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ESG Reporting in the Hong Kong Stock Exchange: an empirical analysis

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To my brothers,

Chase your dreams but always know

the road that'll lead you home again.

Abstract

The study examines how the Hong Kong Stock Exchange moved towards a more sustainable way of doing business with the introduction of the ESG Reporting Guide and its inclusion in the Main Board Listing Rules. Furthermore, the study aims at understanding how more demanding requirements from 1st July 2020 will affect the reporting of companies listed in the Exchange. First, the study analyses the rule making process and illustrates how the Guide has been updated, from its introduction in 2012 to the third version in 2020, along with the characteristics of each Guide and main changes observed, in conjunction with the incremental upgrade of the level of requirements' disclosure. In order to understand the development of the Guide, literature is used to understand how this type of non-financial reporting is influenced by cultural and political variables within the country in which is developed, but also highlights to what extent this practice has positive effects on company's financial and economic value, also from an investors' perspective. Through an empirical analysis based on ESG Reporting of 12 companies based in Hong Kong and listed in both the Exchange and the DJSI, the author tries to understand how the reporting has evolved in the Stock Exchange at the crucial points of the evolution of the Guide. This study also forecasts the level of compliance of the new requirements that companies will have to face after the introduction of the new Guide on 1st July 2020.

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CFP Corporate Financial Performance

CR Corporate Responsibility

CSA Corporate Sustainability Assessment

CSP Corporate Social Performance

CSR Corporate Social Responsibility

DJSI Dow Jones Sustainability Index

EPS Earnings per Share

ESG Environmental, social and governance

GFCC Global Financial Centre of China

GHG Greenhouse Gas

GRI Global Reporting Initiative

HKEX Hong Kong Stock Exchange

HKICPA Hong Kong Institute of Certified Public Accountants

HKSAR Hong Kong Special Administrative Region

HSMHSUS Hang Seng (Mainland and HK) Corporate Sustainability Index

IIRC International Integrated Reporting Committee

ISO International Organization for Standardization

KPI Key Performance Indicator

NGOs Non-governmental organizations

OECD Organization for Economic Co-operation and Development

P/E Price/Earnings Ration

ROA Return on Assets

ROC Return on Capital

ROE Return on Equity

SEHK Stock Exchange of Hong Kong

SFO Securities and Futures Ordinance

SOEs State-owned Enterprises

SRI Socially Responsible Investments

SSE Shanghai Stock Exchange

STI Science and Technology Innovation Board

SZE Shenzhen Stock Exchange

TFCD Taskforce on Climate-Related Financial Disclosures

UITP Union Internationale des Transports Publics

UN United Nations

UNGC UN Global Compact

WBCSD World Business Council for Sustainable Development

导言

企业社会责任的概念从 XX 世纪下半叶开始越来越流行。现在这个概念是经济学中最具争议的话题之一：从经济和金融的角度来看，学者们对其效用和有效性存在严重分歧。许多年以来，人们对企业声誉的概念给出了许多定义：然而，在香港，企业社会责任的概念似乎比以往任何时候都更受关注。十年前，在中国大陆发布第一个绿色环保政策之后，香港中枢地区的 ESG 才开始实施。与中国企业一样，全球企业也在开业务时越来越多地采用更绿色的方式，除了慈善事业和减缓影响之外，还加强了对可持续发展的促进和支持。因此，这种新的商业环境需要更多额外的投资，而这些投资不属于传统投资和经济理念，而是涵盖了各种可持续的商业策略和领域。开发这一新的商业领域，是为了响应包括消费者和公民在内的广大国际社会的呼吁，以在全球范围内扩大整个供应链的环境与社会管理活动。本研究的目的旨在概述香港社会枢纽中的 ESG 报告做法，并参考香港交易所颁布的《环境、社会及管治报告指引》作为框架， 以此来了解香港的公司如何面对这些新机遇，以及如何与利益相关者沟通。

在第一章中，《指南》中规定的制定过程进行了完整而详细的概述，并介绍了多年来执行条款的动因、障碍、内容以及对条款的主要修改。该《指南》反映了它已经通过的三个步骤：第一份指南于 2013 年实施，第二份修订版于 2016 年和 2017 年分两步颁布，最后，新指南将于 2020 年 7 月 1 日生效。该《指南》是根据《上市规则》推荐下的一项简易做法， 以配合利益相关者和投资者日益需要 ESG 信息的国际趋势。2015 年，香港交易所进一步采取措施，修订了《主板上市规则》下的第 13.91 章和随录 27 的《环境、社会及管治报告指引》。在港交所上市的公司必须遵守该《指南》的规定，因此港交所决定提高该指引规定的披露水平。该《指南》的最新修订稿是在 2019 年 5 月咨询文件发布之后获得的。它表示着 ESG 报告向前迈出了重要一步，因为治理结构、报告原则和报告边界的披露将被升级为强制性规定。

第二章收集了有关 ESG 的参考文件综述：由于香港的研究课题和实施都比较新，因此提到的香港的研究并不是详尽的。此外，文献的发是在国际的基础上进行的，国际商界报告了一些证据。 特别是，文献分为两部分：第一部分涉及可

能影响 ESG 报告的文化变量，在该研究下，企业的短期主义、儒家思想和企业与政府之间的联系。事实上，ESG 代表了公司和利益相关者之间最亲密的关系，因此理解公司运管的环境非常重要。因此，在考虑香港的文件背景时，不可能不去考虑儒家思想如何塑造管理者和利益相关者的思维方式，进而料想企业考虑它们对社会的影响。这就是 ESG 似乎在香港找到了温床的原因，这也要归功于这个前英国殖民地仍存在的西方思维方式。但是，短期主义可能成为ESG实施的障碍，因为它的作用写上述特征背道而驰，使得这种现象更难根深蒂固。然而，香港政府采取的干涉主义做法，使 ESG 的做法对企业更具包容性，从而无法将其用于政治合法性。第二个小组试图提供一个关于 ESG 计划时如何被先前的研究分析的关于商业的经济和金融方面的影响的概述，从而确定企业在报告此类行为时可能面临的挑战，驱动因素和障碍。特别是，本章主要分析了 ESG 对企业价值、财务业绩、投票价值以及经济业绩的影响。关于企业可持续发展的文献中，大部分是指双赢的模式，认为经济、环境和社会可持续性可以同时实现。然而，在实践中，如果不切断某一方面或另一方面的资源，就很难管理所有这些方面，从而使得 ESG 实践的实现很难集成到业务模型中。 最后，第三章是笔者的实证分析，旨在回答两个研究问题：

Q1: 香港公司在多大程度采用香港交易所《环境、社会及管治报告指引》？他们可以在多大程度上遵守《指南》中所载项目的被露？

Q2: 我们能不能预测公司将如何实施新《指南》？

实证分析基于参考 2013 年、2017 年、2019 年十二家香港上市公司发布的可持续发展报告内容分析。这些公司是在道琼斯可持续发展指数上市。通过对该指引各方面披露的最大值、最小值、平均值和种植水平以及标准差的计算，进行了分析。为了对符合性的改善给出更详细的描述，频率分析已经整合到研究中。为了回答第二个研究问题，该分析包括对信息披露的调查和测量，也是基于两个早期采纳者的基础上建立的，它们已经将 2020 年《指南》应用于 2019 年的报告。这项附加分析可让作者估计 2020 年的预期合规水平，完成过去十年在香港内有关趋势演变的研究，并就目前在香港公司管理内部整合 ESG 事宜提供一个总体框架。

Introduction

The concept of Corporate Social Responsibility became increasingly popular from the second half of XX century, developing into one of the most debated topics of economics by dividing scholars sharply about its utility and effectiveness in economic and financial terms. Over the years many definitions of the concept of corporate reputation have been given: however, in Hong Kong the concept of CSR seems to be more topical than ever. In the hub, ESG practices started to be implemented just a decade ago, after the first green policy was issued in Mainland China. Just like Chinese companies, global ones are more and more implementing a greener approach when doing business, enhancing the promotion and support of sustainable development beyond philanthropy and impact mitigation. Thus, this new business environment required additional investments that fell outside the classical idea of investment and economy but comprise a variety of sustainable business strategies and fields. This new aspect of business was developed in order to respond to calls from the global community, including consumers and civil society, to improve the environmental and/or social management of activities all over the supply chain enlarged on a global scale. This study aims at providing an overview on ESG Reporting practices in the hub, in particular using the HKSE ESG Reporting Guide as reference framework, in order to understand how companies in Hong Kong face these new opportunities and how they communicate with stakeholders.

In the first chapter, the author gives a complete and detailed overview of the rule making process of the Guide, along with drivers and barriers of implementation, content and main amendments made to the provisions over the years. The Guide reflects to the three steps that it has been through: the first Guide in 2012 implemented from 2013, the second revision enacted in two steps in 2016 and in 2017 and, lastly, the new Guide that will be effective from 1st July 2020. The Guide was introduced as a recommended practice under the Listing Rules, in order to align with the international trends that saw the ESG information increasingly required by stakeholders and investors. Further steps were made in 2015, when the SEHK amended the Main Board Listing Rules chapter 13.91 and the ESG Reporting Guide in Appendix 27. Companies listed in the Exchange had to comply with the Guide mandatorily, therefore the Exchange decided to upgrade the level of disclosure of the provisions contained in the Guide. The last amendment of the Listing Rules was obtained after the consultation paper was issued in May 2019, and it represents a significant step ahead for ESG reporting, as the disclosure of Governance structure, reporting principles and reporting boundary will be upgraded to mandatory.

The second chapter gathers together a literature review on ESG: as studies referred to Hong Kong are not exhaustive because of the newness of the topic and implementation. Furthermore, the development of literature is made on an international basis, with some evidence reported from the international business community. In particular, the literature is developed in two panels: the first refers to the cultural variables that may affect ESG Reporting, while the second focuses on the economic implications connected to ESG.

Cultural variables described in the first panel of this study focuses on short termism in business, Confucianism and the relations between corporates and government. In fact, as ESG represent the most intimate relation between companies and stakeholders, it makes the context in which companies operate important to understand. Thus, when taking in consideration Hong Kong cultural context, it’s impossible not to consider how Confucianism shapes the pattern of thinking not only of managers but also of stakeholders, which then expect companies to take in consideration their impact on society: this is why ESG seems to find a breeding ground in the hub, also thanks to the western mindset still present in the former British colony. However, short termism may be an obstacle for the implementation of ESG, in that it acts in the opposite direction to the above-mentioned characteristics, making the phenomenon more difficult to ingrain. However, the non-interventionism approach adopted by the Government in Hong Kong makes ESG practices more inclusive for companies, preventing possible use for political legitimacy.

The second panel tries to provide a general overview on how ESG initiatives have been analyzed by previous studies in relation to the implications on the economic and financial side of the business, therefore identifying challenges, drivers and barriers that companies may face in the Reporting of such information. In particular, the chapter analyses mainly how firm value, financial performances and stock value, along with economic performances are affected by ESG. The largest part of literature about corporate sustainability refers generally to a win-win paradigm, believing that economic, environmental and social sustainability aspects can be achieved simultaneously. However, in practice it is really difficult to manage all these aspects without cutting off resources from the one side or another, thus making the implementation of ESG practices difficult to integrate within the business model.

Lastly, the third chapter comprises the empirical analysis elaborated by the author in order to answer two research questions:

Q1: To what extent do companies in Hong Kong adopt HKEX ESG Reporting Guide? To what extent do they comply with disclosure of the items contained in the Guide?

Q2: It is possible to forecast how companies will implement the new Guide?

The empirical analysis is based on the content analysis of sustainability reporting issued by twelve companies based in Hong Kong and listed in the DJSI in the three years taken as reference, namely 2013, 2017 and 2019. The analysis has been made by the calculation of statistics as maximum, minimum, mean and median level of disclosure per Aspect of the Guide, along with the standard deviation. In order to give a more detailed description of the betterment of compliance, the analysis of frequencies has been integrated within the research.

In order to respond to the second research question, the analysis includes the investigation and measurement of disclosures also on the basis of the two early adopters founded to apply the 2020 Guide already for reports of 2019. This additional analysis allows the author to estimate the expected compliance level in 2020, completing the examination on how the trend has evolved in the last decade within the hub and providing a general framework on the current integration of the ESG issue within the management of Hong Kong companies.

1. HKSE ESG Reporting Guide rule making process

1.1 Introduction

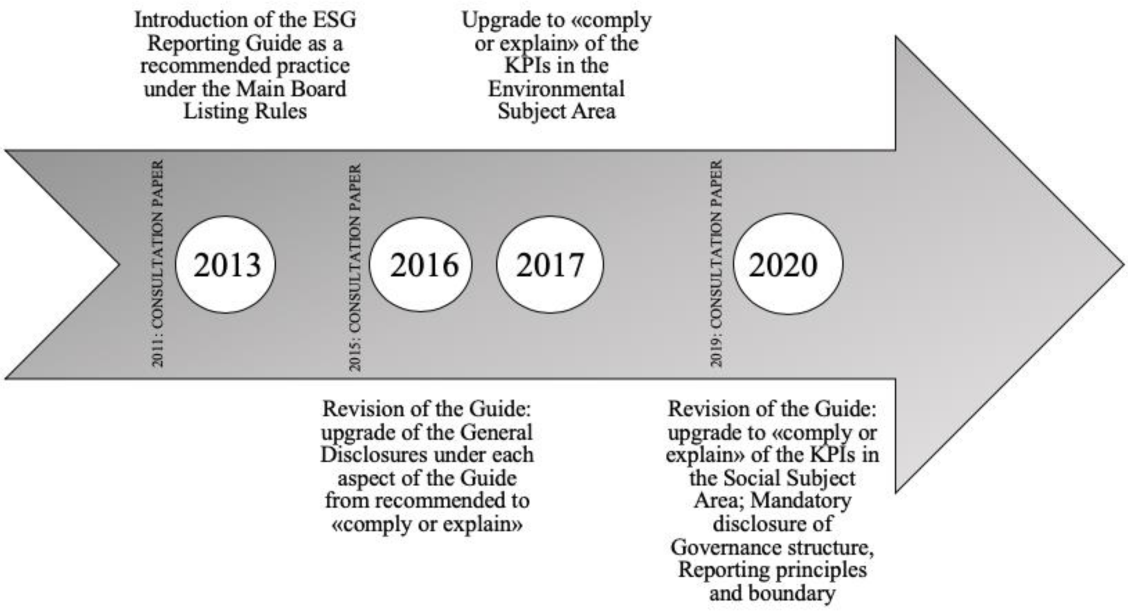
The Stock Exchange of Hong Kong (香港交易所, SEHK), the wholly owned subsidiary of Hong Kong Exchanges and Clearing Limited (香港交易及结算所有限公司), issued in 2012 its own ESG Reporting Guide (环境、社会及管治报告指引), asking companies with financial year starting after 31st December 2012 to disclose ESG information following the Guide's provisions. The Guide was introduced as a recommended practice under the Listing Rules, in order to align with the international trends that saw the ESG information increasingly required by stakeholders and investors.

Further steps were made in 2015, when the SEHK amended the Main Board Listing Rules chapter 13.91 and the ESG Reporting Guide in Appendix 27 (Hong Kong Stock Exchange, 2015a). Companies listed in the Exchange had to comply with the Guide mandatorily, therefore the Exchange decided to upgrade the level of disclosure of the provisions contained in the Guide. In fact, the disclosure level shifted from a merely recommended compliance to a "comply or explain" approach. It was amended in two different phases: the upgrade of the General Disclosures to "comply or explain" came into effect for financial years beginning on or after 1st January 2016, while the upgrade of the KPIs in the Environmental Subject Area came into effect for financial years beginning on or after 1st January 2017.

The last amendment of the Listing Rules was obtained after the consultation paper was issued in May 2019, and it represents a significant step ahead for ESG reporting: in fact, from 1st July 2020 the disclosure of Governance structure, reporting principles and reporting boundary will be upgraded to mandatory, while a "comply or explain" approach will be required for all the provisions (both General Disclosures and KPIs) contained in the Guide. A further important modification of the Guide is the introduction of an Aspect exclusively referred to climate change, aimed to highlight how the business intends to manage its environmental footprint in order to decrease it through a more conscious business activity. In fact, the upgrade of these requirements represents an important shift towards a more responsible approach to business, as well as a signal of the willingness of the HKSE to be aligned with the international standards already in place in regards to the issue of sustainability (Hong Kong Stock Exchange, 2019a).

To sum up, the first chapter offers an analysis of the specificities of the Guide at every stage of the evolution, of the main changes occurred in requirements, along with the local and international context in which the Guide has been developed by regulators, defining both drivers and barriers to the integration of these practices within the Exchange. The timeline below illustrates how the Guide and related provisions developed over the years in Hong Kong, in particular considering the various step of the ESG Reporting Guide, from its introduction to the current version.

Figure A Evolution of the ESG Reporting Guide in Hong Kong



Source: elaborated by the author

1.2 ESG Reporting Guide in 2013

1.2.1 ESG Reporting initiatives: an overview

Traditional CSR Reporting nations in Europe have always seen the highest reporting rates, but the Americas and the Middle east and the African region is quickly gaining ground. Even if the attention towards ESG practices is still considered coming mostly from western countries, nowadays this phenomenon is not only about European countries or America, but it involves the international community as a whole, including Asian countries and, of course, China. In fact, the International Survey of Corporate Responsibility Reporting 2011 conducted by KPMG on the 250 largest global companies reveals that 95% of these companies reported on their CR activities, with an increase of more than 14% over the 2008 survey (KPMG, 2011).

In order to understand why and how the ESG Reporting practices started in Hong Kong, a first analysis of the drivers and barriers has to be made. In the international context, the United Nations (UN) played for sure a relevant role in the spread of ESG Reporting, in particular because of the widespread commitment to the UN Principles for Responsible Investment ("PRI[1]"), as shown by the annual report (PRI, 2011). Drivers for the engagement of companies in CR can be seen from the financial and economic point of view, but also have connection with the organization's reputation: employee can play a relevant role in pushing companies toward CR practices, as these initiatives may affect employee commitment and therefore stimulate companies to practice corporate responsibility on a daily basis. Another motivation that is connected to the internal sphere of the company and encourage a greener approach while doing business is the practice of reporting, considered a way to "improve internal process" and determining risk management. The reporting process helps companies to assess their ESG performance and to identify gaps, allowing them to understand how to improve performances. One example can be the chance for a company to save money thanks to a better environmental management, increasing its energy efficiency (Monks & Minow, 2011).

In 2010 The International Integrated Reporting Committee ("IIRC") was established, it was aimed at keeping under control the development of a connected and integrated approach to corporate reporting through a concise, clear, comprehensive and comparable framework for the integration of both material financial and non-financial information. In this way the framework may offer high-level guidance to companies who aren't experienced with reporting. In order to start working in the sustainability area, just after the establishment of this Committee, the Hong Kong Institute of Certified Public Accountants ("HKICPA") decided to set up the Sustainability and Integrated Reporting

1 The PRI is the world's leading proponent of responsible investment. It works to understand the investment implications of environmental, social and governance (ESG) factors and to support its international network of investor signatories in incorporating these factors into their investment and ownership decisions. The PRI acts in the long-term interests of its signatories, of the financial markets and economies in which they operate and ultimately of the environment and society as a whole (https://www.unpri.org/pri/about-the-pri).

Advisory Group[2]. The Group was established to assist the institute in taking a more positive approach to raising the profile of sustainability and of integrated reporting in Hong Kong.

Other organizations such as the UN Global Compact and the Organization for Economic Co-operation and Development (OECD) brought together businesses from around the world to promote ESG practices too. Standard setting organizations such as the International Organization for Standardization and GRI have contributed to the growth of ESG as well. In Europe, the European Commission published a renewed EU strategy for Corporate Social Responsibility in October 2011 that setted out ways to promote CSR in the region. Other important actors that emphasized the importance of ESG disclosure and actively participated to the promotion of ESG are NGOs, governmental and business association. Some of them have conducted surveys or given awards to rank companies according to their ESG performance and disclosure practices.

For example, to promote CSR disclosure, HKICPA introduced in 2011 the Sustainability and Social Responsibility Reporting ("SSR") Awards to individuate those firms with excellent performance in ESG Reporting. Oxfam is a global movement fighting inequality to beat poverty: the mission of Oxfam Hong Kong is to work with poor and vulnerable communities and local partners to fight the injustices of poverty and inequality. Oxfam, in pursuing its mission, has been promoting the integration of ESG into the core business of companies in Hong Kong since 2004. These activities attract publicity and may motivate companies to comply to international standards, also because of the pressure of NGOs and business associations for legislative change (Rezaee et al., 2019).

1.2.2 Rule making process in China and Hong Kong

For what concerns Mainland China, the implementation of "green regulations" started in 2008 with Company Law, where Article 5 states that "*a company must bear social responsibility*" (Standing Committee of the National People's Congress, 2005). Afterwards, in July 2010 the Ministry of Ecology and Environment released a circular requiring environmental departments to ensure disclosure of environmental information

[2] See https://www.hkicpa.org.hk/en/Standards-and-regulation/Standards/Major-projects/Sustainability-and-integrated-reporting.

by listed companies through the conduction of environmental reviews. These first steps in Mainland China consequently helped to spread awareness in the Asian area and in particular to raise standards of ESG reporting also inside the Hong Kong financial environment.

Hong Kong's first steps regarding the topic of ESG disclosure were done with Rule 18.05(6) of the Main Board Listing Rules that came into effect in June 2010, which asks mineral companies "*to disclose in the listing documents social and environmental matters, such as risks arising from environmental, social and health and safety issues*" (Hong Kong Stock Exchange, 2010). Furthermore, in January 2011 the Government of the Hong Kong Special administrative Region gazzetted the Companies Bill[3], which proposed that "*a discussion of the company's environmental policies and performance, alongside an account of the company's key relationships with its employees, customers, suppliers and others that have a significant impact on the company must be included in the director's report*" (Hong Kong Stock Exchange, 2012).

The ESG Reporting Guide was introduced as Appendix 27 in the Listing Rules: Chapter 13.91 states that "*issuers are encouraged to disclose information included in the Appendix in the annual report or in a separate report, that anyway have to regard the same period in order to be comparable*". The amendment was possible just after the positive conclusions of the consultation paper published on 9th December 2011, which allowed the Exchange to seek comments on its proposed ESG Reporting Guide: the Exchange received 106 submissions and among them 19% were from issuers: even if the percentage is relatively low, on the other hand the attendance and feedback from the ESG seminars and workshops organized by the Exchange in 2011 represents a strong signal of the growing involvement and awareness of the business community in ESG, representing an overall positive situation.

As respondents welcomed the proposed incorporation into the Listing Rules of the ESG disclosure requirements, the Exchange decided to introduce the Guide as a recommended practice. The Guide was applied to all issuers equally for financial year ending after 31st December 2012. However, this first step was intended to be just the beginning of an evolutionary process, with "*a final goal of achieving better and more comprehensive reporting among issuers*", as stated in the Consultation Paper (Hong Kong Stock Exchange, 2011).

[3] See https://www.elegislation.gov.hk/hk/cap622!en.

1.2.3 Guide's content

The Guide is designed for issuers with limited familiarity with ESG issues in order to be a starting point in ESG reporting and encourage the disclosure. The Guide comprises the list of international guidelines that can be used instead of the HKSE Guide, and from which the Guide itself draws inspiration, as other international players already implement this kind of disclosure. The Guide is divided into four main areas: Workplace Quality, Environmental Protection, Operating Practices and Community Involvement, each of which is further divided into three sections: aspects, general disclosure recommendations and key performance indicators. For what concern the content, the Guide does not define precise KPIs; instead, the Exchange asked the issuers to explain how they calculate them, leaving the Guide as easy as possible in order to encourage the disclosure of the information by the largest number of companies in the Stock Exchange.

The general disclosure (GD) refers to the disclosure of information about the policies and compliance or material non-compliance with relevant standards, rules and regulations on the reference area. Instead, KPIs have to be intended as more specific description of what the company does in concrete terms to ensure the integration of ESG activities within the core business, for example by describing the practices relating to the engagement in that specific area, the percentage and total amount of consumptions etc. In particular, the Workplace quality Subject Area (A) includes: working conditions (A1), health and safety (A2), development and training (A3), and labour standards (A5). Under the Environmental protection Subject Area (B) we can find emissions (B1), use of resources (B2), and the environment and natural resources (B3). The Operating practices Subject Area (C) includes supply chain management (C1), product responsibility (B6) and anti- corruption (B7); lastly, community investment (D1) is categorized under the Community involvement Subject Area (D).

Specifically, KPIs in Subject Area A include, for example, the total workforce and employee turnover by gender, employment type, age group and geographical region (A1.1 and 1.2), the description of occupational health and safety measures adopted, how they are implemented and monitored (A2.3), the percentage of employees trained and average training hours completed by employee category (A3.1 and 3.2), along with the description of measures to review employment practices in order to avoid child and forced labour (A4.1). Under the Environmental Subject Area KPIs refer for example to types of emissions and respective emissions data (B1.1), to greenhouse gas emissions in total and intensity (B1.2), to energy consumption by type (e.g. electricity, gas or oil) in total and intensity (B2.1) and contains a description of the significant impacts of activities on environment and natural resources and the actions taken to manage them (B3.1). KPIs under the ‘operating practices’ area include, for instance, the number of suppliers by geographical area (C1.1), the percentage of total products sold or shipped subject to recalls for safety and health reasons (C2.1), the number of concluded legal cases regarding corrupt practices brought against the issuer or its employees and the outcomes of the cases (C3.1). ‘Community involvement’ KPIs include focus areas of contribution and resources contributed (D1.1 and 1.2). The table below summarizes the structure of the information within the Guide that companies are encouraged to disclose, along with the level of disclosure required by the Exchange.

Table 1 HKSE ESG Reporting Guide structure in 2013

Subject Area	Aspect	Recommended disclosure
Workplace quality	A1. Working conditions	GD+KPI
	A2. Health and safety	GD+KPI
	A3. Development and training	GD+KPI
	A4. Labour standards	GD+KPI
Environmental protection	B1. Emissions	GD+KPI
	B2. Use of resources	GD+KPI
	B3. The environment and natural resources	GD+KPI
Operating practices	C1. Supply chain management	GD+KPI
	C2. Product responsibility	GD+KPI
	C3. Anti-corruption	GD+KPI
Community involvement	D1. Community investment	GD+KPI

Source: elaborated by the author

1.3 ESG Reporting Guide: a first review (2016)

1.3.1 Development of ESG Reporting practices: an international overview

The situation in 2015/2016 changed a lot compared to the initial one of 2011. Globally, over those years there was an important increase in the amount of policy and regulation calling for ESG reporting. In fact, most countries with policies in this area adopt a combination of laws, listing rules, "comply or explain" and/or voluntary guidelines to regulate the disclosure of ESG information. However, an important trend that needs to be highlighted is that these policies are increasingly subject to higher levels of obligation (i.e. "comply or explain" and/or mandatory). Some of these policies are codified in legislation, whilst others are adopted at the stock exchange level.

Looking at the European context, the EU Council adopted on 29th September 2014 the Directive on disclosure of non-financial and diversity information by large companies and groups. Under the Directive, large listed companies with more than 500 employees are required to disclose information on their policies, risks and results in respect of environmental matters, social and employee-related aspects. They also had to disclose information about the respect of human rights, anti-corruption and bribery issues, along with diversity boards of directors**.** The Directive requires companies that do not have a specific policy in one or more of these areas to explain why this is the case, therefore adopting a "comply or explain" approach.

Another example is the one related to the Australian Securities Exchange ("ASX"), that requires that companies, on a "comply or explain" basis, disclose whether they have any material exposure to economic, environmental and social sustainability risks, and if they do, how they manage those risks.

Mainland China has also taken important steps to strengthen its environmental protection measures, as demonstrated by the "Green Securities Policy" launched in 2008 and the recent overhaul of its Environmental Protection Law. The revision came into force on 1 January 2015 and gathered existing regulations on information disclosure and public participation, promoting an increased transparency by requiring companies to disclose pollution data and holding government agencies responsible for disseminating information publicly. Moreover, a study conducted by the People's Bank of China and the UN Environmental Programmed entitled "Establishing China's green financial system" published in April 2015 demonstrated the Mainland's growing focus on the financial market's sustainability. The study, in particular, supported the assumption that the obligation of ESG reporting for companies has to be pursued in China.

Along with the decisions taken individually by countries on the matter in order to push national companies towards sustainability practices, Integrated reporting is another notable trend developing in this area. The International Integrated Reporting Council ("IIRC") in December 2013 published its *Integrated Reporting Framework* in an effort to push the integrated reporting trend forward. IIRC defined the integrated reporting as a "*process founded on integrated thinking that results in an integrated report issued periodically by an organization about value creation over time and related communications regarding aspects of value creation*". Furthermore, it defines the integrated report as "*a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term*".

For what concern Hong Kong development on the topic, the new Companies Ordinance (cap.622), which came into force in March 2014, mandates all Hong Kong incorporated companies to include in the business review section of their annual directors' reports a discussion of their environmental policies and performance, of their compliance with relevant laws and regulations that have a significant impact on them. It should then include an account of their key relationships with employees, customers and suppliers and others that have a significant impact on them and on which their success depends (Hong Kong Stock Exchange, 2014).

In July 2015, the Stock Exchange of Hong Kong Limited published a *Consultation Paper on Review of the Environmental, Social and Governance Reporting Guide*. The aim was to strengthen ESG disclosure requirements and enable issuers to formulate policies, measure relevant data, monitor progress and report to investors and other stakeholders on their work in this area. The consultation period ended on 18 September 2015 and the Exchange received a total of 203 responses. The purpose of the paper was to collect issuers' opinions on proposed changes, such as whether the ESG disclosure requirements under the new Companies Ordinance should be incorporated into the Listing Rules to apply to all listed companies or not. Thanks to the support of the market, these disclosure requirements have been incorporated into the Listing Rules as mandatory for all companies listed on the SEHK, regardless of their place of incorporation in order to maintain the principle of a “level playing field” (Hong Kong Stock Exchange, 2015b).

In addition to these disclosure requirements, Hong Kong listed companies are subject to a general obligation of disclosure under the Listing Rules and a statutory obligation to disclose inside information under Part XIVA (Disclosure of Inside Information) of the Securities and Futures Ordinance (“SFO”) (Cap. 571). These provisions apply to all information, including ESG-related information, that could create a false market in the listed company’s securities and/or would be considered inside information under the SFO (Securities and Futures Commission, 2012).

1.3.2 Amendments to the Guide in 2016

The Hong Kong Stock Exchange started its revision of the Guide with the Consultation paper, whose aim was to seek approval from the companies for the Exchange in order to strengthen ESG disclosure requirements and enable issuers to formulate policies, measure relevant data, monitor progress and report to investors and other stakeholders on their work in this area, as already discussed in the above paragraph. Once respondents approved the amendments of the Guide, the Exchange went ahead with the publication of the new layout and related amendments to the Chapter 13.91 of the Main Board Listing Rules.

Besides the reorganization of the ESG Guide, all the General Disclosures of the various ESG aspects under the Environmental and Social Subject Areas as well as all the KPIs of different ESG aspects under the Environmental Subject Area were upgraded from voluntary to “comply or explain”. Differently, the KPIs in the Social Subject Area of the Guide remained recommended disclosures as in the previous Guide. The SEHK implemented the “comply or explain” requirements in two phases: the upgrade of the General Disclosures to “comply or explain” came into effect for financial years beginning on or after 1 January 2016, while the upgrade of the KPIs in the Environmental Subject Area came into effect for financial years beginning on or after 1 January 2017. In addition, listed companies have to disclose ESG information in their annual report or publish an ESG report on an annual basis covering the same period as its annual report, which must state whether the company has complied with the “comply or explain” provisions of the ESG Guide or not.

The other amendments to the Guide resulting from the 2015 consultation include the revision of the introductory section of the Guide, in order to provide more guidance on reporting and to bring it more in line with international standards. Further revisions concerning the wording of the General Disclosures (where relevant), which has to be consistent with the directors' report requirements of the Companies Ordinance and the revision of the wording of the voluntary provisions of the Guide in order to bring it to a better compliance with international standards of ESG reporting by incorporating disclosure of gender diversity, as stated in the amended Guide. (Hong Kong Stock Exchange, 2015a). In fact, pursuant to rule 18.07A(2)(d), an issuer's directors' report for a financial year must contain a business review in accordance with Schedule 5 to the Companies Ordinance. It must include, to the extent necessary for an understanding of the development, performance or position of the issuer's business:

- a discussion of the issuer's environmental policies and performance;
- a discussion of the issuer's compliance with the relevant laws and regulations that have a significant impact on the issuer; and
- an account of the issuer's key relationships with its employees, customers and suppliers and others that have a significant impact on the issuer and on which the issuer's success depends.

This Guide should complement the content requirements of the directors' report, as it calls for issuers to disclose information in respect of specific ESG areas.

Furthermore, following the revision of the Guide, Corporate Governance is treated separately in the SEHK's Corporate Governance Code. The SEHK revised the risk management and internal control aspects of the Corporate Governance Code to strengthen issuers' disclosure and directors' accountability in this particular area. With effect from 1st January 2016, the Corporate Governance Code requires, on a "comply or explain" basis, that, issuers disclose in their corporate governance reports a number of risk management related matters, including (but not limited to): the process used to identify, evaluate and manage significant risks; the main features of the issuer's risk management and internal control systems; and an acknowledgement by the board that it is responsible for the issuer's risk management and internal control system (Hong Kong Stock Exchange, 2015). The Corporate Governance is the Appendix 14 of the Main Board Listing Rules 13.89. It sets out the principles of good corporate governance and two levels of recommendations: (a) code provisions; and (b) recommended best practices. For the code provisions a "comply or explain" approach is required, and issuers must state whether they have complied with them or not. On the contrary, recommended best practices are for guidance only: issuers are merely encouraged to state whether they have complied with them and give considered reasons for any deviation.

Issuers may also develop their own code as they may consider appropriate. In the case that the issuer deviates from the code provisions, it must give considered reasons for annual or interim reports (and summary reports), as well as in the Corporate Governance Report. Issuer must give reasons for the deviation or by referring to the Corporate Governance Report in the immediately preceding annual report, providing details of any changes. The references must be clear and unambiguous, and the summary must not contain only a cross-reference without any discussion of the matter. The summary must contain, as a minimum, a narrative statement indicating overall compliance with and highlighting any deviation from the code provisions (en-rules.hkex.com.hk).

To regulate ESG disclosure, the SEHK at this stage adopted a combined approach of mandatory rules, “comply or explain” provisions and recommended disclosures. This kind of approach offers a wide variety of business models and provides companies the space to develop their practices and decide on the scope of their reporting, in particular taking into account that not all ESG issues are material to all businesses. The “comply or explain” regime allows companies to focus on ESG issues which they consider are more relevant to their investors and other stakeholders, as well as their own business. In fact, this regime allows the company to explain reason for non-comply, and in the case of an ESG issue is not material to the business.

This process helps companies to filter information which is relevant and avoid disclosing excessive or unmaterial information, which can cause confusion and decrease the value and usefulness of the report itself. Another advantage of this approach is its flexibility, which encourages companies to disclose the information itself, and enables those that are just starting to report to develop their competency and practices through first-hand experience. In essence, under a “comply or explain” regime, the use by a firm of an alternative practice can be considered as an indication that the firm has developed a governance approach that is more cost efficient or effective than the regulator-endorsed “best practice” for its specific needs (Luo & Salterio, 2014).

Of course, giving to companies the faculty to choose whether to comply or explain may generate the so-called *duplication problem*: in fact, during the consultation period of the Amendment, several respondents argued that where issuers adopt alternative reporting guidance or international standards with provisions that can be defined comparable to the

ESG Guide, they should not be required to give any reconciliation in relation to the Guide. In order to solve the issue, the SEHK decided that adopting international standards that contain comparable provisions to the ESG Guide should be considered as sufficient compliance with the Guide without the need for further explanation. However, issuers that report on international standards still have to make reference to the relevant "comply or explain" provisions of the Guide in their reports (Hong Kong Stock Exchange, 2015a).

1.3.3 Guide's content and reporting principles

In 2015 the ESG Guide was reorganized into two main ESG Subject Areas: Environmental (Subject Area A) and Social (Subject Area B).

The Environmental Subject Area includes three aspects: emissions (A1), use of resources (A2), and environment and natural resources (A3). Specifically, Environmental KPIs include: types of emissions and respective emissions data (A1.1), greenhouse gas emissions in total and intensity (A1.2), total hazardous (and non-hazardous) waste produced and intensity (A1.3 and 1.4), energy consumption by type (e.g. electricity, gas or oil) in total and intensity (A2.1), total packaging material used for finished products and per unit produced (A2.5).

The Social Subject Area includes eight aspects: employment (B1), health and safety (B2), development and training (B3), labour standards (B4), supply chain management (B5), product responsibility (B6), anti- corruption (B7) and community investment (B8). Under each aspect, the required disclosure includes both narrative general disclosure on the issuer's policies including strategy, priorities, management approach, compliance with relevant laws, and quantified key performance indicators (KPIs). KPIs under the Social area include, for example, the total workforce and employee turnover by gender, employment type, age group and geographical region (B1.1 and 1.2), the number and rate of work-related fatalities and injuries (B2.1), the percentage of employees trained and average training hours by gender and employee category (B3.1 and 3.2), the number of suppliers by geographical region (B5.1), the percentage of total products sold or shipped subject to recalls for safety and health reasons (B6.1), the number of concluded legal cases regarding corrupt practices brought against the issuer or its employees and the outcomes of the cases (B7.1), the focus areas of contribution and resources contributed to the focus area (B8.1), etc.

As data contained in ESG report can have a strong impact on stakeholders' decisions, the issuer should engage them on an ongoing basis in order to understand their views and better meet expectations and allow them to have the full picture of the business management. The Guide is not comprehensive, and the issuer may refer to existing international ESG reporting guidance for its relevant industry or sector.

The table below summarizes the requirements that companies have to disclose, along with the level of disclosure required by the Exchange:

Table 2 HKSE ESG Reporting Guide structure in 2017

Subject Area	Aspect	"Comply-or-explain" provision	Recommended disclosure
Environmental	A1. Emission	GD+KPI	-
	A2. Use of Resources	GD+KPI	-
	A3. The Environment and Natural resources	GD+KPI	-
Social	B1. Employment	GD	KPI
	B2. Health and Safety	GD	KPI
	B3. Development and Training	GD	KPI
	B4. Labour Standards	GD	KPI
	B5. Supply Chain Management	GD	KPI
	B6. Product Responsibility	GD	KPI
	B7. Anti-Corruption	GD	KPI
	B8. Community investment	GD	KPI

Source: elaborated by the author

As stated in the Guide, the preparation of the ESG report is based on the following reporting principles, that companies have to consider when reporting information to stakeholders:

- Materiality represents the threshold at which ESG issues should be communicated to investors and other stakeholders as considered important enough.

- Quantitative: KPIs need to be measurable and targets can be set to reduce a specific impact. In this way the effectiveness of ESG policies and management systems can be examined and validated. Quantitative information should be accompanied by a narrative explaining of its purpose, impacts, and by giving comparative data.
- Balance: the ESG report should provide an unbiased picture of the issuer's performance, in order to avoid inappropriately influence a decision or judgment by the report reader.
- Consistency: the issuer should use consistent methodologies to allow comparisons of ESG data over time and should disclose in the ESG report any changes to the methods if any, or more in general any change that can affect the evaluation methodology.

1.4 ESG Reporting Guide: a second review (2020)

1.4.1 International drivers for the revision of the Guide

The revision of the ESG Guide in Hong Kong has been encouraged by the tangible positive impact of ESG activities on issuer's business operations and value, as well as the increasing demand by investors for more information on how ESG risks are managed by the issuer that will be discussed in the next chapter. However, those factors drove a rapid change in global regulatory landscape in ESG matters, and 2019 developments in international practices of ESG reporting are evidence of the increasing attention that stakeholders at large pay to the issue.

As a matter of fact, important actions have been taken by all the countries around the world in order to encourage the disclosure of climate-related information through the publication of new requirements and report in order to enhance a greener approach to business and encourage companies to disclose that information. For example, in June of 2019 the European Commission published non-binding guidelines on reporting climate-related information, the so-called *Climate Guidelines* to provide companies with practical recommendations on how to report their environmental impact, as well as the impact of climate change on their business. These Guidelines include TCFD Recommendations of the Taskforce on Climate-Related Financial Disclosures and have to be integrated to the general guidelines or non-financial reporting published in 2017 (TCFD, 2017). The UN organized a climate action summit on 23rd September 2019, where countries announced steps to combat the climate crisis and commit themselves to cut gas emissions to net zero by 2050. The UN-convened Net-Zero Asset Owner Alliance was also launched in September 2019 and its targets to have carbon neutral investments by 2050[4].

For what concern Mainland China, in March 2019 the Shanghai Stock Exchange issued supporting rules for launching the Science and Technology Innovation Board, requiring companies listed on the Board to integrate ecological and environmental protection into their development strategy and corporate governance. Companies listed on the STI Board should also disclose their corporate social responsibility status in the annual report, and publish a social responsibility report, sustainable development report or environment responsibility report as appropriate.

With regard to Hong Kong, the Securities and Futures Commission conducted a survey on integrating ESG factors and climate risks in asset management. This forms part of its initiative to encourage the consideration of ESG factors in the investment and risk management processes and enhance reporting of environmental and climate-related information. In addition, 86% of respondents to the consultation paper agree with the proposal to introduce a new aspect requiring disclosure of policies on measures to identify and mitigate the significant climate-related issues which have impacted and those which may impact the issuer, along with KPI requiring a description of the significant climate-related issues which have impacted, and those which may impact the issuer, and the actions taken to manage them.

In this international context, the ESG guide has been updated also in Hong Kong, through a development that can be defined as "evolutionary": every change to the Guide is to be considered as a step forwards towards the achievement of a more comprehensive and higher quality ESG reporting amongst issuers. On 17th May 2019, The Exchange published the *Consultation Paper on Review of the Environmental, Social and Governance Reporting Guide and Related Listing Rules* in order to collect comments on proposed changes to the Guide, as well as related amendments to the Rules Governing the Listing of Securities on the Exchange. However, its implementation date has been postponed to financial years starting on or after 1st July 2020, in order to give the chance to companies to familiarize themselves with the new requirements. The new Rule defined

[4] See https://www.unepfi.org/net-zero-alliance/

a significant part as mandatory disclosure and require the implementation of additional resources by companies in order to draw up a clear strategic plan to follow over the time, in order enhance a long-run commitment on the matter (Hong Kong Stock Exchange, 2019b).

1.4.2 Amendments to the Guide in 2020

These stricter and more demanding requirements for ESG reporting for listed companies, as we already said, will apply to financial years commencing on or after 1st July 2020. The amendments to the existing guide represent a shift away from pure ESG reporting to actual management of ESG activities by listed companies, with an emphasis on the board's role in the governance structure for ESG matters. The new guidelines explicitly make mandatory for the board to disclose its oversight of ESG issues, its ESG management approach and strategy, and how it reviews progress on ESG related issues: this way, placing the burden of ESG reporting on a company's board of directors. This means that the board now must have an overall ESG strategy with clear goals and targets, that include a formal ESG governance structure, sufficient knowledge and expertise in ESG and internal risk management processes that connect to ESG risk management (Cruz, 2020).

Along with the mandatory disclosure of those requirements, an important change for listed companies is that they now must have policies on the identification and mitigation of significant climate-related issues that have impacted or may impact their business, along with KPIs description of the significant climate related issues (making reference to the TCFD recommendations). The mandatory disclosure of the method company uses to spot the specific entities or operations (business units) that are included in the ESG report means that companies have to explain the basis for the coverage of entities/operations in the report and ensure that the data provided refers to those basis. Other mandatory disclosure includes a description of the targets set regarding emissions, energy use, water efficiency, waste reduction, etc., and the steps taken to achieve them. This means companies have to pay more attention to the material topics and determine the specific KPIs and targets, and thus requires a strong ESG data management system and controls to track ESG performance and ensure reliable data.

Another key change is that the deadline for publication of ESG reports has been revised and reduced to a timeframe of five months after the financial year-end. As before, issuers must publish their report on an annual basis and regarding the same period covered in their annual reports. The report can be drawn up separately by the financial report, and issuers are not required to provide printed form of the ESG report to shareholders unless responding to specific requests, but have to notify shareholders that the ESG report has been published on the Exchange's website and the issuer's website. Issuers should also note that "materiality" is one of the Reporting Principles which underpins the preparation of ESG reports. Through the materiality assessment, companies can gain a fresh and fuller understanding of what ESG factors would have the greatest impact on the company's business, prospects, asset value and reputation. This helps put the company in a better position to address those risks as necessary, which in turn leads to greater investor confidence.

In this context, if an Aspect in the Guide (for example, Climate Change, Supply Chain Management) is considered not material to an issuer's business, the issuer is not obligated to disclose but instead should explain in the ESG report that such Aspect is not material to its business. An explanation is sufficient for the purposes of the Listing Rules: this approach enables an issuer to prioritize and focus on relevant areas which may have an impact on the company's businesses, its investors and its stakeholders, and decide on the ESG reporting guidelines/frameworks that best fit its own circumstances. It also affords issuers the space to develop their practice and decide on the scope of their reporting (Hong Kong Stock Exchange, 2019b).

In 2016 Hong Kong made ESG disclosure mandatory in the Listing Rule for all companies listed in the Exchange, but for what concerns the information there were just "comply or explain" requirements or recommended practices. In 2019, with the new Amendment, the Exchange decided to upgrade the level of disclosure of some of the requirements.

The section B of the revised Guide explains the mandatory disclosure requirements, in particular with reference to the Governance structure, the reporting principles and the reporting boundaries. The new reports, in fact, must include a statement from the board containing the board's oversight of the ESG issues, the board's ESG management approach and strategy, including the process used to evaluate, prioritize and manage the material ESG-related issues (including risks to the issuer's businesses). It should also explain how the board reviews progress made against the ESG-related goals and targets with an explanation of how they relate to the issuer's businesses. Furthermore, an explanation of the reporting boundaries of the ESG report should be mandatorily released, as well as a description of the process used to identify which entities or operations are included in the report. If there are changes in the scope, the issuer should explain the difference and give reason for the change too (Hong Kong Stock Exchange, 2019b).

1.4.3 Guide's content and reporting principles

The Guide has been reorganized into two ESG Subject Areas: Environmental (Subject Area A) and Social (Social Subject B), while the Corporate Governance can be found separately in the Corporate Governance Code as in the previous version. The table below summarizes the general structure of the Guide: we can notice that all the provisions are upgraded to "comply or explain" and a Climate Change-related Aspect has been introduced, keeping pace with the international trends above-mentioned.

In particular, the 2020 Guide presents lot of similarities compared with the previous one. A significant difference, though, is the introduction of a Climate Change Aspect (A4) and the therefore the required disclosure of policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact the issuer. Since general disclosures of this version of the Guide follow the same layout and content of the previous one (considering that there is a new aspect related to Climate Change), here in this paragraph just an overview of the major KPIs is provided.

In the Emission Aspect, there has been a massive change with the introduction of the types of emissions (A1.1), the direct and indirect greenhouse gas emissions and intensity (A1.2) and the description of targets set, and the steps taken to achieve them (A1.6). "Climate change" KPI contains the description of the significant climate-related issues which have impacted, and those which may impact the issuer and the actions taken to manage them (A4.1). For what concern anti-corruption area, an additional KPI describing anti-corruption training provided to directors and staff has been added (B7.3).

The table below summarizes the requirements that companies have to disclose from 1st July 2020.

Table 3 HKSE ESG Reporting Guide structure from 1st July 2020

Subject Area	Aspect	"Comply-or-explain" provision
Environmental	A1. Emissions	GD+KPI
	A2. Use of Resources	GD+KPI
	A3. The Environment and Natural resources	GD+KPI
	A4. Climate Change	GD+KPI
Social	B1. Employment	GD+KPI
	B2. Health and Safety	GD+KPI
	B3. Development and Training	GD+KPI
	B4. Labour Standards	GD+KPI
	B5. Supply Chain Management	GD+KPI
	B6. Product Responsibility	GD+KPI
	B7. Anti-Corruption	GD+KPI
	B8. Community investment	GD+KPI

Source: elaborated by the author

Reporting principles in particular make reference to the concept of materiality, consistency and quantitative information. Materiality should be included in the report by disclosing the process to identify and the criteria for the selection of material ESG factors, a description of significant stakeholders identified (if stakeholders' engagement is conducted), along with the process and results of the issuer's stakeholder engagement. Quantitative refers to the disclosure that should be done with the information about the standards, methodologies, assumptions and calculation tools used, and the source of conversion factors used, for the reporting of emissions/energy consumption (where applicable). Consistency principle implies that the issuer should disclose any changes to the methods or KPIs used, or any other relevant factors affecting a meaningful comparison (Hong Kong Stock Exchange, 2019).

2. Literature review on ESG Reporting

2.1 Introduction

Environmental, Social and Governance reporting can be defined as “the practice of measuring, disclosing and being accountable to internal and external stakeholders for companies performance towards the goal of sustainable development” (Global Reporting Initiative, 2002).

The quality of ESG information disclosure depends on many variables that are characterizes both by the internal and external context in which companies run their business, from political ties to cultural dimension. In particular, in Hong Kong, Confucianism plays a relevant role in the value system of the countries; however, the local government has always sought companies’ approval when making decisions that may affect the market and how companies do business: this approach results in a “market based” legitimacy. Furthermore, the short-term vision that companies in Hong Kong have shown to possess does not encourage ESG practices, as their value is maximized when integrated in a long run strategy, consequently resulting in a worsening of the business performances in the short period. However, ESG trends in Hong Kong are different from those noted in China, not only because legitimacy from political actors has a lower weight for companies operating in Hong Kong, but also due to the openness and the historical vicinity to Western economic mechanisms, to which Hong Kong as former British colony has always been exposed to, enhancing the development of solid ESG practices in the hub.

Although the body of empirical literature on various aspects of ESG is vast, it remains vague and still does not assume a net and shared position on the matter: however, the measurement of CSR has proven to be quite difficult since it is a multidimensional concept covering many areas (Nollet et al., 2016). In particular, researchers tend to avoid analyzing ESG individually, preferring a multidisciplinary approach, comparing those practices with other aspects such as their impact on financial investment, economic performance and how they affect the market value of a company. To enhance the operational side of ESG, the economic side is often taken in consideration to understand the impact of ESG on business. However, as we already said, there are studies reporting different outcomes: some are positive, other neutral or even individuate negative relationships between ESG and financial performance of a company (Levitt, 1958).

In this chapter, we try to analyze all the variables that defined the journey of ESG in Hong Kong, without excluding the influence that China and the international context have had and still have in the development of a sustainable business, as well as the economic reasons that encourage or otherwise demonize the use of these practices and the resulting development of a sustainable way of doing business. In addition, in order to anticipate the trends that will be evaluated in the empirical analysis in the next chapter, previous literature about how mandatory disclosure of these requirements affect corporates is considered.

The variables analyzed in this chapter are divided into two main panels: the first refers to the cultural variables, while the second one makes reference to the economic and financial side of business that ESG practices may affect.

2.2 Cultural context

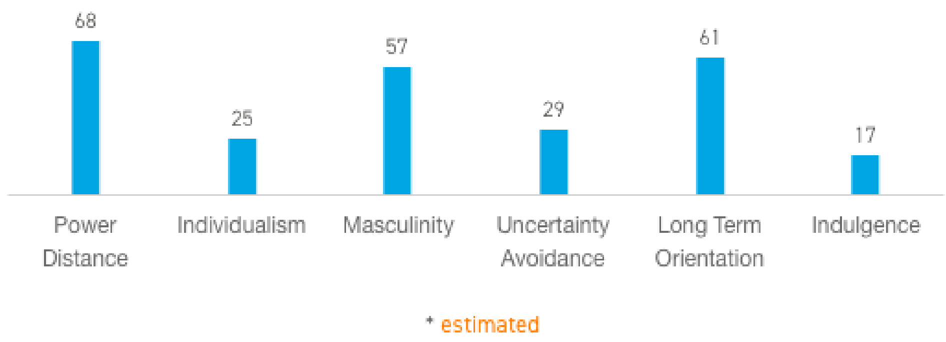
Cultural aspects strongly affect how economic players intend ESG reporting and its consideration, therefore an analysis of the context surrounding the regulation and the Stock Exchange in this particular case is fundamental in order to understand how investors, stakeholders, institutions and companies manage ESG information. First, we use as reference the Hofstede model applied to Hong Kong, in order to understand how culture is developed within the country and which are the more significant aspects that may affect the Reporting. The variables that are traditionally taken into account in this model are: power distance, individualism/collectivism, masculinity/femininity, uncertainty avoidance, long term orientation/short term orientation and indulgence.

As we can see from the graph below, power distance in Hong Kong is particularly relevant: power distance refers to the way in which power is distributed and the extent to which the less powerful accept that power is distributed unequally. Thus, for what concerned Hong Kong, this value indicates that the subordinate-superior relationship tends to be polarized, but also that people’s capacity for leadership and initiative is seen optimistically.

At a score of 25, Hong Kong can be considered a collectivist culture where people act in the interests of the group and not necessarily of themselves. The definition of Hong Kong as a masculine society makes the society itself success-driven in economic performance and personal achievement. Furthermore, Hong Kong registers a very low score on Uncertainty Avoidance: adherence to laws and rules may be flexible to suit the actual situation and pragmatism is a fact of life. People in Hong Kong are comfortable with ambiguity.

The high score of 61 shows that Hong Kong's culture is definitely pragmatic as follow a long-term orientation: people believe that truth depends very much on situation, context and time. They show an ability to adapt traditions easily to changed conditions, a strong propensity to save and invest, thriftiness, and perseverance in achieving results. However, studies revealed that in economic terms companies based in Hong Kong may have a short-term orientation due to high pragmatism, that prevails in the economic environment (Burton et al., 2000; Liu et al., 2019; Wong, 2017). Lastly, Hong Kong's score on the Indulgence dimension is very low, indicating that it may have a tendency to cynicism and pessimism, and society has the perception that actions are Restrained by social norms and feel that indulging themselves is somewhat wrong (https://www.hofstede-insights.com/country/hong-kong/).

Figure B Hofstede model applied to Hong Kong



Source: https://www.hofstede-insights.com/country/hong-kong/

2.2.1 *Short termism and Confucianism influence*

ESG reporting in Hong Kong face lot of difficulties due to the economic short-term vision of investors and managers. Collins dictionary defined short termism as "the tendency to focus attention on short-term gains, often at the expense of long-term success or stability". Thus, short-term orientation of businessman may impact the willingness of companies to engage in ESG practices and therefore represent an obstacle for the development of latter practices. In Hong Kong particularly, the delay compared to the international context in the introduction of laws in favor of ESG reporting can be explained by the disinterest in sustainability reporting of a short-termism vision of the business and investors too, who ignore longer-term opportunities and risks that may come from sustainability issues. In fact, if economic players are driven by short-termism, they would not require ESG information, as these information generate opportunities and risks in a longer-term (Liu et al., 2019). Moreover, this short-term view usually considers historical information useless: thus, ESG reporting may not be relevant to investment decisions, as companies submit this kind of information in the annual final reports for the previous year. In a short-term perspective, we could deduce that the effects of ESG information do not translate into significant changes in the indicator of performance in the short-term, resulting to some extent useless for investors in context such as Hong Kong. For this reason, some researchers argue that in this short-term prospective, there is a negative impact on financial performances when firms follow sustainability strategies which are officially required, as investors do not consider these practices as useful in the decision-making process. Another problem that looms in some countries is that ESG reporting is not statutory or that corporations are only required to provide explanation of why they cannot comply with the statutory requirements, making investors not able to assess the company's ESG information and therefore making useless the disclosure of such data for the companies in a financial way (Wong, 2017).

Burton, Farh and Hegarty (2000) tried to compare companies' CSR orientations in Hong Kong and in the United States by surveying business students from these two countries, on the basis of Carroll's theoretical framework[5]. They discovered a critical difference in the rationale of CSR: US students emphasized non-economic responsibility of corporations, while Hong Kong students' rationale emphasized the economic side. Results are evidence of the pragmatism and materialism that affects investors' mindset in Hong Kong, therefore confirming the outcomes of the Hofstede model. Underlining one

[5] Carroll's definition of CSR was originally published in 1979 as follows: "Corporate social responsibility encompasses the economic, legal, ethical, and discretionary (philanthropic) expectations that society has of organizations at a given point in time" (Carroll, 1979). In 1991, Carroll reformulated it in the form of a CSR pyramid to single out the definitional aspect of CSR and to illustrate the building block nature of the four-part framework (Carroll, 1991).

again that in the short-term, the allocation of existing resources to the ESG issues may represent a negative impact on business management, and therefore assumes a pessimistic view for managers to implement, since the long term is not at the heart of business planning (Burton et al., 2000). Some researchers have argued from the beginning of studies on the subject that CSR practices may have negative financial impact in the short-term, as the implementation of CSR practices require an expenditure that in the short-term is almost impossible to cover, in particular when firms apply the sustainability strategies merely because officially required and consequently without a clear strategic plan. Furthermore, this short-term vision affect how information is implemented and used by investors. Same as traditional financial reporting, ESG reports just provide historical information, resulting not relevant for investment decisions and therefore causing useless expenditures if looking merely to the short-term implementation.

In a *Harvard Business School Review's* article in 1958 Theodore Levitt spoke of "The Dangers of Social Responsibility". He argued that long-run profit maximization is the dominant objective of business, both in practice and in theory, therefore managers have to justify their CSR objectives and integrate them into the core business activities. This point of view can spread really fast the idea that ESG reporting may generate additional costs, which represents something that small companies are not able to pay or just not willing to, especially in such short-termism view of the business (Levitt, 1958). Basically, we can say that companies have to implement a long-term plan for what concerns ESG disclosure and do not have to merely focalize merely on the short-term, as this strategy will hardly pay back in a couple of years. As a matter of fact, this strategy needs to be implemented for a longer timeframe in order to gain value and be recognized by investors and stakeholders as a value-creating activity.

While firms in developed countries are able to operate and solve problems thanks to accepted norms already embedded in the society, acting responsibly in China heavily depends on managerial ethics, influenced by the Confucian cultural tradition. Confucianism in the Asian area is a dominant philosophy, and it is an important feature of Chinese culture that has to be taken in consideration when analyzing on a comparative base the international legal system and how policies-oriented governments develop CSR regulations inside the country (Tang et al., 2018).

Of course, due to the presence of the British government, Hong Kong also presents features of a western culture: Hong Kongers are more pluralistic and have a greater sense of internationalism. However, even if Hong Kong has been an English colony up to 1997, culturally speaking it is mainly aligned with Chinese values, and in particular with the one of Confucianism. Therefore, cultural studies about how Confucianism affect the Chinese way of conducting business can be considered valid also when talking about Hong Kong's value system. However, we also have to consider that Hong Kong is more willing to integrate its way of doing business looking at western countries and international community at large (Yin & Zhang, 2012).

The most familiar version of the Golden Rule says, "do unto others as you would have them do unto you." This idea has played a key role in Christian morality and even before in the Confucian morality. In fact, it is called "Golden Rule", meaning that it should be regarded as the first principle of human moral conduct (Q. J. Wang, 1999). Although Confucianism embodies rich CSR thoughts, it is challenged by the long history of war taking place in neoteric China, the Cultural Revolution during 1966–1976, and the introduction of Western culture, values, and thoughts after the adoption of a reform and opening up policy in 1978. As a result, the impact of Confucianism has been gradually weakening in China, leveling off Confucianism in Hong Kong and Mainland (Gao, 2009).

Already in 2007 Whelan suggested that the analysis of CSR practices in Asia has to be conducted through the lens of Confucianism, which centers social relations on bonds of family and friendship and respect for seniors. For instance, Phoon-Lee emphasized the Confucian notion of "People First", affirming that Chinese companies would be especially committed to CSR. In fact, reduce the human being to pure merchandise within the economic system seems in stark contrast to the Confucian vision. Instead, socially responsible corporations must ask themselves whether they have in any way consciously engaged in any form of bad decision in their anxiety to maximize profits. This expected commitment is not coherent with what is happening in today's China, proving that is difficult to assume simple and direct relationships between CSR and cultural variables that affect society and companies' attitude towards this practice (Phoon-Lee, 2006). Indeed, global and Chinese companies stress concepts such as honesty, integrity and trustworthiness in their CSR, stressing moral values rather than professionalism that is often associated with Western CSR. Many Chinese corporation websites have also stressed "compliance" of employees with ethical values. It is thus important to examine the "Chineseness" of CSR in Chinese companies: in a Confucianism way, CSR emphasis on the compelling and natural need to give back to the community; thus, it can be considered as a natural function and part of the process when doing business. To sum up, the main goal of CSR is to embrace responsibility for the company's decisions and encourage companies to have a positive impact on society and environment when doing business (Cheng Low & Ang, 2013).

Furthermore, CSR initiatives in Mainland China, Hong Kong, and Korea only recently have been taken into account and considered important for business. Only starting from 2009, most of the largest companies of Mainland China and Hong Kong (SOEs and non-SOEs) started to provide a CSR account on their company websites (Conte et al., 2020). Those markets are both strongly regulated by the government through the issuing of CSR codes and guidelines, but the main driver remains the vision of an "harmonious society", which makes in a certain way CSR unavoidable for the enterprises (Hofman et al., 2017).

2.2.2 'Big Market, Small Government' approach

The HKSAR government is renowned for its 'positive non-interventionism' policy in regulations, and this approach is applied also for what concern ESG and CSR initiatives. This means that the government is hesitant to regulate on CSR if these practices are voluntarily addressed by the market. However, when talking about CSR in Hong Kong we have to take into account two main problems: cost on business and China's pressure. In fact, under the 'One Country, Two Systems' arrangement, Hong Kong is a special administrative region, which means it is able to seize opportunities from China and to formulate its own policies. Hong Kong is considered a strategic player in managing China's offerings, which can be linked thanks to the hub's connections with global offerings. This process may generate the possibility that the regulation on CSR in the region could be driven also by a significant change in China's approach towards a greener growth. The 'big market, small government' style of capitalism has been claimed in order to stress the economic freedom that Hong Kong needs to sustain its prosperity (Wong, 2017).

This approach is totally different from the one implemented in China, which can be defined as a paternalistic approach, applied over both the economy and the overall societal governance. In this context, it is hard to say that Hong Kong's ESG reporting initiative is a response to the social and environmental problems caused by corporations 'domestically', or an effort to leverage private firms on public goods provisions. CSR is no longer perceived as a pure management approach but also as one with far-reaching socio-political implications (Steurer, 2013). This political notion is not so much concerned with corporate governance but rather with societal governance in general: however, this new view does not appear so relevant in Hong Kong's case (Lu, 2016).

Framed in this way, Hong Kong has been classified as a competitiveness-seeking system by Lu in 2016: those systems identified under this category actively pursue CSR regulation as a 'value capturing strategy' to enhance its international competitiveness, consequently creating new market segments and generating new sources of value. The investigation also finds little support on the 'political actor view' of CSR regulation. On the other hand, the HKEX's proposal in 2015 to elevate the reporting standard from voluntary to 'comply or explain' received overwhelming support from investors and other market participants, opposition comes from listed companies and multinationals. The main obstacles cited in the consultation conclusions addressed by those companies refers to business, legal, and technical reasons for non-compliance and look forward late implementation. Lu concluded that the overall policymaking process appears to be stock exchange-driven rather than corporate-driven (Lu, 2016).

The approach implemented by the Hong Kong legal system can also explain why, in the case of the ESG Reporting Guide for example, the Exchange, even for the introduction of the Guide in 2012, asked companies whether they were favorable or not to the introduction of the Guide, and after published consultation papers for every amendment of the Guide too. These papers are useful when researching specifically on law reform in particular areas, as this study has done in the first chapter, because it allows not only to track how regulations evolved but also to measure how companies react to the possible modifications. In addition, it might be useful to refer back to the consultation papers for background on the enactment of the laws (Lo et al., 2019).

Results of a study conducted by Conte et al. focused on the national business systems of Asian countries and shows that a top-down approach in countries such as Mainland China, Hong Kong, and Korea can be at least a partial reason why CSR penetration is relatively low. The study makes reference to the websites of 82 Asian companies based in Japan, the Republic of Korea, Mainland China and Hong Kong and included in the DJSI and in the Hang Seng (Mainland and HK) Corporate Sustainability Index ("HSMHSUS") of 2016, in order to address strategic-operational dimensions of CSR communication. Given that the evolution of CSR in Western countries is characterized by bottom-up pressure from both society and the media, whilst in Asian countries it is the Government the main player, and thus, the pressure can be seen as following a top-down approach (Conte et al., 2020a).

However, researchers' position in understanding how Hong Kong manage the introduction of such regulations still presents some doubts: for example, Artie Ng conducted a study on Hong Kong's involvement in ESG reporting, analyzing the circumstantial developments that contribute to the rise of a green financing system of the hub, today identified as the Global Financial Centre of China (GFCC). In fact, Hong Kong has been influenced by international practices for sustainability reporting, further reinforced by the green finance policy within China and by international institutional investors' interest. He individuates a top-down approach of institutional legitimacy for sustainability, influenced by national policy and enhanced through a market-based finance approach. In particular, he shows how the main financial regulators in Hong Kong have continued to function as institutions under a pattern developed during the colonial era and contribute in allowing Hong Kong to operate autonomously as an international financial center. Top-down regulations are those rules that are developed by the higher level of decision-making hierarchy and passed down to the lower level in order to be executed and implemented. Usually these top-down regulations use aggregate models of the entire macro economy thanks to an analysis of historical trends and relationships between the sectors of the economy (Munich Personal Repec Archive, 2006). This complementarity between a top-down national policy and market-based financing may induce political and economic incentives that can be similarly applicable to other regions of the world (Ng, 2018).

As Hong Kong emerges as a regional green finance hub, it is important to clarify the context of the circumstantial developments that contributes to the development of a green financing system. The overall situation suggests a top-down approach of institutional legitimacy for sustainability, influenced by a national policy and enhanced through a market-based finance approach within the GFCC. As these approaches combined integrate both regulating and regulated institutions, we can say that this trend is based on an intrinsic top-down policy approach that establishes a green financing strategy and pertinent sustainability controls through market-based financing (Ng, 2018).

In conclusion, the first panel of variables analyzed in the literature review provides an interesting and encouraging overall framework for the adoption of these practices at a more homogeneous levels in Hong Kong. In fact, despite the ambiguities carried by the cultural environment when analyzing practices, Hong Kong seems to be a fertile ground for the development of ESG practices. In particular, notwithstanding the skepticism caused by the short-term vision found by previous studies, the cultural mindset of Hong Kongers seems ready to face this new international challenge. Confucianism vision, combined with a ‘big market, small government’ style of capitalism results in a complex but favorable context in which those practices can be developed with a sense of responsibility towards others and without forcing from above, increasing reporting quality and enhancing not only the value of these practices in economic but also in ethical terms.

2.3 Economic value of ESG information

In the last decade, the growing attention paid to issues of ‘sustainability’ has led to a boom in firms' information disclosure on environmental, social and governance (ESG) practices. According to the United Nations Sustainable Stock Exchange (SSE) initiative, all big companies are expected to report their impact from environmental and social practice by 2030 at the latest (Sustainable Stock Exchanges (SSE), 2015). Even though the Hong Kong Stock Exchange is the fifth largest in the world and the third largest in Asia[6] by market capitalization, research about Hong Kong and its ESG Reporting initiatives is relatively limited. We know that capital invested in listed companies in Hong Kong comes mainly from overseas institutional investors who consider ESG performance as one of the investment criteria. As latest studies show that ESG is now in the spotlight for investment decisions, it’s important to understand to what extent this kind of information and practices may affect the economic side of a company, along with its financial position and market value, which will be discussed in this chapter.

2.3.1 Impact of ESG Reporting on corporate value

The economic value of a company depends not only from its positioning within the market, but also on how it is perceived by costumers. With regard to the social aspects, it is important for firms in Asian markets to highlight how the adoption of the greener business model enables them to provide consumers with environmentally friendly

[6] https://www.ig.com/au/trading-strategies/what-are-the-largest-stock-exchanges-in-the-world--180905 last seen 1/05/2020

products. This also represents a business opportunity as the firms can continue business relationships with their customers on a long-term prospect, by improving environmental performance. For example, as Chinese consumers pay lot of attention to the positive and healthy benefits that a product may have, Asian firms may also use this as part of their branding and promotion exercise, pointing out the benefits of improved environmental health and the financial incentives. Furthermore, consumers are becoming more and more conscious of the greater value of a company engaged in CSR activities, and therefore tend to place greater value also on products and services of those businesses who too show interest in environmental issues. Consequently, an effort is made by consumers to purchase from these companies to show their appreciation, reward actions and encourage organizations to continue to act responsibly, making the positioning of companies who implement ESG initiatives more profitable.

When looking for the best position in the market, companies have also to balance often divergent economic, social and environmental goals. Thus, this process can create tensions within the company, and those tensions have been analysed in previous literature through a win-win, trade-off, integrative, or paradox lens. The largest part of literature about corporate sustainability refers to a win-win paradigm, which states that economic, environmental and social sustainability aspects can be achieved simultaneously, also due to the fact that corporate sustainability has often been defined as the convergence of the three ESG areas. However, the complex nature of sustainable development has to be taken into account, and that's why trade-offs and conflicts in corporate sustainability cannot be considered as an exception when defining ESG strategies but represent a condition that companies have to learn to manage. In fact, trade off situations have been defined as 'compromise situations when a sacrifice is made in one area to obtain benefits in another' (Byggeth & Hochschorner, 2006). In these situations, it is impossible to achieve at the same time two or more objectives, and consequently decision-makers have to balance a loss in one dimension against a gain in another one. Recently, scholars have also used an integrative approach to bring balance to the three elements of sustainability; lately, a paradox approach, which seeks to understand the nature of tensions along with how actors work through them, allows researchers to evaluate complex sustainability issues and generate creative approaches to them (Byl & Slawinski, 2015).

The two most used approaches in the analysis of the effects of ESG practices within the company, on management and corporate value are the win-win and the trade-off approaches. While in win–win situations is assumed that benefits in two or more areas of corporate sustainability can be achieved simultaneously, in trade-offs in corporate sustainability address those situations in which corporate contributions to sustainable development can only be achieved if one accepts a compromise between at least two sustainability aspects that are in conflict which each other. For instance, accepting a relatively small loss in corporate economic performance to generate a substantial social or environmental benefit might well result in a greater positive corporate contribution to sustainable development compared with a situation of minor gains in economic performance alongside modest improvements in environmental or social performance (Hahn et al., 2010).

Of course, we have also to take in consideration that corporate sustainability based on the win–win logic may restrict the actions and decisions of a company just to those who guarantee zero conflict, thus with little ambition to change core business practices in a deeper manner, in order to pursuit a more sustainable development. In fact, implement a win-win approach in ESG is not easy, and has two major limitations with regard to corporate contributions to sustainable development. First, it limits the scope of potential corporate responses and approaches to sustainable development: as scholars and practitioners who follow this paradigm usually prefer to take win-win solutions, this may lead them unconsciously to not even consider alternatives that may be potentially better for what concerns the contribution of the corporations to sustainable development itself. Second, the win–win paradigm leads to a limited analytical perspective on corporate sustainability initiatives and strategies: the mainstream in corporate sustainability research is stuck in a tunnel vision, as sustainability issues are judged for their profit and its maximization rather than for their own sake. The exclusive focus on this paradigm systematically makes decision makers not consider the potential benefit for corporate contributions to sustainable development, just because these choices are outside the win–win optic.

A study conducted by Li et al. investigates whether superior environmental, social and corporate governance disclosure affects the firm’s value based on a sample of FTSE 350 listed firms. They find a positive association between ESG disclosure level and firm value, suggesting that improved transparency and accountability and enhanced stakeholder trust play a role in boosting firm value. With the wider availability of ESG information disclosure, the asymmetric information between firms and related parties can be reduced, and relationships with important stakeholders can be strengthened, leading to better operating performance and consequently higher firm value. Moreover, disclosure quality reflects the executives' ability to appreciate the competitive environment that companies are more often facing, not only for the new requests of consumers but also because of the international competition that has increased. Therefore, being a first mover in environmental disclosures signals companies’ ability to enhance firm value not only for a social commitment but also in a view of better internal management (Li et al., 2018).

Further empirical evidence is provided by a research conducted by Banerjee et al. on the effects of supplier firms’ environmental risk exposures on their relationships with principal customers. Findings reveal that customers are more likely to favor firms with low environmental risk relative to their competitors. Moreover, the study shows how higher environmental risk leads to a significant decline in the proportion of sales to customers, and to shorter relationship durations: in fact, results indicate that environmental risk undermines supplier firms’ abilities to initiate and maintain valuable trading relationships with customers. Further analysis also shows that the effects of environmental risk on customer-supplier relationships are more visible when the customer adopts an environmentally responsible production process. This is consistent with the hypothesis that environmentally conscious customers are more likely to be concerned about potential disruptions caused by suppliers’ environmental risk factors (Banerjee et al., 2015).

To sum up, we can say that firms with better ESG disclosure result to be more attractive to both investors and other major stakeholders, and that the resulting improved relationship between firms and their multiple stakeholders benefits the former in the long run. Relations with suppliers and consumers appear to be easily long-lasting, thus representing a competitive advantage that helps company to cover the possible trade-off between economic and environmental benefits.

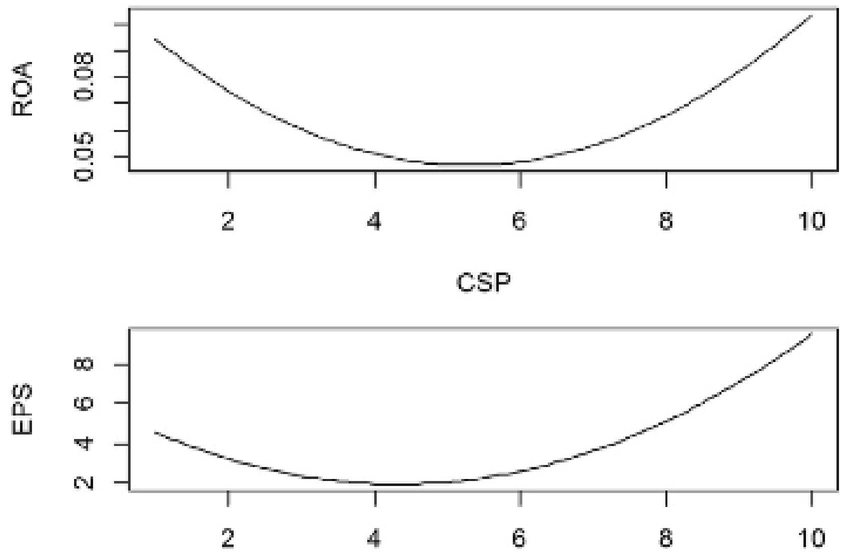
2.3.2 Impact of ESG initiatives on financial performance and stock value

While researches are mainly focused on examining the empirical link between corporate social performance and financial performance in Western countries, limited research has explored this connection in the Asian context. First, we have to highlight the universal fact that investments play a relevant role in pushing Stock Exchange towards CSR regulation: investors are becoming more and more demanding because timely, reliable, consistent, and comparable ESG information is relevant to their investment decisions. As investors increasingly consider ESG reporting and its utility in evaluating company's operational strength, efficiency and its risk management, this information can't be ignored when planning the development of a company's core business. Therefore, ESG reports issued by companies provide relevant information in order to address investment decisions and shape investment plans, consequently affecting long-term value of company's securities (Wong, 2017).

In Nollet investigation the relationship between corporate social performance (CSP) and corporate financial performance (CFP) is explored, making use of a CSR proxy, the Bloomberg ESG Disclosure score, along with three sub-components of the ESG score (respectively Environmental, Social and Governance). The sample includes all firms that are listed in the S&P500 stock market index and annual data are considered for the period from 2007 to 2011. The analysis provides evidence of a U-shaped relationship between CSR performance and accounting-based CFP: this relationship implies that CSR can be profitable only after a certain threshold amount of investment and achievement regarding CSP has been made. On the contrary if this amount is not reached, additional CSR expenditures by the company decrease CFP. The same study suggests that, on the basis of this linear model, there are no significant relationships between CSP and ROA (Return on asset), ROC (Return on Capital) and Ex. Stock Returns. Among the three components of ESG, however, the governance sub-component revealed to be the one with the biggest impact on improved CFP. Results confirm the recent tendency of theoretical literature in considering that CSR oriented governance leads to positive effects on CFP (Nollet et al., 2016).

The curvilinear relationship between CSP and CFP is also confirmed in a study conducted by Wang et al. in 2016: the research empirically tests the relationship between CSP and CFP in the context of the international construction industry. This relationship demonstrates an opportunity for executives of international companies to exploit and capitalize on their social responsibility efforts and create a win-win situation between CSP and CFP. As previously hypothesized, although it is costly to engage in CSR activities, the figure below demonstrates that there are benefits from improved stakeholder relations that can offset these costs. As corporate social activities occupy resources at an early stage without capitalizing on their potential benefits, financial performance declines as CSP increases when CSP is relatively low. When corporate social activities reach a mature level, all the potential benefits transfer to tangible outcomes and are reflected in the firm's financial performance or represented in indicators such as ROA and EPS (Earnings per Share). Passing this inflection point, CSP is positively correlated with CFP (Wang et al., 2016).

Figure C Graphic presentation of the curvilinear relationship



Source: Wang et al., 2016

For what concerns Hong Kong’s context, evidence from a study conducted by Aditi and Singh analyzing in particular Hong Kong and Singapore suggests that developed stock exchange markets among the emerged economies of Singapore and Hong Kong are transitioning from a strong focus on environmental issues to a more social equity-based focus, which is driving higher governance performance among the firms in these Asian economies. This shift indicates the importance of the social dimension inherent in sustainable development and goes beyond the mere ethical dimension among the firms and the economy. In fact, ESG reporting is becoming more and more important because investors and consumers are becoming more aware of and acquainted with the importance of enhancing a sustainable way of doing business, and therefore they are increasingly looking for external drivers that push them toward a company rather than another, transforming ESG in a potential competitive advantage, considered to be equally important as asking mere business performance (Aditi & Singh, 2020).

As we have said before, if on one hand a curvilinear relationship is confirmed between CSP and ROA/EPS, on the other there is no statistically significant relationship between CSP and ROE (Return on Equity), or market-based measures such as P/E ratio (Price/Earnings Ratio) and stock return (Wang et al., 2016). However, studies show a tendency of listed companies in Hong Kong selected in the Hang Seng Corporate Sustainability index[7], to perform better in profitability and revenue turnover compared to those companies not selected in the index over a longer term (three to five years) for their perceived CSR practices, while in the short term (one to two years) there is not a significant difference between the two (Wut & Ng, 2015). If we look at previous studies instead, they showed that there was no significant outperformance or underperformance of sustainability indicis over the market indices (Karlsson & Chakarova, 2008; Cheung, 2011). A recent study conducted by Cheung in 2011, in particular, concluded that CSR performance is positively connected with firm value for what concerns Asian companies, but there is still no significant impact on stock value by inclusion or exclusion in sudden Index. Anyway, although the inclusion or exclusion in the Index seems not to provide significant market reactions, it is an important factor for companies in order to enhance their reputation and competitive advantage in the long run (Cheung, 2011).

Another study conducted by Lo and Kwan examines the impact of ESG and sustainability initiatives on stock value of listed companies in Hong Kong using an event methodology[8]. Results show that the market reacts more positively to ESG initiatives than sustainability initiatives. This is because as investors play a relevant role in driving the development of corporate ESG in Asia, their reactions to such initiatives is crucial to be understood by companies, therefore this attitude brings several implications to corporates' strategy as well as development of socially responsible investments (SRI). To encourage the development of SRI, companies should communicate the value and returns of these initiatives clearly with investors, and financial institutions should help investors to better assess non-financial information.

In order to generate a more positive reaction from investors, companies should disclose ESG information integrating it within a strategic plan, trying to communicate information as specific as possible. This is also one of the reasons why lot of stock exchanges decided to introduced measures to encourage this practice. This process not only can enhance ESG disclosure transparency but can also maximize the value of the

[7] Following the Dow Jones Sustainability index, Hang Seng Corporate Sustainability index series was launched in 2010.
[8] It examines the difference between returns without the event (expected returns) and the actual returns; the difference is called abnormal returns, which can be aggregated across time and firms to compute cumulative averaged abnormal returns (CAAR).

disclosures themselves, enhancing the capability of investors to interpret them and identify them as material for firm value and profitability in the long run. Materiality does not only help investors, but it is also important for companies in order to assess the effect of ESG initiatives on company value, in order to present to the investors a valuation model that comprises such initiatives. In fact, the study clearly shows how ESG initiatives are better accepted than sustainability initiatives, as the definition and impact of ESG initiatives are more explicit. Programs such as waste management, enhancement of transparency, and community engagement can be understood more easily. In particular, investors tend to link sound environmental performance with firms' ability to control risk, while environmental disclosure enables investors to make better stock valuation and forecast. On the contrary, companies are still not sure about the clear value of the sustainability initiative as it is still perceived as vague and unclear, therefore it is difficult for investors too to assess possible benefits. In fact, the value of such disclosure can be maximized by allowing investors and stakeholders in general to better understand and interpret such information.

Lo and Kwan examine how the market reacts to CSR initiatives by responding to two research questions: whether the market reacts positively to ESG initiatives and whether its reaction varies with different kinds of initiatives. The study finds that the market reacts positively to ESG initiatives, but the evidence is rather weak. On the other hand, results show that investors react less positively to sustainability initiatives as compared with ESG initiatives. One possible reason for the less-positive reaction towards sustainability initiatives is that investors do not consider being included in sustainability indices as a financial or reputational benefit, this is because investors believe that sustainability rating agencies' methodologies vary and therefore are not reliable in an absolute manner. Looking at these data, we can affirm that in order to gain reliability and enhanced value and credibility to investors, indices may have to focus their development toward a more transparent methodologies, scoring, and reasons for inclusion or exclusion of companies (Lo & Kwan, 2017).

2.3.3 Impact of ESG initiatives on economic performances

Global trends in recent years reveal that most economic development sectors promote more and more environmental protection and social welfare when looking for economic value. More specifically, Chinese industrial sectors and corporations have been focusing on the betterment of human life and welfare, as well as on the conservation of the ecological resources by providing financial support with the aim to maintain environmental protection and social welfare activities of the corporations. These trends also encourage an expansion of the disclosure of corporate actions related to environmental and social responsibility (Li et al., 2019).

China started to show its interest in environmental politics when entered the WTO in 2001: Yang et al. analyzed how ESG reporting represent a benefit for companies and their profitability. In particular, the research comprises an event study analysis based on 122 firms in China and compare GRI-reporting companies with non-GRI ones, by controlling for industry type, firm size, and performance refers to the preadoption of the guidelines. Results indicate that the benefits of the adoption of those guidelines represent a positive signal in social responsibility and tend to compensate in an adequate measure company for its associated costs and required investment, in particular with a significant improvement of both ROA due to the adoption of the GRI guidelines. However, the effect on profitability may take longer to achieve and therefore need a long-term strategy along with a longer examination period, confirming the mainstream literature that define ESG and CSR practices as a long-term commitment for the company. Furthermore, firms with a higher level of internationalization appear to benefit less from the adoption of GRI guidelines: this may be seen as a prove of how much firms' ties with the local government may determine performance improvement, and in the case of international companies in China it may appear less profitable (Yang et al., 2019).

Another interesting result refers to the environmental sensitivity of the industry, as the findings suggest that firms which operates in a non-environmental sensitive industry significantly benefit from GRI sustainability report. This is due to the fact that firms already belonging to highly environmental sensitive industries face more stringent regulation, as they are more likely to have a negative impact on the environment. Furthermore, these companies are categorized in this way by consumers and investors, thus receive more pressure also from stakeholders. In Hong Kong, for example, mining companies in 2010 already had the duty to disclose environmental information before the introduction of the ESG Reporting Guide, and in China in the same way the government enacts a series of laws and regulations for those firms to control environmental accidents. This phenomenon is due to the fact that these firms have already disclosed more environmental information and made their sustainability report more transparent than non-environmental sensitive firms. In this situation, paying attention to CSR practices and optimizing sustainability reporting for the non-environmental sensitive firms still has much space to improve, and adopting GRI is a significant option (Yang et al., 2019)

In 2019 Li et al. published a study that analyzes trends, context, and impact of CSR initiatives on Chinese company's performance and productivity. The analysis was made by investigating environmental and social responsibility data in 34000 CSR projects released by 839 companies in 31 Chinese provinces from 2006 to 2016. Even if a lot of studies have been conducted in the past in order to prove such relationship, researchers still do not have a homogeneous and clear position with regard to a possible bond between those practices and business performance. Thanks to the empirical analysis, they convey that, from the investors' point of view, a company may gain higher revenue when it is engaged in CSR practices. Cumulatively results reveal that companies in China have a growing initiative to include environmental and social responsibility in their production and services. Those projects, however were different on the basis of economic conditions and regions: for example poorer regions are not stimulated to implement CSR projects, and it is also affected by the different industries in which the company operates (for example manufacturers is the category that announced the higher number of projects). In conclusion, the study reveals that CSR is beneficial to a company's performance, consequently encouraging companies to promote sustainability: undertaking CSR projects not only may bring benefits to a company's performance, but also to the sustainability of economic development of China (Li et al., 2019) .

Even if a lot of researches have been done over the years in order to understand the impact of ESG reporting on firms' value and performance, we can say that increased transparency, to the extent that it is achieved through mandatory reporting regulations, may motivate companies to do better in ESG dimensions. On the other hand, mandating the disclosure may also have a negative impact on that firms with superior sustainability disclosure, as they will have to exert greater efforts and may incur in higher costs to distinguish themselves from the rest of the firms in the period following the regulation.

Critics argue that companies that are "forced" to increase disclosure will bear significant costs either because of the disclosure *per se* or because of the changes that they will have to implement within the managerial asset, thus destroying shareholder value. In contrast, supporters believe that these firms will benefit in terms of enhanced corporate reputation and superior brand value, recruitment and retention of employee's talent, uncovering of opportunities to improve process efficiency and management of hidden risks and better access to finance, among multiple other reasons.

The approach utilized in the empirical analysis conducted by Ioannou and Serafeim starts from an event study in order to understand how company reacted to change in disclosure level of ESG information required by the Exchange. Latter study tries to identify the implications of regulations mandating the disclosure of ESG information. The sample selected comprises 144 Chinese companies that have increased disclosure following the regulations and has been analyzed through a differences-in-differences approach, in order to identify how disclosure regulation affects firms' reporting practices. Another important trend that the study revealed is that companies push more and more towards comparability in order to enhance disclosure credibility. Companies seek comparability and credibility even in absence of regulation that mandated the adoption of assurance or specific guidelines. In conclusion, the study reveals that the regulation has a significant positive effect on the level of ESG disclosure: while the regulation might have imposed additional costs on some firms, researchers found that on average, the effect of the regulation on companies has been value-enhancing rather than value-destroying (Ioannou & Serafeim, 2012).

Another study conducted by Chen et al. in 2018, examines in a similar way the effect of mandatory CSR disclosure on firms' profitability and social externalities in China, by examining the impact of the CSR disclosure mandate enacted in China in 2008. Although the mandate does not require firms to spend additional resources on CSR, the study revealed that profitability of those firms decreased, as firms tend to change behavior toward a more transparent disclosure of such information and initiatives due to an increased pressure from stakeholders and government. Considering that mandatory CSR disclosure may increases political and social pressure with reference to firm's CSR activities, researchers argue that CSR spending is mainly driven by political or social factors rather than economic considerations. Specifically, the results of the study show that the firms included in the sample experience a decrease in return on assets (ROA) and return on equity (ROE) after the mandate of CSR disclosure. Furthermore, firms experience a decrease in sales revenue and capital expenditure and an increase in operating costs and impairment charges. To sum up, results clearly show how firms analyzed experience a decrease in profitability after the mandatory request of disclosure of ESG information (Chen et al., 2018).

In conclusion, we can say that ESG now confirmed to be a positive practice for companies, from both the economic and the financial point of view. Of course, companies need to take into account that results have to be measured in the long run, as the first expenditures will not be covered in the short term. ESG comprises all the levels of the supply chain and characterize not only the way companies act with peers but also how they manage the external context. This is why studies suggest that improved transparency and accountability enhance stakeholders' trust and consequently boost firm value. In order to generate a more positive reaction from investors, a crucial point seems to be the disclosure of ESG information integrated in a strategic plan. As highlighted in the first panel of cultural variables analyzed, this information is historical and therefore may not be able to generate positive effects if not integrated in a long-term planning.

Even if the inclusion in the Index at the moment does not provide significant benefit to company's value, the overall financial and economic performance seems to experience an increase that can be connected to the ESG practices adopted by companies. In particular, the financial value seems to confirm the initial difficulties that companies may face when engaging in ESG practices, especially with the individuation of a certain threshold value that just when reached, allows companies to harvest benefits form those ESG practices implemented.

However, evidence from the second panel, even if not completely aligned, seems to confirm the fact that ESG reporting generates a positive influence on companies' performances although an initial sacrifice in terms of costs and distribution of resources has to be made.

3. Methodology and results

3.1 Research objectives

This study tries to make an empirical evaluation of the ESG Reporting Guide's implementation by companies listed in the Hong Kong Stock Exchange, taking into consideration those reports issued in English and published on the website of the sampled companies. The study aims at understanding how these companies comply with the Guide, in order to estimate the quality of the ESG reporting practices and the overall performance of environmental, social and governance aspects of sustainability. In particular, the study focuses on those reports issued following the introduction of the revision of the Guide itself, understanding how these companies reacted to amendments of the Guide over the years. Moreover, latest reports published by these companies are used with the aim of forecasting how companies will implement the new Guide that will enter in force on 1st July 2020.

The main research questions on which the study is focused are:

Q1: To what extent do companies in Hong Kong adopt HKEX ESG Reporting Guide? To what extent do they comply with disclosure of the items contained in the Guide?

Q2: It is possible to forecast how companies will implement the new Guide?

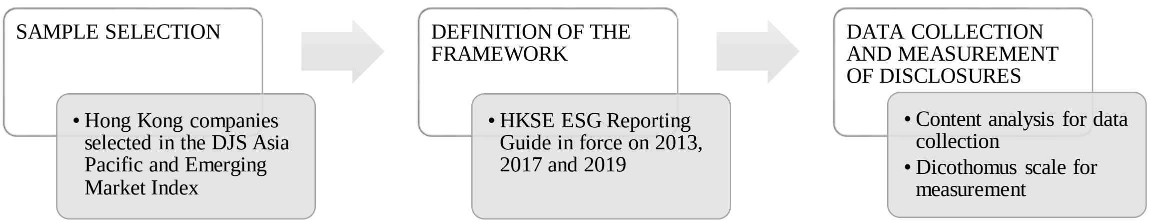
The first research question focuses on the implementation of the ESG Reporting Guide by a group of sampled companies: the selection of these companies among the DJSI allows to set a benchmark for other enterprises in the Exchange. In doing so, the study analyzes the level of adoption of the Guide over the years individuated as crucial in the development of the Guide, which respectively are 2013, 2017 and 2019. In order to answer to the first research question, after the content analysis of the reports is taken into account, a dichotomous scale is used for the evaluation of the standard individuated as crucial for the three frameworks of reference. Along with the overall level of adoption of the Guide by sampled companies, this study goes deeper, by analyzing through a content analysis of the reports' items and indicators contained in the Guide in order to evaluate the overall performance of a company in terms of sustainability. This issue is also related to the second question of the study, which is discussed below.

The second question aims at forecasting the level of disclosure expected in 2020 after the entry in force of the new Guide. For the forecast, the two early adopters of the new Guide individuated in the analysis of disclosure in 2019 are used as sample. The forecast may be used as basis for future research on the matter in order to understand how effective implementation deviate from expectations matured in this study.

To sum up, this study attempts to measure the quality of non-financial reporting in Hong Kong and its evolution by analyzing how companies act in respect of ESG requirements and to what extent they engage in the disclosure of such information through an empirical analysis. The analysis of the reports issued by the companies selected in the sample allows the discovery of evidence about the type and nature of qualitative information and quantitative data that companies decide to disclose in their own reports and at the same time allows researchers to find a hypothetical lack of sustainability information disclosure where actually it should be done.

In order to answer these questions, the empirical analysis involves a content analysis of the sustainability reports prepared and published by a sample composed of twelve Hong Kong companies selected among the Dow Jones Sustainability Index components: the creation of the sample is explained in the next paragraphs. For the analysis and assessment of such information, the scheme described in the figure below has been followed. After the selection of the sample and the definition of the framework to analyze when measuring disclosures (in this case the HKSE ESG Reporting Guide), data contained in the sustainability reports which was considered relevant for the study has been collected through a content analysis and then measured using a dichotomous scale.

Figure D Analysis procedure



Source: elaborated by the author

3.2 Sample selection

As mentioned in the previous paragraph, the study focuses on a sample of twelve companies selected from the Dow Jones Sustainability Index (DJSI); therefore, a brief introduction of the Index has to be made in order to understand how these companies are positioned in the international context and why they are so important.

The Dow Jones Sustainability Indices (DJSI) are a family of best-in-class benchmarks for those investors who believe in sustainability and recognize that sustainable business practices create shareholder value in the long-term. The family was launched in 1999 and represents the first global sustainability benchmark, tracking the stock performance of leading companies in terms of economic, environmental and social criteria on a global basis. The DJSI family comprises global, regional, and country benchmarks which are named as follows: World, North America, Europe, Asia Pacific, Emerging Markets, Korea, Australia, Chile and MILA Pacific Alliance. All DJSI indices are calculated in both price and total return versions and are disclosed in real time. The more sustainable companies are selected across 61 countries, selected jointly by S&P Dow Jones Indices and RobecoSAM: only the top ranked companies within each industry are selected for the inclusion. The composition of the Index is reviewed each year in September: it is based on the Total Sustainability Scores resulting from the annual SAM Corporate Sustainability Assessment (CSA) which is updated quarterly. The indices can be useful for those investors who would like to push companies toward a betterment of their corporate sustainability practices[9], but also helps companies to understand which sustainability aspects are more relevant from an investor’s point of view, and which may affect company’s financial performance.

The 2019 SAM CSA results show that corporate sustainability performances in Asia is holding up well compared to the previous year, particularly in social and environmental issues. However, all countries score below average for Corporate Governance. A positive signal is that the companies selected as sample grew from 327 in 2018 to 372 in 2019, showing a rising participation rate in the Asian region. The rising participation rate indicates that more companies are proactively choosing to engage in the management of sustainability and to be benchmarked alongside their peers. Average scores show consistency in the sustainability performance of Asian countries: the region

[9] See https://www.robecosam.com/csa/indices/djsi-index-family.html

of Asia-Pacific (also including Australia, Macao, New Zealand, and the UAE), scores an average of 57, outperformed Latin America (52) and North America (51).

Companies based in Hong Kong are inserted into two families of the Index, respectively Asia Pacific and Emerging Markets. The total number of companies gathered in the indexes in 2019 is respectively 148 and 98, for a total of 246 companies. Among them, 14 are those based in China and Hong Kong: however, as this study is strictly focused on Hong Kong companies' ESG performances, the total number of enterprises used as sample and therefore relevant for research purposes is twelve. Among these twelve companies, eleven were selected among the Asia Pacific Index, while one company has been selected from the Emerging Markets Index. Table 4 shows the sampling procedure of the companies considered relevant for the research.

Table 4 Sampling procedure

Number of Dow Jones Sustainability Asia Pacific Index components	148
Number of Dow Jones Sustainability Emerging Markets Index components	98
SUBTOTAL	246
LESS	
Companies not based in Hong Kong	234
TOTAL	
Companies relevant for the analysis	12

Source: elaborated by the author

Furthermore, we can identify seven different sectors in which the sampled companies operate: the list of the different sectors is indicated in Table 5. Here, we can see the total number of sampled companies, while in Panel B there is the description and percentage of companies' sector, both in absolute number and percentage in order to give a full picture of the sample analyzed. As we can see in Panel B, Real Estate is the sector with the highest number of companies inserted in the Index (5 on 12).

Table 5 Sampled companies by sector

Sector	N (on 12)	%
Consumer Services	1	8.33
Banks	1	8.33
Diversified Financials	1	8.33
Real Estate	5	41.67
Transportation	1	8.33
Utilities	2	16.67
Food, Beverage & Tobacco	1	8.33

Source: elaborated by the author

To sum up, the sample utilized in the study is composed of twelve companies based in Hong Kong and inserted in the DJSI of 2019, in particular in the DJS Asia Pacific and Emerging Markets Index. These companies run their business in seven different sectors, mainly related to the service sector.

3.3 Framework for data collection

A precise framework has been used for the data collection and relative content analysis. The construction of a framework represents the basis on which the whole analysis stands: the study focuses on three years which are 2013 and 2017, considered crucial for the analysis of the evolution of compliance with the Amendments of the Guide, and lastly the report issued by the sample companies in 2019 in order to assess disclosures and forecast 2020 performances. Therefore, the first step in the construction of the framework was to individuate the Guide’s requirements for each year considered in the analysis. Originally, all the items of all the Guides were taken into consideration and reported into a table, creating a list of aspects, useful for assessing the sustainability performance of every single enterprise. Consequently, all the items were adjusted in order to create the ultimate frameworks. However, as the study aims at giving an overall idea on the implementation of the Guide, we can say that the framework taken in consideration in the analysis correspond to the different version of the Guide over the years already shown in the first chapter, and whose precise list of items is illustrated in the Annex.

In particular, the frameworks are divided into Subject Area and Aspects that include both General Disclosure and KPIs. Thus, these requirements were arranged in a table in order to make possible the data collection through a content analysis both per item and per company. The second revision of the Guide came into force in two steps: firstly in 2016 and then in 2017, as we already said in the first chapter. However, for the analysis we just used the complete revision of the Guide, consequently making reference to the reports concerning 2017 fiscal year. 2017 requirements have also been used for the analysis of disclosures in 2019, as the new version of the Guide will be in force from 1 July 2020: consequently, the last version in force from 2020 has been adopted just for the forecast of disclosures in 2020, in particular on the basis of two companies early adopters of the latter Guide. Thus, the frameworks taken in consideration for the analysis are three:

- The first makes reference to the Guide of 2013, that contains 43 items divided into four main Subject Areas: Workplace quality (A), Environmental protection (B), Operating practices (C) and Community investment (D);
- The second refers to fiscal year 2017 and contains the same items of the first framework (comprising the same number, 43), but divided no more into four but two Subject Areas, respectively Environmental and Social Subject Area. This is the framework adopted not only for the analysis of disclosures in 2017 but also in 2019;
- Lastly, forecast has been made with reference to the new Guide's requirements, that are still divided into Environmental (A) and Social (B) Subject Area but contains five more items, for a total of 48. These five new items have been added respectively two in the Area A and 3 in Area B, taking the overall number of items per area respectively to 17 and 31.

Of course, we have to say that this study focuses exclusively on the ESG Reporting Guide level of compliance, but companies in Hong Kong, especially in 2013, referred heavily to GRI standards, which were excluded by the framework utilized in this study. As the aim of the research is to analyze in deep to what extent companies in Hong Kong comply with the national Guide to respond to investors' request of ESG information disclosure, all the items in the framework refer exclusively to those required by the HKSE, therefore those reports issued following exclusively GRI have been linked to the corresponding disclosures required in Hong Kong. Additional information disclosed following GRI have not been taken in consideration for the construction of the framework and relative calculation: all the items were adjusted in order to create a unique framework for each version of the Guide analyzed.

Thus, after all these considerations, we can say that the final results of the framework utilized correspond to the sum of the items contained in the HKSE Reporting Guide in force during the fiscal year taken in consideration by the analysis and, consequently, in force in the year of publication of the reports analyzed.

3.4 Data collection and measurement of disclosures

Once the framework and criteria for the analysis are fixed, the next passage is the data collection and the measurement of disclosures. Data collection and consequent measurement of disclosures allow to verify whether or not these reports have been issued following ESG Reporting Guide, and if yes to what extent companies disclosed items. The collection of sustainability reports of the sampled companies issued in 2013, 2017 and 2019 represents a crucial step in the definition of the analysis: reports are available on the website of the companies in English. In fact, due to the lack of time and vocabulary, the reports analyzed are exclusively those issued in English on the companies' website referred to the years individuated as relevant for the research (2013, 2017 and 2019). Considering that Hong Kong is a Special Administrative Region of China and a former British colony, the selection of just reports issued in English does not represent a barrier for the analysis, as the language used within the Exchange, in order to better communicate with international investors, is English. Furthermore, all the reports selected by the Index are published in English.

Data collection was made using as research method a content analysis. This type of analysis is defined as "a technique for gathering data that consists of codifying qualitative information in anecdotal and literary form into categories in order to derive quantitative scales of varying levels of complexity" (Abbott & Monsen, 1979). Content analysis does not require the collection of data from people, instead it is the study of recorder information, usually reports, texts, media etc. This method has been broadly applied for the study of environmental disclosure as it allows researchers to categorize information on the basis of precise criteria in order to develop a model for the presentation of the information (Stemler, 2001).

At the very beginning of the research, the sustainability reports of the twelve companies were examined on the basis of a selection of information. As the latest Guide will be implemented from 1st July 2020, a forecast has been made using the approach of early adopters that applied the Guide already for the 2019 report. Furthermore, pictures and charts contained in the reports are excluded from the analysis: this is because in a study conducted by Frost and Wilmshurst (2000) this approach has been criticized and seen as a limitation, as pictures might be useful for management in order to better impact stakeholders. However, trying to assess the impact of pictures generates complications: researches argue that “a picture may be worth a thousand words”, but to measure pictures based on an unweighted word count brings to a higher level of subjectivity in the research (Frost & Wilmshurst, 2000).

Looking at the reports, we can identify mainly two guides with which Hong Kong companies comply for the disclosure of ESG information: one is the national ESG Reporting Guide issued by the HKSE focused on environmental, social and governance disclosure, while on the other hand we find the international GRI standards that also include economic items, along with social and environmental ones. One prominent concept developed to get sustainability up and running is Elkington’s (1997) triple bottom line (TBL). This concept refers to three sustainability dimensions (respectively economic, environmental and social): guidelines such as GRI or the HKSE ESG Reporting Guide usually follow this type of approach, recommending that companies commit to focus on social and environmental concerns just as they do on profits (Elkington & Rowlands, 1999).

However, as we have already seen, a distinguish has to be made before starting with the analysis of the data. In fact, some enterprises refer to HKSE ESG Reporting Guide as required in the Hong Kong Main Board Listing Rules 13.91, but also refer to GRI standards, in order to better comply with international practices and to satisfy international investors’ requirements. The distinguish has to be made as the analysis in this study refers just to the HKSE ESG Reporting Guide, and therefore excludes further information disclosed following GRI standards. The method of collecting data after the analysis of more than one guideline aims at creating a list of aspects for the analysis of the report, in order to better evaluate sustainability performances of the sampled companies. For example, Liao et al. in 2017 published a study that established a systematic content analysis approach to compare CSR communication among contractors in Asia, EU, USA/Canada and China (Liao et al., 2017). As the aim of the research is to analyze in deep to what extent companies in Hong Kong comply with the national Guide to respond to investors' request of ESG information disclosure, all the items in the framework refer exclusively of those required by the HKSE, therefore those reports issued following exclusively GRI have been linked to the corresponding disclosures required in Hong Kong. Therefore, additional information disclosed following GRI or other standards have not been taken in consideration for the measurement of disclosure. The precise list of items that companies should disclose helps companies to better organize the disclosure of such information and to gather them in an efficient and schematic way, avoiding duplication problem of the information, explained in the first chapter, or omission of some relevant information. Furthermore, this method helps investors to better understand and compare information of different companies or referred to different years of the same enterprise, consequently making possible for investors and stakeholders to interpret such information in an unambiguous manner.

In addition, data collected from the latest reports available including also those who already have reported following the 2020 Guide, confirms that similarly to 2017 the Guide will be implemented by all the companies listed in the HKSE, as required by the Listing Rules. However, international recommended practices still advise the disclosure of such information also following GRI standards, which results to be implemented by almost 85% of the companies analyzed in the study. After all these considerations, the analysis of the disclosure of ESG information from these companies is exclusively based on the requirements illustrated in the first chapter related to the ESG Reporting Guide of Hong Kong, consequently without considering that information disclosed by following GRI standards or other sources. During the data collection, in order to simplify the linking between the disclosures made by just following the GRI standards and the Guide, a chart for linking the same information requirement has been used: in this way, it was possible to assess following the ESG Guide also those reports issued with reference to the GRI. In particular, those reports enable us to understand whether Hong Kong listed companies decide to give priority to either international or national standards when disclosing ESG information. This method allows us to analyze and compare both of the frameworks, especially in 2013 when the utilization of HKSE ESG Reporting Guide was still limited.

Once the methods used for the composition of the sample and the gathering of the information and the consequent framework have been illustrated, we have to explain how it was possible to conduct the analysis about the ESG reporting performance of the selected companies. The objective and nature of this study as a comparative study required the organization of the disclosure index by standard: this structure enables a clear and accurate measurement of the level of compliance with every single standard, and hence to improve the objectivity of the comparison across companies and years. In particular, the method used to measure the quality of the disclosure is called "two-point scale". The method consists in two possible scores for each item that has to be analyzed: in particular, researcher usually assign 0 for the non-disclosure of the item; 1 for the disclosure of the item. This type of scale is also named "dichotomous scale" because there is the unique possibility of choosing between 0 for the non-disclosure and 1 for the disclosure. The refined items list is consequently employed and then a dichotomous scale applied as follow:

- "0" is assigned to those items that are not disclosed in the reports;
- "1" is assigned to those items that are disclosed in the reports.

This method assumed that each aspect has the same weight within the framework, removing possible subjectivity involved in assigning more relevance to an aspect rather than another one (Hassaan, 2013). Generally, we can say that if the total result of the item is 1, this 1 means that at least one company just have disclosed the General Disclosure referred to the item but failed to disclose related KPIs. Moreover, for the assessment of the final score, in order to maintain the analysis as simple as possible, when not applicable or not relevant for the sector or company 0 was assigned to the item. One of the reasons why this method has been adopted is due to the fact that often companies do not disclose an item because the explanation can be more profitable than comply with, but at the same time lack of an explanation for the non-disclosure too, leaving a blank space in the reporting and lowering the overall quality level of the reporting itself. Thus, with the aim of highlight this phenomenon, those items scored low to be better analyzed both from the companies' management and researchers in future studies.

The following step is the practical analysis of the selected reports which is based on the list of items inserted in the HKSE ESG Reporting Guide, with the aim of finding the relative descriptive information or quantitative data disclosed in the reports. During the examination of the reports it was possible, through the method of finding or not finding the information related to the items required, to evaluate the disclosure's quality. Companies in Hong Kong broadly refers to the ESG Reporting Guide during the preparation of the report, with a few exceptions in 2013 when the Guide was just recommended and consequently companies applied the GRI standards. As result, the data referring to "comply-or-explain" items contained in the Guide should be necessarily found during the examination of the reports from financial year 2016, as the non-disclosure may represent a breach to the Listing Rules. Once individuated, the scores “0” and “1” can be associated to each item of the framework under the referring guideline. This method has been applied independently for each sampled company. Even if the disclosure under the Guide in 2017 refers both to a “comply or explain” approach and “recommended practices”, the same weight has been given to all the items taken in consideration in the analysis, independently by the level of disclosure required and the year of analysis.

Finally, in order to assess the sustainability disclosure quality of the reports released by the observed companies, the following statistics have been calculated: minimum, maximum, mean, median and standard deviation. To complete the analysis, frequencies of disclosure per item have been inserted in the empirical results, in order to assess which items are the more disclosed and which of Hong Kong’s companies still lag behind and have more difficulties, looking also at previous literature’s findings. At the end, results are combined together in order to obtain the concluding results of the analysis. All these statistics have been calculated and are expressed in absolute value.

Findings related to the years taken in consideration during the empirical analysis (2013, 2017 and 2019) as well as the forecast made starting from the sustainability practices detected by the analysis of reports in 2019 and consequent identification of two early adopters are provided below.

3.5 Empirical results

Based on the two research questions discussed above, this study aims at evaluating the implementation of the Guide by the sampled companies, and therefore to what extent they comply with the items required by the Guide, and lastly, it tries to forecast how companies will implement the new Guide which will enter in force on 1st July 2020. Through the content analysis of the reports published on companies’ website and relative dichotomous scale used for the evaluation of the single framework, the study analyses the implementation of the Guide, also making reference to the frequencies of those items contained in said frameworks in order to understand to what extent the disclosures made in the various Subject Areas are coherent with previous literature. With the purpose of answering to the first research question, it is necessary to consider that the results can present some misstatement and may not represent the full picture of the situation. This is because additional items disclosed following GRI standards aren't taken in consideration and as the sample of the research refers exclusively to companies that represent a benchmark in ESG Reporting in the global market.

3.5.1 Analysis of the reports

As mentioned before, from 2017 all the companies included in the sample adopted the HKSE ESG Reporting Guide for the disclosure of ESG information. Some of them (66.66% in 2013) also refer to GRI in order to better respond to international investors' requirements. The use of GRI has been excluded just by two companies: all the other companies generally provide a double table of content index referred to both guidelines, therefore it's impossible to assess if one of them prevails, but companies comply to both of them in the same way.

However, in 2013 the difference among the two frameworks can be easily assessed as companies just indicate which items of the GRI standards could be linked with the correspondent one in the Guide, therefore in these cases we can say that GRI prevails on the Guide. This phenomenon can be linked to the fact that in 2013 ESG Reporting Guide was just recommended and therefore companies already implementing GRI standards continued to follow this practice, which was also seen as a competitive advantage in the international context. On the other hand, we can say that UNGC and TFCD still lack of implementation, as their adoption still refers just to a small niche of. Companies. However, this limited implementation may be connected to the fact that hose guidelines are sector-specific and have been used just from companies of the precise one that consider these disclosures material for the sector. Other principles or Guidelines with which the sampled companies comply when redacting sustainability report are UITP and IIRC.

Even in for the present analysis other frameworks' implementation is not taken in consideration, a brief introduction of the others principle and guidelines used for the reporting of ESG information can be useful for future researches on the matter. The UN Global Compact is the world's largest corporate sustainability initiative: organizations which are part of the UN Global Compact do business responsibly by aligning their strategies and operations with the UN Global Compact's Ten Principles on human rights, labour, environments and anti-corruption, and take actions to achieve the UN Sustainable

Development Goals[10]. The Task Force on Climate-Related Financial Disclosures (TCFD) is an organization that was established in December of 2015 with the goal of developing a set of voluntary climate-related financial risk disclosures which can be adopted by companies so that those companies can inform investors and other members of the public about the risks they face related to climate change[11].

UITP (*Union Internationale des Transports Publics*) is the International Association of Public Transport and a passionate champion of sustainable urban mobility. It is the only worldwide network that brings together all public transport stakeholders and all sustainable transport modes[12].

The International Integrated Reporting Council (IIRC) is a global coalition of regulators, investors, companies, standard setters, the accounting profession, academia and NGOs. The coalition promotes communication about value creation as the next step in the evolution of corporate reporting. The International Integrated Reporting Framework is used to accelerate the adoption of integrated reporting across the world[13].

Anyway, following the above results, we can affirm that Hong Kong companies mainly refer to both GRI and HKSE ESG Reporting Guide. This double compliance is due to the fact that on one hand companies have to respect HKEX Main Board Listing Rules and therefore comply with the Guide, on the other hand GRI standards are important in order to maintain and enhance companies' position in an international view, as Hong Kong is considered an international financial hub and considers international investors' demands crucial for its positioning. As stakeholders all over the world may not have familiarity with the HKSE provisions in terms of ESG, they can find it difficult to assess reports published just by abiding national requirements.

The table below highlights the guidelines used by the companies in the sample to disclose ESG information: along with a full disclosure made by following the Guide and GRI for the majority of the companies, we can see how companies may refer also to more specific and sectorial requirements, in order to maintain themselves up to date with the ESG requirements of Western institutions and to meet a precise target of investors' demands.

[10] See https://citiesprogramme.org/who-we-are/
[11] See https://www.fsb-tcfd.org/about/#
[12] See https://www.uitp.org/vision-mission
[13] See https://integratedreporting.org/resource/international-ir-framework/

Table 6 Guidelines followed by the sampled companies

	HKSE ESG Reporting Guide		GRI		UITP Sustainability KPIs		TFCD		UNGC		IIRC	
	N	%	N	%	N	%	N	%	N	%	N	%
2013	10	83.33	8	66.67	1	8.33	0	0	1	8.33	1	8.33
2017	12	100	9	75	1	8.33			1	8.33	1	8.33
2019	12	100	10	83.33	1	8.33	2	16.66	1	8.33	1	8.33

Source: elaborated by the author

Another important factor is to understand how companies approach to the reporting and how they communicate their initiatives and achievement. A previous study affirms that the country of origin is an important factor to be taken in consideration when talking about CSR practices and relative communication, as the communication is often related to the specific cultural and social contexts in which a company operates (L. Tang & Li, 2009): specificities of Hong Kong context have been discussed in the chapter 2 of this study. When analyzing reports, as already said in the second chapter, communication plays a relevant role and Chinese culture, which is classified as a high-context one, have to be fully analysed too before drawing conclusions on findings.

One of the methods used for the analysis of communication in this study is by looking at the name companies gave to the reports published on their websites: in the present study, companies published seven different report for the disclosure of ESG information. The most common name that companies give to those reports is the "Sustainability Report", which over the years has always had the highest usage rate (from 58.33 to 75%), always representing half or more of the sampled companies' choice for the publication of sustainability information.

Table below provides the details about the different types of reports published by the sampled companies, with the relative number and percentage of firms releasing them divided per year.

Table 7 Types of sustainability-related reports used by sampled companies providing ESG information

Report type	2013		2017		2019	
	N (=12)	Proportion (%)	N (=12)	Proportion (%)	N (=12)	Proportion (%)
Environmental, Social And Governance Report	0	0	1	8.33	1	8.33
Sustainability Report	9	75	7	58.33	8	66.67
Sustainable Development Report	1	8.33	1	8.33	1	8.33
Corporate Responsibility Report	1	8.33	1	8.33	1	8.33
Corporate Social Responsibility Report	1	8.33	1	8.33	1	8.33
Responsible Business Report	0	0	1	8.33	0	0

Source: elaborated by the author

3.5.2 Analysis of disclosures in 2013

As we already said in the first chapter the layout of the framework changed over the years, in fact, items disclosed in the 2013 Guide refer mainly to four Subject Areas: workplace quality (A), environmental protection (B), operating practices (C) and community investment (D), for a total of 43 items, respectively divided as follows: 13 items in the Subject Area A, 15 in the B, 12 in the C and 3 categorized under the Subject Area D. Results are consequently developed separately for each Subject Area and category.

For what concerned Subject Area A, at least general disclosures about workplace quality are published, and the mean among items appears high (10.83 on 13), with a median of 11 to confirm that almost every company disclosed the majority of items within the area.

Looking at the environmental performances disclosed in section B, we can say that companies have different trends in disclosing that information, and heterogeneity prevails in related findings. This heterogeneity among issuers can also be assessed by looking at the value of the standard deviation, which is quite high compared to the total number of items contained in the Subject Area (3.09). However, findings reveal that at least general disclosures are published by all the companies.

Operational Subject Area (C) presents some issues: the mean among items revealed to be 3.83 on a maximum of 6, and the minimum score of 0 means that at least one company did not disclose the item. This problem may be related to materiality: in fact, when analyzing the reports a phenomenon that often emerged is that as a lot of companies belong to the tertiary sector, therefore they do not consider physical products and related management as material for the company's business, and consequently they do not consider them as an item to be disclosed. Anti-corruption-related items also have difficulties in being individuated and disclosed, with a 0 registered also here as minimum score. Mean seems to be barely sufficient when looking to the subtotal of the Subject Area (8.66 on 12), and standard deviation is also high (3.78) as well as median (9.5), meaning that not only there is heterogeneity among companies but also among items disclosed by the same company.

Lastly, community investment area shows some problems as well, in particular in the disclosure of KPIs, which can be related to the fact that the Guide was just recommended and therefore companies did not invest in looking for such specific data. In fact, findings reveal a low mean (1.33 on 3), proving the fact that generally companies just published general disclosure and do not consider KPIs. Here again, the minimum score of 0 means that at least 1 company did not disclose any of these items.

However, the overall situation of 2013 disclosures shows how companies in Hong Kong had just approached ESG, as the average of compliance with the items required by the Guide is about 74.60%. Even if compliance rate can be considered quite low, we have to take in account that in 2013 the Guide was introduced just as recommended practice, and therefore the rate refers to a spontaneous compliance of the companies' management. Of course, as the sample contained a small number of companies, in 2013 information disclosed following the GRI were integrated in the framework following both the instructions given by the company and the linkage table published by the Global Sustainability Standards Board (Global Sustainability Standards Board, 2016), therefore some misstatement cannot be excluded.

The results categorized by Subject Area and items with the correspondent disclosure scores based on the dichotomous scale are described in Table 8 below.

Table 8 Results by Subject Area and category of the Guide in 2013

Subject Area	Aspect	Min	Max	Mean	Median	Standard deviation
Workplace quality	1. Working conditions	1	3	2.75	3	0,62
	2. Health and safety	1	4	3.33	3.5	0.89
	3. Development and training	1	3	2.83	3	0.58
	4. Labour standards	1	3	1.92	1.5	1
SUBTOTAL		4	13	10.83	11	3.09
Environmental protection	1. Emissions	3	7	5.42	5.5	1.51
	2. Use of resources	1	6	4.17	5	1.53
	3. The environmental and natural resources	1	2	1.67	2	0.49
SUBTOTAL		5	15	11.26	12.5	3.53
Operating Practices	1. Supply chain management	1	3	2.75	3	0.62
	2. Product responsibility	0	6	3.83	4.5	2.08
	3. Anti-corruption	0	3	2.08	2	1.08
SUBTOTAL		1	12	8.66	9.5	3.78
Community involvement	1. Community investment	0	3	1.33	0.5	1.50
SUBTOTAL		0	3	1.33	0.5	1.50
TOTAL		10	43	32.08	34.5	11.9

Source: elaborated by the author

3.5.3 Analysis of disclosures in 2017

The framework for the analysis of disclosure in 2017 contains the same items analyzed in 2013, the major difference is that the items are no longer divided in four but in two main Subject Areas. Again, results are developed separately for each Subject Area and category. The two main Subject Areas, named Environmental (A) and Social (B) contain a total of 43 items, respectively 15 in the environmental area and 28 in the social one. In the Subject Area A, we can notice relevant changes in the overall level of performance compared to the previous framework analyzed, with a higher percentage of compliance (93.33% compared to 75% of the previous framework). In fact, this section detects a higher mean (14 on 15) along with the same value for median (14), determining a homogenous betterment of the level of disclosure in the area, also due to the "comply or explain" approach that companies now have to apply in the disclosure of the items in the area. A quite low standard deviation (1.2), reduced by two-thirds compared with the same data of the previous analysis, proves the homogeneous development in the disclosure of the item gathered in the section, with also a minimum of items disclosed particularly high (12 on 15).

In the Social Subject Area (B), a little improvement in disclosure can be detected compared to the previous framework analyzed. Even though the median referred to the overall area is high (25.5 on a total of 28), the average disclosure level does not even reach 23 points: this data has to be analyzed along with the standard deviation of the area, which is quite high (6). To sum up, statistics reveal that there is a strong heterogeneity among companies, as they either disclose the majority of the elements or strongly fail to do so. Looking deeper to the single Aspect, the most disclosed is the one referred to community investment (B1.8), which is the only item in the framework to register a full disclosure by the sampled companies. In fact, the most reported item comprises, not only the general disclosure of policies on community engagement in order to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests, but also the disclosure of community investment focus areas of contribution and resources contributed to the area. This can be related to the fact that companies put a lot of attention on how stakeholders and society perceive the company's image, and social initiatives are the most tangible aspect of that creates the image (Abbott & Monsen, 1979; Dienes et al., 2016). On the other hand, product responsibility presents some issues, probably related to the materiality assessment already discussed in the previous analysis, which can be seen from the low percentage of compliance with the item. In fact, this is the only item in the framework that registered a minimum of disclosure equal to 0, meaning that at least one company hasn't disclosed neither general disclosure nor KPIs. Labour standards item present a high variability as reports usually lack specific information, such as employee turnover rate by gender, age group and geographical region etc.

The overall situation of Hong Kong companies shows a clear improvement over the years: minimum disclosure doubled compared to the previous year, with a disclosure average of 85% of the total number of items. Standard deviation value is half compared to 2013 (6.92 against 11.9) and median shows a strong improvement, with an overall value of 39.5 on a maximum of 43. Of course, the registered improvement of the general level of compliance is related to the fact that from 2016, due to the integration into the Main Board Listing Rules, disclosure of ESG information is mandatory and no more a "recommended practice". However, the framework still requires a "comply or explain" approach of some items that grants companies partial freedom when disclosing those items. On the other hand, this approach can lead to a "box-ticking[14]" issue that may undermine the quality of reported information. That's why quality of the disclosure becomes a problem at this stage: some social and environmental reporting (SER) research recognized that the quantity of disclosure does not indicate what is actually being disclosed (Frost & Wilmshurst, 2000). This is also one of the reasons why the 2020 Guide introduces the mandatory disclosures of reports boundaries, materiality assessment and other tools in order to make these reports easier to assess by both investors and authorities. The results, developed for each item and organized into Subject Areas and categories, are illustrated in the table below.

Table 9 Results by Subject Area and category of the Guide in 2017

Subject Area	Aspect	Min	Max	Mean	Median	Standard deviation
Environmental	1. Emissions	6	7	6.75	7	0.45
	2. Use of resources	4	6	5.25	5	0.75

14 "Box-thicking" can be defined as "the process of satisfying bureaucratic administrative requirements rather than assessing the actual merit of something" (https://www.collinsdictionary.com/it/dizionario/inglese/box-ticking).

	3. The environmental and natural resources	2	2	2	2	0
SUBTOTAL		12	15	14	14	1.2
Social	1. Employment	1	3	2.67	3	0.65
	2. Health and safety	2	4	3.75	4	0.39
	3. Development and training	2	3	2.58	3	0.51
	4. Labour standards	1	3	2.17	2.5	0.94
	5. Supply chain management	1	3	2.42	3	0.9
	6.Product responsibility	0	6	3.5	4	1.78
	7. Anti-corruption	1	3	2.67	3	0.65
	8. Community investment	3	3	3	3	0
SUBTOTAL		11	28	22.67	25.5	5.82
TOTAL		23	43	36.67	39.5	6.92

Source: elaborated by the author

3.5.4 Analysis of disclosures in 2019

In order to have a complete view on the evolution of the level of compliance with the Guide over the years, the latest sustainability-related reports have been analysed too. In addition to providing an updated view on the development of ESG practices in Hong Kong, the following analysis is the starting point for the forecast of disclosure in 2020. The forecast was also possible in particular thanks to two early adopters that have been individuated during the analysis. The framework in force in 2019 is the same as the one in 2017: it includes two Subject Areas, respectively named Environmental (A) and Social (B), counting a total of 43 items, 15 in the area A and 28 in the B.

Subject Area A shows an overall high compliance with the items, with a slight increase of the general performance over 2017: for example, there is a sensible decrease of the standard deviation, calculate under 1 (0.97), compared to the 1.2 individuated in the previous analysis. As we can see media and median are both above 14 (respectively

14.25 and 14.5), measuring a significative engagement of the sampled companies in the disclosure of the items contained in latter Area.

For what concern section B, a significant improvement has been detected in the overall compliance level. In fact, minimum disclosure experienced a strong increase from 11 to 19, as an evidence of the effort that companies are making to reach a sufficient level of compliance with the Guide over the years. While median increased by 0.5, the average recorded in 2019 increased by almost 2.5 points, showing how companies increase their commitment to the disclosure of such items over the years. We can note how all the items within the area reached almost full disclosure, showing a clear improvement compared to the framework analyzed in 2017, representing a step forwards in the direction of a complete integration of ESG in corporate management. This situation attests also how important it is becoming for companies to disclose this information and to implement these practices within the core business. The high median for every item in the area proves that the overall disclosure level is very high and just one or two companies on all the sample fail to disclose the items, representing a strong signal for the market in terms of compliance and commitment.

Despite the improvements registered by the analysis of the area, results concerning “Product responsibility” are quite different: even though all the companies in the sample, at least, reported about the general disclosure, this item still presents some criticisms in terms of compliance. As we have already said, this item and relative KPIs are often not considered material for those companies operating in the tertiary sector providing services, and therefore represent an anomaly within the reports and the framework too. This problem is the same as the one related to the box-ticking issue that has been encountered also in a BDO survey which randomly sampled 400 companies in Hong Kong in 2019. In fact, results of the survey are coherent with those found out in this study, as the analysis of 400 randomly selected issuers revealed an overall high level of compliance, but a varying quality of reporting, ranging from comprehensive, considered, and detailed, to “box-ticking” without explanation or details on the matter, which cannot be considered as a full disclosure of the item in analysis (BDO, 2019). For what concerns Development and training, even if the median suggests an overall total compliance with the item, there are companies that fail to disclose, and this is mostly because they fail to calculate detailed information as required by the framework.

Looking at the overall total of the framework’s analysis, we can note that the mean stands at almost 40 points, resulting in a clear improvement compared to 36.67 of the previous detection. Of course, the statistic that shows the biggest betterment is the standard deviation, halved compare to 2017, from 6.92 points to 3.74. The minimum level of disclosure also marks a high improvement, from 23 to 32 in 2019. Here again, these betterments demonstrate the great attention that companies are paying to ESG issues, also in the view that from 2020 the lack of disclosure of an element could be perceived as more serious by the Exchange. This is due to the various mandatory constraints that will be inserted, and therefore may generate consequences also in legal terms for those companies that fail to disclose. Findings developed for each item and organized into Subject Areas and categories are illustrated in the table below.

Table 10 Results by Subject Area and category of the Guide in 2019

Subject Area	Aspect	Min	Max	Mean	Median	Standard deviation
Environmental	1. Emissions	6	7	6.75	7	0.45
	2. Use of resources	5	6	5.5	5.5	0.52
	3. The environmental and natural resources	2	2	2	2	0
SUBTOTAL		13	15	14.25	14.5	0.97
Social	1. Employment	2	3	2.92	3	0.29
	2. Health and safety	4	4	4	4	0
	3. Development and training	1	3	2.83	3	0.58
	4.Labour standards	2	3	2.92	3	0.29
	5. Supply chain management	3	3	3	3	0
	6.Product responsibility	1	6	3.67	3.5	1.61
	7. Anti-corruption	3	3	3	3	0
	8. Community investment	3	3	3	3	0
SUBTOTAL		19	28	25.33	25.5	2.77
TOTAL		32	43	39.58	40	3.74

Source: elaborated by the author

3.5.5 Measurement of frequencies

In order to have a deeper view on the items' disclosure and to better answer to the first research question, the empirical analysis goes further analyzing frequencies of the disclosures made in those years already taken in consideration by this study. In fact, frequencies provide a detailed picture of the compliance level and go deeper in understanding where companies lack to comply with or perform well. Calculation of frequencies are reported following the 2017 framework's layout, as it is more similar to the one that will come in force in July and therefore easier to compare in future researches. Even if the framework does not graphically correspond to the one used for the analysis of disclosures in 2013, content is the same and therefore the layout does not impact on the value of disclosures. Therefore, frequencies are divided into the two main Subject Areas already seen in the previous part of the empirical analysis, respectively Environmental (A), and Social (B) Subject Area.

Findings in the environmental area show how companies in Hong Kong pay a lot of attention in disclosing information about latter area: the importance of these information for companies but also for investors explains why KPIs related to the Area were the first to be upgraded on a "comply or explain" level. In particular, those concerning emissions are disclosed by almost all the companies since the first version of the Guide, reaching an almost-full disclosure in 2019. For what concerns the use of resources, companies show some difficulties in assessing precisely KPIs in latter Aspect: in particular, KPI 2.5 (Total packaging material used for finished products -in tonnes- and, if applicable, with reference to per unit produced) reveals to be the most controversial request among the others, due to the possible immateriality that such information can have in some type of activities. Even if a strong improvement has been recorded, this trend may be related to the upgrade of such item to "comply or explain", rather than an actual improvement in quality: however, while for all the other items of the framework companies reach almost a full disclosure of the required information, KPI 2.5 heavily lag behind other information in terms of disclosure. In fact, those companies that haven't disclosed the KPI usually refer at it in a too generalistic way, missing not only to disclose it but also without a reasonable explanation of why they fail to comply with it.

Frequencies' distribution per item are illustrated in the table below.

Table 11 Frequencies distribution in Environmental Subject Area

Environmental Subject Area	2013		2017		2019	
	Disclosed	Not disclosed	Disclosed	Not disclosed	Disclosed	Not disclosed
Emissions GD	12	0	12	0	12	0
KPI 1.1	8	4	10	2	10	2
KPI 1.2	11	1	12	0	12	0
KPI 1.3	9	3	11	1	12	0
KPI 1.4	7	5	12	0	12	0
KPI 1.5	9	3	12	0	12	0
KPI 1.6	9	3	12	0	11	1
Use of resources GD	11	1	12	0	12	0
KPI 2.1	11	1	11	1	12	0
KPI 2.2	9	3	12	0	12	0
KPI 2.3	10	2	12	0	12	0
KPI 2.4	6	6	10	2	12	0
KPI 2.5	3	9	6	6	6	6
Environmental and natural resources GD	12	0	12	0	12	0
KPI 3.1	8	4	12	0	12	0

Source: elaborated by the author

For what concerns the Social Subject Area, we can affirm that the most disclosed items are those related to the community investment. In fact, as we already said in the description of other findings related to the statistics, companies through social initiatives can affect consumers perception of the company, obtaining bigger consensus among stakeholders. In accordance to the research conducted by Aditi and Singh (2020), our results confirm the increasing pressure of social actors on companies' way of doing business, with a strong increase of community investment engagement by these companies; health and safety KPIs also performed quite well over the years, reaching a full disclosure in 2019. KPIs 6.1 (Percentage of total products sold or shipped subject to recalls for safety and health reasons.) is the less disclosed item looking at the three years. These findings are coherent with the previous analysis and confirm the fact that as this framework is not "one-size-fit-all" it's difficult for some companies to disclose information which is not considered material for them. Results are illustrated in the table below.

Table 12 Frequencies distribution in Social Subject Area

Social Subject Area	2013		2017		2019	
	Disclosed	Not disclosed	Disclosed	Not disclosed	Disclosed	Not disclosed
Employment GD	12	0	12	0	12	0
KPI 1.1	11	0	10	1	12	0
KPI 1.2	10	2	10	0	11	1
Health and safety GD	12	0	12	0	12	0
KPI 2.1	11	1	11	1	12	0
KPI 2.2	11	1	10	2	12	0
KPI 2.3	6	6	12	0	12	0
Development and training GD	12	0	12	0	12	0
KPI 3.1	11	1	8	4	11	1
KPI 3.2	11	1	11	1	11	1
Labour standards GD	12	0	12	0	12	0

KPI 4.1	6	6	8	4	12	0
KPI 4.2	5	7	11	1	11	1
Supply chain GD	12	0	12	0	12	0
KPI 5.1	11	1	9	3	12	0
KPI 5.2	10	2	8	4	12	0
Product responsibility GD	11	1	11	1	11	1
KPI 6.1	6	6	2	10	3	9
KPI 6.2	4	8	7	5	8	4
KPI 6.3	8	4	6	6	4	8
KPI 6.4	9	3	6	6	6	6
KPI 6.5	8	4	10	2	12	0
Anti-corruption GD	8	4	12	0	12	0
KPI 7.1	9	3	9	3	12	0
KPI 7.2	8	4	11	1	12	0
Community investment GD	6	6	12	0	12	0
KPI 8.1	5	7	12	0	12	0
KPI 8.2	5	7	12	0	12	0

Source: elaborated by the author

These findings can be useful in order to better assess the previous framework analysis and allows to better understand the data and statistics found thanks to the analysis. Furthermore, frequencies may be useful for future researches on the framework.

3.5.6 Forecast of disclosures in 2020

Based on the results obtained from the previous analysis, we tried to forecast how companies will disclose ESG information in 2020 following the new Guide introduction on 1 July. The following analysis of early adopters' behavior, forecast and table give an exhaustive answer to the second research question illustrated before in the chapter, providing a detailed forecast of how the introduction of the new Guide will impact on the disclosure practices of Hong Kong companies complying to the latter Guide.

First, it is important to remember that the Exchange may deem the non-disclosure of an item as an infraction of the Listing Rules, therefore once all the provisions will be upgraded to a "comply or explain" level, every breach may be considered as a breach of the Listing Rules. As we already said, given the mandatory constraints that will be inserted, the lack of disclosure of an element will generate consequences also in legal terms. This is one of the reasons why the revision of the Guide will be implemented from July 2020 rather than January of the same year: in fact, the Exchange decided to give companies more time to get ready for reporting these detailed information, in particular for the new items concerning the climate change impact, which can be difficult for a company to assess. This choice adopted by the Exchange also influenced the forecast on the Guide, which is encouraging because of all the positive signs received by the companies' betterment and commitment but also by the attention payed by the Exchange in order to make it easier for companies to comply with the Guide. The decision to postpone the entry in force of the guide is coherent with the discussion in the second chapter related to the 'positive non-interventionism' that characterize Hong Kong's government and how this hub is managed not only from the top institutions but also take in consideration how companies act (Lo et al., 2019).

Forecast of the statistics taken in consideration during the overall study are based on the two early adopters founded during the analysis of disclosure in 2019, which were two on twelve. As we can see from findings, an almost overall disclosure level has been detected, therefore we expect the forecast to be coherent with these findings. The two early adopters' compliance level from where the forecast starts is illustrated in table below.

Table 13 Early adopters' disclosures per Aspect in 2019

Subject Area	Aspect	Company A	Company B
Environmental	1. Emissions	7	7
	2. Use of resources (on 6)	5	5
	3. The environmental and natural resources	2	2
	4. Climate change	2	2
SUBTOTAL		16	16
Social	1. Employment	3	3
	2. Health and safety	4	4
	3. Development and training	3	3
	4.Labour standards	3	3
	5. Supply chain management	5	5
	6.Product responsibility (on 6)	5	4
	7. Anti-corruption	4	4
	8. Community investment	3	3
SUBTOTAL		30	29
TOTAL		46	45

Source: elaborated by the author

After having identified early adopters' practices, we extended the level of disclosure to all the other ten companies in the sample. Forecast has been made considering that those companies already disclosing the item analyzed in 2019, consequently that have already registered "1" when using the dichotomous scale, will continue to do that in 2020. After all, all the data has been inserted in the framework and relative statistics have been calculated.

The new framework still presents two different Subject Area named Environmental and Social (as the 2017 Guide) but contains 48 items, respectively 17 in the Area A and 31 in the area B. These 5 new items refer in particular to the impact of the company on climate change: in Subject Area A, companies have to disclose policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer, along with the description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them (Item 4). In the Subject Area B, companies have to describe the practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored, along with those aimed at promoting environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored (Item 5). Lastly, there is a new KPIs requiring a description of anti-corruption training provided to directors and staff that has been introduced (KPI B7.3).

As we can see from the table containing the results reported below, for what concerns the Environmental Area, mean and median show an almost-full disclosure, also for what concerns the new item related to the climate change (both 16.5 on 17); the average disclosure level is calculated to be equal to 97%, and the standard deviation of the area is determined by Item 2 “Use of resources”. For what concerns the new entry in the guide, the “Climate change” Item (4), both the companies individuated as early adopters of the framework disclosed both General disclosure and KPIs, therefore we forecast that all the companies will disclose the Aspect. Furthermore, as the environmental area already has registered a high compliance, this hypothesis can be easily confirmed easily. Even if a forecast predicting a total compliance could be risky, all the conditions are right for this scenario to be realized.

Looking at the Social Subject Area, based on the latest report published by the companies we can affirm that, compared to the previous analyses, the overall disclosure level is expected to show an important betterment. There should just be some deviations in the operational item related to the product responsibility, which have revealed to be the most difficult item to assess also in previous analyses. However, the introduction of mandatory disclosure of materiality and how it is calculated will make easier to verify in what extent this item can be considered not-material for the company, improving also the overall quality of reporting and avoiding problems such as the already discussed “box-ticking” issue. In fact, results of the forecast suggest a slight improvement in the disclosure of product responsibility, but still not at the same level of other items in the Area. Anyway, the increased minimum disclosure of the Item has the possibility of being connected with the increased pressure that the Exchange exerts towards materiality within the reports, and therefore to a better analysis of the element, witnessing the effectiveness of the new measures.

Looking at the overall forecast, taking in consideration that the 2020 framework contains five more items, we can note how minimum level of disclosure is estimated to significantly increase compared to 2017, from 32 to 45. The average of disclosure is supposed to increase, from 92.05% to 96.35%. Furthermore, a clear decrease in standard deviation shows how the Guide is moving towards a more homogenous implementation by companies, lowering the statistic by almost two thirds. The results are categorized into Subject Areas and categories are illustrated in table below.

Table 14 Forecast of results by Subject Area and category of the Guide

Subject Area	Aspect	Min	Max	Mean	Median	Standard deviation
Environmental	1. Emissions	7	7	7	7	0
	5. Use of resources	5	6	5,5	5,5	0,52
	6. The environmental and natural resources	2	2	2	2	0
	7. Climate change	2	2	2	2	0
SUBTOTAL		16	17	16,5	16,5	0,52
Social	1. Employment	3	3	3	3	0
	2. Health and safety	4	4	4	4	0
	3. Development and training	3	3	3	3	0
	4.Labour standards	3	3	3	3	0
	5. Supply chain management	5	5	5	5	0
	6.Product responsibility	4	6	4,75	5	0,62
	7. Anti-corruption	4	4	4	4	0
	8. Community investment	3	3	3	3	0
SUBTOTAL		29	31	29,75	30	0,62
TOTAL		45	48	46,25	46,5	1,14

Source: elaborated by the author

Conclusions

The term 'ESG' was coined in 2004 in a landmark study entitled "Who Cares Wins" by the UN Secretary General and UN Global Compact in collaboration with the Swiss government. Although the issue has always been strongly linked to a Western vision of business, studies analyzing ESG practices in underdeveloped and developing countries such as Africa, South America and Asia are increasing exponentially, fueling a debate that has now taken global dimensions. The rise of China as a world power has overthrown the international chessboard and placed more and more attention towards the Asian area, consequently influencing the adjacent governments. In China, the enactment of Company law in 2008, whose Article 5 states that "a company must bear social responsibility", activated other similar mechanisms with the aim of creating green regulations and a greener business community. The commitment of China to the cause lead the Hong Kong Stock Exchange to step forward with the introduction of the ESG Reporting Guide and relative regulations within the HKEX Main Board Listing Rules, Chapter 13.91 in 2012, asking companies operating in the hub to disclose relevant information about environmental, social and governance management. After its introduction, the Guide went through different revisions, as illustrated in the first chapter of the study: one revision implemented in two phases in 2016 and 2017, and the most recent one in 2020.

The most significant change detected over the years is the upgrade of the disclosure level: the Guide was a recommended practice when introduced in the Main Board Listing Rules, also because companies that already disclosed those kind of information followed the GRI standards, which were much more spread worldwide. The Guide became mandatory for companies after the revision in 2016. Even if the disclosure was requested from the Exchange, items inside the Guide still had two types of disclosure level: those related to the environmental area respond to a "comply or explain" approach, while KPIs in the Social were just disclosed on a voluntary basis, as still considered a recommended practice. Although the general disclosure of Aspects was supposed to be fully disclosed, only after the revision of 2019 the Guide reached a full implementation: in particular, all the Aspects were required to be disclosed on a "comply or explain" level. Furthermore, the Exchange introduced the mandatory request of descriptive elements to enhance reporting quality, such as Governance structure, reporting principles and reporting boundaries.

One of the peculiarities of the legislative process for the enactment of the Guide is the mutual exchange between the institutions and those directly involved, namely the companies listed in Hong Kong. In order to understand the context in which the Guide has been developed, along with drivers and barriers that characterize the implementation of the Guide, a review of the existent literature on ESG practices revealed to be essential. In fact, this study goes deeper in analyzing the cultural variable that may affect ESG reporting in Hong Kong, also giving some examples of how those practices affect financial and economic performances of companies involved.

Firstly**,** evidence collected by the study proved that long termism individuated by Hofstede in the society of Hong Kong is not coherent with the practices implemented when doing business. In fact, later studies revealed how economic players in the area are driven by short-termism, thus not considering ESG information, as this type of information generates opportunities and risks in a longer-term (Ktk, 2017). This characteristic may undermine the effectiveness of ESG information in the hub, as in the short term ESG practices result to generate a negative impact, and therefore companies may prefer to invest elsewhere.

On the other hand, other aspects have been found to affect positively the development of latter practices in Honk Kong: first, Confucianism played an important role in the development of this kind of social practices, as the attention paid to others is fundamental for the harmony in the society. However, the impact of Confucianism has been gradually weakening (Gao, 2009), which may explain why initial steps in ESG have only been taken in the more recent years, generally lagging behind western institutions. Anyway, the main goal of CSR, following a Confucianism view, is to embrace responsibility for the company's decisions and encourage companies to have a positive impact on society and the environment when doing business (Hofman et al., 2017). Of course, we have to consider that Confucianism not only affects the point of view of Chinese managers but also characterize investors' way of doing business, creating an unstoppable flow of information between the two. This is why considerations has been drawn also for what concerns the relationship between the Government and the institutions at large, along with all the economic actors.

In particular, the HKSAR government is renowned for its 'positive non-interventionism' policy in regulations, and this approach revealed to be consistent also with ESG and CSR initiatives. In particular, the publication of consultation papers is a clear signal of the complementarity that exists between a top-down national policy and market-based financing, which may induce political and economic incentives. Thus, the hub can be categorized as a competitiveness-seeking system, as it looks for a 'value capturing strategy' to enhance its international competitiveness and the value of the companies running their business in Hong Kong, by supporting their activities and listening to their requests. However, overall policymaking process appears to be stock exchange-driven rather than corporate-driven (Lu, 2016).

To sum up, culturally speaking we can affirm that Hong Kong seems to be breeding ground for the development and the achievement of great results in ESG Reporting. The many points in favor of these practices are confirmed by the empirical results that show a clear improvement in performances over the years. The legal system proves to be a great ally of companies, especially by complying with the requests of interlocutors and by avoiding forcing practices which may damage the quality of the information issued.

For what concerns the economic side of the matter, even if researchers were sceptic about the implementation of ESG strategies at the very beginning, more recent studies show how these strategies may generate in the long run real positive benefits for the companies. In fact, the largest part of literature refers to a win-win paradigm, which states that economic, environmental and social sustainability aspects can be achieved simultaneously. The paradigm has been analyzed on both financial and economic side, in order to understand to what extent ESG initiatives may undermine or generate benefits for the companies (Byggeth & Hochschorner, 2006; Byl & Slawinski, 2015; Hahn et al., 2010). Evidence suggests that firms with better ESG disclosure result to be more attractive to both investors and other major stakeholders, thus gaining a competitive advantage that may cover the possible trade-off between economic and environmental benefits.

ESG has been often analyzed under the financial lens, and the most prominent result is a U-shaped relationship between CSR performance and CFP: CSR can be profitable only after a certain threshold amount of investment and achievement regarding CSP has been made (Nollet et al., 2016). Furthermore, ESG reporting provide relevant information for investors in order to address investment decisions and shape investment plans, consequently affecting long-term value of company's securities (Wong, 2017). Different is the positions revealed for what concerns stock value: in fact, there is no significant impact on stock value by inclusion or exclusion in Sustainability Index. Findings show that the market reacts positively to ESG initiatives, but the evidence is rather weak (Lo & Kwan, 2017). Therefore, the overall situation suggests that if on one hand a curvilinear relationship is confirmed between CSP and ROA/EPS, on the other there is no statistically significant relationship between CSP and ROE, or market-based measures P/E ratio and stock return (Wang et al., 2016).

As anticipated from the previous findings, the most controversial aspect of ESG is that in the short-term it represents a cost for the company rather than a benefit, and therefore companies may be sceptic about its implementation. However, according to the United Nations Sustainable Stock Exchange (SSE) initiative, all big companies are expected to report their impact from environmental and social practice by 2030 at the latest (Sustainable Stock Exchanges (SSE), 2015). Results from a study conducted on GRI practices indicate that the benefits of the adoption of the guidelines represent a positive signal in social responsibility and tend to compensate the company in an adequate measure for its associated costs and required investment (Yang et al., 2019). Even if a lot of studies have been conducted, researchers still do not have a homogeneous and clear position with regard to a possible bond between those practices and business performances. Nevertheless, a recent study conducted by Li et al. in 2019 on Chinese corporates reveals that CSR is beneficial to a company’s performance (Li et al., 2019) .

An important feature for what concerns the possible impact of ESG practices on economic performance is represented by transparency of the information and consequently the actions taken by the exchanges all over the world. In fact, if on one hand mandatory disclosure may help the development and spread of these practices, on the other hand this may represent a big obstacle for SMEs to overcome, as the above-mentioned initial costs that cannot be recovered in the short term. However, evidence reveals that regulations have a significant positive effect on the level of ESG disclosure: on average, the effect of the regulation on companies has been value-enhancing rather than value-destroying (Ioannou & Serafeim, 2012). These findings are coherent with the empirical results obtained from the present study, as explained next.

As a matter of fact, our results lack of a strong literature which to make comparison, as ESG practices in Hong Kong is a quite new practice and not fully analyzed, if not just looking at the mere “legalization” of the Guide itself. However, this complete overview may be useful to understand not only how the Exchange is managing its role as GFCC, but also to set up new researches related to the economic side of the matter.

The research questions on which the study is focused are basically two. The first aims at measuring to what extent companies in Hong Kong adopting HKEX ESG Reporting Guide and to what extent do they comply with the disclosure of the items contained in the Guide. The second one asks if is possible to forecast how companies will implement the new Guide.

In order to answer to those questions, a sample of 12 companies based in Hong Kong and listen on the DJSI have been used. Findings suggest that best in class in ESG reporting are mainly companies from the tertiary sector. However, a disclaimer has to be done since sampled companies are part of a family of best-in-class which do not represent the entire business environment in Hong Kong. Furthermore, the number of sampled companies represent just a small portion of the entire Index, as well as the economic actors in Hong Kong, and therefore cannot be considered quantitative relevant: thus, a margin of inaccuracy is expected, and the overall phenomenon in the hub cannot be accurately represented by this study. As already highlighted in the literature analysis, we have seen that ESG not only represents a competitive advantage under many points of views, but it could guarantee to those companies adopting the strategy a first mover advantage that can strongly impact on positioning in the national and international market.

The first research question finds evidence in the analysis of the frameworks, and more in details in the description of the frequencies over the relevant years, namely 2013, 2017 and 2019. After the content analysis of the reports taken in account, a dichotomous scale is used for the evaluation of the standard individuated as crucial for the three frameworks of reference. The second question aims at forecasting the level of disclosure expected in 2020: the forecast has been based on the reports of two early adopters' report founded to implement the new Guide already in 2019.

Looking at the statistics calculated on the three frameworks, we can assume that the entire journey of ESG in Hong Kong has successfully made significant changes and reached an important milestone. In fact, after the introduction of the Guide companies shown a crescent commitment not only to the Guide itself and the mere level of compliance, but also to all of what ESG practices and initiatives can be, becoming an example of strong commitment. Of course, Hong Kong's position in the global economy play a relevant role, as its companies have to be competitive all around to be able to face global competition, and therefore are pushed and encouraged to comply with the highest level of standards possible. This is also a consequence of the fact that Hong Kong has been identified as the Global Financial Centre of China, and therefore is pressured from

Mainland. In this case, even though a top-down approach is suggested, the implementation of the Guide and relative requirements has always been through consultation with the business community, confirming again the market-based approach that can be found in literature (Lu, 2016).

Even if ESG Reporting just developed in the last decade, results from Hong Kong are important and are evidence of a strong commitment to the cause, with an equally strong improvement from one regulation to another in terms of compliance. This compliance can be seen from the homogeneity that has developed over the years, testifying a widespread commitment and willingness to improve company's performances. To sum up, we can say that Hong Kong's companies even if they still represent a small percentage of the companies listed in the DJSI, prove to be ready to participate in this new green financial system that Exchange are developing, aiming at a leading role and accepting the challenge of those countries already better integrated into the context.

Hong Kong's companies revealed to have fully implemented ESG Reporting Guide from its mandate in the Main Board Listing Rules. However, the Guide obtained success already in its first year of introduction, overcoming the implementation of GRI standards (10 vs 8 adopters). This clear picture can, without any doubt, represent the answer to the first research question.

Community involvement seems to be the easiest but also the most disclosed area of the Guide, as it was the first to reach a full compliance from companies: findings are coherent with the literature that, in fact, describe this lately trend of ESG to focus a lot more on the social area rather than the environmental one. This shift indicates the importance of the social dimension inherent in sustainable development and goes beyond the mere ethical dimension among the firms and the economy (Aditi & Singh, 2020).

For what concerns the second research question, the findings forecast an extremely positive situation. Results are coherent with the literature on the impact of mandatory disclosures in ESG: in fact, the entry in force of more demanding items generates a positive response from companies, and therefore reporting records a significant betterment in the overall level of compliance. Results from the Environmental Subject Area suggest an almost total compliance with requirements, providing significant evidence that the environmental issue is almost completely integrated in the core business, confirming the positive trend detected over the last decade (Ng, 2018). Both companies individuated as early adopters have disclosed Climate Change Aspect and relative KPIs, therefore we expect a total disclosure also from all the other companies in the sample. This hypothesis, even if hard to be confirmed, finds its basis also on the fact that the implementation of this change has been postponed to 1st July 2020 rather than 1st January, consequently leading to higher expectations on the overall level of adherence to the standard. The Social Area presents a strong improvement from previous years, confirming that companies are more and more oriented to the social issue rather than those merely related to the environment. As we have seen throughout the study, Aspects in this Area are particularly affected by materiality issue, as two Aspects (namely B5 and B6) are closely related to the operational side of the companies, and therefore may be considered immaterial for those companies operating in the tertiary sector. However, as materiality assessment will be mandatory from 2020, we expect that companies will take more serious the disclosure of such element and consequently assess the non-compliance on the basis of a certified immateriality of the Aspect. However, results may be connected to the competitive advantage highlighted in literature: those companies that aimed at gaining market share in the international context have to always do best in order to obtain a first mover advantage within the markets and reinforce their positioning. We also expect that companies based in Hong Kong and listed in the DJSI will grow, as happened in the previous years.

Future researches may be addressed at understanding if the findings of this study are confirmed in 2020, and if not, the cause of the missed compliance. Other possible future researches may compare these findings with economic variables, as we have seen in literature, and based on a latter literature development of a sustainable map for companies in Hong Kong. Findings from this study may also be useful for those researches aimed at understanding ESG Reporting in Hong Kong from a different point of view, for example looking at the implementation of GRI standards, thus completing all around sustainability initiatives in the hub. Furthermore, future researches may analyze deeper Hong Kong's cultural system in order to understand how to overcome cultural differences when trying to formulate an integrated system for the reporting of ESG information.

However, as we have seen, ESG do not only refers to the economical side of a business but represents the deepest relation that a company may have with stakeholders on an international basis, including investors, people, governments, NGOs and competitors. Thus, as ESG has been proved to be a competitive advantage, companies should commit themselves in a continue rise of standards, in order to create a better and more conscious business not only for their own nation, but also in a global view of the problem.

Having regard to the international health emergency during which this study was completed, further analyses may be focused on how COVID-19 pandemic increases the importance of ESG information and how companies looked for publicity through the enactment of social and environmental policies during the pandemic.

The Golden Rule of Confucius has to be applied on an international basis, as people now more than ever, are aware, due to the COVID-19 pandemic, that no one saves himself and that the effort for a better world must be common. Globalization deleted boundaries and made all of us closer: every step towards a more conscious way of doing business may generate benefits for the entire world. Thus, all the environmental and social issues have to be considered in an international perspective: all of us must participate in the change, to ensure a better world and support a more conscious and responsible way of doing business, exploiting existing sustainability models such as ESG reporting, improving them and studying new and more effective ones.

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Appendices

Appendix I: ESG Reporting Guide Content in 2012

Subject Area	Aspect	Recommended disclosures
A.Workplace quality	1. Working conditions	Information on: a) the policies; and b) compliance and material non-compliance with relevant standards, rules and regulations on compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity and other benefits and welfare.
		KPI A1.1 Total workforce by employment type, age group and geographical region.
		KPI A1.2 Employee turnover rate by age group and geographical region.
	2. Health and safety	Information on: a) the policies; and b) compliance and material non-compliance with relevant standards, rules and regulations on providing a safe working environment and protecting employees from occupational hazards.
		KPI A2.1 Number and rate of work-related fatalities.
		KPI A2.2 Lost days due to work injury.

		KPI A2.3 Description of occupational health and safety measures adopted, how they are implemented and monitored.
	3. Development and training	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. Training refers to vocational training. It may include internal and external courses paid by the employer.
		KPI A3.1 The percentage of employees trained by employee category (e.g. senior management, middle management, etc.).
		KPI A3.2 The average training hours completed per employee by employee category.
	4. Labour standards	Information on: a) the policies; and b) compliance and material non-compliance with relevant standards, rules and regulations on preventing child or forced labour.
		KPI A4.1 Description of measures to review employment practices to avoid child and forced labour.
		KPI A4.2 Description of steps taken to eliminate such practices when discovered.
B. Environmental protection	1. Emissions	Information on: a) the policies; and b) compliance and material non-compliance with relevant standards, rules and regulations on air and greenhouse gas emissions,

		discharges into water and land, generation of hazardous and non-hazardous wastes, etc. Air emissions include NOx, SOx, and other pollutants regulated under national laws and regulations. Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. Hazardous wastes are those defined by national regulations.
		KPI B1.1 The types of emissions and respective emissions data.
		KPI B1.2 Greenhouse gas emissions in total (in tonnes) and where appropriate, intensity (e.g. per unit of production volume, per facility).
		KPI B1.3 Total hazardous waste produced (in tonnes) and where appropriate, intensity (e.g. per unit of production volume, per facility).
		KPI B1.4 Total non-hazardous waste produced (in tonnes) and where appropriate, intensity (e.g. per unit of production volume, per facility).
		KPI B1.5 Description of measures to mitigate emissions and results achieved.
		KPI B1.6 Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.
	2. Use of resources	Policies on efficient use of resources including energy, water and other raw

		materials. Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.
		KPI B2.1 Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kwh in ‘000s) and intensity (e.g. per unit of production volume, per facility).
		KPI B2.2 Water consumption in total and intensity (e.g. per unit of production volume, per facility).
		KPI B2.3 Description of energy use efficiency initiatives and results achieved.
		KPI B2.4 Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.
		KPI B2.5 Total packaging material used for finished products (in tonnes), and if applicable, with reference to per unit produced.
	3. The environmental and natural resources	Policies on minimizing the operation’s significant impact on the environment and natural resources.
		KPI B3.1 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.
C. Operating Practices	1. Supply chain management	Policies on managing environmental and social risks of supply chain.
		KPI C1.1 Number of suppliers by geographical region.

		KPI C1.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.
	2. Product responsibility	Information on a) the policies; and b) compliance and material non-compliance with relevant standards, rules and regulations on products and services health and safety, advertising, labelling and privacy matters relating to products and services provided and method of redress.
		KPI C2.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons.
		KPI C2.2 Number of products and service-related complaints received and how they are dealt with.
		KPI C2.3 Description of practices relating to observing and protecting intellectual property rights.
		KPI C2.4 Description of quality assurance process and recall procedures.
		KPI C2.5 Description of consumer data protection and privacy policies, how they are implemented and monitored.
	3. Anti-corruption	Information on: a) the policies; and b) compliance and material non-compliance with relevant standards, rules and regulations

		on bribery, extortion, fraud and money laundering.
		KPI C3.1 Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.
		KPI C3.2 Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.
D. Community involvement	1. Community investment	Policies on community engagement to understand the community's needs in where it operates and ensuring its activities takes into consideration of communities' interests.
		KPI D1.1 Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).
		KPI D1.2 Resources contributed (e.g. money or time) to the focus area.

Source: elaborated by the author

Appendix II: ESG Reporting Guide content in 2017 (first revision)

Subject Area	Aspect	"Comply or explain" provisions	Recommended Disclosures
A. Environmental	1. Emissions	Information on: a) the policies; and b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. *Note: Air emissions include NO_X, SO_X, and other pollutants regulated under national laws and regulations.* *Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride.*	

		Hazardous wastes are those defined by national regulations.	
		KPI A1.1 The types of emissions and respective emissions data.	
		KPI A1.2 Greenhouse gas emissions in total (in tonnes) and where appropriate, intensity (e.g. per unit of production volume, per facility).	
		KPI A1.3 Total hazardous waste produced (in tonnes) and where appropriate, intensity (e.g. per unit of production volume, per facility).	
		KPI A1.4 Total non-hazardous waste produced (in tonnes)	

		and where appropriate, intensity (e.g. per unit of production volume, per facility).	
		KPI A1.5 Description of measures to mitigate emissions and results achieved.	
		KPI A1.6 Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	
	2. Use of resources	Policies on efficient use of resources including energy, water and other raw materials. *Note: Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.*	
		KPI A2.1 Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kwh in	

		‘000s) and intensity (e.g. per unit of production volume, per facility).	
		KPI A2.2 Water consumption in total and intensity (e.g. per unit of production volume, per facility).	
		KPI A2.3 Description of energy use efficiency initiatives and results achieved.	
		KPI A2.4 Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	
		KPI A2.5 Total packaging material used for finished products (in tonnes), and if applicable, with reference to per unit produced.	
	3. The environmental and natural resources	Policies on minimising the issuer’s significant impact on the environment and natural resources.	

		KPI A3.1 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	
B. Social	1. Employment	Information on: a) the policies; and b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	
			KPI B1.1 Total workforce by gender, employment type, age group and

			geographical region.
			KPI B1.2 Employee turnover rate by gender, age group and geographical region.
	2. Health and safety	Information on: a) the policies; and b) compliance with relevant laws and regulations that have a significant impact on the issuer. relating to providing a safe working environment and protecting employees from occupational hazards.	
			KPI B2.1 Number and rate of work-related fatalities.
			KPI B2.2 Lost days due to work injury.
			KPI B2.3 Description of occupational health and safety measures adopted, how they are implemented and monitored.

	3. Development and training	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. *Note: Training refers to vocational training. It may include internal and external courses paid by the employer.*	
			KPI B3.1 The percentage of employees trained by gender and employee category (e.g. senior management, middle management).
			KPI B3.2 The average training hours completed per employee by gender and employee category
	4. Labour standards	Information on: a) the policies; and b) compliance with relevant laws and regulations that	

		have a significant impact on the issuer relating to preventing child and forced labour.	
			KPI B4.1 Description of measures to review employment practices to avoid child and forced labour.
			KPI B4.2 Description of steps taken to eliminate such practices when discovered.
	5. Supply chain management	Policies on managing environmental and social risks of the supply chain.	
			KPI B5.1 Number of suppliers by geographical region.
			KPI B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being

			implemented, how they are implemented and monitored.
	6. Product responsibility	Information on a) the policies; and b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	
			KPI B6.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons.
			KPI B6.2 Number of products and service related complaints received and how they are dealt with.
			KPI B6.3 Description of

			practices relating to observing and protecting intellectual property rights.
			KPI B6.4 Description of quality assurance process and recall procedures.
			KPI B6.5 Description of consumer data protection and privacy policies, how they are implemented and monitored.
	7. Anti-corruption	Information on: a) the policies; and b) compliance with relevant laws and regulations that gave a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	
			KPI B7.1 Number of concluded legal

			cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.
			KPI B7.2 Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.
	8. Community investment	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	
			KPI B8.1 Focus areas of contribution (e.g. education, environmental

			concerns, labour needs, health, culture, sport).
			KPI B8.2 Resources contributed (e.g. money or time) to the focus area.

Source: elaborated by the author

Appendix III: ESG Reporting Guide from 1st July 2020

Subject Area	Aspect	*"Comply or explain" provisions
A. Environmental	1. Emissions	Information on: a) the policies; and b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. *Note: Air emissions include NO_X, SO_X, and other pollutants regulated under national laws and regulations.* *Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride.* *Hazardous wastes are those defined by national regulations.*
		KPI A1.1 The types of emissions and respective emissions data.
		KPI A1.2 Greenhouse gas emissions in total (in tonnes) and where appropriate, intensity (e.g. per unit of production volume, per facility).
		KPI A1.3 Total hazardous waste produced (in tonnes) and where appropriate, intensity (e.g. per unit of production volume, per facility).

		KPI A1.4 Total non-hazardous waste produced (in tonnes) and where appropriate, intensity (e.g. per unit of production volume, per facility).
		KPI A1.5 Description of measures to mitigate emissions and results achieved.
		KPI A1.6 Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.
	2. Use of resources	Policies on efficient use of resources including energy, water and other raw materials. *Note: Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.*
		KPI A2.1 Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kwh in '000s) and intensity (e.g. per unit of production volume, per facility).
		KPI A2.2 Water consumption in total and intensity (e.g. per unit of production volume, per facility).
		KPI A2.3 Description of energy use efficiency initiatives and results achieved.
		KPI A2.4 Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.
		KPI A2.5 Total packaging material used for finished products (in tonnes), and if applicable, with reference to per unit

		produced.
	3. The environmental and natural resources	Policies on minimising the issuer's significant impact on the environment and natural resources.
		KPI A3.1 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.
	4. Climate change	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.
		KPI A4.1 Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.
B. Social	1. Employment	Information on: a) the policies; and b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.
		KPI B1.1 Total workforce by gender, employment type, age group and geographical region.
		KPI B1.2 Employee turnover rate by gender, age group and geographical region.

	2. Health and safety	Information on: a) the policies; and b) compliance with relevant laws and regulations that have a significant impact on the issuer. relating to providing a safe working environment and protecting employees from occupational hazards.
		KPI B2.1 Number and rate of work-related fatalities.
		KPI B2.2 Lost days due to work injury.
		KPI B2.3 Description of occupational health and safety measures adopted, how they are implemented and monitored.
	3. Development and training	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. *Note: Training refers to vocational training. It may include internal and external courses paid by the employer.*
		KPI B3.1 The percentage of employees trained by gender and employee category (e.g. senior management, middle management).
		KPI B3.2 The average training hours completed per employee by gender and employee category
	4. Labour standards	Information on: a) the policies; and b) compliance with relevant laws and regulations that have a significant

		impact on the issuer relating to preventing child and forced labour.
		KPI B4.1 Description of measures to review employment practices to avoid child and forced labour.
		KPI B4.2 Description of steps taken to eliminate such practices when discovered.
	5. Supply chain management	Policies on managing environmental and social risks of the supply chain.
		KPI B5.1 Number of suppliers by geographical region.
		KPI B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.
		KPI B5.3 Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored. suppliers, and how they are implemented and monitored.
		KPI B5.4 Description of practices used to promote environmentally preferable products and services when selecting
	6. Product responsibility	Information on a) the policies; and b) compliance with relevant laws and regulations that have a significant impact on the issuer

		relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.
		KPI B6.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons.
		KPI B6.2 Number of products and service related complaints received and how they are dealt with.
		KPI B6.3 Description of practices relating to observing and protecting intellectual property rights.
		KPI B6.4 Description of quality assurance process and recall procedures.
		KPI B6.5 Description of consumer data protection and privacy policies, how they are implemented and monitored.
	7. Anti-corruption	Information on: a) the policies; and b) compliance with relevant laws and regulations that gave a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.
		KPI B7.1 Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.

		KPI B7.2 Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.
		KPI B7.3 Description of anti-corruption training provided to directors and staff.
	8. Community investment	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.
		KPI B8.1 Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).
		KPI B8.2 Resources contributed (e.g. money or time) to the focus area.

Source: elaborated by the author

Appendix IV: Sample of companies

Name	**Index**	**Sector**
Shangri-La Asia Ltd	Asia Pacific	Consumer Services
Hang Seng Bank Ltd	Asia Pacific	Banks
Hong Kong Exchanges & Clearing Ltd	Asia Pacific	Diversified Financials
Hang Lung Properties Ltd	Asia Pacific	Real Estate
Link REIT	Asia Pacific	Real Estate
New World Development Co Ltd	Asia Pacific	Real Estate
Swire Pacific Ltd	Asia Pacific	Real Estate
Swire Properties Ltd	Asia Pacific-World	Real Estate
MTR Corp Ltd	Asia Pacific	Transportation
CLP Holdings Ltd	Asia Pacific	Utilities
Power Assets Holdings Ltd	Asia Pacific	Utilities
WH Group Ltd	Emerging Markets	Food, Beverage & Tobacco

Source: elaborated by the author

Ringraziamenti

Quando due anni fa ho intrapreso questo percorso, per me è stato come un salto nel vuoto. Le paure e le incertezze erano tante, ma sapevo che questa era la strada giusta da intraprendere, ed essere già giunti al termine un po' mi rattrista. Le nuove esperienze che ho avuto la fortuna di vivere le ricorderò sempre con immensa gratitudine e sincera commozione, perché solo chi c'è passato può capire l'importanza, la difficoltà, la gioia ma anche la perplessità che tutto ciò che è nuovo può regalarti, e quanto sia difficile buttarsi e uscire dagli schemi facendo scelte azzardate. L'adrenalina mista a paura che ha caratterizzato questo percorso mi ha insegnato a ricercare la felicità nelle piccole cose, e mi ha restituito gli occhi del bambino che avevo un po' perso negli ultimi anni. Ho imparato ad accettare i miei limiti, a trovare i miei punti di forza, mi ha dato l'opportunità di essere la Martina che volevo.

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Ci tengo a ringraziare innanzitutto la mia relatrice, la Prof.ssa Cordazzo, per essersi dimostrata disponibile e comprensiva fin dal nostro primo incontro, nonostante l'elaborato sia stato poi preparato interamente a distanza. Alla fine del corso di Accounting sapevo che l'avrei voluta come relatrice e a posteriori confermo la grande professionalità e umanità con la quale ha saputo gestire il nostro rapporto e la stesura della tesi in un momento delicato come questo.

Grazie alla mia famiglia, in primis ai miei genitori per aver creduto in me e avermi permesso non solo di vivere da fuori sede, ma anche di partire per uno stage a Pechino.

Ogni mio successo è anche vostro, anzi è tutto per voi che mi spronate quotidianamente a fare di meglio. Ma soprattutto vi ringrazio per avermi cresciuta educata e disponibile verso chiunque avesse bisogno, per avermi insegnato ad ascoltare e fare tesoro di tutto ciò che ci circonda, a “fà ballà l’oeucc”. Non importa dove sia, in quale lingua parli o con chi, nessun percorso formativo sostituirà mai l’educazione e il rispetto che mi avete insegnato, e di questo ne vado estremamente fiera.

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E infine una seconda menzione spetta a Rachele! Sei piombata nella mia vita all'improvviso e ovviamente non in punta di piedi, dato che ovunque tu vada riesci a far casino- persino alle tombe Ming. Senza di te questo percorso sarebbe stato totalmente differente, e così lo sarei anche io. La cosa che preferisco di te è come tu riesca a farmi sentire speciale, amata, apprezzata sempre nonostante le mie scelte opinabili (per non dire sbagliate) o i miei lunghi momenti di silenzio. E come nonostante anche tu non mi faccia dormire sogni tranquilli, riusciamo sempre a venirci incontro e a non giudicarci, a guardare oltre e vedere quanto sia grande il nostro bene. Tante cose che non si possono spiegare, ma solo viverle e godersele. Sei stata il mio vero tesoro in questo percorso, e non vedo l'ora di vedere cosa ci aspetta ora.