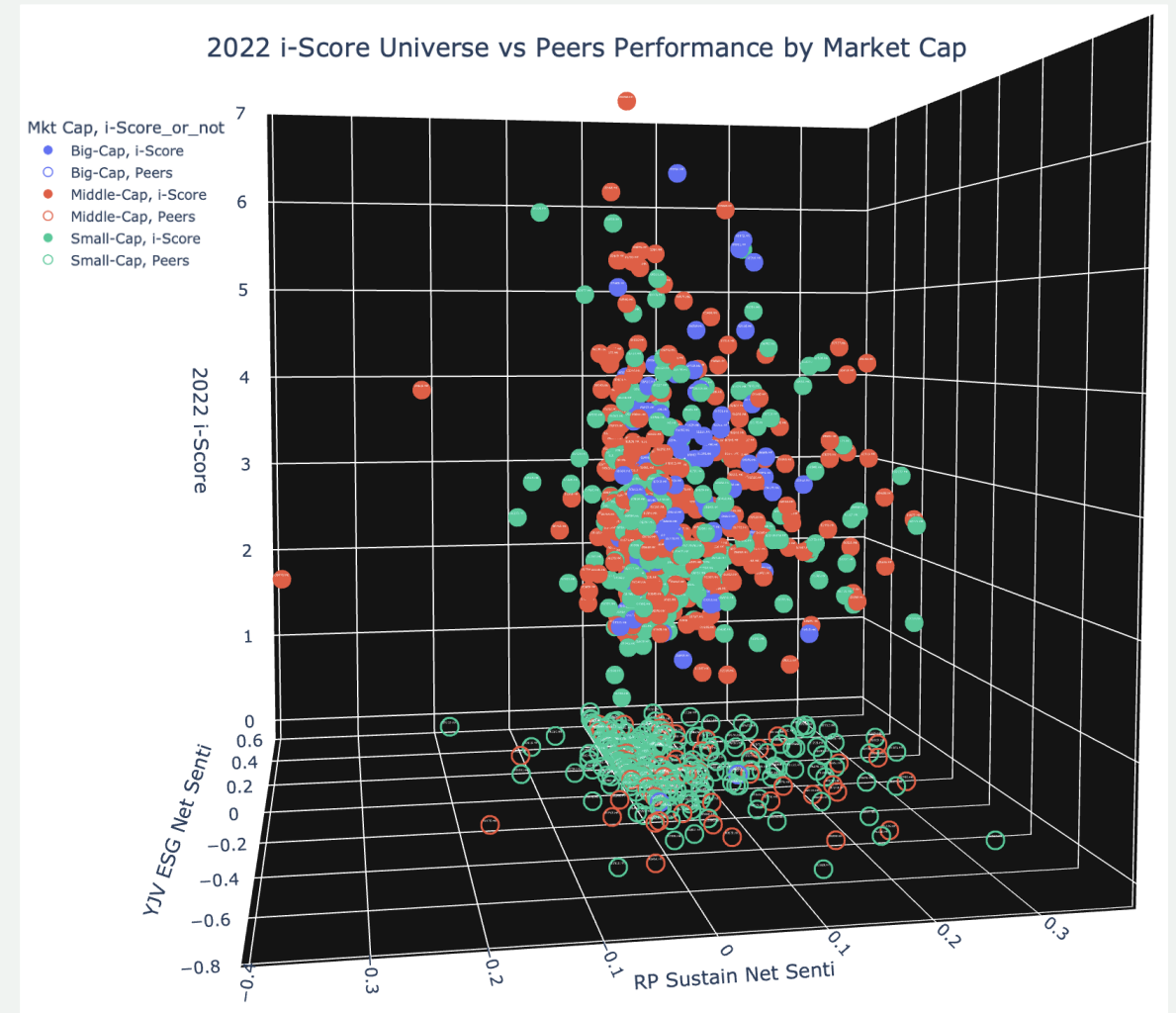
2022 i-Score Universe vs Peers Performance by Market Cap

Established in 2022, the Research Centre for ESG at HSUHK was created to conduct ESG research funded by the Research Grants Council (RGC) of Hong Kong. Currently the Centre has developed four research components:

1) Incorporating social returns into the ESG integration process

2) Improving KPIs of ESG reporting for listed firms

3) Measuring consumer satisfaction on ESG performance

4) Enhancing the effectiveness of strategic corporate communication on ESG effort for Listed firms.

~ **Thank you** ~

To learn more about ESG, please visit our Centre: https://esg.hsu.edu.hk/