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Business Consultancy Project's Topic:

The ESG Investing imperative impact in M&As and how ESG can alter the valuation of an M&A transaction.

The paradigm of the natural resources sector.

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**The promise of an ESG economy is bigger
than the financial reward**

I. Abstract

The fast expansion of the ESG is expected to influence the business ecosystem holistically and to that extent the M&A activities will be impacted too. In this thesis report, our hypothesis that has been researched and discussed, it supports that ESG will impact M&As and the valuation of targets in the M&A context for the natural resources sector. Fifteen professionals and practitioners with multiple years of experience in the investment banking, M&A, valuation advisory, natural resources and ESG advisory have been interviewed. The interviewees were located in 4 different continents and in some cases, there was an overlap (i.e.: experienced former investment banker currently working as CxO in a listed mining company, or former oil and gas executive currently working as CxO for developing renewable energy projects, etc...) in their prior experience so to cover the subject as accurately as it could be.

The findings validated our hypothesis, which drawn from a plethora of different academic research reports as well as from the interviews. Findings show that ESG impacts the M&A transactions, the valuation of the target companies in an M&A, while more specifically the factors that impact the valuations are pressure from investors, the cultural fit between target and acquirer, the pressure from the regulatory frameworks and the limited availability of targets that are ESG motivated. Lastly, the climate change related risks proved to have a high and medium impact in the valuation in the M&A context.

On the non-valuation aspect, findings supported that the due diligence process is impacted as well as the decision-making process in the post-M&A integration period with the interviewees to reply that ESG officers should participate in the Executive Committees and that management should consider environmental risks alongside with the social and governance ones.

II. Acknowledgments

Many thanks, should go to my supervisor, Dr. Christos Grose, this work would not have been possible without his feedback and helpful suggestions. Lastly, I must thank my wife Avra and my daughter Jennie for constantly supporting me throughout this two years journey.

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III. Table of Acronyms, Glossary, and Symbols

CSR: Corporate Social Responsibility

ESG: Environmental, Social, Governance

M&A: Mergers and Acquisitions

JV(s): Joint – Venture(s)

WACC: Weighted Average Cost of Capital

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1. Chapter 1: Introduction

In 1970, [Milton Friedman](#) published an article for The New York Times newspaper, titled "A Friedman doctrine: The Social Responsibility of Business Is to Increase Its Profits" ([Times,1970](#)) where he was arguing that an organization's responsibility is to its shareholders while has no social responsibility to the public or to the society. Later, one of the famous pushbacks is the Business Roundtable's ("BR") statement in 2019 ([BRT,2019](#)), and according to it there is an interconnection and interaction between all the stakeholders, (namely equity-holders, investors, the board members, the local communities, the vendors, the management team, the employees, and the debtholders). After all shareholders are stakeholders too. The above-described arguments sparked a new discussion between shareholder capitalism versus stakeholder capitalism. Nowadays a discussion regarding sustainability and the role of the adaptation of the Environmental, Social and Governance (ESG) frameworks in the business world gradually becomes a necessity, as except of the social and the governance issues organizations face the significant importance of environmental issues and the climate crisis.

The topic that will be discussed and unpacked is the impact of the ESG in a company's valuation in the context of mergers and acquisitions (M&As) and more particularly for companies in the natural resources space, since natural resources sector is expected to be one of the most ESG heavy sectors. Natural resources sector includes the energy / renewable energy, metals, mines/minerals and in some cases the agriculture verticals. But why ESG matters? Mainly for two reasons: (i) because more increasingly today, the companies' value is associated to their intangible assets and ESG can contribute on this intangible assets valuation; and (ii) climate change and its associated risks is a behemoth topic, with widespread uncertainty that the society should confront

while according to the International Energy Agency ([IEA,2021](#)) a value of approx. USD \$100 trillion of investments by 2050 is associated to the transition to a net zero emissions economy.

So as the sustainability discussion becomes crucial, this report attempts to explore and reply on (a) the ESG investing imperative impact in M&As, and (b) how ESG can alter the valuation of an M&A transaction, in the natural resources sector. The practical side of the above questions could indicate how the incorporation of ESG factors in an M&A transaction process could impact the valuation (economic value) of a company (in the natural resources sector). The report will also explore (the above-mentioned questions) and discuss through interviews with experienced professionals the steps of an M&A transaction both during the pre-M&A and the post-M&A periods.

Our hypothesis is that the adaptation of ESG would impact the valuation of a company in the M&A context. The available literature discusses the impact of the Corporate Social Responsibility (CSR) and of the ESG (as the progress of the CSR) in the companies' valuation in M&A transactions. Although a number of M&A transactions have been reviewed and studied from the available literature, in different geographies and for different business sectors, the results of the ESG's impact in M&A transactions in the natural resources sector is still quite limited. In addition, since ESG's development is recent and as ESG investments are continuously increase, we expect that changes will continue and more impact in the M&A process and valuations will be seen.

The author of the report collected qualitative and quantitative data through the interviews he conducted with fifteen (15) of professionals from the natural resources sector with most of them having prior experience and knowledge of the M&A process (either due to their occupation as investment bankers and corporate finance professionals or due to their involvement /participation in the natural resources industry) as well as from their involvement in the sustainability space as consultants, and in any case all the interviewees have been exposed either in the M&A process or are

working in the natural resources space (in some cases they have both attributes, i.e.: former investment bankers and/or consultants who became C-level employees in mining companies). This interviewing process gave the opportunity to the author to perform a deep dive in the experience and knowledge of the interviewees and obtain a well-articulated view of the current situation globally, given the interviewees are located in 4 different continents. Moreover, some of interviewees have global exposure since the organizations they are working for, own natural resources assets and had activities in different countries. In addition, the thematic analysis methodology in this dissertation allowed to extract meaningful data during the interviewing process, this also helped to present the extracted data with a simple way. The interviews mostly took place through video calls and audio calls due to the presence of the interviewees in different countries (with the exception of two interviews that took place on an in-person mode), and all of the interviewees have been expressly informed that their identity will remain confidential and known only to the interviewer. Lastly, in some cases the fact the interviewer had the ability to return to some of the interviewees to validate and clarify some of their replies should be considered significant in terms of reliability.

In the following chapters, will be presented the literature that has been studied/reviewed, the research methodology the author followed since this is an interview-based report, as well as the results/findings, conclusions, and the recommendations.

2. Chapter 2: Literature Review

ESG term is used massively nowadays. However, it all started by the American economist Howard Bowen who used the term Corporate Social Responsibility (CSR) in his book ([Bowen,1953](#)). Later in 1971, the US based Committee for Economic Development (*CED, 1971*) introduced the concept of “social contract” between business & society and the global discussion about Corporate Social Responsibility became more vivid. In 1994 the term “Triple Bottom Line” (TBL) has been introduced, by John Elkington in his book ([Elkington,1994](#)) where the companies should be simultaneously prepared for their bottom line, their people account, and their planet account (also known as People – Planet – Profit). The discussion regarding ESG became more vivid from 2005 onward, when the UN Global Compact issued the “Who Cares Wins” report ([United Nations,2005](#)), where institutional investors, asset managers, research analysts, consultants, government bodies and regulators participated and concluded that better investment could drive to more sustainable communities. In this report included a set of instructions on how to incorporate ESG in the investing process. In 2015, the United Nations set 17 Sustainable Goals that encourage “*companies to adopt sustainable practices and reporting*” through “The 2030 Agenda for Sustainable Development” ([United Nations, 2015](#)) which is a more granular set of actions to transform the world.

2.1 ESG, M&A and valuations

The last years ESG metrics and frameworks became more and more vitally important (although not yet mandatory). Currently, the available literature is not quite extensive, but it is expected the coming years to have more scientific and empirical data available. The last years and especially after the COVID-19 pandemic, a turn into an ecosystem where organizations will also report non-mandatory non-financial ESG metrics started to appear as an informal prerequisite for an increasing

number of investors. Some interesting findings in the M&A context is that not positive value impact of ESG performance exists for acquirers ([Tampakoudis et al.,2021](#)) and respectively for their shareholders. According to this study ([Tampakoudis et al.,2021](#)) which reviewed and explored 889 M&A transactions of US companies during the period from January 1st ,2018 to July 31st, 2020 (first wave of Covid-19 pandemic) there is a negative association between ESG performance and value creation for M&A transactions. More specifically, according to the same study ([Tampakoudis et al.,2021](#)) the companies with high ESG score are more sensitive to an acquisition announcement, while companies with lower ESG scores have experienced positive impact for its shareholders from the announcement of their acquisitions. [Tampakoudis et al.\(2021\)](#) study conclusion that high ESG performance of a company does not increase the shareholders' valuation (in the M&A context) it is reflected mainly due to the Covid-19 pandemic. This specific finding could be considered in line with the rationale that during economic downturns like the one we faced during the pandemic companies' management could reallocate their capital spending so to cope with liquidity issues they may face instead of allocating capital to ESG related activities. This could probably be a valid explanation why the ESG evolution although voluntary in principle, has until today the essence of the obligatory task only for publicly listed and traded companies (i.e. the Sustainable Stock Exchanges Initiative ([SSEI](#)) as well as for companies that are backed by different type of institutional investors (i.e.: Private Equity / Venture Capital funds, Sovereign Wealth funds, Family Office investors, etc....). In other words, when companies face significant financial shocks, they prefer to allocate capital with a way that will allow them to survive rather than invest in long term activities like ESG adaptation.

It is also, worth noting that while based to Friedman's doctrine ([Friedman,1971](#)) the sole social responsibility of a company is to increase shareholders profits, there are additional related studies –

that didn't take place during the Covid-19 pandemic period [Crisostomo et al.\(2011\)](#) and [Brammer et al.\(2006\)](#) – supporting that Corporate Social Responsibility does not add value to companies. Although in both these studies, CSR holds the role of a proxy for what today is called ESG, these studies are not referring to the valuation of companies in the context of M&A transactions and they cover two disparate markets namely Brazil, which is a developing market ([Crisostomo et al.,2011](#)) and the United Kingdom, which is a developed market ([Bramer et al.,2006](#)), the results of both studies indicate a negative impact of the CSR to the companies valuation, with their common point of intersection being the environmental concerns.

However, there is a series of studies that performed outside the pandemic period that provide evidence there is a positive correlation between acquirer's and target's valuations and degree of sustainability, both during the deal processing and in the post-merger/post-acquisition integration period.

More specifically, according to [Caiazza et al.\(2021\)](#) research paper which reviewed 6,500 M&A transactions (in the hospitality sector) the results validated that ESG /sustainability is associated with improvements in financial ratios in the long-term for both the acquirers and the target companies. Also in the same study ([Caiazza et al.,2021](#)), it is worth noting the importance of the corporate culture integration (we will also discuss corporate culture in the findings in chapters 3 and 4) during the post-merger/post-acquisition era as well as that the improvements could be maximized if the acquirer is already a company with significant degree of sustainability/ESG performance or in other words with an ESG motivated culture.

Also, in [Deng et al.\(2013\)](#) study researched if Corporate Social Responsibility (“CSR”) could generate value for the acquirer. The results validated that acquirers with great degree of CSR performance receive greater returns during the M&A transaction period (i.e.: announcement) as well

as enhanced operating performance post-merger, in comparison to acquirers that have lower CSR performance. In addition, merger transactions executed by high CSR performing acquirers took less time to be concluded and bear limited possibility for the transaction itself to fail (due to lower degree of associated risks). The above-mentioned result – in [Deng et al.\(2013\)](#) depicts that corporate culture is a significant element of M&A transactions as CSR is corporate culture driven. So, these findings validate that CSR increase stakeholders value and shareholders wealth, in the M&A context.

Another evident is the study by [Tampakoudis et al.\(2020\)](#), which researched the effect of M&A on ESG performance and market value in 100 M&A transactions within the EU territory. According to the study there was an evolution in the socially responsible investment market, and this gradually obliged investors and asset management professionals to turn into using ESG scores so to value companies. The findings of the study by [Tampakoudis et al.\(2020\)](#) show that ESG performance of acquirers increased if they acquire a target with higher ESG performance than theirs. An in addition, the results of the [Tampakoudis et al.\(2020\)](#) study, partially proved a positive relationship between the post-merger valuation of an acquirer and the target's ESG performance (if the target has a higher greater ESG performance from the acquirers prior to the merger transactions then after the transaction the acquirer increases its valuation).

In addition, in the [Alexandridis et al.\(2022\)](#) study regarding the role of the corporate culture in international M&A transactions that took place in 22 developed markets, the results showed that a disconnect between CSR and corporate culture (in other words when CSR is not embedded in the company's corporate culture) for both the acquirer and the target could increase the possibility to not capitalize the potential synergies of an M&A transaction, as well as an increased risk of either delaying the M&A transaction completion or even not completing the M&A transaction. Moreover,

the target selection process, the post-merger / post-acquisition as well as the M&A financing options can be impacted by the lack of CSR.

Similar results have been shown in the [Aktas et al.\(2011\)](#) study, where the relation between the stock performance on mergers and acquisition of socially responsible investments is positively correlated to the acquirers gain when it acquires a socially and environmentally conscious target company. A very interesting finding in the [Aktas et al.\(2011\)](#) study is the usage of the “*Intangible Value Assessment rating (IVA)*”, introduced by Innovest (an investment portfolios consulting firm, based in Wall Street, New York, USA).

Moreover, in the annual edition of the global M&A outlook report for the year 2022 issued by the management consulting firm Bain & Company ([Bain&Co,2022](#)) according to a survey which the firm carried out among 281 M&A executives globally, it was found that: (a) 11% of the M&A executives assess ESG in the deal-making process; (b) 65% of the M&A executives expect their company’s focus to increase over the next 3 years; (c) companies that incorporate ESG into their M&A process have an advantage in achieving value creation; and (d) making ESG part of a deal thesis and benchmarking corporate priorities help companies to identify target assets that could generate economic value and/or increase their valuation in the future.

Cultural fit together amongst strategic fit, degree and speed of post-merger/post-acquisition integration is another factor which has positive impact on M&As, according to [Bauer et al.\(2013\)](#). Cultural fit – which is another intangible element of the ESG - has also been identified as a significant factor for successful M&As, during the interviews performed among fifteen (15) corporate finance and sustainability professionals and practitioners and the results are presented in chapter 4.

In addition, this is also validated by the research papers of ([Graham et al.,2016](#)) and ([Graham et al.,2022](#)) as it is mentioned that “54% percent of executives would walk away from an acquisition target that is a poor cultural fit, while another 33% would require discounts between 10%–30% of the purchase price of the target”, while in the same report it is indicated that corporate culture contributes to any firm’s value largely either in the M&A context or through standard corporate actions.

Moreover, according to a paper issued by Harvard Law School Forum on Corporate Governance paper ([Harvard Law School,2022](#)), the number of ESG investments have increased tremendously mainly due to availability of capital for this specific reason. In addition, ESG related regulations and standards may change the deal making process by adding parameters like climate change risks and social responsibility related factors that are expected to impose companies to do deals and impact the valuation (i.e.: ESG premium, also known as “greenium”) and the associated risks.

Lastly, according to a recent academic paper ([Bancel et al.,2023](#)) it is verified that ESG factors are incorporated within the valuation process given they mainly refer to intangible values and assets. The report also discovered this process of engaging ESG factors in the valuation (although not in the M&A context and not focused in the natural resources sector) of a firm is being used mostly by parties (stakeholders) that are not involved in the day-to-day management of the firms (namely the executives and/or managers) but from the shareholders, the debt providers. Also, investment banking professionals, advisors and valuation experts thrust for the usage of ESG in the valuation process.

2.2 ESG, M&A and the natural resources sector

The overall impact of ESG in the M&A context is crucial as indicated by the above-mentioned studies. Natural resources’ sector has already been impacted by the climate crisis and it is expected

to be impacted further as the sector's verticals which are energy (oil & gas, renewable energy), metals, mining are ESG heavy. The road to net-zero pledging (as far as the environmental part) anticipates different set of actions by the different actors of the sector and while for the mining and metal companies this could mean the closing or selling of assets that produce greenhouse gas emissions (i.e.: coal mines) or the restructuring of its human capital (i.e.: by hiring employees of underrepresented minorities or other labor related initiatives), for the energy companies could mean the acquisition of renewable energy assets or other targets that are ESG motivated and ESG conscious.

There is a plethora of M&A transactions in the energy sector. An academic paper issued recently ([Andriuskevicius et al.,2022](#)) has reviewed and researched M&A transactions in the energy sector, in combination with the sustainable development's elements and it discussed the different parameters of an M&A transaction which includes the process during the pre-merger/acquisition (target identification, due diligence, valuation) and the post-merger/acquisition. This paper ([Andriuskevicius et al.,2022](#)) uses the SALSA (Search-Appraisal-Synthesis-Analysis) framework as its main research methodology which is considered qualified and accurate for analysis and synthesis purposes in the context of literature review. According to [Andriuskevicius et al. \(2022\)](#) M&A activities and sustainability are interconnected and can interact both ways between them. Sustainability in the energy sector can influence merger and/or acquisition transactions while an acquirer can enhance its sustainability and ESG performance via acquisition of targets / assets with high ESG scores or performance. The [Andriuskevicius et al.\(2022\)](#) paper supports that energy companies should not stop taking into account their stakeholders' needs and requests and for that purpose to include ESG in their M&A activities (as well as in their reporting and in their operations). Moreover, incorporating ESG (and sustainability) in the M&A process, namely (i) in target selection

process, (ii) in the due diligence and (iii) during the post-merger/post-acquisition period could lead to better risk management of the M&A transaction (namely less number of mistakes) and to enhanced investment decision (which could mean a higher valuation).

Another research paper from [Niemczyk et al. \(2022\)](#) validated the research hypothesis on the changing motivations for M&A transactions in the energy sector. The [Niemczyk et al. \(2022\)](#) paper supports that there was a shift from M&A transactions for energy production purposes adjacent to green energy-related M&As, especially after 2015 (namely the year of Paris Climate Conference), when the green economy took a precedence for the Western European countries as well as for all the regions which moved towards to the rationale to enhance their energy mix with more green energy. The research clearly states that *“The motives are changing from positional approaches to motives closer to resource approaches (green economy).”* Amongst several motivations for M&As in the energy sector, the most important (for the period January 1st, 2015 to November 19th, 2021) is the *“business risk diversification”* aiming the acquirer to acquire a green energy company or green assets (wind farm, solar farm, etc....) so to enhance its energy mix, increase production capacity and at the same comply with the “net-zero” economy rules while diversify weather related risks.

In the same context, the [Bose et al.\(2021\)](#) study found that acquirers which generate high degree of carbon emission and /or have high carbon footprint acquire targets in countries with either low GDP or not strong environmental, governance or regulatory standards. Another interesting finding of the [Bose et al. \(2021\)](#) study is that investors do not like acquirers that claim the adopt CSR but at the same time they do not reduce their carbon footprint, as reducing carbon risk could increase shareholders value.

Lastly, in research from [Riedl \(2021\)](#) it is presented the energy transition risk in the fossil fuel companies' valuation. Energy transition is an integral part of the Environmental element of the

ESG and sustainability and as such it impacts the valuation of a company, which could have an impact during M&A transactions in the natural resources sector.

2.3 ESG Investing and access to finance.

Another element that impacts M&A valuation (both for targets and acquirers) is the access to finance as well as the cost of finance. In the investments space, the term ESG is often identical with that of Responsible Investments. According to the United Nations Principles for Responsible Investment ([UN-PRI,2022](#)) organization as of September 30th, 2022, 5,179 investors globally were signatories of the UN backed Principles for Responsible Investment (PRI) while as of March 30th, 2021, all the PRI signatories’ managed assets valuing USD \$121.3 trillion ([UN-PRI,2022](#)), up from less than USD \$6 trillion in 2006 ([UN-PRI,2022](#)). The chart 2.1 below presents the evolution of the available funds for responsible investments as well as the signatories of the Principles for Responsible Investments from 2006.

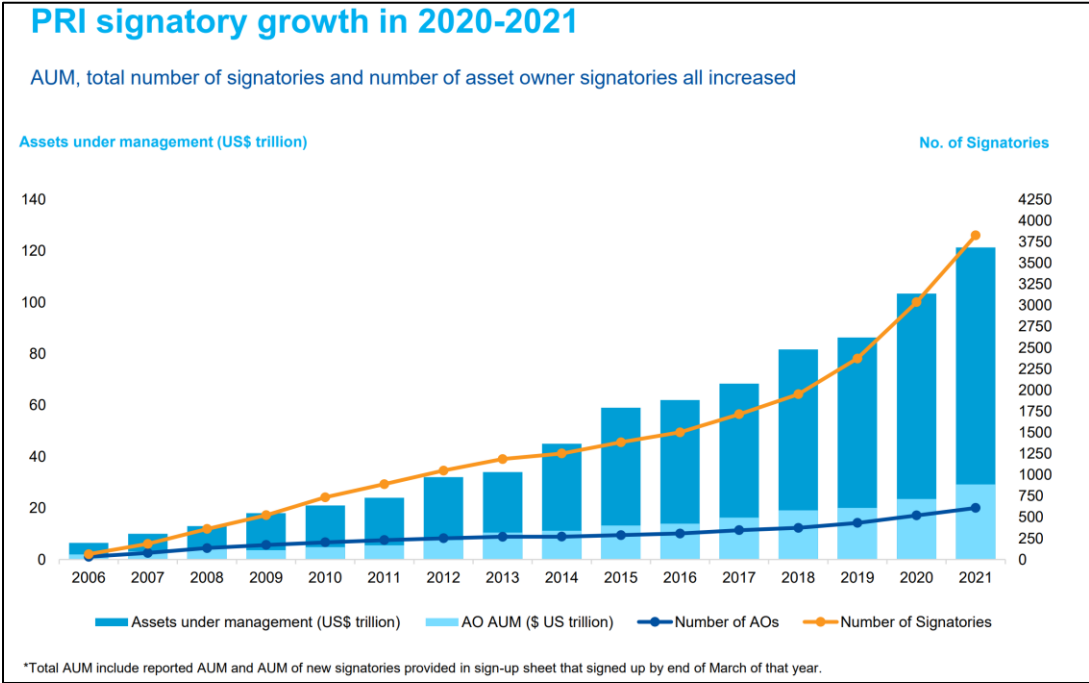


Chart 2.1 – PRI Signatory Growth 2006-2021 - Source: PRI Signatory Update Report, December 2022

Recently Larry Fink, the Chairman & CEO of Blackrock (the largest money-management firm in the world with more than USD \$10 trillion in assets under management) in his annual letters to the CEO's of the investee companies of Blackrock for the years 2019 ([Fink,2019](#)), 2020 ([Fink,2020](#)), and 2021 ([Fink,2021](#)) respectively, noted clearly that capital management, purpose and climate change can work together as far as there is a strategy in place.

Another notable investment manager with USD \$3.26 trillion under management, called State Street Global Advisors (a US based asset manager), the last years consistently was writing a letter to the CEOs of the companies it invested in, clearly stating that ESG is no longer an option and *“that addressing material ESG issues is good business practice and essential to a company’s long-term financial performance – a matter of value, not values”* ([Taraporevala,2020](#)).

In addition to the above, the [Cheng et al. 2014](#) academic research showed that companies with better CSR performance could have less difficulties to access capital and this is driven mostly by the social and the environmental elements of the CSR, while CSR is the proxy for ESG.

And lastly, according to a research performed by MSCI, ([ESG And the Cost of Capital, 2020](#)), companies with higher ESG scores are positively correlated to a lower cost of capital (both for cost of equity and cost of debt) irrelevant of the sector as well as lower risk exposure. The same applies for both the developed and the emerging markets, while high-rated companies experience an above average valuation and profitability.

2.4 Chapter Summary

This research has its foundations and it is based on reviewing the literature before and after the Covid pandemic with a critical view on the natural resources sector, which is considered ESG

heavy to its multidimensional nature that includes severe environmental element in combination with socially critical issues (i.e.: underrepresented minorities, child labour) and the paramount importance of corporate governance, especially in jurisdictions where governance is underestimated (i.e: emerging markets). It has highlighted the lack of previous works that could gauge and investigate the workforce perspective. In chapter 3 we will review the methodology in capturing qualitative information from practitioners, C-suite executives and consultants from the basic verticals of the natural resources sector (i.e.: renewable energy, oil and gas, metals and mining companies) as well as from the management / strategy consulting, M&A and capital markets industries.

3. Chapter 3: Research Design and Methodology

We have initially reviewed and performed a critical analysis of the literature and studied several academic research papers and other business reviews as well as studies, articles and white papers from internationally known strategic advisory / management consulting firms, which are specialized and experienced in numerous merger and acquisition transactions as well as currently are working in the sustainability / ESG investing and strategy space as discussed in Chapter 2. However, ESG Investing's impact on the valuation during M&A transactions can not yet be fully seen because all the actors, namely acquirers, target companies, stakeholders, investors and regulators are still working on setting up their priorities.

In order to sufficiently reply to the questions addressed in Chapter 1 we have engaged in obtaining information as well as real-life data from practitioners and highly experienced professionals. This Research Design and Methodology chapter provides detailed information regarding the research and the design utilized as well as unfolds the reasons behind the respective selections and also depicts how the author secured the accuracy of the process.

3.1 Methodology

Due to lack of vast number of research papers, and academic studies regarding the impact of the ESG on the valuation during M&A transactions, in the natural resources sector the author decided to initially research the impact that ESG has in M&A transactions in general – irrelevant of the sector. As a second step, the author utilized the data available from limited number of academic papers focused on different verticals of the natural resources, namely energy, metals and mining, as this is depicted in the chapter's 2 literature review. Also, the author used data from internationally known organizations (i.e.: UN-PRI: United Nations Principles for Responsible Investments) that are

related to sustainability, ESG and responsible investments ([Chart 2.1](#)) so to utilize updated and accurate information. In addition, a set of interviews have been conducted and the methodology followed is a thematic analysis of the information collected from these interviews, so to identify practices, topics and patterns observed repeatedly in the interviewees replies.

3.2 Research and Design

Due to lack of enough and closely- related to the subject sources, a series of 15 interviews have been conducted by the author. The interviews' process provided the opportunity to interact and ask direct questions to the practice and industry professionals and receive “real-life” replies, which validated some of the data reviewed in the literature.

The ultimate preposition of the research is to investigate the ESG related factors that could impact the valuation of natural resources companies under the M&A context by taking advantage from the insights and the opinions of the individuals that are heavily involved in this process within the industry. In addition, the interview process allowed the author to validate factors (from the professional individuals' replies) that have been outlined by the literature (i.e.: corporate culture), since most of the ESG's ecosystem is associated with the value and notion of the so-called intangible assets. This provided the author the opportunity to gain an insider view and to better capitalize the interviewees views and thoughts instead of receiving standardized replies from questionnaires where there will be the uncertainty that responses could be shallow and not of very rich content.

All the interviewees were identified through the author's professional (a former investment banking professional) and academic (an alumnus of an internationally known top tier business school) network and they have been handpicked throughout a wide variety of professionals with the view to match several criteria that will allow the author to retrieve all the required info for this research. More specifically, the interviewees combine prior experience and knowledge of the M&A

process (including investment banking and corporate finance professionals who they have strong knowledge and prior experience from performing and decoding valuations of complex M&A transactions), knowledge or even hands-on operational know-how of the different verticals of the natural resources sector, while all of them are either currently dealing with ESG and sustainability related aspects (i.e.: as board members) or they are advising CxO executives or board members in case they are coming from a consulting practice.

3.3 Data Analysis and Data Validity

The table below presents a high overview of the interviewees’ profiles:

Interviewee #	Country	Occupation (Current Role)	M&A Experience (in years)	Nat. Resources Experience (in years)	ESG Experience (in years)
I 1	UK	C-suite & Investor (PE)	20	10	5
I 2	UK	C-suite & Investor	30	30	5
I 3	S. America	Advisor / Consultant	20	35	2
I 4	Switzerland	C-suite	12	23	5
I 5	UK	Executive Director	15	18	7
I 6	India	Vice President	10	30	7
I 7	UK	Director, Consulting	5	20	3
I 8	Germany	Director & PE Investor	15	15	5
I 9	Canada	Managing Director	15	30	3
I 10	UK	Executive Director	14	14	10
I 11	UK	C-suite	20	15	10
I 12	UK	Director	9	4	5
I 13	Canada	C-suite	20	5	2
I 14	UK	C-suite & BoD Member	34	30	5
I 15	UK	C-suite	20	30	8

Table 3.1 – Interviewees Profiles List - Source: Author (2023)

The respective data collected used for this research and present the demographic, and the relevance of the interviewees to the report’s topic, based on their experience. The questions were written and provided to the interviewees prior to the interview, so the interviewees had ample of time to prepare their replies as well as to perform any indicative research before they reply. The questions were open-ended so to encourage the discussion and replies that could enhance the quality and the spectrum of the info that could be provided while they requested information regarding the ESG and its impact in the valuation and the M&A process. The interviewees sample size is good enough and

the geographical presence of all participants is quite international, so to avoid any reliability risk due to geographical concentration. The interviewees were encouraged to not limit themselves to reply only the questions and often moved off topic and expressed personal opinions and/or described prior experiences. The majority of the interviews took place via video and/or audio call, while for the ones the proximity between interviewer and interviewee was convenient an in-person meeting took place. **Given the interviews were open ended the author of the report tried to homogenise and group the collected information so to be able to derive some basic conclusions and present them with a clear way to the readers. To that extent some of the replies are presented in tables in [Appendix 8 B](#).**

4. Chapter 4: Results, Findings and Data Analysis

In this chapter we will illustrate the results of the 15 interviews that the author conducted. As it is mentioned above in Chapter 3, the author designed and executed a series of interviews with ESG practitioners, M&A professionals, C-level executives in mostly developed but also in developing/emerging markets who they are working for the natural resources sector or for sectors adjacent to it (i.e.: as consultants). The relevant questions can be found in the Appendix A.

The questions asked are covering two distinct parts, which are related (a) to the perception regarding the ESG definition of the interviewees and (b) to the views of the interviewees regarding the impact of the ESG in the M&A activity.

4.1 What ESG means in the business world?

4.1.1 Question 1: The opening question to the interviewees was the following: “*Q1*”. This question posed with the view to better understand the business world’s perception regarding sustainability and ESG, since it is widely noticed that the terms ESG, sustainability and climate are often used interchangeably, and they only address Environmental related topics. In the charts (Chart 4.1 & 4.2) below, the weighting of the Environment in ESG term is clearly depicted and it is significant. The reason that charts and numerical depiction are used is because this question’s replies are eye-opening. According to the responses from the interviewees, in their organizations most of them when they refer to ESG they mostly address Environmental and Climate related issues. All the interviewees confirmed that the Environmental issues have at minimum a weight of 33%, with most of the interviewees (nine out of the fifteen) to reply that 50% of ESG topics are related to Environmental issues. In other words, most of the times they use the term ESG they are referring to issues, aspects or topics related to the Environment or to Climate.

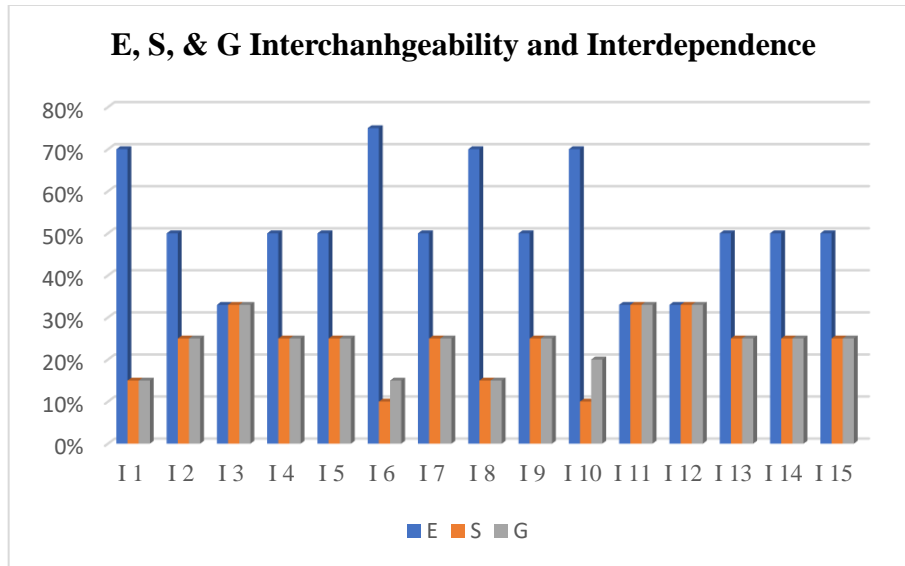


Chart 4.1 – E, S, & G Interchangeability and Interdependence - Source: Author (2023)

One of the most representative replies is the one provided by Interviewee 1(I1) who claimed that “...in any transaction we do, the first thing we review even before the financials is the environmental related risks, since these risks could make or break the deal, either during the closing or post-closing”. In the same question I10 replied that “...after 3 decades in the oil & gas sector, nowadays we firstly and mostly seek to acquire projects that are environmentally friendly, even they are in the fossil fuel industry...”. Lastly, I7 replied that “... mining and commodities became gradually, the most environmental conscious and cautious sector,.... , environmental aspects for us come with high priority not only when we acquire assets but also on our modus-operandi....”. So the above-described replies is a serious indication that environmental-related factors are nowadays in the mind of the executives who run businesses and/or make M&A deals. Traditional corporate governance issues are now looked under the environmental prism. From the interviews findings above (Charts 4.3. and 4.4) it is evident that in the business world the term ESG is used to mostly address Environmental related issues and topics. The Social and Governance related issues although they are present, they do not have the highest priority. The interviewees although they recognise the

significance of the Corporate Governance as well as the Social impact in the natural resources sector, they associate Sustainability and the usage of ESG metrics with the Environmental dimension and they are cautious for the Environmental related risks that may arise in the sector.

4.2 ESG Investing, M&A Transactions, and Valuations.

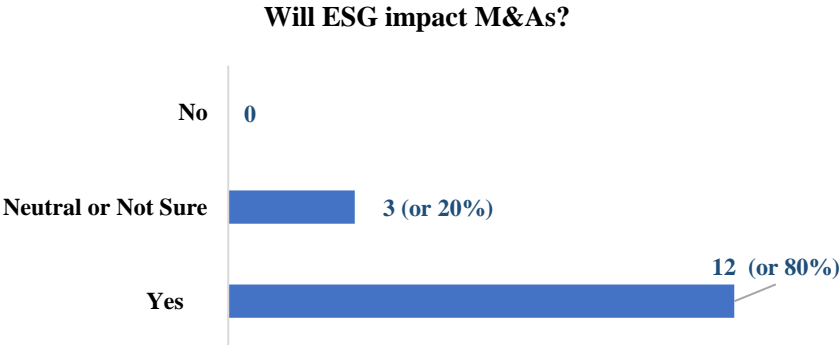
4.2.1 *ESG Investing and Valuations*

4.2.1.1 Question 2: The author addressed the following question to interviewees so to identify the actual impact of the ESG in the valuation of the companies. The second question (Q2) asks about the impact that ESG investments could have in the valuation of companies and the majority of the replies were positive. More specifically, eleven out of the fifteen interviewees replied positive regarding the impact on the valuation of companies due to the earmarked funds available for ESG investments and they expect this trend to increase exponentially in the near future, in combination with the availability of “environmental-friendly” assets or “environmentally driven” companies.

Three of the interviewees that are coming from the advisory / consulting industry said that their buy-side clients are looking to acquire “green/environmental motivated” companies and they are willing to pay a premium if they can see this acquisition could have a direct impact in their valuations and in their corporate image. They also said that some of their clients they prioritize E (environmental) as they believe it will positively impact their overall G (governance) profile. Moreover, the same three interviewees said that when they work on debt finance and/or equity finance mandates (i.e: capital raising) the companies that have a clear ESG motivated vision and mission, they mostly attract capital at a better/higher valuation and the whole process concludes in a shorter period of time.

4.2.2 ESG Investing, M&A Transactions and Valuations

4.2.2.1 Question 3: In the third question (Q3) the supermajority of the interviewees replied that the ESG evolution impacts the M&A activity across the natural resources sector, with some of them to support that there could be variations of this influence based on the vertical of the sector or even based in the geography as there could be fluctuations in several regions / jurisdictions (i.e.: China) that are not yet aligned with the ESG narrative. Overall, the trend was strongly positive on the impact the ESG is expected to have on the M&A activity.



4.2 – ESG and its impact on M&A transactions

More specifically, the interviewees that are coming from the investment banking and the consulting industry they noted that already they have “buy-side” clients (namely investors and/or corporation that assigned them to search for target companies they want to acquire) that ask them to find them either for target companies that already have an ESG rating or at least for companies that after the acquisition are ready (or almost-ready with minor intervention) to submit application to rating organization so to receive an ESG rating.

4.2.2.2 Question 4: In the fourth question (Q4), which bears sub-questions, the results are presented and analysed below:

○ In the 1st sub-question ([Q.4.1](#) - a table with the replies for this sub-question from all the interviewees in Appendix 8.B) the main ESG factor that impacts M&A transactions - according to most of the interviewees' replies - is the investors pressure. Especially, interviewee 1 (I1) said *"...being myself and investor -except of a manager- nine of the ten times I invest (together with our co-investors), I invest only in green projects or in companies that are taking ESG seriously, if not then we do not invest, even if the profit margins are phenomenal or the valuation is attractive"*. On the same mode, I13 said that *"...it is now more difficult to convince investors to invest in non-ESG targets"*.

Also, a worth noting factor that mentioned by most of the interviewees – and it is fully aligned with the academic research, and it is depicted in this report's literature review chapter - is the Corporate Culture -which can be considered an intangible asset. Corporate Culture seems to play a role under the ESG prism in the valuation of a target in the context of M&A transactions. In the Table 4.1 in the Appendix 8.B are presented the interviewees' replies, where Corporate Culture is in the 2nd position as a factor that could impact a target company's valuation. In this context I12, noted that *"...corporate culture is one of the main intangible factors we review, and if we feel we will not be able to align with the target company then most of the times we walk away, as we consider it a closely related to ESG related qualitative factor..."*. Also, I14 replied that *"...in a continuously changing business environment if we can't find a company that has a similar corporate culture with us and prioritize ESG then our risk increases steeply...."*. Lastly, interviewee I11 replied *".... from our experience our clients when they acquire other companies are willing to pay a premium to acquire companies that they share the same values...."*, which reflects the importance of the corporate culture as an ESG factor.

- In the second sub-question of the 4th question (Q.4.2) the interviewees validated once more the importance of the environmental component of the ESG and clearly stated that the Climate Change risks have either High (66%) or Medium (33%) impact in a target's valuation or selection.
- In the third sub-question of the 4th question (Q.4.3) interviewees replied positively, with some of them to mention that changes in Due Diligence process, could severely impact the Target's Valuation. Interviewee I6 replied: *"ESG, Climate change will be a major impact and integral part of due diligence process"*. Also, interviewees I11 & I12 respectively outlined that according to their recent experience from managing the execution of M&A transactions as advisors both for the sell-side (when their clients mandated them to identify potential buyers for their companies) and for the buy-side (when their clients asked them to identify target companies to acquire and also manage the execution of the acquisition) the importance of the Due Diligence in the target's valuation was crucial. It is also interesting that none of the interviewees replied that changes in the Due Diligence process will not impact the Target's Valuation (in the M&A context).
- In the fourth sub-question of the 4th question (Q.4.4) the replies described granularly the relation between ESG scores, the Weighted Average Cost of Capital (WACC) and how this can impact the target's valuation. Although, the interviewees come from different verticals within the natural resources sectors (i.e.: mining, renewable energy, oil & gas), the replies were either totally attached to the ESG scores or fully neutral and not associated to the ESG. As interviewee, I13 outlined, who is currently raising equity capital from investors and is also under discussions for arranging debt so to acquire a target company in the mining sector *"... having high ESG scores as an acquirer could help you to arrange cheaper capital,*

but having lower ESG scores will not stop you from arranging the required capital, probably at a higher cost, after all ESG is a nice to have thing, but will not stop you from executing your deal, from the cost perspective... ”.

The results of this question look like a mixed bag, with marginally more than half of the interviewees to believe that high ESG scores could impact / decrease WACC and increase the target's as well as on the acquirer's valuation and the remaining to be neutral regarding the impact on the valuation. In case of low ESG scores, half of the interviewees believed that although the cost of debt and equity will be increased this will not have a direct impact in the valuation of both the target and the acquirer company. One explanation could be that still there are available sources of capital that do not consider ESG ratings and scores a crucial factor and not all the investors are willing to pay a premium for ESG investors. In addition, although the cost of capital globally is in an upward trend, the adaptation of ESG frameworks could potentially drive to a lower cost of debt (due to green bonds issuance, according to what the interviewees believe), while the increasing appetite for ESG motivated investments could also reduce the cost of equity, for the companies with high ESG scores. Another interviewee, I8 who is an investor and executive of an investment vehicle claimed that *“...high ESG scores helped us to raise cheaper capital and this increased our valuation as an acquirer while when we target firms for acquisition the higher the ESG scores the have the higher their valuation is...., we are also looking for targets with poor ESG scores and if there is room to change this then we discount our bids... ”.* This is an indication that there are investors which they have started taking into consideration ESG factors and scores in their valuation process. However, the author of this report considers that as far as the ESG

rules adaptation is not yet mandatorily enforced there will not be significant impact on the valuations.

- In the last fifth sub-question of the 4th question (Q.4.5) as far as the regulatory framework changes that ESG will bring, the interviewees are somehow splitted with 7 out of the 15 to believe that there will be an impact on the valuation of a target (during an M&A transaction), while 6 of them where not sure if there will be an impact or not. There were also 2 interviewees who believe that the regulatory framework will not have any impact on the valuation. The author of this report believes that indeed the impact of any changes of the regulatory framework will not play a significant role since all these changes are not yet a mandatory.

4.2.2.3 Question 5: In the fifth question (Q5), which bears sub-questions, the results are presented and analysed below:

- In the 1st sub-question of the 5th question (Q5.1) regarding the strategic planning most of the interviewees state their importance regarding the role of the ESG agenda in an M&A transaction as well as how strategic they consider it is for the target companies to be really ESG- motivated and not simply ESG aware or ESG-oriented. The term ESG-motivated stands out the target companies that really take the ESG alignment seriously and allows the acquirer to strategically select the “proper-fit” target. As it is self-explanatory, the interviewees noted they expect ESG-motivated target companies to have a higher valuation in comparison to companies that are simply ESG-oriented or they are just aware of ESG but they do not make any commitments. They interviewees consider that the acquirers should make ESG part of their M&A agenda (11 out of the 15). There was only 1 out of the 15 interviewees who does not consider that ESG should be part of the M&A strategy as the

interviewee could not really see any impact in the valuation, while 3 out of the 15 interviewees are not sure about it.

Nonetheless – and this is an interesting finding- all the interviewees believe ESG’s weighting in the Board of Directors agenda is important when they are evaluating M&A deals, with 8 out of 15 to give a High weight and 7 out of 15 to consider a Medium weighting. It is expected that the acquiring companies gradually will develop a preference in selecting ESG motivated companies that have enforced ESG frameworks and seriously follow ESG guidelines (“walk the talk”) rather than companies that superficially comply with the minimum requests of an ESG framework. As interview I11 said characteristically “...companies are now well informed and have realized that ESG frameworks is not another set of rules that should comply with, it is matter of strategy and of sustainable future planning, otherwise it would be a greenwashing...”. And interviewee I12, outlined “...Boards today should start planning and measuring reasonable metrics and not superficial ones like young directors versus old directors Boards should know what kind of target companies must acquire and why...”.

- In the second sub-question of the 5th question (Q.5.2) regarding the Due Diligence process and the related risks and improvements for M&A transactions the view of the interviewees clearly depicts that Low ESG scores of the target firms could be a Due Diligence risk for the acquirer. Fourteen out of the fifteen interviewees consider consider low ESG scores a risk and they also consider it as one of the Due Diligence findings that could negatively impact the target’s valuation. Moreover all of the interviewees consider the Environmental risks as a critical finding during the Due Diligence of a target firm and to that extend they consider this could impact the valuation of an M&A transaction while it seems

there is a marginal tolerance for the Governance (13 out of the 15 consider these risks crucial too) and/or the Social (12 out of the 15 consider these risks crucial too) related risks. This finding verifies the importance of the Environmental awareness that companies have today and is aligned with the findings in Q1 where most of the interviewees replied that they consider and use the ESG term more as an Environmental related topic and/or risk. The interviewee I13, outlined characteristically “...*although we could consider any potential low ESG score and proceed with the acquisition of a target, if we identify any environmental, governance or social risks during the due diligence process, we will have to express these risks in potential monetary losses before we proceed. A low ESG score can be improved next year, an environmental risk can really break the deal and us as investors and acquirers in the post-acquisition era...*”. Interviewee I11, also, stated that “...*during the due diligence process investors / acquirers should be very careful and we as investment banking advisors we help acquirers to find any hidden risks and nowadays a low ESG score could potential become a risk...*”

○ In the third sub-question of the 5th question (Q.5.3) the author of the report asked the interviewees regarding the Post-Merger / Acquisition period and what could be the minimum framework that a target’s ESG should meet. According to the replies 12 out of the 15 interviewees they consider that the target companies should have strong ESG culture, while 3 out of the 15 they were not sure but without necessarily being negative. A similar finding has been identified in question 4.1 where corporate culture was one of the factors that could impact the valuation of a target company in the context of an M&A transaction. It is also very interesting that most of the interviewees consider important element that targets should

have adopted and actively comply with an ESG framework, and this could contribute to the target's valuation.

In the second part of this sub-question (Q.5.3) asked about any specific initiatives that could unlock value creation for the acquirer during the Post-Merger / Post-Acquisition period and the replies were eye-opening again. More specifically, more than half of the interviewees (9 out of 15) claimed that having ESG officers in the Executive Committees or heavily engaged in any other related process could contribute to the value creation after the completion of an acquisition or a merger. The interviewees considered important for the acquirer to safeguard that the target company should be able to create value after the acquisition and to that extent ESG adaptation should be a high priority. However, seven out of fifteen interviewees they do not necessarily consider this adaptation will come if the ESG officers are part of the Executive Committees, which it could have a very broad interpretation. One interpretation could be that participating in committees cannot alone add value in the ESG value chain and needs more to be done in the corporate culture level. In any case it is another sign that ESG contribution could play a role in the valuation of the target company in the M&A context.

Moreover, all of the interviewees considered that the Environmental related issues should be set as a high priority for the Post Merger/Acquisition integration period so the acquirer to be able to take advantage of the merger or the acquisition. Lastly, almost all the interviewees (14 out of the 15) considered the other two factors, namely Governance and Social important for a successful integration. Interviewee I13 noted that *"... post M&A integration is as important as the origination and the execution phases of a takeover transaction, we are very careful and we carefully design the post M&A integration period*

with the view to create value and increase profits immediately. We believe ESG could be a multiplier of the value creation of a transaction. In the past we had issues with an acquisition and in our sector when you do not create value, losses could be unprecedented...”

4.3 Chapter Summary

This fourth chapter presents the replies the author received from the interviews he had with the interviewees, who are senior executives (up to C-level with roles which they bear a high level of responsibility and a very good view regarding the strategy and execution within their organizations) and consultants with vast experience in Mergers & Acquisitions as well as they have prior experience in the natural resources sector. The recorded replies validated the main hypothesis, and they presented in the next chapter titled Discussion and Analysis.

5. Chapter 5 - Discussion & Analysis

The data that have been studied and collected are mainly from two sources, namely from academic research papers, and white papers issued from organizations and management consulting firms as well as from interviews with Mergers, Acquisitions, and ESG professionals and practitioners. The literature review as presented in chapter 2 and the interviews findings as they presented in chapter 4 have taken into consideration the fact that ESG frameworks are gradually becoming a cornerstone for the global business ecosystem. Having studied all the above, the author of this report considers that the Merger and Acquisition activity will be also influenced. The main factors that will impact M&A activities and the respective valuations in the M&A context – because of the ESG are:

- (i) the huge increase and excess cash availability of ESG funds ([Chart 2.1](#)) that are seeking to be invested in ESG-motivated companies,
- (ii) the immense pressure from the investors (Chart 4.7, Chart 4.8, Fink [2019](#), [2020](#), [2021](#), [State Street 2020](#)),
- (iii) the change in the Corporate Culture, which is one of the factors that impacts the M&A decision making and the valuation of it, according to the bibliography presented in the literature review (Chart 4.8, [Alexandridis et al. 2022](#), [Gaiazza et al., 2021](#), [Deng et al.\(2013\)](#) [Graham et al., 2022](#) and [Graham et al. 2016](#)).

Especially for the energy vertical, except the trend as it is stipulated by the Bain & Co's M&A outlook report ([Bain&Co,2022](#)) the fact that there is a global trend to mobilize investments in the net-zero emissions economy by 2050 make the investments in green energy unprecedented and the transition to the green energy a multi-trillion business, according to data issued on the World Outlook 2021, by the International Energy Agency([IEA,2021](#)).

Another important finding is change in the M&A process, during the due diligence process, as this clearly depicted by the majority of the interviewees (replies in question 4.3) as well as in the post-M&A integration period where a more focused approach on the ESG risk related factors will be required. While a further concentration in ESG scores during the due diligence process seems to be another factor that the M&A industry professionals and practitioners have started to review in an M&A as this is depicted from the replies of the interviewees in the question [Q.5.2](#). In addition, according to the results from the interviews a more inclusive strategic planning approach and process should be considered (based on the answers received in question [Q.4.5](#)) as ESG is already part of the M&A strategy, while the appetite of ESG being part of the Board of Directors agenda has a medium to high weighting.

Lastly the impact on the valuation of companies (mostly the targets) in the M&A context for the natural resources sector as this has been identified by the interviews (with professionals from the natural resources) that have been conducted for the needs of this thesis report, shows that 73.3% of the interviewees believe the valuations will be impacted by the excess cash availability of ESG funds. More specifically, breaking down this 73.3%, a portion of 46.67% of the interviewees believe that the excess funding availability has increased already the value of the target companies. The remaining portion of 26.67% indicated that there was an impact on the valuation of green and net-zero assets acquisitions (target companies) which is also supported by the literature review ([Andriuskevicius et al.,2022](#)) and ([Niemczyk et al. 2022](#)).

The author considers that the above-mentioned data and analysis prove his hypothesis about the ESG's impact on the M&As valuations for the natural resources sector, correct. The hypothesis is supported by both the available literature as well as by the results of the interviews that have been

conducted. The advantage of the interviews is that the interviewees have been selected by multiple locations across the globe and this gives an additional comfort that there is a more global bird-eye view of the natural resources sector and incorporates a wide array of views that could minimize the potential errors in the research.

6. Chapter 6 – Conclusion and Recommendations

Conclusively, this report investigates the impact of the ESG on M&A transactions and on the valuation of these transactions, as ESG rules and frameworks gain significance importance and become the new standard of doing business. The conclusion supports the hypothesis that ESG have an imperative impact in the M&A process context as well as in the valuation of a firm in the M&A context and this is applied to the natural resources sector as it is an ESG -heavy sector. Given the natural resources sector (namely oil & gas, energy, renewable energy, metals, mining and agriculture verticals) is a heavy assets concentrated sector, where the danger of these assets to be transformed overnight to stranded assets is high, the author of this report considers the adaptation of ESG in the natural resources sector is crucial and it can be turned into a risk factor.

6.1 Main Findings

The main objective of tis research as indicated in the above paragraph, concluded with the below findings. As far as the impact in the valuation of firms in the M&A context, the main factors are (i) the immense pressure from investors, (ii) the limited availability of available targets and (iii) the cultural fit. These factors are the findings from the interviews that have been conducted for this thesis report with professionals, practitioners and experts that combine prior experience in the investments, finance, valuation, and natural resources sector. An additional factor that seems has an impact in the valuation of firm in the M&A context is the regulatory framework pressure. Moreover, this report discovered that the excess cash availability of funds that are earmarked as ESG funds, has an impact on the valuation of target firms in the M&A context, which in combination with the investors' pressure for ESG-motivated investors could multiply this impact. Lastly climate change

risks and the changes in the due diligence process were two factors where the majority of the interviewees replied positive regarding their contribution to impact the valuation of a target firm during an M&A transaction.

As far as the M&A transactions in general, ESG rules incorporation in the business in general but also in the natural resources sector's modus operandi will have an imperative impact and this is also indicated clearly by the answers of the interviewees who 80% of them replied positive and 20% of them they were not sure (Q3). Also, the due diligence process per se will be impacted as factors like low ESG ratings and all the environmental related risks need to be included now in the process (and they bear a high priority according to the interviews) while the social and governance related risks are now playing a more prominent role. In addition, in the Board of Directors level the ESG agenda should added when we talk about strategic planning, according to most of the interviewees. Lastly, an impact in the post merger/acquisition integration era is expected as the majority of the interviewees consider that the target companies should be strongly ESG motivated and have embedded in their culture the execution of the ESG frameworks, while most of the interviewees considered that ESG officers should be part of the Executive Committees, so to increase engageability.

Another finding from the interviews which has also been validated by the academic research is the importance of the corporate culture fit. As ESG are mainly related to the notion of the intangible, a factor like the corporate cultural fit, has significant impact in the valuation of firms in the M&A context.

6.2 Recommendations

Based on the literature review (chapter 2), findings (chapter 4) and the discussion and analysis (chapter 5) the companies in general and more specifically in the natural resources sector will gradually – but probably quicker than expected – should be obliged to adapt and incorporate the ESG rules and metrics in their day -to-day operations and in their overall modus operandi. Any delays in doing so will not only create reputational damage but it is expected to create negatively influence their valuation in the M&A context, especially when they will have the role of a target company. Inside stakeholders, namely the managers accompanied by the shareholders and supported by external advisors should start “walk the talk” when it reaches to the adaptation of the ESG frameworks.

6.3 Limitations

This thesis report is based on a qualitative research that took place through interviews with 15 professionals of the M&A, investments and natural resources industries. As every qualitative research it is exposed to the potential bias of the interviewees. The interpretation feature of this report took place in an online-real time mode do to avoid any potential errors.

Lastly, the author considers this report may be enhanced by further research on sector-specific factors regarding the impact of ESG in the natural resources sector, as the author couldn't find research papers related to ESG and the mining or the metals or the agriculture. Also, there could be a limitation due to the fact that ESG is a recently established concept and using as proxy CSR, Triple Bottom Line or other similar but older chronologically concepts may not be accurate enough to express the notion of the ESG.

The author believes that further analysis and research could provide more accurate data. He expects this will happen the coming years as a convergence of the existing ESG frameworks will happen and also he expects that the global business society and ecosystem will gradually understand that sustainability and ESG metrics could help management to better manage business risks.

7. Bibliography & References

Aktas, N., de Bodt, E. and Cousin, J.-G. (2011) “Do financial markets care about SRI? Evidence from mergers and acquisitions,” *Journal of Banking & Finance*, 35(7), pp. 1753–1761. <https://doi.org/10.1016/j.jbankfin.2010.12.006>.

Alexandridis, G., Hoepner, A. G., Huang, Z., & Oikonomou, I. (2022). Corporate social responsibility culture and international M&As. *The British Accounting Review*, 54(1), 101035. <https://doi.org/10.1016/j.bar.2021.101035>

Andriuškevičius K., Streimikiene D. (2022) Sustainability Framework for Assessment of Mergers and Acquisitions in Energy Sector. *MDPI, Energies*, <https://doi.org/10.3390/en15134557>

Bancel, F., Glavas, D. and Karolyi, G.A. (2023) “Do ESG Factors Influence Firm Valuation? Evidence from the Field,” *SSRN Electronic Journal [Preprint]*. <https://doi.org/10.2139/ssrn.4365196>

Bauer, F., & Matzler, K. (2013). Antecedents of M&A success: The role of strategic complementarity, cultural fit, and degree and speed of integration. *Strategic Management Journal*, 35(2), 269–291. <https://doi.org/10.1002/smj.2091>

Bose, S., Minnick, K., & Shams, S. (2021). Does carbon risk matter for corporate acquisition decisions? *Journal of Corporate Finance*, 70, 102058 <https://doi.org/10.1016/j.jcorpfin.2021.102058>

Bowen, H.R. (1953). Social Responsibilities of the Businessman. *New York: Harper & Row*. https://archive.org/details/socialresponsibi0000unse_q4n4/page/n5/mode/2up

Brammer, S., Brooks, C. and Pavelin, S. (2006), “Corporate social performance and stock returns: UK evidence from disaggregate measures”, *Financial Management*, Vol. 35 No. 3, pp. 97-116, <https://doi.org/10.1111/j.1755-053X.2006.tb00149.x>

Branden J.C., Seemann A., Lino M. (2022). The ESG Imperative in M&A. *Bain & Co: Global M&A Report*, pp:24-27 <https://www.bain.com/insights/esg-imperative-m-and-a-report-2022/> and [M&A Report 2022 - Trends & Outlook | Bain & Company](#)

Brownstein A., Lu C. (2022). ESG and M&A in 2022: From Risk Mitigation to Value Creation. *Harvard Law School Forum on Corporate Governance*. <https://corpgov.law.harvard.edu/2022/01/24/esg-and-ma-in-2022-from-risk-mitigation-to-value-creation/>.

Business Roundtable (“BR”); [Business Roundtable Redefines the Purpose of a Corporation to Promote ‘An Economy That Serves All Americans’ | Business Roundtable](#)

Caiazza, S., Galloppo, G. and Paimanova, V. (2021) “The role of sustainability performance after merger and acquisition deals in short and long-term,” *Journal of Cleaner Production*, 314, p. 127982. Available at: <https://doi.org/10.1016/j.jclepro.2021.127982>.

Cheng, B., Ioannou, I. and Serafeim, G., 2014. Corporate social responsibility and access to finance. *Strategic Management Journal*, 35(1), pp.1-23. <https://doi.org/10.1002/smj.2131>

Committee for Economic Development, 1971. *Social Responsibilities of Business Corporations: A Statement on National Policy by the Research and Policy Committee* of the Committee for Economic Development. Washington DC. (New York: CED, June 1971), p. 27. <https://www.ced.org/>.

Crisóstomo V., de Souza Freire, F. and Cortes de Vasconcellos, F. (2011), "Corporate social responsibility, firm value and financial performance in Brazil", *Social Responsibility Journal*, Vol. 7 No. 2, pp. 295-309. <https://doi.org/10.1108/17471111111141549>

Deng, X., Kang, J. K., & Low, B. S. (2013). Corporate social responsibility and stakeholder value maximization: Evidence from mergers. *Journal of Financial Economics*, 110(1), 87–109. <https://doi.org/10.1016/j.jfineco.2013.04.014>

Elkington, J. (1994). Towards the Sustainable Corporation: Win-Win-Win Business Strategies for Sustainable Development. *California Management Review*, 36(2), 90–100. <https://doi.org/10.2307/41165746>

Fink L. (2019). Larry Fink’s 2019 letter to CEOs. *BlackRock Annual Letter*. [Larry Fink's 2019 Letter to CEOs | BlackRock](#)

Fink L. (2020). Larry Fink’s 2020 letter to CEOs. *BlackRock Annual Letter*. <https://www.blackrock.com/corporate/investor-relations/2020-larry-fink-ceo-letter>

Fink L. (2021). Larry Fink’s 2021 letter to CEOs. *BlackRock Annual Letter*. <https://www.blackrock.com/corporate/investor-relations/2021-larry-fink-ceo-letter>.

Friedman M. – University of Chicago economist | Biography & Facts | Britannica – “About Milton Friedman: The Becker Friedman Institute for Research in Economics”. [About Milton Friedman: The Becker Friedman Institute for Research in Economics \(uchicago.edu\)](#)

Giese G., Lee L.E., (2019). Weighing the evidence: ESG and private equity returns. *MSCI Research Insight*. <https://www.msci.com/documents/10199/9aec76d8-376f-91ef-a575-b2b0ea65061a>

Graham, J.R., Grennan, Harvey, *Rajgopal* (2022) “Corporate culture: Evidence from the field,” *Journal of Financial Economics*, 146(2), pp. 552–593. <https://doi.org/10.1016/j.jfineco.2022.07.008>

Graham, J.R., Harvey, C.R. and Rajgopal, S. (2016) “Corporate Culture: The Interview Evidence”. *SSRN Electronic Journal [Preprint]*. <https://doi.org/10.2139/ssrn.2842823>.

International Energy Agency, (2021). Mobilising investment and finance. *World Energy Outlook 2021 – Analysis*. License: CC BY 4.0, pp: 47-49. <https://iea.blob.core.windows.net/assets/4ed140c1-c3f3-4fd9-acae-789a4e14a23c/WorldEnergyOutlook2021.pdf>

Lodh A., (2020). ESG and the cost of capital. *MSCI Research Insight*, <https://www.msci.com/www/blog-posts/esg-and-the-cost-of-capital/01726513589>

Niemczyk, J.; Sus, A.; Borowski, K.; Jasinski, B.; Jasinska, K., (2022). The Dominant Motives of Mergers and Acquisitions in the Energy Sector in Western Europe from the Perspective of Green Economy. *Energies* 2022, 15, 1065. <https://doi.org/10.3390/en15031065>

Riedl, D. (2021). The magnitude of energy transition risk embedded in fossil fuel company valuations. *Heliyon*, 7(11), e08400. <https://doi.org/10.1016/j.heliyon.2021.e08400>

Sustainable Stock Exchanges Initiative <https://sseinitiative.org/>

Tampakoudis, Noulas, Kiosses, Drogalas (2021) “The effect of ESG on value creation from mergers and acquisitions. What changed during the COVID-19 pandemic?” *Corporate Governance: The International Journal of Business in Society*, 21(6), pp. 1117–1141. <https://doi.org/10.1108/cg-10-2020-0448>

Tampakoudis, I. and Anagnostopoulou, E. (2020) “The effect of mergers and acquisitions on environmental, social and governance performance and market value: Evidence from EU acquirers,” *Business Strategy and the Environment*, 29(5), pp. 1865–1875. Available at: <https://doi.org/10.1002/bse.2475>.

Taraporevala C. (2020). CEO’s Letter on Our 2020 Proxy Voting Agenda. *State Street Global Advisors Annual Letter*, <https://www.ssga.com/us/en/institutional/ic/insights/informing-better-decisions-with-esg>.

Times, T.N.Y. (1970) A Friedman doctrine-- The Social Responsibility Of Business Is to Increase Its Profits. Available at: <https://www.nytimes.com/1970/09/13/archives/a-friedman-doctrine-the-social-responsibility-of-business-is-to.html>.

United Nations Principles for Responsible Investments, “*Signatory Update, October to December 2022*”, [PRI update \(unpri.org\)](https://www.unpri.org/pri-update), pp38-40

United Nations, Resolution adopted by the General Assembly on 25 September 2015, “Transforming our world: the 2030 Agenda for Sustainable Development”. <http://undocs.org/A/RES/70/1>

United Nations Global Compact ([United Nations Global Compact, 2005](https://www.unglobalcompact.org/)). [Who Cares Wins](https://www.unglobalcompact.org/)

8. Appendices

Appendix 8.A – Questions to Interviewees

- Q1:** In the business context, often the terms Sustainability, ESG, and Climate are used interchangeably. If we would like to quantify ESG (in the natural resources sector) which, do you think, would it be the weighting between E (Environment), S(Social), G(Governance) respectively within your organization?
- Q2:** Given that ESG Investments significantly increased the last years, do you expect this will have a direct impact in the valuation of the companies?
- Q3:** Do you expect there will be an impact, in the context of M&A transactions, due to the ESG evolution?
- Q4:** Assuming that M&A activity will be shaped by the incorporation of ESG factors within the decision-making process:
- Q.4.1 Which of the following factors do you think will impact a target's valuation? (i. Excess availability of cash (dry powder) allocated for ESG related acquisitions; ii. Immense pressure from investor; iii. Pressure from the regulatory framework; iv. Limited availability of targets for acquisition or merge; v. other factors)
- Q.4.2 How crucial do you think it will be the climate change related risks in the target's valuation?
- Q.4.3 Do you expect changes in the Due Diligence process that will affect the target's valuation?
- Q.4.4 What do you expect to be the role of both the equity and the debt financing?
- Q.4.5 Do you expect the changes in the regulatory frameworks to have an impact in the target's valuation?
- Q5:** Within a spectrum from ESG-motivated to ESG-oriented targets, how the economic value of the acquirer will be enhanced / increased from an acquisition or a merger in terms of:
- Q.5.1 Strategic Planning: What are the implications of the corporate ESG agenda on the organization's M&A strategy? How will the board weigh ESG considerations when evaluating deals?
- Q.5.2 Due Diligence: What are the potential risks and improvements to the overall ESG position and competitiveness for every transaction?
- Q.5.3 Post M&A – Integration: What is the minimum framework that the target's ESGs should meet based on the acquirer's thesis? What are the specific initiatives to unlock the ESG value creation opportunities?

Appendix 8.B – Replies from Interviewees

All the below tables contain data from open ended interviews. The author of the report tried to homogenise and group the collected information so to be able to derive some basic conclusions and present them with a clear way to the readers.

	Excess Cash Availability	Investors' Pressure	Regulatory Framework Pressure	Limited Availability Targets	Other (Corporate Culture)
I 1		Y		Y	Y
I 2		Y	Y	Y	
I 3	Y	Y	Y		
I 4	Y	Y		Y	
I 5	Y	Y			Y
I 6		Y	Y	Y	
I 7		Y	Y		Y
I 8		Y		Y	Y
I 9	Y		Y		Y
I 10	Y	Y			Y
I 11	Y			Y	Y
I 12	Y	Y		Y	
I 13		Y	Y		Y
I 14		Y	Y	Y	
I 15	Y	Y			Y
	8	13	7	8	9

Table 4.1 –Source: Author (2023) -Interviewees’ Replies Q.4.1: ESG and its impact on M&A transactions

	Yes	No	Not Sure
I 1	Y		
I 2	Y		
I 3			Y
I 4	Y		
I 5	Y		
I 6	Y		
I 7			Y
I 8	Y		
I 9			Y
I 10	Y		
I 11	Y		
I 12	Y		
I 13	Y		
I 14	Y		
I 15	Y		
	12	0	3

Table 4.2 –Source: Author (2023) – Interviewees’ Replies: ESG and Due Diligence

	High	Medium	Low
Y		-	-
-		Y	-
Y			-
Y			-
Y			-
Y			-
		Y	-
Y			-
Y			-
		Y	-
		Y	-
Y			-
Y			-
		Y	-
Y			-
10	5	0	

Table 4.3 –Source: Author (2023) – Q.4.2. Interviewees’ Replies: ESG, M&A, Climate Change Risks Importance

