





Symposium 2 - Using Big Data Analytics and AI to Generate ESG Intelligence for Investment Opportunities

Copyright by Prof Louis Cheng

Special thanks to

Dr Maureen Chan and Ms Kirsten Tsui

Project Title	Fostering Big Data Applications and Innovation to Reflect Corporate ESG Performance through Media and Social Listening (GSP/033/22)
Funding Body	Innovation and Technology Fund
Project Organiser	Research Centre for ESG (CESG), HSUHK
Supporting Organisations	Excellent Global and Master Insight
Symposium 2 - Using Big Data Analytics and AI to Generate ESG Intelligence for Investment Opportunities	
Date and Time	12th June 2024, 10:30am-4:00pm
Location (Hybrid)	Rooms 1101-02, 11/F, Excellent Global Business Centre, Euro Trade Centre, 13-14 Connaught Road, Central
Presenters	Section 1 Prof Louis Cheng, HSUHK Dr Liane Lee, HSUHK Ms Luna Fong, Shui On Land Limited Ms Sophia Wong, Champion REIT Representative from an international ESG data provider Mr Frank Tsui, Value Partners Group Section 2 Ms Vivi Hu, YoujiVest Dr Jerry Cao, HSUHK Mr Hauman Yeung, Ascent Partners Mr Cyrus Cheung, PwC Mr Harry Yan, Deloitte

DISCLAIMER

This report is prepared by The Research Centre for ESG at the Hang Seng University of Hong Kong. This report and the results should be used only as a reference in understanding the ESG and big data. It is not an offer to sell or solicitation for an offer to buy any financial products and services and they should not be considered as investment advice. The Research Centre for ESG, Excellent Global, Master Insight, the research team, and the consultation participants accept no responsibility or liability for the accuracy and completeness of such information in the report. Any opinions, findings, conclusions or recommendations expressed in this material/event (or by members of the project team) do not reflect the views of the Government of the Hong Kong Special Administrative Region, the Innovation and Technology Commission or the Vetting Committee of the General Support Programme of the Innovation and Technology Fund.

1. Introduction

The symposium 2, held on 12 June 2024, was the last of the series of four meetings on ESG topics funded by Innovation and Technology Fund (ITF). The goal of the symposium is to access and apply ESG intelligence for making sound investment decisions. The targeted participants are various ESG stakeholders from investment, accounting, corporate communications, ESG consulting, NGOs, government bodies and IT sectors who are looking for long run investment opportunities. The symposium was divided into two sessions of about 2 hours and 15 minutes each. It was structured with individual presentations for knowledge inputs as well as panel discussions for active interactions with audiences. Light lunch was provided so that participants and speakers could keep on sharing directly.

2. Opening remarks by Prof Louis Cheng

Prof Cheng remarked that the knowledge and information shared about big data, AI and ESG data in the previous seminars were leading to the theme of the symposium 2, which was to show how to use such data to form a portfolio when making investment decisions. There would be two panel discussions in the morning session and one panel discussion in the afternoon session with professionals from different areas.

To start with, Prof Cheng demonstrated how to use the ESG data from the i-Score website (https://www.bigdataesg.com/the-top-500). The illustrating example involved top 20% of i-Score firms (i.e. 100 firms) to form a portfolio. He then extracted relevant stock return data from Bloomberg and computed the monthly portfolio returns by using market cap weights and industry neutral approach from the top 500 firms' universe. Therefore, for the 500 firms in 11 sectors, he allocated the same 20% of the total number of firms in each industry and put it into the portfolio to make it industry neutral. By adopting the industry neutral approach, it is to control for the variations of ESG considerations in different industries as shown before in the previous seminars. For example healthcare is not concerned much about

carbon emission.

So, if we look at the absolute number, the health industry or the electronic industry will be put on a very top position on the list. The related portfolio may not be so worthwhile since it is to some extent biased towards these clean companies.

Prof Cheng then put up a portfolio with the processed data and compared the return performance against two benchmarks - Hang Seng Index and Hang Seng ESG Enhanced Index with reference to their 2022 and 2023 monthly data. From two separate line graphs about the performance trend, the line of top 20% i-Score portfolio always ranked higher than the other two lines of benchmarks. Consider that the original capital was "1" unit, the line would go up if the portfolio could earn more than the original capital. If the line went down below one, it meant losing money. It was found that when all stock prices went down, the top 20% i-Score portfolio incurred less loss than other stocks. The overall performance of the top 20% i-Score portfolio was better in 2022. In 2023, the gap was even bigger. The top 20% i-Score portfolio closed to not losing money as the line ended at 0.975 which was close to "1", while the Hang

Seng index was 0.862 and the ESG Enhanced Index was 0.798.

By another example, Prof Cheng demonstrated the use of the top 20% ipredict portfolio to performance in 17 months, 24 months 29 months. The portfolio still worked well as the overall performance was still better than the other two indexes. The two examples show that ESG performance does matter to alpha generation and to the long-term development of a company.

In some other countries, attention may be drawn to stocks like oil or weapons and therefore some polluting companies are still making money while clean companies setback: energy get however, this situation cannot go on forever. In the long run, companies call sustainability. It is then worthwhile to consider buying stocks with high ESG premium in China and Hong Kong.

Prof Cheng acknowledged that referring to 100 firms for forming a portfolio was probably too large for local investment, but he emphasized that it was just an not a recommended example and advice. He encouraged interested parties to gain access to the i-Score website and the latest to studv scorecard 3.0 for more relevant ESG data produced. People can identify and structure the information of ESG

i-Composite Score and stocks they would like to explore further and gain insights from the top 500 listed firms in Hong Kong for portfolio formation and making investment decisions. The website will initially be kept for two years with continuous updates.

He reminded that the i-Score scoreboard actually has sentiment data which provides valuable information for investment assessing decision. Therefore, he has engaged Ms. Vivi Hui of YoujiVest to provide professional advice to participants. From her sharing, negative news could predict return better as companies without negative news earn more money. For investment considerations. investors should remember the importance of "double materiality" and ensure that the selected stocks are from companies which have both good ESG performance financial performance.

People in business should notice the global trend of the transition planning to attain the status of carbon neutrality. Recalling this "Net Zero" carbon emission goal for mainland China and Hong Kong in future, Prof Cheng envisages that transition planning will provide great consultancy opportunities. Companies can be advised to stage their transitions from now to "Net Zero" in stages of 20 or 25 years later and plan for how to set the corresponding KPIs, goals and the governing strategies

towards this goal attainment. Interested parties can provide such consultancy service to companies, while contributing to the betterment of Hong Kong society and earning money at the same time.

3. Panel one on communication - 5 Managing Media and Social Media for ESG Issues

Moderator: Dr Liane Lee

Panel members: Ms Luna Fong Ms Sophia Wong

3.1 Managing Investors' Relations (IR) and Public Relations (PR)

3.1.1 Proactive communications

A listed company needs to announce results and has the responsibility to compile annual reports. Champion REIT is a real estate investment trust under the listed company and is managing different properties. One of the key roles of IR and PR is to maintain proactive communications with different stakeholders who may be investors, tenants in the shopping malls, international or local grade offices and customers. The experiences and needs shopping stakeholders may vary a lot but the common concern would be the capability of companies to sustain and evolve well in this changing market environment amidst all kinds of hardship and challenges. As a PR or IR professional, a key role is to present the company's strengths and strategies to stakeholders, not only good stories, but to give evidences and support with facts and data so as to let the investors or stakeholders know that the company can sustain in future.

3.1.2 Consistency of messages

It is important to have a strong narrative of the company, especially in tough times.

In addition to providing facts and data, ensuring a consistency in messages is another important principle. This means that all stakeholders concerned are sharing the stories on what a company does, who the company is, what it does and how it does. Employees in a company probably may not know what the company does as they will care more their individual work achievements. However, employees are representatives of a company who would probably talk about stories of their company. Therefore, keepina messages consistent across all levels helps internal stakeholders to relate messages of companies with confidence.

3.1.3 Knowledge of the receivers

Another important consideration is to know the shareholders with whom you are communicating in the other end and enable direct communication between company and shareholder. A shareholder identification system, with the help of data analytics, can help companies to understand more the investment behaviors of a particular stakeholder and follow up his/her needs more consistently.

3.1.4 Keep communication channels open

Noting that nowadays media would pick up very nitty-gritty words to make headlines to attract readers, on top of reporting good stories of companies, it is also advisable for companies to keep communication channel open both for good and bad news, even though it is the most challenging task to answer for bad news. For bad news, it is wise to keep the enquiry call short, and to let stakeholders understand that you are busy and would need to clarify things with management prior to the proper presentation of news.

3.2 The preemptive measures / strategies in bad times and crisis situations

3.2.1 Balancing disclosure and confidentiality

Employees in the capacity of IR or PR for suggestions need to prepare whether they are handling good or bad news. Ensuring the consistency of the messages shared is critical, but it is also useful, though difficult, to strike a balance between providing information investors to and maintaining confidentiality. This is to ensure the investors' interest but also without leaking confidentiality. A crisis situation will usually result in a press release which is also an approach to ensure that investors and media can receive the consistent information while it can help

correct some of the news reports already published. Still, the best way to do is to know the issues before it goes out to the market. However, rumors are unavoidable and it is hard to control. Speedy reaction is still required when necessary.

3.2.2 Good emotional intelligence

Emotional control is also necessary as there would be unfriendly investors who would tell you things that you find unreasonable. It is wise to maintain neutrality while providing useful information to investors to ensure that they can make informed decisions.

3.2.3 Establish a comprehensive procedure

It is helpful to establish a thorough procedure for quick reactions during crisis as it is hard to have enough time for detailed discussions under crisis situation. Media nowadays responds extremely fast around the clock and therefore companies also need to respond hastily to the media and the netizens.

A panel member shared that an incident happened about the failure of an escalator and caused injuries. The news was the top ten news in that year. Without any delay, the company formed a task force immediately and mobilized all departments to work together in real time. Not only PR, but the CEO, all property management teams worked

together because they should know more what had happened. The company needed to communicate closely with the external parties, like the EMSD (Electrical and Mechanical Services Department) and also the escalator supplier, to know more.

A major focus would be really to care about the injured and how the company can provide assistance to them. The company also need to have data and facts like the frequency of the escalator suppliers to check and maintain the conditions of the escalators. At the same time, the marketing team need to align the consistency of messages about the focus in offering assistance to the injured more frequently.

Also, not only during the crisis period, the post-event management is also very important. It is important to maintain open communications with suppliers and customers about the progress of the follow-up, about how your company will maintain improve and а stronger maintenance process. To conclude, a clear, transparent and proactive type of communication with different stakeholders is critical nowadays.

3.3 The use of AI and data analytics in managing ESG issues and performance

3.3.1 The importance of data

The availability of data is really the key to address ESG issues as companies need lots of data, for example,

protection. environmental Α panel member talked about that her company is leveraging AI and the big data for the optimization of its chiller plants inside their properties because machine learning is very powerful nowadays. It can help generate some real time data and process large loads of climate data as well. Feeding in climate data from weather stations on the roof tops of their properties and feed to their BMS (Battery Management Systems), some automated calculations can be done so that they can optimize the chiller plant usage and lower the energy use in the end with the big data. Similar usage principle applies to the minimization of use in the carpark energy maintaining better air quality.

3.3.2 The use of data for prediction

Some data analysts use big data, not only those from Hong Kong but also the global data so that people can better predict the severe typhoons or floodings coming in the next 10 years. This helps the forecasts of the scenarios of upcoming problems and with more knowledge in advance, it helps the development of preemptive measures. The information is very useful, especially for adjusting the temperature inside the shopping centres for different weather states known in advance and taking precautions against typhoons and floodings.

3.3.3 The use of data to make investment decisions

Good air conditions can be maintained with the support of technologies, but equally important is the manpower supply for monitoring and controlling. A emphasized member panel investors care about credit ratings. Her company looks at credit ratings and also ESG ratings carefully. Some ESG rating companies are using big data to help provide climate data like carbon emission. Her company will need the data from those ESG rating companies and to follow up with specific analysis. Her company has used data of floodings to help improve the safety of the properties built on a piece of land next to a river in China because of the good river view. The company bought the land earlier on an elevated land level which then becomes a natural floodgate. This is how the company used the data to end up with making the important investment decision.

3.4 Manage internal communications

3.4.1 Engage the employees

It is agreed that employees are the ambassadors and voices of the company. A company should align the corporate messages and motivate employees to communicate for the company, especially in rapidly changing market environment and challenging time. То facilitate internal communications, instead of a common

annual gathering, the company of a panel member starts a bi-monthly town hall meeting in 2024 so as to engage employees more often in the alignment of messages across different position levels and generate new ideas.

3.4.2 Establish an internal handling procedure for crisis events

During crisis situation, for example, given the spread of a piece of bad news, in the same way as for handling external stakeholders. the will company immediately form a taskforce. A few of management the key people, employees who are responsible for communications and managing relationship and that include IR, PR and HR (Human Resource) will work closely together. It is important to ensure understanding between departments. For example, for finance matters, there should be explanations to ensure the understanding of HR staff as they are handling staff relationships. should be alignment of messages and proposed solutions for the senior management to consider.

3.4.3 Assess the level of confidentiality The involvement of employees depends on the confidentiality of the piece of news. The employee list will be very restrictive if the news confidential. We need be very to cautious about the selection of employees as representatives and they should be professional enough, having

particular expertise to talk for the company. Other employees will show understanding that only some employees would be selected to present for the company. For good news and news involving all employees, like good ESG performance or appointment of key staff, it will be good to share with everyone in the company.

3.4.4 Involving senior people

In response to good news or bad news or anything that is important, it is necessary to keep the top management informed and ensure that they are on board for decision making. Nowadays it is believed that all the top **KPIs** involve **ESG** management's parameters.

3.5 Expected support for performing roles as IR and PR

3.5.1 Filtering devices

It is challenging to manage social media or investors' chat groups. They will share secrets and bad news among themselves without the knowledge of the company. A panel member is facing this situation as there were people who sent her the chat history in their own chat group regarding the issues of her company. It is good to have some devices that can help monitor and filter company news or messages so that companies can at least acknowledge the bad news at the same time when it is being circulated in the market. She hopes that she can keep some market

rumors under control to avoid panic and shock moments. There is a suggestion of using some social listening tools to help.

3.5.2 Continuous learning

Another panel member emphasized the importance of continuous learning like learning new AI technologies. That will be grateful for all team members and employees to develop a learning mindset to keep updated with new knowledge nowadays, especially the AI technologies, so as to work smarter and be more efficient and effective. We all face new challenges rapidly at the present time and so keeping on learning is necessary.

4. Panel two on investment-How Financial Intelligence Can Be Generated from ESG Data

Moderator: Prof Louis Cheng

Panel members:
Representative from an international ESG data provider Mr Frank Tsui

4.1 Data validation for data quality

EST data provider will provide information and executor will use it in a portfolio construction for making money for investors. In this real-life work process, data validation due to quality issue, can be challenging and the turn-around time may be longer than expected. There are useful approaches adopted by international finance company for accessing data and ensuring data quality. adopts The company the globally consistent data processing and also (QA) procedures quality assurance across different markets to ensure the consistency and also the comparability of data. The company has been using a lot of QA data tool box in the daily production, for example, they will apply dual vendor validation and validate data from alternative data sources. They will also look into the outliers based on the percentile and the quality of data, trying to spot them if there are any large variations year on year, for example.

The data processes are edited and it means that they have undergone multiple-layers of validation. From the input layer, they will get the data from the vendor, the issuers, the regulators, news and NGOs. The second layer is the

derived data from the company proprietary small model, such as the estimation model the carbon or governance model. The output layer, which are, for example, the ESG rating at the issuer level. The firm has been increasing the interactions with the issuers. The issuers can gain access to the methodology in processing data collected by the firm and also the ESG rating reports published. The issuers are also invited to participate in the data verification process done by the firm.

4.2 Managing the turn-around time

The market does not lack data but has massive of it. For massive amount of data, the quality and inconsistency of it require time to validate. We have to judge the reliability of data from different sources and to confirm which dataset actually fits better into our proprietary model and to make sensible adjustment the overall financial modelling. Recently, Value Partners Group has been looking at several portfolios of climate data which is the carbon footprint from different data vendors and finds that one of them is actually higher than all the other data subsets they received. On such occasion. the company has to investigate before

concluding which datasets to choose from. From a buy-side perspective, the company has to validate and understand the data to be used. Usually, the company has to investigate further for variance and adds its own judgement.

Another concern is the traceability of the data. This question is to find out whether the data is coming straight from the reported data or from vendors using proxy estimations. It is to ensure those proxy estimations methodologies to be in line with the expectations of the buyers. Therefore, there will be quite a lot of deep dive kind of approaches and practices that the buy-side professionals need to engage.

4.3 The use of AI in data processing

ESG is called non-financial data and is gaining importance lately. Unlike the financial data which has been used for many years with rich information in its applications, it is rather easy to know whether it is a cheated piece of information or not. But with the newly developed ESG data, how can people use it for prediction of alpha generation accurately and what will be the challenging issues?

The international finance company utilizes AI in the data processing. First of all, there will be a comprehensive review annually of a large number of companies and the available public data sources, which are translated into a huge amount

of news as well as a considerable number of documents. It will issue a company report and 8 million data points on annual basis. To look into the massive amount of data, the company has to leverage technologies in every step of the content creation in order to provide the scale, the speed, the uniqueness and a variety of different contents. The AI techniques have also been applied to detect anomalies.

Al also has the capability to identify the entities whether they are organizations people from semi-structured or unstructured sources. But equally important is the inputs of a strong team of different expertise backgrounds, for example, carbon emissions. data governance as well as the industry leads. On average, for each single ESG rating report, it will be reviewed and contributed by 6 to 8 different ESG analysts. There will be different layers of checking when gathering insights from these public data sources for ESG assessments.

4.4 Broader view of ESG data, alpha and Al

A panel member put forward a broader view for ESG integration. He commented that it is hard to consider ESG as non-financial data and to distinctively differentiate it from the fundamental financial data. ESG is definitely a broad topic that comes with a lot of different sectoral considerations. ESG integration

is an additional lens to add to the fundamental analysis.

Alpha is excess return but it comes in different forms. From an **ESG** perspective, excess return does not have to come with a tangible growth data as the ESG factor may not be imminently reflected by share price performance. For example, a property developer has invested a lot in using renewable energy on buildings. It does not mean that the company is telling you that energy efficiency facilitates the rise of share price, at least not imminently, not on the day when the news has been announced. But in longer terms, it could easily attract higher quality tenants, who may be willing to pay more rents. Therefore, ESG may not be an imminent immediate factor for growth but definitely plays a role in the long-term alpha generation.

People will also think that excess return means additional return. If the index generates 10%, when you get 12%, then 2% is the excess return. If the index drops 10% and if you manage to drop 2%, that is also about 8% excess and in this regard, ESG plays a role in mitigating downside risk as well. ESG provides a good perspective of risk mitigations, investors can look into the reputation risks from ESG data sets. They could set up alerts in their databases and when negative news pops up, they could be able to make some tactical changes in

their investment.

Alpha may be very intangible in a broader perspective. For example, a company cares about people's wellbeing. In their buildings, their premises and their offices, they have acoustics guidelines on how to make the staff feel better. The outcome may not be materialized in our considerations, but in the longer term it may potentially lead to tenants' retention. Tenants' intention actually involves in ESG considerations. That is not something tangible or you could visualize immediately. positive intangible effect should not be neglected.

4.5 Implications of regulators' requirements

The different regulations or regulators' requirements can be perceived as quidance for companies to review different kinds of risk and place companies at a better position to capture the upside business opportunity. For example, in the EU (European Union), there is a CSRD (Corporate Sustainability Reporting Directive) requirement that requires companies to conduct double materiality assessment. The companies have to look into whether the sustainability issues have any material impact on the financial position (outsidein), and also to review the impacts of their business activities the on environment and society (inside-out).

Through this kinds of analysis, companies or investors will be able to do quick examination of the risk exposure and also assess the upside opportunity based on the positive or negative impacts of the value change in their investments.

From a product creation perspective, for example, in the EU, we have the MiFID II and the investors are asked to integrate the clients' sustainability preferences as part of their suitability assessment. So is seeking many asset managers to integrate the SFDR (Sustainable Finance Disclosure Regulation) and the MiFID II consideration into their product design. They have to come up with the sustainable investing definitions and the characteristics of their funds in order to attract the sustainable investment flow.

5. Opening remarks - How to Use Climate Data to Generate Financial Predictions by Ms Vivi Hu

5.1 Climate-related products and services

Catastrophe bond (CAT) is of new potential in the market. Recently, YoujiVest has cooperated with quite a few of insurance companies, reinsurance companies and also asset managers on catastrophe related products. There are investment opportunities as well. The catastrophe bond is a comparatively highyield debt instrument when compared to financial traditional products. hedge funds and insurance companies issue them, they want to transfer their risks to the market. Investors of the catastrophe bond bear some product risks. Reinsurance companies also do that when they cannot bear some tail risks, they then send it out to the market. Interested parties will have choices since different types there are many disasters taking place globally so that the market can offer investment products with different yields.

The features of CAT

CAT has a very low correlation with the traditional financial market because it is all about climate disaster. As CAT bond is not related to financial market trend or economic conditions, it's a very good tool

to do the diversification of portfolio. It has more competitive yield compared to other fixed-income bonds and dividend-paying stocks. CAT helps insurance companies to transfer risks and provides them with cash when needed while preventing issuers from bankruptcy from a natural disaster.

For retail investors, depending on the level of risk they want to engage, there will be different outcomes. Only if retail investors buy something that is really of high risk, they will lose more principal capital. But in general, if they are risk aversive and would only want to earn a little higher yield, the chance of their covering for the disaster's risk is not that high.

The Climate Risk Model, launched in 2023, of YoujiVest covers eight hazards with **IPCC** reference to (The Intergovernmental Panel on Climate Change). The eight hazards are: Water Stress, Tropical Cyclones, Floods, Extreme High Temperatures, Extreme Low Temperatures, Wildfires, Landslides and Sea Level Rise. The Climate Riks Model is helpful for climate assessment. According to the **IPCC** (The Intergovernmental Panel on Climate

Change) new guidelines, YoujiVest also works on climate predictions for 5 years, 10 years, 20 years and 50 years. Her company is doing predictions for long-term periods.

With new technologies like AI, the accuracy of predictions has been increased. The collaborations with insurance companies help to perform risk transfers functions. There are quite a few of catastrophe-related products among industries and there is a very good business opportunity in the future.

6. Panel three on accounting- Relating Financial Disclosure and ESG Disclosure: A Double- materiality Issue

Moderator: Dr Jerry Cao Panel members: Mr Hauman Yeung Mr Cyrus Cheung Mr Harry Yan

In the past like 20 years' ago, financial disclosure and ESG disclosure hardly had any cross-over between them. However, we all experience climate change and its associated risks can have huge impacts on financial formulas.

6.1 The development of disclosure requirements (by Mr Hauman Yeung)

6.1.1 Historical development – TCFD and IRFS

In 2015, the FSB (Financial Stability Board) established the TCFD (Task Force on Climate-related Financial Disclosures) to develop recommendations for more effective climate-related disclosures. Since then, there are more discussions about the financial impact of climate change. Starting from 2017, people in the world have started to integrate TCFD into the ESG standards. TCFD contains domains of risks and opportunities. For risks, there are physical transitional risks and risks. For opportunities, a lot of companies, like BYD, have taken opportunities from change. The risks and opportunities analyzed will be reflected in the financial statements such as cashflow statement, balance sheet and

income statement. The vision of TCFD since 2017 is to integrate financial and **ESG** reporting. The **TCFD** recommendations are structured around four thematic areas that represent core elements of how organizations operate: governance, strategy, risk management, and metrics and targets. The disclosure items proposed by TCFD are different from those recommended for traditional ESG reporting. Regarding the environmental aspect, **TCFD** only concerns GHG (Green House Gas) emission issues. The traditional ESG reporting items covers a lot of different issues, for example, the use of water, the use of resources, waste treatment etc. TCFD emphasizes climate change and does not touch upon social issues.

In 2023, IFRS (International Financial Reporting Standard) saw the issue of two papers S1 and S2. S1 is about sustainability disclosure and S2 is climate-related disclosure. The contents (governance, strategy, risk management, metrics and targets) of TDFC and IFRS are pretty much duplicated, but S1 emphasizes sustainability related risk and opportunities, which is not the focus

in TCFD. And IFRS only concerns financial impacts on the companies and wants to have figures being reflected in the financial reports.

6.1.2 Challenges of disclosure in S1 and S2

For IFRS, there is a stringent requirement of scenario analysis and scope 3 disclosure. Concerning Scope 3, there are 15 reporting categories and most of them are very difficult to collect, for example, the "purchased goods and services" and "end-of-life treatment of sold products". When the supply chain involves many primary and secondary suppliers, it is difficult to collect all those gas emissions figures from their respective supply chains. With the availability of big data and its associated analysis, there may be tools for producing accurate figures. more different units However, the of measurements again cause another problem. HKEX has issued a consultation paper with the resultant plan to handle the alignment issue of TCFD and IRFS in future.

6.2 The impacts of disclosure requirements

6.2.1 Guidance to corporates

A panel member held that the exercise of disclosure creates many business opportunities from professional service perspective. People have had decades of experience in financial reporting, which has already been a very mature

process and position in the market, but **ESG** this space appears to be developed in the recent decade. Lots of companies are still learning how to handle this issue. There should be room for further development. Even the regulators only start to issue new regulations and requirements while a lot of alignment issues need to be handled well. People will share that there is much information to digest. There will be different kinds of enquiries from clients, thereby creating opportunities to help clients to navigate the challenges as well as to comply with the regulators' requirements precisely and efficiently.

The whole concept regarding climate change is not only about risks and compliances but also opportunities. This is because through this exercise, the setting different kinds idea of of compliance standards etc. help companies to revisit their business models to avoid risks and grasp business opportunities as well.

6.2.2 Common goal attainment through collaborations

Climate change and risks are common challenges to people and stakeholders (individuals, corporates and governments) who do not refute against the importance of sustainability related disclosure requirements. For transition to a low carbon economy and attaining the goal of carbon neutrality, the governments and the corporates have to

work together. The investors are very concerned about the impacts of this disclosure requirement the on corporates as this affects their interests. All these compliance requirements add burdens and costs to the corporates because they are new requirements. However, people have to get used to these changes because they guide them to the right direction. Meanwhile, the investors are concerned about how the corporates can meet the transition requirements.

In fact, there is a common understanding of the direction and requirements and some corporates are also putting effort to present their transition plans to their stakeholders and the impacts on the companies regarding climate change. Due to different business nature, some corporates will be affected more by climate change and therefore the requirements or the compliance rules also have some flexibilities. Companies may need to do a deeper dive analysis when businesses are highly influenced

by climate change. For companies which are less impacted by climate change factors, they would be allowed to make a preliminary high-level analysis to explain to stakeholders why climate change is not so important to their businesses.

6.2.3 The implications of meeting disclosure requirements

ESG, with its associated disclosure and reporting, requires professional knowledge and experiences in both financial and non-financial aspects. Why is it the concerns of all stakeholders and even every citizen?

A possible explanation is that ESG does concern everyone in society. The financial economy and the environmental conditions not only affect the businesses of corporates but also employees of companies. The current valuation process for а particular perfect company is not vet companies still afford to pay attention to a financial driven model while lots of non-financial considerations may be overlooked by many, though not all, analysts. In fact, the employee wellbeing is an important element in the social pillar of ESG.

It is anticipated that a consensus is gradually built up across the investors' space regarding the need to have ESG-related considerations as well as the disclosure requirements by regulators.

Investors should pay attention to both sets of information, the financial performance and the specific ESG performance of a company. Nowadays, regulators mention the need to have "connectivity" between the financial information and the ESG information. It

is therefore also advisable for companies' management to provide investors with a full picture, rather than the financial side only, of their companies.

People will be forward looking and ESG data and the disclosure concept implies the need of predictions of the future business development of a company. For investors of some companies in the energy sector, they will be very concerned about the forward-looking opportunities since every country is about the commitment talking "carbon neutrality". This is not only for the institutional investors, but also for the retail investors as well because both of them care about the long-term investment in the next 10 or 20 years. In this exercise, they also need to make a lot of assumptions or projections. For example, we do not have any carbon test in Hong Kong or mainland China right now. Think about one day we have to follow the practice in Europe or Singapore since they already have the carbon test.

7. Closing remarks - Opportunities and Challenges in Consulting for ESG/Climate Change by Prof Louis Cheng

After discussions with other professions on ESG and climate change and referring to the speakers and panel members of this symposium, Prof Cheng concludes the following opportunities and challenges on ESG/Climate Change:

Opportunities

- Buy-side analyst or fund manager for building ESG or green integrated portfolios
- Carbon neutrality and transition planning
- ESG/Low carbon products and services (including consultancy service)
- ESG/Green standard consultancy
- Green bond/carbon certification consultancy or verifier services

Challenges

- Lack of data (scope 3) and specific knowledge, especially for SMEs
- Identifying greenwashing risks
- Unlike other services, the scope is too big
- Standards are not clear enough and keep on changing rapidly

8. Conclusion

The symposium provides a good platform for different ESG professionals and experts to share their practical experience and knowledge with the participants. Their vivid explanations of how they address their real-life issues in their workplace have provided reliable and concrete information for other people to acquire and consider the applications of the same practice.

The structure of panel discussion facilitates active communications between presenters and audience. After each topic of discussions, there were always follow-up discussions from the floor. These extended discussions stimulate more sharing and learning among all the attendees and provide a wider perspective for participants to know more about ESG. For example, after the discussion of the IR and PR roles with external stakeholders, an attendee called the attention to the discussions of internal communications. While talking about the support of technologies like AI, participants concerned about the issues of data breach and cyber security and this led to discussions of the precautions against the inappropriate use of big data technologies. Disclosure requirements may not be a burden to companies, there may be upside business opportunities

ESG rating performance can help make money, but it is shown that less money is lost in a downtime and therefore it can help risk mitigation. In investment, losing less alpha is important because more capital is preserved for investment when the market goes up. ESG is for the long-term development of a company and climate data becomes more important to support the ESG performance of a company in the long-run. Through illustrations with real-life examples, ESG data and i-Score are shown to help form reliable portfolio for investment decisions. By and large, although ESG is non-financial and intangible, it does affect the tangible financial development of a company.

ESG develops into a global trend and there appears to have large number of alignment issues to follow up. All stakeholders including governments, regulators, corporations, investors etc. appear to move their space towards one another and need to work together to reduce climate risks for better future. Behind all the hard work addressing ESG performance, there are challenges which we all need to face and overcome. With a positive forward-looking perspective, people can turn challenges into opportunities. Similarly, during the transition period to the attainment of carbon neutrality target, people can continue to discover the collaborative opportunities and generate the value-added to the supply chain of companies.