Università
Ca'Foscari
Venezia

Master's Degree
programme

in

Economics and
Finance

Final Thesis

Between Integration and Denial: Navigating the ESG Flux in the United States

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Academic Year
2022/2023

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Introduction

"*There is no business to be done on a dead planet.*"
David R. Brower[1]

The history of economic thought has seen multiple economists discussing about the relationship between economic activity and the environment. What they all share is the fact that since the 18th century, with the works of classical economists, such as Malthus and Ricardo, neoclassical economists such as Pigou, environmental economists, such as Hotelling, and finally ecological economists, such as Georgescu-Roegen, the environment has always been perceived as a constraint to human economic activities, which is mostly imputed to the limitedness of natural resources.

Ricardo, exponent of the Classical Economics school of thought[2], considered natural resources as "*free gifts of nature*", whose reservation price is equal to zero. His work was focused on a specific natural resource, which is land. In his work "*On the Principles of Political Economy and Taxation*" (1817), Ricardo introduced the concept of rent, linking it to the limited availability of fertile land. However, Ricardian rent should not be confused with contract rent, i.e. the "actual payments tenants make for use of properties of others". Rather, the Ricardian law of rent is linked to the difference of fertility among different lands. According to classical economists, such as Malthus before and Ricardo later, this limited availability of fertile land, which at that time was the principal source of industrial raw materials and food, imposes natural limits to growth. In this sense, the diminishing returns to cultivation leads the economic state to reach a stationary state. Hence, the role of technological progress in the context of the industrial revolution was crucial to counteract this tendency of the economy to reach the stationary state.

[1] David Ross Brower was one of the most successful environmental advocates ever and considered by many to be the father of the modern environmental movement. Brower held the position of Executive Director of the Sierra Club, the oldest and biggest environmental organization in the United States, from 1952 to 1969 and helped create multiple environmental organizations in the United States. Available at: https://browercenter.org/about/who-was-david-brower/.

[2] The Classical Economics school of thought refers to that branch of economics which originated in the late 18th century and early 19th century, thanks to the work of Adam Smith. It focused on economic growth, promoting market freedom, laissez-faire ideas and belief in free trade and competition.

The Neoclassical paradigm[3] extends the Ricardian theory of rent to other factors of production, without a specific analysis of resources. They aggregate all factors of production into a single entity called "capital", making land lose any specific characterization with respect to all other factors of production. According to neoclassical economists, the central source of any environmental problem shall be imputed to the inefficient use of natural resources and the inefficiency is to be considered as a direct result of market failures and externalities. Externalities are sources of market failures because there is a non-optimal allocation of production factors which leads to an over-exploitation of resources or to over-production and finally pollution. Hence, the neoclassical economics adopts a market-based approach in trying to understand and solve the environmental problem.

In 1931, Harol Hotelling further developed the environmental problem, focusing on the role of natural resource in the economic process and their impact on market failures and externalities. In his work "*The Economics of Exhaustible Resources*", published in 1931, Hotelling developed what is known as the *Hotelling Rule* (or *Hotelling's Price Path*). What this rule explains is that since natural resources are only considered to be productive commodities or amenities supply to the economic process that are traded on the market, as a resource become scarce, its price will relatively increase with respect to the price of other comparable goods and this will represent a deterrence to its depletion. In this context, some decades later, neoclassical economists such as Stiglitz and Solow directed the focus of their researches on the role of innovation and technological progress in substituting natural resources: the depletion of an essential resource can be compensated by either the substitution by a new production factor created by human activity or by a technical progress which sufficiently increases the productivity of the essential resource. Hence, in this context, there are no limitations to economic growth thanks to the role of technical progress: when the rate of technical progress is higher than the rate of depletion of the (essential) natural resource, it is possible to experience an optimal growth path.

Nicholas Georgescu-Roegen was a progenitor and paradigm founder of the Ecological Economics as an independent academic sub-discipline in economics. He was one of the

[3] The Neoclassical Economics emerged at the beginning of the 20th century to compete with other recognized school of economics, such as the Classical Economics, and focused on the law of supply and demand as the driving forces of market mechanism. It has its roots in the rational behaviour theory and it believes that individuals should maximize their own utility rather than focusing on the cost of production of a good/service.

first economists to highlight the importance in considering the contribution of biophysical principles to study the evolution of the economic system. In his work "*The Entropy Law and the Economic Process*", published in 1971, he criticized the neoclassical approach of conceiving the economic activity as a closed system without reference to is material basis which cannot seriously accounts for the material limit that the nature imposes on the economic process. The author shifts back the topic of discussion to the nature, which is identified as the exclusive primary source of all factors of production. Natural resources cannot be substituted by other factors, but man-made capital and natural capital should be considered as perfectly complementary. In its approach based on the finitude of the Earth, Georgescu-Roegen adopts a concept of scarcity which does not involve limits in quantity, as the Ricardian land, but also a continuous and irrevocable degradation by use. The Entropy law, derived from the second law of thermodynamics, explains us that as materials and energy are transformed in the production and consumption processes, higher entropy waste is released into the environment. Hence, it is not possible to produce anything but at a much greater cost in terms of low entropy[4]. In this sense, the author was one of the first economists to make it clear that it is necessary to change the patterns of consumption and production in order to minimize the entropic degradation of the environment.

One year after the Georgescu-Roegen's publication "*The Entropy Law and the Economic Process*", the first to fundamentally challenge the mainstream economic paradigm of unbridled economic growth without looking at the physical limitations to growth that the Earth imposes, another groundbreaking study was released. This is the case of the Meadows Report "*The Limits to Growth*", published in 1972 by Donella H. Meadows, Dennis L. Meadows, Jørgen Randers, and William W. Behrens III, representing a team of international researchers from more than 30 countries that just 4 years before, in 1968, came together and formed the group known as The Club of Rome[5]. The report was a

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[4] According to the entropy law developed by Georgescu-Rogen in 1971, what happens in the economy is that all matter and energy is transformed from states available for human purposes to states unavailable for human purposes (the degradation principle). This transformation constitutes a unidirectional and irreversible process. Consequently, valuable natural resources ("*low entropy*") are procured by the input end of the economy; the resources flow through the economy, being transformed and manufactured into goods along the way; and unvaluable waste and pollution ("*high entropy*") eventually accumulate by the output end. In terms of entropy, the economic activity transforms low entropy materials into high entropy materials and more "*disorder*" is created.

[5] The Club of Rome is a non-profit organization that was created in 1968 thanks to the will of Aurelio Peccei, an Italian industrialist, and Alexander King, the Scottish Head of Science at

disruptive event at that time as, for the first time in the history of humanity, the ecological and environmental crisis that was affecting the Earth was evidenced by means of computer-simulated world model. As evidenced by Thomas Döring and Birgit Aigner-Walder[6], the researchers focused their attention on "five basic development trends with global consequences: population growth, industrialisation, malnutrition, exploitation of raw materials and destruction of the living environment." (Döring & Aigner-Walder, 2022). The MIT-computer-run simulations revealed that, in a world with a finite supply of resources, a steady-state level of population and economic growth was affordable until 2050; however, after that, a tipping point of unrestrained economic and population decrease was evidenced, together with environmental ruination and acute rate of raw materials' depletion.

The Meadows Report was the first economic study to impose physical limitations to the economic paradigm of unlimited and exponential growth. In many ways, the report began our current globally focused environmental debate and it is after this publication that environmentalists, scientists and policymakers increasingly thought of ecological problems in planetary terms and as dynamically interconnected. Most of all, "*Limits to Growth*" has put an emphasis on the need of a new paradigm at the corporate level, where economic profit should be interconnected with the responsibility toward the society and the environment, somehow anticipating and highlighting the concept of Corporate Social Responsibility (CSR), a central topic in what are now the Environmental, Social and Governance (ESG) considerations.

50 years after the publication of the Meadows Report, the growing global awareness of the profound impact that business activities have on the environment and on their impact on climate change led the concept of Corporate Social Responsibility (CSR) before and the Environmental, Social and Governance (ESG) framework after to gain momentum in the academic and general public discussion, influencing political, regulatory, corporate and investment landscape all over the world.

OECD of that time, who convened a meeting of European economists, with the goal of advancing three core ideas: a global and a long-term perspective, and the concept of "*problematique*", a cluster of intertwined global problems, be they economic, environmental, political or social. See more at: https://www.clubofrome.org/history/.

[6] Döring, T. and Aigner-Walder, B. (2022) – "*The Limits to Growth — 50 Years Ago and Today*". Intereconomics 57, 187–191, June 7, 2022 - https://doi.org/10.1007/s10272-022-1046-5.

In this context, being one of the world's largest and most influential economies of the globe, the United States of America has been witnessing a significant shift towards ESG integration in various sectors. This transformation is driven by multiple factors, including the increasing recognition of ESG risks and opportunities, investor demands for sustainable and responsible practices, and a controversial governmental and regulatory panorama, where the sustainability agenda of the President and of the Congress is not always matched with the goals of Federal States' legislative actions. Moreover, the considerations about the impact of climate change don't only involve economic and social aspects. In fact, the 10th of January, 2019, the Office of the Under Secretary of Defense for Acquisition and Sustainment published a "*Report on Effects of a Changing Climate to the Department of Defense*", where they noted that "The effects of a changing climate are a national security issue with potential impacts to Department of Defense missions, operational plans, and installations"[7], calling attention to the threat that climate risk has on the national security and prosperity of the United States. In 2021, the United States of America's President Joe Biden declared climate change a national security priority[8].

It is within this dynamic context that this master's thesis delves into the U.S. ESG approach, seeking to comprehensively examine the key elements and driving forces shaping the sustainability landscape in the United States. This thesis aims to shed light on the multifaceted aspects of ESG within the U.S. context, providing a comprehensive understanding of the current state of ESG adoption, the challenges and opportunities arising from an evolving regulatory landscape and the increasing ESG activism. The United States stands at a crucial juncture where the integration of ESG into business and finance is rapidly evolving, making it an intriguing and pertinent subject of research.

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[7] Office of the Under Secretary of Defense for Acquisition and Sustainment – U.S. Department of Defense - "*Report on Effects of a Changing Climate to the Department of Defense*", January 10, 2019 - https://media.defense.gov/2019/Jan/29/2002084200/-1/-1/1/CLIMATE-CHANGE-REPORT-2019.PDF.

[8] The White House – "*Fact Sheet: Prioritizing Climate in Foreign Policy and National Security*", October 21, 2021 - https://www.whitehouse.gov/briefing-room/statements-releases/2021/10/21/fact-sheet-prioritizing-climate-in-foreign-policy-and-national-security/.

I. The Evolution of Corporate Social Responsibility into ESG Criteria: Development from Business Ethics to Sustainability and Environmental Goals.

In this chapter, the focus of my research is to show, by means of a literature review, how the concept of Environmental, Social and Governance (ESG) has evolved from a business-focused approach of Corporate Social Responsibility toward a more financial oriented perspective. I will show what these two concepts have in common and, more significantly, in what they differ and why. Later in the chapter, I will explain, by means of a general comparison, how the United States are moving in the sustainable framework with respect to the European Union's sustainable agenda, to show that, although the United States has been the precursor of sustainable development, there is still work to be done.

1.1. Corporate Social Responsibility: Meaning, Origin and Development.

Although the considerations around the social responsibility of businesses could be thought as a rather innovative and modern conceptual paradigm, indeed the belief that businesses should have a concern for the society as a whole can be traced back several centuries. In fact, according to Eric C. Chaffee, the justification for engaging in socially responsible behaviour was evident in ancient Roman law, according to which entities were often organized to have a strong orientation toward society. It is in this context that the creation of organizations with social purposes was first idealized, with examples being "asylums, homes for the poor, homes for the aged, hospitals, orphanages, political clubs and burial societies" (Chaffee, 2017). The socially oriented conception of corporations present in the Ancient Rome environment was then progressively carried on through the Middle Ages and then until the sixteenth and seventeenth century where the English law required corporations to be aimed at social development (Chaffee, 2017). With the expansion of the English crown in the following centuries, the English corporate law was exported to the newly born American colonies. In this context, the few corporations that existed where "specifically chartered to operate banks, insurance companies, and companies to build and operate canals, bridges and roads" (Padfield, 2004), evidencing better than ever their social orientation. However, it is only in the late 19th century and beginning of the 20th century that corporate managers developed their role as balance

between the inner responsibility of corporations, i.e. the maximization of profits, and a more socially devoted duty toward the customers, the labor force and the community (Carroll, A History of Corporate Social Responsibility: Concepts and Practices, 2008). It is especially during the first decades of the 20th century that, as a response to the growing level of urbanization and industrialization of that time and in the attempt to find the harmony between the working force and the industry, businessmen and corporations' executives instituted associations with the specific aim of promoting a new ethic where the economic goals of the corporations were merged with social considerations on creating better working conditions and improving the social standards of the time (Latapí Agudelo, Jóhannsdóttir, & Davídsdóttir, 2019). It is in this context that the Civic Federation of Chicago was found in 1894, "an organization created to promote better working conditions and where religious values merged with economic objectives with a sense of civic pride" (Latapí Agudelo, Jóhannsdóttir, & Davídsdóttir, 2019). This evolution of the social behaviour of corporations led business managers being regarded as "trustees for the different set of external relations with the company, which in turn translated into social and economic responsibilities being adopted by corporations" (Latapí Agudelo, Jóhannsdóttir, & Davídsdóttir, 2019). The first academic literature regarding the social responsibility of businesses began appearing during the Second World War, a period that evidenced the first wave of internationalization and growth of major corporations. The most important examples can be noted in the work, published in 1938, "*The Functions of the Executive"* by Barnard and one year after with "*Social Control of Business*" by Clark.

As proposed by the work published in 2019 by Latapì Agudelo, Jóhannsdóttir and Davídsdóttir, the first paper to outline a structured chronological timeline of the evolution of CSR, I will delve into the evolution of CSR, with a precise focus on the U.S. academic and societal environment in each different decades of the 20th and 21st centuries, by analysing how these influenced the definitional conception of CSR.

1.1.1. Going Beyond the Philanthropic Attitude of Social Responsibility.

Although the first publications targeting the concept of CSR were published in the very end of the 1930's, it was not until the 1950's that the academic environment started focusing on the social level of analysis surrounding specifically what the social responsibility of corporations should be. In fact, according to Latapì Agudelo,

Jóhannsdóttir and Davídsdóttir (2019), the 5th decade of the 20th century is the period that gave birth to the modern definitional construct of Corporate Social Responsibility.

The first example of a changing perspective came from Bowen in 1953, with his work "*Social Responsibilities of the Businessman*". Starting from the consideration around large corporations of the time, considered by the author as "power centers", Bowen evidenced that large corporations' actions have an impact and influence individuals and the society as a whole on a variety of scales, and, in this sense, a changing attitude was needed to include in their corporate responsibility the impact these corporations have on their stakeholders, employees and customers. The author considered as a key element in its analysis the fact the corporations exist "at the pleasure of society" and hence they act as "moral agent" inside society. Having this in mind, Bowen gave a first definition of the social responsibilities of the *businessman* as "it refers to the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society" (Bowen, 1953). Thanks to his revolutionary work on the doctrine of social responsibility of businessman (and corporations), Bowen is now considered, according to Archie B. Carrol (1999), as the "father of Corporate Social Responsibility". A fundamental role in the popularization of the concept of Corporate Responsibility has to be attributed to the work of P. Drucker "*The Practice of Management*", published in 1954. In fact, the author was the first to coin the sentence "*social responsibilities of business*", as evidenced by Carroll (1991)[9] and Joyner and Payne (2002)[10], focusing more on the responsibilities of the corporation as a collective character and not only, as in the book by Bowen (1953), on the responsibility of the businessman as a single character.

During the 1960's, because of the growing awareness in society and the explosion of social movements with particular interest in environmental issues and human and labor rights, a spreading interest around the concept of CSR began appearing in the academic literature. This was particular evident in the United States of America, where publications such as *Silent Spring* by Carson (1962) and *The Population Bomb* by Ehrlich (1968) and

[9] Carroll, A. B. (1991) – "*The Pyramid of Corporate Social Responsibility: Toward the Moral Management of Organizational Stakeholders*", Business Horizons, vol. 34, no. 4 - https://doi.org/10.1016/0007-6813(91)90005-G.

[10] Joyner, B. E., Payne, D. (2002) – "*Evolution and Implementation: A Study of Values, Business Ethics and Corporate Social Responsibility".* Journal of Business Ethics, 41(4), 297–311 - http://www.jstor.org/stable/25074929.

the growing anti-war and civil rights protests marked the rise of a new, more environmentally and socially oriented activism.

It is important to notice that alongside the new social, economic and political context that began appearing during the 1960's, two publications were influential in framing the definitional conception of CSR: "*Can Business Afford to Ignore Social Responsibilities?*" by Keith Davis and "*The Growing Concern Over Business Responsibility*" by William C. Frederick, both published in 1960. The publication by Davis stressed that businessmen have a social responsibility that "need to be commensurate with their social power" (p. 71), both in term of economic and human values and, for the first time, a link between the social performance of corporations was linked to possibility of generating economic returns. On the other hand, with the publication of "*The Growing Concern Over Business Responsibility*", Frederick proposed a new theory of corporate responsibility that rely on five requirements:

1. To have a criteria of value that should be based on a socially effective economic production and distribution system and the need for economic growth and development on a more broad social scale, where the businessman oversees the operation of an economic system that fulfills the expectations of the public;
2. To be based on the latest concepts of management and administration, where the manager is considered as team member with specific role as coordinator and planner;
3. To acknowledge the historical and cultural traditions behind the current social context;
4. To recognize that the behaviour of an individual businessman is a function of its social role within business and society; and,
5. To recognize that responsible business behaviour does not happen automatically but on the contrary, it is the result of deliberate and conscious efforts of "institutional functionaries" who have been give this task by society.

Frederick envisaged an economy where the means of production "should be employed in such a way that production and distribution should enhance total socio-economic welfare", where social responsibility translates into an interest towards economic and human resources utilized for broad social ends.

Although the academic approach to CSR in 1960's almost fully reflected the social context and the expectations that society had on corporations, it is important to notice that not all scholars was fully confident of the conception of CSR. This is case of the illustrious economists and Nobel Prize winner Milton Friedman who, with its article "*The Social Responsibility of Business is to Increase its Profits*" published in 1970, conceived CSR as a "fundamentally subversive doctrine" that would lead to an "inappropriate use of company's resources" and to an "unjustifiable spending of money for the general social interest". Moreover, Friedman added that in a free society "there is one and only one social responsibility of business - to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud" (Friedman, 1970).

The 1970's was a crucial period for the solid establishment inside corporations of what CSR should be. In fact, this was a period where publications were focused not only on the development of a theoretical conception and definition of CSR, but also, citing the work of M. Heald (1970) "*The Social Responsibilities of Business: Company and Community, 1900-1960*", on "how businessmen themselves have defined and experienced it". In his work, Heald declared that "[the] meaning of the concept of social responsibility for businessmen must finally be sought in the actual policies with which they were associated", where corporate executives' actions regarding social responsibility should be contextualized in the historical period during which these are developed (Heald, 1970).

In this sense, the social context of the beginning of 1970's was influenced by a major accident that happened in 1969 in the cost of Santa Barbara, California, where within a ten-day period, an estimated 80.000 to 100.000 barrels of crude oil spilled into the water of the Santa Barbara Channel[11]. The accident received outstanding media coverage in the United States and it resulted in massive protests that spread outside California to reach the whole country and is considered as a pivotal event in the birth and development of the modern environmental movement in the USA. In fact, thanks to the work of the Senator of Gaylord Nelson and the young activist Denis Hayes, on April 22, 1970, the first Earth Day was promoted and it inspired twenty million Americans - at the time, 10% of the total population of the US - to protest against the impacts of 150 years of industrial

[11] Wikipedia – "*1969 Santa Barbara Oil Spill*" - https://en.wikipedia.org/wiki/1969_Santa_Barbara_oil_spill.

development which had left a growing legacy of serious human health impacts[12]. As evidenced by Latapì Agudelo, Jóhannsdóttir and Davídsdóttir (2019), the first Earth Day had a severe impact on the political agenda of the USA, to the point that by the end of 1970 the Environmental Protection Agency (EPA) was created under President Nixon mandate with the specific aim to reduce pollution and improve and protect human health and the environment[13], and a "new regulatory framework was developed that would later influence corporate behavior and create additional responsibilities for corporations" (Latapí Agudelo, Jóhannsdóttir, & Davídsdóttir, 2019). The discussion around social responsibility was fuelled by two publications that came from the U.S. Committee for Economic Development (CED), first with "*A New Rationale for Corporate Social Policy*" and then with "*Social Responsibilities of Business Corporations*" published June 1, 1971, where the CED stated that "business functions by public consent, and its basic purpose is to serve constructively the needs of society - to the satisfaction of society" and they evidenced that "business is being asked to assume broader responsibilities to society than ever before and to serve a wider range of human values. Business enterprises, in effect, are being asked to contribute more to the quality of American life than just supplying quantities of goods and services." (Committee for Economic Development, 1971). Most importantly, in 1972, a major study titled "*The Limits to Growth*" was published where, working and improving the considerations brought, 10 years before, by Carson in her work "*The Silent Spring*", the Club of Rome, together with a team of the Massachusetts Institute of Technology (MIT) evidenced, with computer simulations and material data, the heavy ecological footprint of the economy and challenged the economic paradigm of unrestrained economic growth.

These publications, the growing protests around social welfare and environmental issues and the new social context that had been building in the first part of 1970's influenced the democratization of the concept of CSR to the general public, becoming increasingly popular to the point that its "meaning became unclear, and as a consequence it meant something different for everybody" (Latapí Agudelo, Jóhannsdóttir, & Davídsdóttir, 2019). This uncertainty surrounding the definition of what corporate responsibilities should be lasted for the whole decade, until 1979, when Carroll, in its publication "*A*

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[12] EarthDay.org – "*Our History*" - https://www.earthday.org/history/.

[13] United States Environmental Protection Agency – "*Our Mission and What We Do*" - https://www.epa.gov/aboutepa/our-mission-and-what-we-do.

Three-Dimensional Conceptual Model of Corporate Performance", advanced what is potentially the first unified definition of CSR as being: "The social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time" (Carroll, A Three-Dimensional Conceptual Model of Corporate Performance, 1979). What is important in Carroll's definition is that the economic and social purposes are tied together in the framework of the responsibility of businesses and are not seen as incompatible trade-offs.

After the spread of CSR in 1970's and the birth of a commonly acknowledged definition of social responsibility of businesses, the discussion around CSR during the 1980's centred more around how to effectively implement CSR within corporations. It must be noted that the shift in the focus of researchers toward the operationalization of CSR was highly influenced by neo-liberal economic goals of the Reagan administration. In fact, during the 1980's it was thought that a free market was sufficient to fulfil society's needs and new market instrument such as management standards and code of ethics were introduced. Notably, the term *stakeholder* became common in the academic environment to include groups such as shareholders, employees and customers as the characters toward whom corporate responsibility was directed.

The publication by Thomas M. Jones "*Corporate Social Responsibility Revisited, Redefined*", published in April 1980, was arguably the first piece of study where, as evidenced by Latapì Agudelo, Jóhannsdóttir and Davídsdóttir (2019), CSR was considered as a "decision making process that influence corporate behaviour". Moreover, in 1981 the publication by Tuzzolino and Armandi "*A Need-Hierarchy Framework for Assessing Corporate Social Responsibility*" a new focus on how "corporate actions - as well as their effects on claimants - can be assessed" (Tuzzolino & Armandi, 1981) was first evidenced. The authors supported that, in a period marked by a clash between stockholders, civic interests and corporations' economic goals where role conflict and role ambiguity persist as serious organizational problems, a "taxonomic framework" was needed to facilitate the operationalization of CSR. Basing their research on Maslow's Hierarchy of Needs theory and considering that corporations, as individuals, have different needs that guide their behaviour, Tuzzolino and Armandi tries to integrate such a conceptual framework to CSR, constructing a need-hierarchy framework, based on 5 different needs, through which social performance of corporations can be assessed and measured.

It is in this context that other scholars began focusing on what is known as Corporate Social Performance. This is the case for Cochran and Wood's "*Corporate Social Responsibility and Financial Performance*", published in 1984, where the authors tried to find the existence of a correlation between CSR initiatives and corporate financial performance, to evidence a link of causality between better corporate performance and higher corporate social activism. In 1985, another publications looking at the correlation between CSR and financial performance was published by Aupperle, Carroll and Hatfield. With "*An Empirical Examination of The Relationship Between Corporate Social Responsibility and Profitability*", the authors, applying the *four-part definition* by Carroll (1979, 1983), surveyed a sample of business executives by means of questionnaire in order to understand how much relative importance an organization place on both the non-economic and the economic factors, namely philanthropic responsibilities, ethical responsibilities, legal responsibilities and economic responsibilities. They found that "the non-economic means taken together (6.06) were of much greater weight than the mean for the economic component (3.50). Perhaps this suggests the corporate community is more responsive to social issues than has been suspected" (Aupperle, Carroll, & Hatfield, 1985). In addition, as a result of their research, a strong negative correlation between the economic and each of the non-economic components was evidenced, suggesting that the more interest a corporations embed in non-economic issues, the less emphasis on the economic aspect appears and they concluded that the profitability (in terms of ROA adjusted for risk) of firms with strong orientation toward social responsibility was not statistically different than the profitability of firms without such orientation.

It is important to notice that during the 1980's major international events influenced the international community. This is the case of the establishment in 1983 of the World Commission on Environment and Development (WCED) chaired by the Norwegian Prime Minister Gro Harlem Brundtland, who commissioned the drafting of "*Our Common Future*", a report by the Brundtland Commission where was coined the concept of *sustainable development* as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987), seeking to reconcile economic development with social and environmental goals. Moreover, events such as the Bhopal gas tragedy in 1984, the Chernobyl nuclear catastrophe in 1986, the Exxon Valedez oil spill in 1989 and the creation of the Intergovernmental Panel on Climate Change (IPCC)

in 1988, although these didn't directly affected the evolution and conceptualization of corporate responsibility, reflected the societal expectations of the time, which according to Archie B. Carroll, were mostly focused on "environmental pollution, employment discrimination, consumer abuses, employee health and safety, quality of work life, deterioration of urban life, and questionable/abusiveness practices of multinational corporations" (Carroll, A History of Corporate Social Responsibility: Concepts and Practices, 2008).

The natural disaster that happened during the 1980's, together with new influential international events such as the United Nations summit on Environment and Development held in Rio De Janeiro and the creation of the UN Framework Convention on Climate Change (UNFCCC) in 1992 and, later, the adoption of the Kyoto Protocol in 1997, alongside the globalization process that began appearing during the decade influenced the behaviour of corporations and the concept of CSR gained international attention and became stronger.

The academic publications during the 1990's focused, as happened during the 1980's, on the operationalization of the concept of CSR within corporations, with the specific aim of providing a useful approach for business executives in adopting CSR activities. In 1991, Carroll published the "*Pyramid of Corporate Social Responsibility*", where he presented the *four-part definition* discussed above as a pyramidal scheme and defined the four responsibilities that any corporation should have as being, from the top to the bottom following a decreasing order of importance:

1. The economic responsibilities: be profitable;
2. The legal responsibilities: obey the law;
3. The ethical responsibilities: be ethical; and,
4. The philanthropic responsibilities: be a good corporate citizen.

Although presented in a hierarchical shape, the non-economic responsibilities of the corporation should not be seen as being in competition between them, but rather as aspects that should be present in corporate executives' agenda in any stage of company's development.

Another important publication of the period was the publication by the English economist and entrepreneur John Elkington, a pioneer for the global sustainability movement, "*Cannibals with Forks. The Triple Bottom Line of 21 Century Business*" in 1997.

Although this book wasn't published on US soil, it was of fundamental importance for the development of CSR because the author introduced the concept of Triple Bottom Line, according to which Corporate Social Responsibility incorporates three different types of responsibilities: social responsibility (toward people and society by adopting internal code of ethics), environmental (toward the planet by abiding at international standards and principles) and economic (profit-oriented). It's important to highlight that the author thought the triple bottom line as being interrelated, interdependent and partly in conflict and that a business can be considered sustainable only if it lives up with this conceptualization of triple bottom line. The publication was highly influential in the spreading of the concept of *sustainability* that quickly became a mantra to follow for business executives as the conception the triple bottom line suggests that corporations need to incorporate in their agenda a socially *and* environmentally reputation that can be interrelated with their economic responsibilities. In 1998, the World Business Council for Sustainable Development (WBCSD), a coalition of 120 international companies that "aims to be a catalyst for change towards sustainable development and to foster closer co-operation between business, government and other organizations concerned with the environment and sustainable development"[14], in the WBCSD Stakeholder Dialogue on CSR held in The Netherlands from September 6 to 8, 1998, defined CSR as "the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large"[15], evidencing the mandatory dimension of CSR where corporations have "certain obligations to behave in a way society finds acceptable".

As evidenced by Latapì Agudelo, Jóhannsdóttir and Davídsdóttir (2019), some corporate certifications designed to address CSR became appearing in the international context. This is the case of the ISO 26000, which was presented by the International Organization for Standardization (ISO) in 2002 to complement the ISO 9001 and ISO 14001 which are, respectively, focused on quality and environmental management standards. The Standard ISO 26000 - Social Responsibility was approved in 2010, thanks to the work of an

[14] World Business Council for Sustainable Development (WBCSD) (1999) – "*Corporate Social Responsibility*" by Phill Watts, Lord Holme, Shell International, Rio Tinto - https://growthorientedsustainableentrepreneurship.files.wordpress.com/2016/07/csr-wbcsd-csr-primer.pdf.
[15] See note 14.

international working group. The standard was particularly relevant and influential for the internationalization and global recognition of CSR as it represents an authoritative criterion that managers can follow to implement CSR activities within corporations.

With the beginning of the new century, academic research focused more on the strategic determinants of CSR. This is particularly evident with the work by Geoffrey P. Lantos "*The Boundaries of Strategic Corporate Social Responsibility*" published in 2001. The author specified that strategic CSR or "strategic philanthropy" is done to accomplish corporation's strategic business goals and in this view CSR can lead to a profitable financial performance in the long run since "market forces provide financial incentives for perceived socially responsible behaviour. Stakeholders outside the stockholder group are viewed as means to the ends of maximizing shareholder wealth" (Lantos, 2001). The author assimilates social actions to marketing activities, in the sense that the long-term benefits these activities may bring need time to show up in corporations' financial statements, but the goodwill they generate among customers, government regulators and other general stakeholders justify the initial investment. Although the author explains that the academic literature is not able to find a statistically significant positive correlation between CSR efforts and financial performance, by citing the "*Iron Law of Responsibility*", he is sure that in the near future "returns to strategic CSR should rise", as "[…] those who do not use power in a manner which society considers responsible will tend to lose it" (Boatright, 1999).

It is thanks to this publication that some academics began using the concept of Strategic Corporate Social Responsibility (SCSR) in their publications. This is the case for Werther and Chandler (2005), where they emphasised that CSR should be transformed from being a mere minimal commitment to a strategic necessity, evidencing the mandatory aspect of Strategic CSR that should be implemented by management within corporations to reach a "sustainable competitive advantage" (Latapí Agudelo, Jóhannsdóttir, & Davídsdóttir, 2019). The concept of achieving a competitive advantage through strategic implementation of social activities by corporations was resumed by Porter and Kramer in their work "*Strategy & Society: The Link Between Competitive Advantage and Corporate Social Responsibility*", published in 2006 in the Harvard Business Review. They argued that in order to achieve a competitive advantage by means of CSR, corporations should not focus on single-handed objectives, such as achieving stakeholders' satisfaction or obtaining and maintaining a reputational status, on the contrary management should

implement it within a holistic approach that supports business goals. The publication was particularly relevant because the authors coined the term “shared value”, evidencing the necessity of generating both economic and societal benefits placing environmental, social and economic issues at the centre of how corporations operate. The focus is placed on the value chain of corporations, and hence on the positive or negative social and environmental impacts of business activities; understanding how social issues may or may not influence corporations’ competitiveness and hence ranking and selecting those social issues that are considered more strategical for any corporation; finally, corporation can create their own social agenda and apply strategic CSR activities that may help corporations to simultaneously solve social and/or environmental issues and gain a competitive advantage over other competitors. The focus on Strategic CSR was once again present in the publication by Peter A. Heslin and Jenna D. Ochoa “*Understanding and Developing Strategic Corporate Social Responsibility*” (2008). In their research, they evidenced that, although “particular CSR practices that some organizations adopt might not necessarily be useful for others, many of the principles underlying them are applicable to a wide range of organizations” (Heslin & Ochoa, 2008). The seven principles that were evidenced by the authors should not be interpreted as a “checklist of best practices”, but rather as a set of organizational activities that are actually implemented by corporations to improve business opportunities while benefiting the social context. These are:

1. Cultivate needed talent;
2. Develop new markets;
3. Protect labor and welfare;
4. Reduce your environmental footprint;
5. Profit from by-products;
6. Involve customers;
7. Green your supply chain;

This work is highly influential because it evidenced how business executives are already considering and applying notions of SCSR within business agenda in an attempt to create shared value with respect to employees, customers, suppliers, shareholders and the society as a whole.

All these publications targeting SCSR was so influential in the business environment that, by the end of the first decade of the new century, “SCSR was understood as having the

potential for generating shared value and for addressing social concerns" (Latapí Agudelo, Jóhannsdóttir, & Davídsdóttir, 2019) and these paved the way for a definitive application of the strategic approach in the decade in coming.

In 2011, Porter and Kramer developed further the concept of shared value, coining the term Creation of Shared Value (CSV), considered as an unavoidable step in the development of corporate's business and was defined as: "policies and operating practices that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which it operates. Shared value creation focuses on identifying and expanding the connections between societal and economic progress" (Porter & Kramer, Creating Shared Value: How to Reinvent Capitalism - and Unleash a Wave of Innovation and Growth, 2011), specifying the target of business operations should be reoriented toward the Creation of Shared Value and not only on economic profits.

The belief that SCSR can lead to the generation of a shared value was also present in the third edition of Chandler and Werther's book "*Strategic Corporate Social Responsibility: Stakeholders, Globalization and Sustainable Value Creation*", published in 2013. What is important to notice is that the authors, specifically for the publication of their third edition of the book in 2013, changed the subtitle of the work, including the concept of CSV directly, to highlight the relevance of this concept in business discussions. The authors advanced the idea that the ability of corporations to generate shared value for different stakeholders simultaneously in the medium to long term has to be found in the strategic implementation of CSR activities in an efficient and socially responsible manner, which should be incorporated within the core operations of the business and not considered as secondary activities.

Working on Chandler and Werther's publication of 2013, Chandler published the fourth edition of "*Strategic Corporate Social Responsibility: Sustainable Value Creation*" in 2016, where he presented a decision-making framework for the strategic implementation of CSR within corporation: first, CSR should be completely incorporated into the strategic planning process and corporate culture of the corporation; second, the understanding that all corporation's activities are directly related to the core operations; third, strategic incorporation of stakeholders needs into business activities; fourth, switch from a short-term profit-oriented perspective to a medium to long term strategic planning

with implementation of stakeholders' perspective; fifth, Chandlers added as a new component (with respect to the previous editions) that the target of corporation should be to *optimize the value created*.

Carroll's 2015 publication "*Corporate Social Responsibility: the Centerpiece of Competing and Complementary Frameworks*" was particularly important for institutionalization of the concept of CSR because he analysed different concepts that have become part of the modern business vocabulary. He showed that concepts such as stakeholder engagement, business ethics, corporate citizenship, corporate sustainability and creation of shared value are all interrelated and overlapping and addressing one of this concept singularly may help in addressing other concept simultaneously. Remarkably, he illustrated that CSR has developed by incorporating all of these concepts all together and that's why CSR is recognized to be the "benchmark and central piece of the socially responsible business movement" (Latapí Agudelo, Jóhannsdóttir, & Davídsdóttir, 2019).

In the 2010's, the exponentially growing number of publication around CSR, together with the adoption of international initiatives such as the Paris Agreement and the Sustainable Development Goals agenda in 2015, helped the concept of CSR to spread all around the world, evidencing the new societal role that corporation are now called to play to solve environmental and social problems. As developed by Latapì Agudelo, Jóhannsdóttir and Davídsdóttir (2019), it became evident that the concept of CSR between scholars is now a central point of discussion. In fact, they presented a research showing the number of publications per year in three different online databases: in Science Direct, publications more than doubled since 2010, with 2845 covering CSR topic in 2017; in Pro Quest, the number of publications grew from 5735 to 8188 in 2016, with a decrease in publication for the year 2017 at 5670; in Web of Science, publication almost quadrupled, passing from 479 in 2010 to 1816 in 2017 (Latapí Agudelo, Jóhannsdóttir, & Davídsdóttir, 2019). The numbers presented are helpful in showing how academics are still focused on the concept of CSR, most of all in the implementation of CSR and its financial impact on business activities and corporate overall performance. However, it is important to point out that other competing frameworks and new concepts are becoming increasingly important and how they might even become more important and influential than the CSR itself. One of this is for sure the Environmental, Social and

Governance (ESG) criteria, which will be the central topic of discussion in the next paragraph.

1.2. From CSR to ESG: the Transformation of Corporate Duty Towards Sustainability.

As discussed in the previous paragraph, it is evident that the concept of Corporate Social Responsibility evolved from a discussion of the corporate social duty and the impact that big corporations of the time had on external stakeholders and society as a whole toward a general concept of sustainability and sustainable development. It is important to highlight this because with the beginning of the new millennium, the focus shifted from the accountability of business operations toward societal issues (working conditions, employees welfare, environmental issues), where the "ethical choice is not framed as an instrument for improving financial performance, albeit that the expectation might be that observance of ethical standards would, in the long term, have that effect" (MacNeil & Esser, 2022), to an orientation where Environmental, Social and Governance (ESG) considerations around financial factors and risk mitigation are integrated into the investment process whose aim is to improve financial performance and returns in the long run by mitigating those specific risks associated with ESG factors. In this context, sustainability can be understood as the overarching concept that links CSR and ESG together, although "the fundamental difference in the objectives of each approach means that they cannot be fully reconciled" (MacNeil & Esser, 2022).

The misalignment between the objectives of CSR on one hand and ESG criteria on the other hand became apparent during the 1990's, where concepts such as *Socially Responsible Investing (SRI)* and, in general, *sustainable investment* practices appeared in the investment environment in the attempt to reach higher financial performance and improve financial returns while promoting long-term environmental or social value. This was a direct result of major international environmental disasters, such as the Bhopal gas tragedy in 1984, the Chernobyl nuclear catastrophe in 1986, and the Exxon Valedez oil spill in 1989, and as a result of the improvement in the discussion around social duty of corporations towards the society that started to be recognised internationally. The concept of SRI is wide and can be applied in different forms, but it generally entails one of the following strategies:

- Screening of potential investments to enable exclusion of investment in specific sectors, or companies or projects that show poor environmental or social performance relative to industry peers (*Negative/Exclusionary screening*) or companies or projects that do not comply with international norms and standards (*Norms-based screening*);
- Integration of sustainable criteria (environmental, social or governance) in investment strategies by institutional investors and asset managers;
- Shareholder engagement and activism;
- Sustainability themed investing; and,
- Impact investing, focusing on measurable positive social or environmental outcomes alongside financial returns (MacNeil & Esser, 2022).

A further, decisive step in the recognition of ESG concept can be retrieved in the publication by the United Nations Global Compact, working with partners such as the Swiss Government and the International Finance Corporation (IFC), of the 2005 report "*Investing for Long-Term Value: Integrating Environmental, Social and Governance Value Drivers in Asset Management and Financial Research*", which followed the "*Who Cares Wins: Connecting Financial Markets to a Changing World*" initiative in 2004, with the aim to assist the financial sector and government bodies and regulators in integrating ESG criteria in the investment process and financial decision-making, that, according to the Ambassador Thomas Greminger, Head of the Human Security Division of the Swiss Department of Foreign Affairs, are now considered "inevitably becoming an obligation for mainstream analysts and decision makers" (UN Global Compact; Federal Department of Foreign Affairs Switzerland; International Finance Cooperation, 2005). The report evidenced the fact that different initiatives, both individual and collective, have been undertaken in the previous years with the aim of improving ESG integration in the investment process and evidenced that a more-long term approach was needed to effectively implement these factors. However, it stressed the fact that, being in a tipping point for the evolution and spread of ESG strategies, the progress should move faster to exploit the ESG momentum and that the movement could be "pushed back by powerful forces interested in short-term gains only (majority of institutional investors and hedge funds were mentioned)" (UN Global Compact; Federal Department of Foreign Affairs Switzerland; International Finance Cooperation, 2005). In the same year 2005, the United Nations Environment Programme Finance Initiative (UNEP FI), directly working with

financial services sector and its stakeholders, published the so-called "*Freshfield Report*" (*"A Legal Framework for the Integration of Environmental, Social and Governance Issues into Institutional Investment*"), where they evidenced the importance of influencing the investment strategies given the profound effect they have on corporate behaviour and ultimately on the environment and the society as a whole and the growing recognition of the material impact on financial performance and risk mitigation of ESG criteria. These two report formed the foundation for the launch of the *Principles for Responsible Investment (PRI)* at the New York Stock Exchange in 2006 and the *Sustainable Stock Exchange Initiative (SSEI)* in 2007, with the aim, respectively, of promoting the integration of ESG criteria into investment strategies and decision-making contributing "to developing a more sustainable global financial system" with the belief that the application of these Principles "may better align investors with broader objectives of society"[16]; "to build the capacity of stock exchanges and securities markets regulators to promote responsible investment in sustainable development and advance corporate performance on ESG issues"[17], to enhance listing rules and/or regulatory initiatives to include disclosure of ESG issues and providing guidance for ESG reporting in different exchanges.

Although in the 2010s economists and scholars, on one hand, continued their research on CSR activities and corporate duty and, on the other hand, "corporations would still report on CSR issues and disclose how they fulfilled certain social obligations and how they balanced these values with profit maximization" (MacNeil & Esser, 2022), it became clear that ESG criteria became the central point of discussion, both in the academic environment and in the financial sector. ESG, unlike CSR that was more directly linked with operations that corporate executives should implement to tackle corporation's duty, is focused on the supply of capital as "primary driver of behavioural change and that investors would be the agents of change" (MacNeil & Esser, 2022). The shift from the social obligation perspective of CSR toward the improvement of financial returns and risk management perspective of ESG can be described by different factors:

[16] Principles for Responsible Investing – "*What Are the Principles for Responsible Investing*?" - https://www.unpri.org/about-us/what-are-the-principles-for-responsible-investment.

[17] Sustainable Stock Exchanges Initiative – "*About the SSE Initiative*" - https://sseinitiative.org/about/.

- The climate change issue has become an urgency all around the world and now is general belief that organizations, working together with international regulatory agencies and governments, should intervene in this direction.
- The size of investment firms have become so large that "they are too big to let the planet fail"[18].
- Plenty of different research papers emerged showing positive relationship between high performance on ESG-related issues and superior financial performance, evidencing lower stock pricing volatility and lower default probability;
- The importance of focusing on material factors with respect to the entity's sector. In this sense, the publication by the Sustainability Accounting Standards Board (SASB) identifying material ESG issues for all 77 industries in its classification system was particularly influential in shaping investors actions and strategies.
- A growing demand for sustainable financial assets from financial players because of their empirically tested higher performance and their potential to mitigate systemic risks. This is particularly evident for investment firms with long-term investment strategies, such as pension funds.
- Higher ESG activism by investors, that now are not only focused on the maximisation of returns, but have an increased interests in topics such as climate change and environmental issues, human rights, human capital management, and diversity in the workforce and in corporate boards.
- Diffusion of metrics for the measurement of ESG related issues that are material in the evaluation of investment strategies and portfolio decision making, including the creation of ad-hoc ESG ratings by rating agencies to track and give a measure to corporate's ESG actions and strategies.
- Development of ESG reporting frameworks and initiatives focused on corporate disclosure to avoid "greenwashing" practices.

Having this in mind, it's important to specify that the concept of ESG, although it prominently revolves around the Environmental, Social and Governance pillars, has been used by investors "to refer not only to sustainability measures or to environmental, social,

[18] Harvard Business Review – "*The Investor Revolution – Shareholders are Getting Serious About Sustainability*" by Robert G. Eccles and Svetlana Klimenko, from the Magazine May-June 2019, pp. 106-116 - https://hbr.org/2019/05/the-investor-revolution.

or governance practices specifically, but to all nonfinancial fundamentals that can impact firms' financial performance, such as corporate governance, labor and employment standards, human resource management, and environmental" (Harper Ho, 2016). This definition of ESG clearly shows that, although the drivers of CSR and ESG implementation appear to be similar, their aim have nothing in common: CSR focuses on business ethics while the focus of ESG has shifted toward firm and portfolio financial performance and the mitigation of risks.

In 2023 ESG investing has become so prominent in the financial environment that, according to the ESG Global Study 2023 report by Capital Group[19], as of October 2023 "global ESG adoption among global investors has reached a new high", with an increase of a single percentage point with respect to the previous year to reach a total of 90%. However, the report, whose sample of research includes 565 global institutional investors and 565 global wholesale investors based in 25 different countries (18% North America, 50% EMEA and 32% Asia-Pacific) with a total of $52,9 trillion of Assets Under Management (AUM), highlights that the situation in North America is rather different: in contrast to the global trend, the percentage of ESG adoption in this area has fallen with respect to 2022 levels, from 79% to 75%. The decrease in ESG adoption has to be attributed largely to the United States, where the percentage fell from 74% in 2022 to 69% in 2023. Most of U.S. respondents attribute this decrease to the increasing regulations and legislative actions that have been implemented by federal states agencies to limit ESG adoption in their territory.

These numbers are particularly useful because they highlight the deep contrast between the difficulties in the implementation of ESG factors in the United States, with respect to the strict regulations and the clear focus that other regions such as the European Union and the U.K. have given to ESG as a central topic of action. In fact, when it comes to the United States, the general consensus is that the U.S. is lagging on its ESG implementation. This is mostly due to an ideological battle that is emerging at the federal state level, where pro-ESG states (and political party) on one hand, and anti-ESG states that seek to exclude or limit its implementation on the other hand, is shattering an already complicated ESG

[19] Capital Group is an American financial services company born in 1931 that ranks among one of the world's oldest and largest investment management organization, with over $2.3 trillion in Assets Under Management (AUM).

environment and is posing significant legislative, operational and financial concerns for both public and private financial institutions in the U.S.

In the next paragraph I will highlight what are the U.S. congress legislation and state-level regulations aiming at defining the future ESG landscape of the country. I want to do so by comparing these legislative initiatives with respect to the ESG panorama of the European Union, considered as the most developed geographical region when it comes to ESG legislation.

1.3. State of the Art of ESG Legislation and Sovereign/State Approach in the US versus Europe.

Although the U.S, have been slower in regulating the ESG landscape with respect to other developed countries, since the establishment of the Biden's Administration in 2021 there has been significant progress towards the topic. I will now focus on some of the most important ESG regulations that have appeared in the last two years to show how the current state of the art in the U.S. financial industry when it comes to ESG looks like and which are the national agencies that promoted these regulations and make a comparison with the actual regulations and legislative actions in the European Union (EU).

1.3.1. ESG Regulations in the United States.

In the last year, ESG implementation by private and public companies in the United States have been largely determined by voluntary adoption, with the aim the respond to the surgent shareholders' sustainable needs and institutional investors focus on sustainable investing. In this sense, regulations was mostly promoted by international committee such as the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB), the International Sustainability Standards Board (ISSB), the Task Force on Climate-Related Financial Disclosures, etc., with the aim of pushing the standardization and comparability of ESG disclosing practices. Things have started to move in the sustainable environment with the establishment of the Biden's administration. In fact, on January 27, 2021, just one week after the presidential elections, the President of the United States of America, Joe Biden, released "*An Executive Order on Tackling the Climate Crisis at Home and Abroad*", where it was made clear that actions were needed to avoid the catastrophic impacts of climate crisis and tackling climate change was made a priority.

In the next paragraphs, I will show what are the national agencies that have somehow focused on the ESG topic and the most important ESG-related regulations these have implemented in the United States.

1.3.1.1. The Securities and Exchange Commission (SEC).

The Securities and Exchange Commission (SEC) was established in 1934 at the height of the Great Depression with the aim of protecting investors, maintaining fair, orderly, and efficient markets, and facilitating capital formation. With more than $100 trillion monitored yearly, the mission of the SEC is to deter misconduct, hold wrongdoers accountable and provide resources to help investors evaluate their investment choices and protect themselves against fraud[20].

With the recognition of the rapid growth of ESG investment practices in the last years, the SEC has included ESG investing in its examination priorities since 2021. In fact, with the growing recognition of the importance of climate and ESG topics, ESG-focused investors are now facing new risks and opportunities. In order to help investors in facilitating their financial decision-making process, the SEC has been active in promoting new regulations and guidelines. In 2022, the SEC proposed "rule changes that would require registrants to include certain climate-related disclosures in their registration statements and periodic reports, including information about climate-related risks that are reasonably likely to have a material impact on their business, results of operations, or financial condition, and certain climate-related financial statement metrics in a note to their audited financial statements"[21]. Most importantly, a framework for the reporting on different types of greenhouse gas emissions has been proposed, with the requirement to keep track of Scope 1, Scope 2 and Scope 3 emissions[22] generated by the corporation or by its supply chain. The SEC also proposed a requirement to disclose climate costs that are 1% or more of each line-item total of a company's financial statements. Although the

[20] U.S. Securities and Exchange Commission – "*About the SEC: Mission*" - https://www.sec.gov/about/mission.

[21] U.S. Securities and Exchange Commission – "*SEC Proposes Rules to Enhance and Standardize Climate-Related Disclosures for Investors*", March 21, 2022 - https://www.sec.gov/news/press-release/2022-46.

[22] Scope 1 emissions are those directly attributable to an entity's activities and owned resources; Scope 2 emissions are those that are connected with purchased or acquired energy by other suppliers; Scope 3 emissions are indirect emissions in the company's supply and value chain. See GHG Protocol definition at: https://ghgprotocol.org/.

implementation of the SEC proposal was firstly planned for October 2023, the final implementation is now expected for late 2023 or beginning of 2024. At the same time, the SEC is working for a final regulation on ESG funds' name and to report on the standards used for classifying funds as ESG-focused, as well as on corporate board diversity and human capital management regulation.

1.3.1.2. The U.S. Department of Labor (DOL).

The Department of Labor (DOL) is one of the executive departments of the federal government in the United States of America. The DOL administers federal labor laws to guarantee workers' rights to fair, safe and healthy working conditions, wage and hour standards, unemployment benefits, reemployment services, and occasionally, economic statistics[23].

On November 22, 2022, the US Department of Labor released its final rule, officially titled "*Prudence and Loyalty in Selecting Plan Investments and Exercising Shareholder Rights*", that enables Employee Retirement Income Security Act (ERISA) fiduciaries to consider ESG factors in investment strategies and decision making where the fiduciaries reasonably determine that those factors are financially relevant to a risk and return analysis[24]. Both the US House of Representatives and the Senate passed a resolution to overturn the DOL "*ESG Rule*" on February 28 and March 1, 2023, respectively. The President Joe Biden used for the first time during his administration its veto power over this resolution. Moreover, as of November 2023, the "ESG Rule" has been challenged also in a U.S. District Courts for the Northern District of Texas and in the Eastern District of Wisconsin. In September 2023, the Texas court ruled in favour of the DOL, but the lawsuit in Wisconsin is still pending and a final decision should come in the next months.

1.3.1.3. The U.S. Department of Treasury (USDT).

The U.S. Department of the Treasury (USDT) is one of the executive departments of the federal government of the United States of America. The role of the USDT is to promote

[23] Wikipedia – "*United States Department of Labor*" - https://en.wikipedia.org/wiki/United_States_Department_of_Labor.

[24] Morgan, Lewis and Bockius – "*Department of Labor's 'ESG' Rule Survives Challenge in Federal District Court*" by Julie K. Stapel, October 6, 2023 - https://www.morganlewis.com/blogs/mlbenebits/2023/10/department-of-labors-esg-rule-survives-challenge-in-federal-district-court.

the conditions that enable economic growth and prosperity, ensures the financial security of the United States, and manages the U.S. government's finances and resources. The Department's basic functions include: i) managing Federal finances; ii) collecting taxes, duties and paying all bills of the U.S.; iii) printing all paper currency and minting coins; iv) managing Government accounts and public debt; v) supervising national banks and thrift institutions; vi) Advising on domestic and international financial, monetary, economic, trade and tax policy[25].

In September 2023, the Department of the Treasury released the "*Principles for Net-Zero Financing & Investment*" to "underscore the importance and value of financial institutions net-zero commitments; promote consistency and credibility in financial institutions' approaches to these commitments; and, highlight and encourage greater adoption of emerging best practices pertaining to these commitments" (U.S. Departement of Treasury, 2023). The Principles are divided into 9 pillars but these do not impose any legal requirements, as their use and application is completely voluntary, to any institution in the country. The release of the Principles fits within the Biden-Harris Administration agenda with respect to the necessity of reducing emissions and climate change's adverse impacts on the productive capacity of the U.S. economy and the well-being of society.

Moreover, the Federal Insurance Office (FIO), a federal agency that is part of the U.S. Department of the Treasury which advises the Treasury Department and other federal government on all matters related to the insurance industry in the United States, in the attempt to respond to the President's Executive Order on Climate-Related Financial Risk, has submitted a Request for Information (RFI) in August 2021 to monitor and assess the significance of climate-related financial risks in the insurance sector. The FIO intends also to work, together with other Treasury's agencies, and to focus on the following three climate-related priorities:

1. Insurance Supervision and Regulation: Assess climate-related issues or gaps in the supervision and regulation of insurers, including their potential impacts on U.S. financial stability.
2. Insurance Markets and Mitigation/Resilience: Assess the potential for major disruptions of private insurance coverage in U.S. markets that are particularly

[25] U.S. Department of the Treasury – "*Role of the Treasury*" - https://home.treasury.gov/about/general-information/role-of-the-treasury.

vulnerable to climate change impacts; facilitate mitigation and resilience for disasters.

3. Insurance Sector Engagement: Increase FIO's engagement on climate-related issues; leverage the insurance sector's ability to help achieve climate-related goals[26].

Although the FIO's agenda didn't lead to the publication of any binding regulations within the insurance industry, its initiatives, together with the initiatives of other federal agencies such as the Federal Reserve, and the increased focus on climate-related matters, both financial and nonfinancial, highlight the raising importance that the environmental pillar of ESG is finding in the federal agenda.

1.3.1.4. The Federal Reserve (Fed).

The Federal Reserve is the central bank of the United States of America. It performs five general functions to promote the effective operation of the US economy: i) conducts the monetary policy with the aim of promoting maximum employment, stable prices and moderate long-term interest rates; ii) promotes the stability of the financial system and seeks to minimize and contain systemic risks through active monitoring; iii) promotes the safety and soundness of individual financial institutions and monitors their impact on the financial system as a whole; iv) fosters payment and settlement system safety and efficiency through services to the banking industry and the U.S. government that facilitate U.S.-dollar transactions and payments; v) promotes consumer protection and community development through consumer-focused supervision and examination, research and analysis of emerging consumer issues and trends, community economic development activities, and the administration of consumer laws and regulations.

Although, as according to Micheal S. Gibson, Director of Supervision and Regulation of the Federal Reserve, the Fed "is not a climate policymaker"[27] and recognizes that the Federal Reserve's responsibilities with respect to climate change are important, but narrow, a growing attention have been directed in recent years towards understanding the

[26] Federal Register – "*Federal Insurance Office Request for Information on the Insurance Sector and Climate-Related Financial Risks*". A notice by the Treasury Department, 31 August 2021 - https://www.federalregister.gov/documents/2021/08/31/2021-18713/federal-insurance-office-request-for-information-on-the-insurance-sector-and-climate-related.

[27] Federal Reserve – "*Climate-Related Financial Risks*" by Micheal S. Gibson, July 18, 2023 - https://www.federalreserve.gov/newsevents/testimony/gibson20230718a.htm.

impact of climate change-related financial risks on the financial sector and financial stability. As evidenced by the Fed's note "*Climate Change and Financial Stability*", published in March 2021, the adverse effects of a changing climate can have impact both in terms of financial risks, prompting a reassessment of asset values, changing the cost or availability of credit, or affecting the timing and reliability of cash flows, and in terms of risks to the economic activity, which can themselves create or amplify financial risks. These risks can increase financial-system vulnerabilities and that's why the recognition of the importance of climate-related financial risk fits within the Federal Reserve's financial stability monitoring framework. With the aim of evaluating the strength of the US financial sector under different climate scenarios, at the beginning of 2023 the Federal Reserve announced that it will conduct climate scenario analysis on six large US banks. The climate stress test will be focused on testing *physical risk* and *transition risk* to evaluate their effects on prudential risk of large banks (debt repayment ability, residual value of non-performing loans, evaluate banks' real estate portfolios, etc.). Although the Federal Reserve's agenda toward climate change is not an abiding rule, its actions within the financial sector may help solidify the integration of ESG criteria within the financial sector that, we shall remember, can have the potential of mitigating climate-related risks.

1.3.2: European Union's Initiatives for the Implementation of ESG Criteria.

In contrast to the scarce progress made in the US region, the European Union has been actively involved in the legislation of different ESG-related regulations. The EU ESG regulatory initiative started in March 2018, when the European Commission published the EU Action Plan on sustainable finance, with aim of pushing the Capital Markets Union (CMU) participant to sustain the specific needs of European (and global) economy towards a more sustainable economy and to the benefit of global society. The key features of the plan are:

- Establishment of a unified EU classification system (taxonomy) of climate, environmental and social activities;
- Creation of EU standards for green financial products on the basis of the EU classification system;
- Clarification of the duty of asset managers and institutional investors to include in their investment process ESG criteria.

- Requirement for insurance and investment firms to be more transparent toward their customers and advise them on the basis of their sustainability preferences.
- Establishment of guidelines and specific rules for the reporting of climate-related and sustainable (non-financial) information that should come together with financial statements reporting[28].

In 2019, the European Commission presented the *European Green Deal*, a set of legislative proposals and policy initiatives with the aim of transforming the European Union in the first net-zero region worldwide by 2050 and reducing GHG emissions by 55% with respect to 1990 levels by 2030, with the target of tackling climate change impacts and environmental risks in Europe and spurring the implementation of sustainable finance within European countries. With the Covid-19 pandemic hitting the world and spreading all around European countries, some European leaders asked the European Commission for a reassessment of EU climate goal and a deeper focus in the economic crisis generated by the pandemic. European agencies replied that the ecological cause helped create the pandemic, emphasizing even more the necessity of the European Green Deal. In May 2020, the €750 billion Next Generation EU recovery package, together with the €1 trillion budget were announced, and the European Green Deal is part of this.

As part of the European Green Deal, three major pieces of legislation need to be cited:

- The Sustainable Finance Disclosure Regulation (SFDR – Regulation (EU) 2019/2088). The Regulation, whose main provision will apply from March 2021, with other more specific ESG-related disclosure requirements that will apply starting from 1 January 2022, requires financial market participants to mandatorily disclose, following standardised requirements and common practices, on how ESG factors are integrated at both an entity and product level. The Regulation aims at improving transparency and preventing greenwashing in the financial markets around the sustainability claims and sustainable financial products market participants offer to their clients. The Regulation "aims to reduce information asymmetries in principal-agent relationships with regard to the integration of sustainability risks, the consideration of adverse sustainability

[28] The EU Switch to Green Flagship Initiative – "*The EU Action Plan on Financing Sustainable Growth*" - https://www.switchtogreen.eu/the-eu-action-plan-on-financing-sustainable-growth/.

impacts, the promotion of environmental or social characteristics, and sustainable investment, by requiring financial market participants and financial advisers to make pre-contractual and ongoing disclosures to end investors when they act as agents of those end investors (principals)"[29]. The most important articles of the Regulation are Article 6, Article 8 and Article 9, which defines the classification schemes, depending on their sustainability level, that asset managers should apply to all the investment products sold within the EU under the SFDR.

  - Under Article 6 asset managers and financial advisers should classify those financial products that have no particular sustainability scope; the Regulation requires to disclose the manner in which sustainability risk is integrated into the investment strategy and the impact of sustainability risk on the risk-return profile of the financial product.
  - Under Article 8 asset managers and financial advisers should classify those financial products that promote, among others, environmental or social factors or a combination of those factors, provided that the companies object of the investments follow good governance practices (so called *light green financial products*).
  - Under Article 9 asset managers and financial advisers should classify those financial products that have as a clear objective a sustainable investment and where an index has been designated as a reference benchmark (so called *dark green financial products*)[30].

- The Taxonomy Regulation (Regulation (EU) – 2020/852). The Regulation, which took effect on 12 July 2020 and with application starting from January 2022, specifies a detailed classification system for a common definition of environmentally sustainable economic activities. It requires nonfinancial undertakings to disclose the proportion of their activities that are taxonomy-eligible and taxonomy-aligned in terms of their turnover, Capital Expenditures (CapEx) and Operating Expenditures (OpEx), to disclose the proportion of the entity's activity that qualify as environmentally sustainable according to the

[29] European Parliament and the Council of the European Union (2019) – "*Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on Sustainability-Related Disclosures in the Financial Services Sector*". Official Journal of the European Union. Strasbourg, 27 November 2019 - https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R2088&from=EN.
[30] See note n. 29.

Taxonomy and they are required to provide information on how they calculated their KPIs[31]. The Regulation also requires fund sponsors in scope of the SFDR to report on the extent to which their portfolios are in investments aligned with the Taxonomy[32].

- The Corporate Sustainability Reporting Directive (CSRD – Directive 2022/2464/EU), which amends the Non-Financial Reporting Directive (NFRD - Directive 2014/95/EU). The Directive, which was published in the EU Official Journal in December 2022 with the first obligation starting at the beginning of 2025, does not change the reporting obligation of companies under the NFRD but widens the number of undertakings that are obliged to report their environmentally sustainable activities (in terms of environmental impact, social rights, human rights and governance factors) and introduces new specific standards for reporting to increase the transparency of sustainable reporting, fight greenwashing issues and to strengthen the sustainable impact of the European economy and of their undertakings. Large EU companies (that already published non-financial reports under the NFRD) will be obliged to report on their sustainable activities under the scope of the CSRD from the financial year starting at the beginning of 2025 or after; then, it will be the time of small- to medium-sized enterprises (SMEs) listed on EU-regulated markets starting from the financial year 2026 (or after); from the financial year starting at the beginning of January 2028, non-EU companies with significant operations in the European territory or subsidiaries listed in EU-regulated markets will be obliged to report under the scope of the CSRD. All the sustainable reports have to respect the requirements of the Taxonomy Regulation[33].

As in the case of the Federal Reserve, also the European Central Bank (ECB), as part of its yearly Financial Stability Review, has shown concern toward the risks that climate change can have on euro area financial institutions. The need of mitigating policies and actions to try to prevent and moderate the economic and financial impacts that climate change can impose on European economic area has been addressed by establishing the

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[31] EY – "*Why Organizations Should Stay the Course with their EU Taxonomy Reporting*" by Jan Niewold, October 13, 2023 - https://www.ey.com/en_gl/assurance/eu-taxonomy-report.

[32] Debevoise & Plimpton – "*The EU Taxonomy Regulation*", by Patricia Volhard, Jin-Hyuk Jang and John Young, October 16, 2023 - https://www.debevoise.com/insights/publications/2023/10/the-eu-taxonomy-regulation.

[33] See note n. 32.

Network for Greening the Financial System (NGFS), that was put in place during the Paris "One Planet Summit" in December 2017 and that now counts 127 member from all the five continents, with the purpose of "strengthening the global response required to meet the goals of the Paris agreement and to enhance the role of the financial system to manage risks and to mobilize capital for green and low-carbon investments in the broader context of environmentally sustainable development. To this end, the Network defines and promotes best practices to be implemented within and outside of the Membership of the NGFS and conducts or commissions analytical work on green finance"[34]. The mission of the ECB with regards to climate change is way deeper than the approach adopted by the U.S. Federal Reserve. In fact, the ECB, as opposed to the Fed which generally focuses on the supervision climate-related risks to the financial system, focuses on three main objectives:

- Managing climate-related risks in monetary policy, investment operations and in the financial system and assessing the economic impact of climate change and mitigation policies;
- Supporting the green transition to a carbon-neutral economy by promoting the diffusion of sustainable finance and incentivising a greener financial system.
- Improving the understanding of climate-related risks, the transparency of its activities and reducing its own environmental impact[35].

The 5th of October 2023, the European Parliament has approved the final version of the long-awaited EU Green Bond Standard Regulation, as part of the EU Action Plan on sustainable finance, which guarantees the European green bond providers that matches the EU Taxonomy Regulation standards the label of "European Green Bond" to be attached to their issuances. The Regulation is particularly important as it consolidates the leading role of European Union in the sustainable finance market and it further helps investors to better understand the sustainability claims of investment products to increase the transparency between green bond issuers and investors, to fight the risks of greenwashing, to reduce potential reputational risks for issuers and improve trust in external reviews. The European Green Bond label is a first of a kind in the sustainable

[34] Network for Greening the Financial System – "*Origin and Purpose*" - https://www.ngfs.net/en/about-us/governance/origin-and-purpose.
[35] European Central Bank – "*Climate Change and the ECB*" - https://www.ecb.europa.eu/ecb/climate/html/index.en.html.

finance industry and it sets out a common framework that bond issuers need to follow when issuing environmentally sustainable and sustainability-linked bonds in the European Union, ensuring that bond issuances are aligned with the EU environmental and climate objectives.

The European Union is also currently working on a proposal by the Commission of the Corporate Sustainability Due Diligence Directive, which is focused on the business operations and value chain of European corporations to identify, mitigate and account for their positive or negative ESG impact, with the aim of fostering the contribution of both EU e non-EU corporations operating in the European Single Market to respect environmental, social and governance aspects in their corporate strategy and day-to-day operations.

As evidenced by the ESG regulations and policies adopted by the United States and the European Union presented above, a clear difference appears between the two jurisdictions, mostly in terms of their scope, depth and breadth. However, thanks to the Biden's administration orientation toward climate change, progress toward the implementation of stricter ESG or climate-related regulations and policies can still be made and, although anti-ESG movements have been on the rise both at the federal and state levels, there is still hope for the United States to chase EU ESG regulations.

Having evidenced the main differences and approach in the sustainability regulatory agenda of both the United States of America and the European Union, in the next chapter I will delve more deeply into the regulatory environment of the United States, both at the federal and at the state level. I will evidence that what is threatening mostly the environmental goals of the Biden-Harris Administration is an ideological battle that is happening both at the federal level, within the House of Representatives and the Senate, and at the state level, within regional and local governments.

II. How is the U.S. Catching Up with the European Union on ESG Legislation.

2.1. The Sustainability Ambition of the Biden-Harris Administration's Inflation Reduction Act.

As evidenced in the first chapter, where I showed the evolution of the concept of CSR that, with the passing of time and with the evolution of the concern of the society in the 20th century, has evolved from being more focused on the social duties of corporation toward its stakeholders, namely employees, workers, customers and the society as a whole, to objectives such as sustainable development and preservation of environmental resources, the United States has always been a major character in the evolution of sustainability and environmental challenges that were spreading all over the world. In fact, since the beginning of the American Industrial Revolution in the late 19th century, concerns about social, environmental and economic issues began proliferating, with problems of rapid population growth, economic growth, environmental resources depletion and worsening of environmental conditions, such as water and air pollution, use of pesticide, soil and forests destruction and endangering wildlife, being at the centre of discussion. It is in this context that U.S. regulators and federal agencies began to design regulations to fit and solve the problems of environmental and standard of life degradation.

2.1.1. History of Environmental Protection and Conservation in the United States.

The history of environmental protection regulation in the United States can be traced back to the end of the 19th century and early 20th century, where the focus of U.S. Congress legislation was on environmental protection and resource conservation, associated with the Presidents Roosevelt and Pinchot Administrations, with the beginning of the conservation movement. The first important acts passed by the U.S. Congress were the Yellowstone Act in 1872, that created the first national park in the United States ("a public park or pleasuring-ground for the benefit and enjoyment of the people"[36]) and the Rivers

[36] The U.S. National Archives and Records Administration – "*Act Establishing Yellowstone National Park (1872)*" - https://www.archives.gov/milestone-documents/act-establishing-yellowstone-national-

and Harbors Act in 1899, which represents the oldest federal environmental law in the United States, that regulated the release of refuse matter into navigable waters, the excavation or the alteration of the course, condition or capacity of any port, harbour and channel without a permit a misdemeanour[37] and provided for fines if violations to the Act were found of $500 to $2,500 as well as imprisonment for 30 days to one year[38]. Until the end of the Second World War, small or null passes were made for the legislation of new environmental regulations in the United States, as the focus of the country was mostly on the economic restoration following the two World Wars. The Congress, with the objective of involving more deeply the U.S. States and local governments into the environmental problems that were hitting the country, passed some important regulations, such as the Federal Water Pollution Control Act in 1948 and the Air Pollution Control Act in 1955. The first Act "authorized the Surgeon General of the Public Health Service, in cooperation with other Federal, state and local entities, to prepare comprehensive programs for eliminating the pollution of interstate waters and tributaries and improving the sanitary condition of surface and underground waters and […] to prevent dischargers of inadequately treated sewage and other wastes into interstate waters and subsidiaries"[39]; the Act was then amended extensively and reorganized to become the Clean Water Act in 1972. The second Act was the first Act in the United States whose objective was to address the environmental problem of air pollution, leaving States and local governments "in charge of prevention and control of air pollution at the source"[40], with the federal government left a purely information role, and was followed by the Clean Air Act of 1963 and the Air Quality Act in 1967. However, these two acts war largely criticised by the general public for their ineffectiveness. A pivotal role in the environmental legislative context had been the publication "*Silent Spring*" by Rachel Carson in 1962. In fact, the book pointed out how the use of synthetic pesticides (especially DDT) in the agricultural sector and the chemical pollution that followed was a concern for natural preservation

park#:~:text=Yellowstone%20became%20the%20first%20Federally,aware%20of%20its%20western%20lands.

[37] Wikipedia – "*Rivers and Harbors Act of 1899*" - https://en.wikipedia.org/wiki/Rivers_and_Harbors_Act_of_1899.

[38] Reference JRank – "*Rivers and Harbors Act of 1899*" - https://reference.jrank.org/environmental-health/Rivers_and_Harbors_Act_of_1899.html.

[39] FedCenter – "*Federal Water Pollution Control Act (Clean Water Act) of 1948*" by the Federal Facilities Environmental Stewardship & Compliance Assistance Center - https://www.fedcenter.gov/Bookmarks/index.cfm?id=2431.

[40] Wikipedia – "*Air Pollution Control Act of 1955*" - https://en.wikipedia.org/wiki/Air_Pollution_Control_Act_of_1955#cite_note-handbook-3.

and human health. The book was so influential that it led to an environmental wake in the United States, with significant regulatory action undertook soon after. The game-changing legislation was signed by the President Richard Nixon on January 1, 1970. The National Environmental Policy Act (NEPA) was a ground-breaking legislation as "it requires the federal government to use all practicable means to create and maintain conditions under which man and nature can exist in productive harmony"[41] and it set forth new requirements for federal agencies in the measure of assessing and presenting a report on the environmental impact of their proposed actions and opportunities for public review and comment on those evaluations were to be provided. The Act also created the Council on Environmental Quality, which was responsible for the preparation of an annual report on the state of environment for the President and the overview of federal agencies environmental impact assessment reports. Later that year, President Nixon created the Environmental Protection Agency (EPA), with the aim of consolidating many environmental responsibilities of the federal government under one single agency, and was intended to protect both human health and the environment from the adverse effects of resource depletion and water and air pollution. The EPA is mainly involved in:

- Developing and enforcing regulations, national standards and help companies in understanding its requirements;
- Giving grants to state environmental programs, non-profit organizations, educational institutions and others to help achieve the EPA's mission;
- Studying environmental issues to identify and try to solve environmental problems and sharing its researches' results with other stakeholders;
- Sponsoring partnerships with businesses, non-profit organizations, state and local governments on topics such as water and energy conservation, minimization of GHG emissions, re-use of solid waste and getting a handle on pesticide risks.
- Teaching people about the environment by means of learning activities for students and other professionals[42].

[41] U.S. Environmental Protection Agency – "*What is the National Environmental Policy Act?*", last updated October 5, 2023 - https://www.epa.gov/nepa/what-national-environmental-policy-act#:~:text=The%20National%20Environmental%20Policy%20Act%20(NEPA)%20was%20signed%20into%20law,actions%20prior%20to%20making%20decisions.

[42] U.S. Environmental Protection Agency – "*Our Mission and What We Do*", Last updated on May 23, 2023 - https://www.epa.gov/aboutepa/our-mission-and-what-we-do.

Moreover, in 1970, President Nixon decided to create the National Oceanic and Atmospheric Administration (NOAA), a U.S. governmental agency within the Department of Commerce, by merging together three separate agencies that were established in the 19th century, namely the U.S. Coast and Geodetic Survey (established in 1807), the U.S. Water Bureau (established in 1870) and the U.S. Commission of Fish and Fisheries (established in 1871), with the mission "to understand and predict changes in climate, weather, ocean and coasts, to share that knowledge and information with others, and to conserve and manage coastal and marine ecosystems and resources"[43]. President Nixon's environmental initiatives gave the go-ahead to what is known as the "environmental decade". The most important legislative actions in the 1970's are: the amendments to the Clean Air Act in 1970 and to the Federal Water Pollution Control Act in 1972, the Federal Insecticide, Fungicide and Rodenticide Act and the Ocean Dumping Act in 1972, the Endangered Species Act in 1973, the Safe Drinking Water Act in 1974, the Toxic Substances Control Act and the Resource Conservation and Recovery Act in 1976, the Surface Mining Control and Reclamation Act in 1977 and the Comprehensive Environmental Response, Compensation and Liability Act in 1980. The 1980's were characterized by the skeptical view of the then Republican President of the United States Ronald Reagan. In fact, Reagan gradually cut the number of employees and the budget of the Environmental Protection Agency by almost 30% and appointed people sitting on key agency offices that were questioning and hostile to environmental protection and to State intervention in this field. The consequence was that few regulations were passed during this period and multiples Acts were amended: one important amendment is the one proposed by the George H. W. Bush Administration of the Clean Air Act in 1989, and passed into law in 1990. The Clinton Administration was more focused on environmental policy with respect to the previous one, thanks to the encouragement coming from the Vice President Al Gore and the President of the EPA Carol Browner and the Secretary of the Interior Bruce Babbit. The EPA's budget was increased once again, the President's Council on Sustainable Development was created and the Kyoto Protocol was signed. The 2000's was dominated by the controversial George W. Bush Administration. As a first step, the President withdrew from the Kyoto Protocol, with the belief that it could have negative consequences on U.S. economy and citing the exemption of developing

[43] National Oceanic and Atmospheric Administration – U.S. Department of Office – "*About our Agency - Our Mission*" , Last updated March 2, 2023 - https://www.noaa.gov/about-our-agency.

countries such as India and China. He was highly criticized by environmentalists, scientists and some non-governmental organizations because of his ideological-based rather than science-based decisions on environmental issues and policies. However, during the end of his second mandate at the White House, Bush engaged in a series of environmental proposals, such as the motion, in a combined effort with the United Nations, to establish a post-2012 global climate plan once the Kyoto Protocol expired. With the Obama presidency, the climate and environmental campaign was one of the widest to date. The President presented the largest single investment in clean energy and clean transportation to date with The American Recovery and Reinvestment Act in 2009, he rejected two major pipeline construction proposal, namely the Keystone Pipeline and the Dakote Access Pipeline, permanently protected the Arctic and the Atlantic coast from offshore drilling, he was crucial for forging the most important international agreement in history, the Paris Climate Agreement in 2015, he presented the Clean Power Plan in 2015 to reduce carbon emissions from electricity generation by 32% compared to 2005 levels and established the first-ever national carbon pollution standards for power plants. Moreover, under his presidency, multiple standards to reduce GHG emissions and methane emissions, among others, were presented, was involved in the protection of national parks and water ecosystems, and many other initiatives focusing on environmental protection were launched[44]. It's shared general knowledge and belief that Obama's presidency was one of the most active in environmental and resource conservation fields in the history of the United States. With Donald J. Trump winning the elections in 2017, most of the advancements made by the Obama Administration just few years before were completely scrapped. In fact, the Trump Administration prioritized the increase of fossil fuels usage with the America First Energy Plan and required the federal review of the Obama-signed Clean Water Rule and Clean Power Plan. In November 2020, it became official the withdrawal of the United States from the Paris Climate Agreement. With the beginning of the Biden Administration in 2021, climate change and environmental issues came back as central topic in the political agenda of the United States. As evidenced in the previous chapter, few days after the presidential elections, on January 27, 2021, the newly-elected President Joe Biden issued the "*Executive Order on*

[44] The White House – President Barack Obama – "*A Historic Commitment to Protecting the Environment and Addressing the Impacts of Climate Change*" - https://obamawhitehouse.archives.gov/the-record/climate#:~:text=The%20Clean%20Power%20Plan%20gives,by%20reducing%20dangerous%20co%2Dpollutants.

Tackling Climate Crisis at Home and Abroad", where he put the climate crisis at the center of both U.S. foreign and national policy and he asserted that the United States will promote international climate ambitions to meet climate challenges and he proposed his will to rejoin the Paris Climate Agreement.

I will now focus my research on the provisions of one of Biden's most important legislative act, the Inflation Reduction Act, and how it will impact national climate and environmental goals and the consequences the Act has on the U.S. economy.

2.1.2. The Provisions of the Inflation Reduction Act (IRA).

On August 16, 2022, President Joe Biden signed into law the Inflation Reduction Act (IRA), the largest and most ambitious investment in U.S. history directed toward climate policy issues, with the aim of accelerating the nation's path in the reduction of GHG emissions and building a new, resilient green economy. It is important to highlight that the Inflation Reduction Act's legislative genesis has not always been a straight line. In fact, two major unambiguous events followed in July 2022: first, on July 14 a shocking news surfaced that the pivotal vote for the passing of the Act by the Senator Joe Machin of West Virginia was compromised after negotiation on the provisions of the Act suddenly halted; then, on July 27 Senator Machin and Senator Schumer announced that a deal was reached for the supporting of the new climate legislation. The Act was then passed by both the Senate, on the 7th of August and by the House of Representatives on the 12th of August. Although the Act was firstly conceived as a provision to fight the surging inflation storming on American households and businesses, it also provides long-run objectives of strengthening the U.S. economy by incentivizing the deployment of clean energy, vehicles, buildings and manufacturing, lowering health care costs, funding the Internal Revenue Service (IRS) and reducing the budget deficit by $237 billion over the next ten years, according to the estimates of the Congressional Budget Office (BDO)[45]. To reach the stated environmental goals of "reaching 100 percent carbon pollution-free electricity by 2035; a 50-52 percent reduction from 2005 levels in economy-wide net greenhouse gas pollution in 2020; and net zero emissions economy-

[45] McKinsey & Company – "*The Inflation Reduction Act: Here's What's in it*" by Justin Badlam, Jared Cox, Adi Kumar, Nehal Mehta, Sara O'Rourke, and Julia Silvis, October 24, 2022 - https://www.mckinsey.com/industries/public-sector/our-insights/the-inflation-reduction-act-heres-whats-in-it.

wide by no later than 2050"[46], the Inflation Reduction Act contains $370 billion in grants, loans, tax credits and incentives and loan guarantees[47] to spur financing in game-changing green technologies and clean energy solutions, agriculture, coastal and forest restoration, advanced manufacturing and transportation to achieve the objective of putting the United States at the forefront of building a sustainable development strategy. As estimated by the U.S. Department of Energy (DOE), the provisions of the Inflation Reduction Act, together with other actions such as the Bipartisan Infrastructure Law (or Infrastructure Investment and Jobs Act), "could reduce emissions by more than 1000 million metric tons of CO2 in 2030, equivalent to the combined annual emissions released from every home in the United States"[48] and it could help to achieve the goals of the Biden-Harris Administration climate agenda by reducing economy-wide greenhouse gas emissions by over 40 percent below 2005 levels by 2030, as per Department of Energy estimate, helping the country meet the Nationally Determined Contribution settled by the Paris Agreement in 2015[49]. It is important to notice that, prior to the implementation of the Inflation Reduction Act, the United States were on track for a 25-30% greenhouse gas emissions reduction, hence the IRA will considerably lead the country to a more than 10% increase in the rate of GHG emissions reduction with respect to current predictions[50]. The IRA will also help advancing Biden's social agenda, promoting the *Justice40 Initiative*, a federal initiative to steer 40 percent of the overall benefits of federal investments toward disadvantaged and marginalized communities that have been overburdened by legacy pollution and environmental hazards[51].

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[46] The White House – "*Building a Clean Energy Economy: A Guidebook to the Inflation Reduction Act's Investments in Clean Energy and Climate Action*", January 2023, Version 2 - https://www.whitehouse.gov/wp-content/uploads/2022/12/Inflation-Reduction-Act-Guidebook.pdf.

[47] The Congressional Budget Office (CBO) estimates that more than two-thirds of the provisions of the IRA will be tax credits, with a total amount of $271 billion, while the remaining one-third will be direct expenditures, with a total amount of $121 billion.

[48] See note 46.

[49] The Nationally Determined Contributions (NDCs) are the heart of the Paris Agreement and requires each party to sustain efforts in reducing national emissions and adapt to the impacts of climate change. The United States has set a NDC of greenhouse gas emissions reduction by 50-52 below 2005 levels by 2030. See source at: https://unfccc.int/sites/default/files/NDC/2022-06/United%20States%20NDC%20April%2021%202021%20Final.pdf.

[50] Morningstar Sustainalytics – "*Sustainable Finance and the Inflation Reduction Act: 5 Key Takeaways for Issuers and Investors*" by John Cameron, Jennifer Li, Anna Leckman, December 5, 2022 - https://www.sustainalytics.com/esg-research/resource/corporate-esg-blog/sustainable-finance-inflation-reduction-act-5-takeaways-for-issuers-and-investors.

[51] The White House – "*Justice40 - A Whole-Of-Government Initiative*" - https://www.whitehouse.gov/environmentaljustice/justice40/.

The Act is aimed at ensuring a long-term green economic development for the country by contributing to the creation of thousands of new good-paying jobs, mostly in the energy, infrastructure and manufacturing sectors, and to the reduction of economy-wide pollution, improving U.S. competitiveness, innovation and industrial productivity. The most important provisions of the Act include:

- The extension and the increase, through at least 2025, of clean energy Production Tax Credit (PTC) of $0.0275/kWh and Investment Tax Credit (ITC) of 30%, to incentivize private capital investments in the manufacturing of multiple solar and wind technologies, solid waste (biofuel), geothermal and tidal energy innovation projects and grid energy storage. It's important to highlight that many of these tax credits are in form of direct pay, meaning that businesses can receive the full amount of the tax incentives notwithstanding the amount of their tax liability.
- The establishment of a green bank, called the Greenhouse Gas Reduction Fund, achieved through an amendment to the Clean Air Act and that will be managed by the Environmental Protection Agency, for the capitalization of more than 20 regional green banks. The competitive grant program of total $27 billion will award $14 billion under the National Clean Investment Fund for multiple decarbonization investments and clean technology project nationwide, $6 billion under the Clean Communities Investment Accelerator for delivering funding and assistance for similar investments in low-income and disadvantaged communities, and $7 billion Zero-Emissions Technologies Grant Program to state and local energy funds for decentralized solar power and installation of residential solar panels[52].
- The Act aims at reducing U.S. households energy bills by providing tax credits and rebate programs for the installation of residential solar panels, energy-efficient residential improvements projects that will help U.S. households, if they replace fossil-fuel-reliant home systems with clean electric equivalents, to save up to $1800 per year on energy bills[53]. The provisions of the IRA are valid also

[52] Reuters – "*U.S. Launches $20 Billion in 'Green Bank' Programs to Curb Climate Change*" by Gardner T., July 14, 2023 - https://www.reuters.com/sustainability/us-launches-20-bln-green-bank-programs-curb-climate-change-2023-07-14/.

[53] The Brookings Institution – "*The Inflation Reduction Act Will Reduce Household Energy Insecurity—but it Could Do More*" by Carlos Martin, August 22, 2022 - https://www.brookings.edu/articles/the-inflation-reduction-act-will-reduce-household-energy-insecurity-but-it-could-do-more/.

for the purchase of new, leased or used Electric Vehicle (EV) and electric charging stations.

- The Act impacts the healthcare sector with the following provisions: it will allow the Medicare program to negotiate drug prices for some high-priced drugs directly with drug companies (with effect starting from 2026); it will require drug manufacturers to pay inflationary rebates to Medicare when they raise drug prices faster than the rate of inflation; it will provide a $35 per month out-of-pocket cap for insulin for Medicare beneficiaries; it will ensure that no household pays more than 8.5 percent of its income for health insurance purchased in the marketplace[54]. Moreover, the Act will extend the subsidies contained in the Affordable Care Act (ACA) for further three years. According to CBO estimates, this provisions will ensure a reduction in federal government spending in the healthcare sector of roughly $173 billion through 2031[55].
- The Act, with the objective of raising more revenue through which offsetting the IRA spending, will impose a 15% minimum tax on large corporations (those with average annual financial statement income exceeding $1 billion) for the fiscal year beginning after December 31, 2022; it will impose a 1 percent excise tax on stock buybacks and provides new funding to enhance IRS collections and tax enforcement.

2.2. The Impact of the Inflation Reduction Act on Financial Markets and on the Sustainable Finance Sector.

The Inflation Reduction Act, together with other U.S. provisions such as the SEC's reporting requirements on certain climate-related disclosures, are providing U.S. business encouragement in investing in ESG-related processes, so as to not lose the momentum linked to sustainability appeared in the last two years at the international level. As evidenced by the 2023 KPMG report "*ESG in a Downturn: Why it Pats to Sustain ESG efforts, Despite a Slowing Economy*", 70% of U.S. CEO's surveyed declared that ESG topics are crucial to their company's growth and financial performance, stating that "ESG metrics directly affects company performance and yields crucial financial benefits,

[54] National Academy for State Health Policy – "*The Inflation Reduction Act's Health Care Provisions: Opportunities for States*" by Reck J., and Cousart C., August 22, 2022 - https://nashp.org/the-inflation-reduction-acts-health-care-provisions-opportunities-for-states/.
[55] See note 46.

enhancing stock valuations, improving credit ratings, and reducing energy costs" (KPMG US, 2023). Although most of the financial incentives funded by the IRA are directed toward the energy, manufacturing and infrastructure sectors, it is possible to imagine that the positive impacts of the IRA may spur to other sectors, mostly the sustainable finance sector, which will be a central character in the sustainable transition because of its centrality in providing innovative financial solutions to U.S. corporations. According to "*The Inflation Reduction Act: A Q&A with Investors*" report by BlackRock, the biggest asset management company in the world, the IRA will inject optimism and lead to a positive momentum for sustainable assets, especially those in the sustainable energy sector, which will lead to a wider adoption and lower costs in general. According to Pieter Houlleberghs, one of the interviewees in the BlackRock report, "The incentives in the law could drive a virtuous cycle across newer technologies and markets: It will encourage more adoption, which drives down costs, which drives up adoption, which then further drives down costs - which is what we as investors look for. The multiplier effect of the incentives in the bill means that the market for attractive green investments effectively just got bigger"[56].

Moreover, as evidenced by Micheal D. Bauer, Eric A. Offner and Glenn D. Rudebusch in their paper "*The Effect of U.S. Climate Policy on Financial Markets: An Event Study of the Inflation Reduction Act*", published in September 2023, the implications of the Act on financial markets, thanks to their forward-looking responses, will be evident much sooner with respect to the Act's macroeconomic and climate consequences. Having this in mind, the authors, by using an event-study methodology, try to investigate the financial market reactions to the passing of the Act on the stock prices movements in different industries and different firms in the United States. The event-study is based on the two opposing events, as highlighted in the first paragraph of this chapter, which led to the passing of the climate legislation, with the two episodes that the authors labelled as "brown event" and "green event" to underline the probability that the proposed legislation would eventually become law[57]. The authors firstly run the event-study analysis on the returns of eleven equity indices, of which six were labelled as "green" and five as

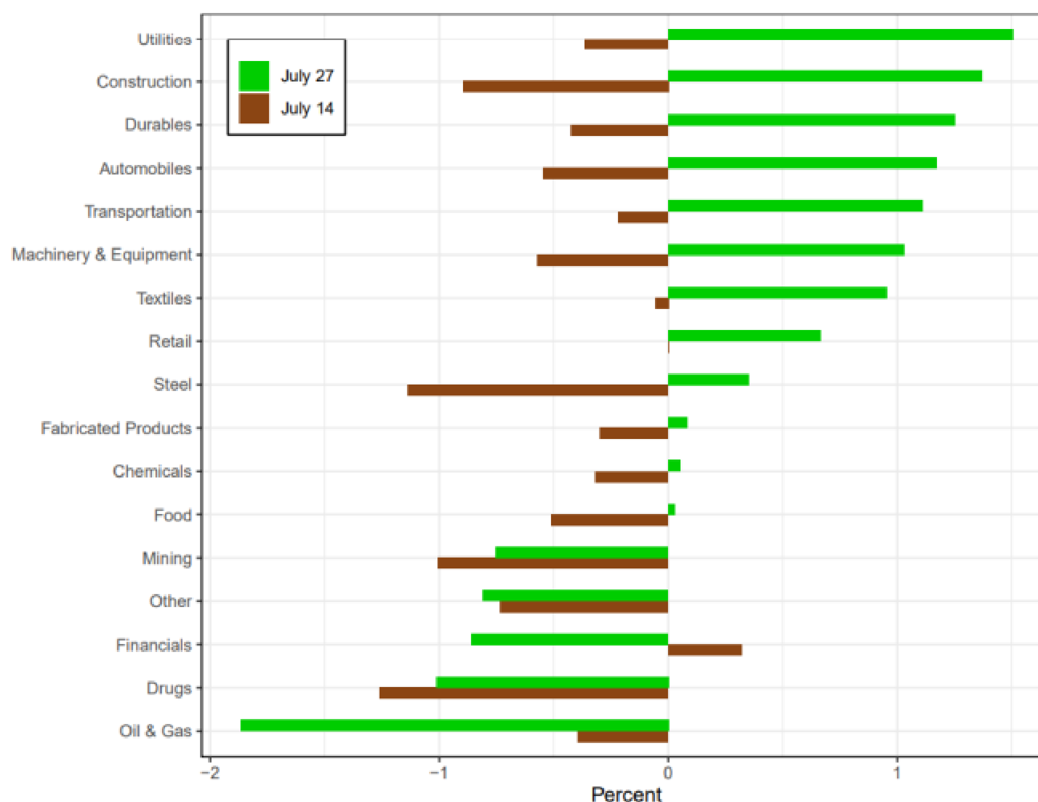
[56] BlackRock – "The Inflation Reduction Act: A Q&A with Investors" by Florian M., Giordano D., and Houlleberghs P., August 2022 - https://www.blackrock.com/institutions/en-us/literature/investor-education/inflation-reduction-act-q-a.pdf.

[57] A probability close to zero that the Act would pass is linked to the "brown" event; on the other hand, a probability close to one is linked to the "green" event.

"brown", and found substantially different impacts of the "brown" and "green" events on the two sets of equity indices. On one hand, when studying stock markets responses to the "brown" event of the July 14, the authors found an average negative one-day return of "green" indices of 3.0% while little impacts occurred to the "brown" indices, and an average three-days negative return of 0.15% for "green" indices as opposed to a positive average three-days return of 3.02% for "brown" indices. On the other hand, when studying stock market responses to the "green" event of July 27, the authors found a positive median abnormal return of 6.5% for green funds as opposed to a negative median abnormal return of 1.1% for brown funds. The findings of the research show that after the passing of the IRA, financial markets forecasted that the biggest beneficiaries of the provisions of the Act would have been companies in the clean and renewable energy and manufacturing sectors and/or those performing well when it comes to their environmental footprint, while oil/gas/coal companies would have been disadvantaged by the Act. The findings at the equity indices level were further confirmed by the analysis that the authors run at the industry level. Using the 17 Fama-French industry portfolios[58], the authors calculated the one-day abnormal returns for both the "brown" event and the "green" event. The results are reported in Figure 1:

[58] The Fama-French Industry Portfolios refer to a set of stock portfolios created by financial economists Eugene Fama and Kenneth French that are sorted in seventeen different sectors according to their characteristics. The industry sectors are as follows: 1. Food; 2. Mining and Minerals; 3. Oil and Petroleum Products; 4. Textiles, Apparel & Footwear; 5. Consumer Durables; 6. Chemicals; 7. Drugs, Soap, Perfumes, Tobacco; 8. Construction and Construction Materials; 9. Steel Works; 10. Fabricated Products; 11. Machinery and Business Equipment; 12. Automobiles; 13. Transportation; 14. Utilities; 15. Retail Stores; 16. Banks, Insurance Companies and Other Financials; 17. Other.

Figure 1: One-Day Abnormal Returns for 17 Fama-French Industry Portfolios After the "Brown" and "Green" Event.



Source: "The Effect of U.S. Climate Policy on Financial Markets: An Event Study of the Inflation Reduction Act" by Micheal D. Bauer, Eric A. Offner and Glenn D. Rudebusch, September 2023. Brown bars show returns using closing prices from July 14 to July 15 (brown event) and green bars show the returns from July 27 to July 28 (green event). Available at: https://doi.org/10.24148/wp2023-30.

As it can be evidenced by Figure 1, the "green" event of July 27 "produced industry winners and losers generally in line with what would be expected based on the IRA legislation. In response to the green event, those industries performed best that are likely to benefit substantially from IRA subsidies and related measures" (Bauer, Offner, & Rudebusch, 2023).

The empirical evidence presented by Bauer, Offner and Rudebusch (2023) sustain the thesis that companies in those industries that showed positive abnormal returns in response to the news of the agreement on the IRA on July 27, 2022, such as electric services suppliers and renewable gas transmission and distribution businesses, construction businesses focused on solar installations and power generation, EV producers and electrical equipment and batteries producers, thanks to the financial incentives and tax credits they will be eligible for under the IRA's provisions, will also

be those more likely to enter and use the sustainable finance market in order to get the necessary funds and meet the ever-growing demand by investors. Among all the different financial products that meet sustainability requirements, the one that is expected to burst after the implementation of the IRA will be sustainable bonds, especially green bonds. According to the "*Green Bond Principles: Voluntary Process Guidelines for Issuing Green Bonds*"[59], produced by the International Capital Market Association (ICMA) and published in June 2021, green bonds have no differences with respect to their "brown" counterparts in terms of structure of the product, even though to classify as a green bond, the proceeds or an equivalent amount must be "exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible Green Projects […] and which are aligned with the four core components of the GBP" (International Capital Market Association, 2021). The eligible Green Projects categories under the Green Bond Principles include, among others:

- Renewable energy: production, transmission, appliances and products;
- Energy efficiency: new and refurbished buildings, energy storage, district heating, smart grids, appliances and products;
- Pollution prevention and control: reduction of air pollution, GHG control, waste prevention and reduction;
- Environmentally sustainable management of living natural resources and land use: environmentally sustainable agriculture, animal husbandry, fishery and forestry, climate smart farm inputs and preservation or restoration of natural landscapes;
- Terrestrial and aquatic biodiversity: protection of costal, marine and watershed environments;
- Clean transportation: electric, hybrid, rail, multi-modal transportation and infrastructure for clean energy vehicles;

[59] The Green Bond Principles are a collection of voluntary framework that outline best practices to be followed by corporations when issuing Green Bonds and promote international transparency and disclosure among market participants. By doing so, the Principles aim to raise awareness of the importance of ESG impacts in financial markets and to attract more capital to fund and support sustainable development. See source at: https://www.icmagroup.org/assets/documents/Sustainable-finance/2022-updates/Green-Bond-Principles-June-2022-060623.pdf.

- Sustainable water and wastewater management: sustainable infrastructure for clean and/or drinking water, wastewater treatment, river training and other forms of flooding mitigation;
- Climate change adaptation: efforts to make infrastructure more resilient to impacts of climate change and information support system;
- Circular economy adapted products, production technologies and processes and/or certified eco-efficient products;
- Green buildings that meet recognised standards for environmental performance.

Having this in mind, one important fact about the IRA is that most of the Act's provisions for businesses are aimed to directly fund and incentivize operations directly related to the eligible Green Projects under the Green Bond Principles by ICMA. This is particularly important as companies in the United States operating in those sectors regarded as winners of the IRA may decide to adopt the Green Bond Principles when issuing green bonds in order to increase transparency among investors, fight greenwashing concerns and attract even more demand. Looking at the numbers, climate policy (both regulatory and market-driven) all over the world is rapidly evolving and is set to influence the trajectory and the development of the sustainable bond market. As evidenced by Moody's Investor Service report the "*Sustainable Bonds Fare Better than Broader Market, Despite Third Quarter Decline*", published on November 2, 2022, despite the U.S. green bond market is one of the largest by volume globally[60], the provisions of the Act may help spur further issuance, especially in those industries such as renewable energy, green buildings, clean transportation and climate-resilient infrastructure incentivized by the Act.

To understand the impact of the Inflation Reduction Act on the volume issuance and pricing of green bonds in the United States, I extrapolated data from the paper "*Green Bonds and the Inflation Reduction Act (IRA)*", published in April 2023 by Sanjay Kumar Jain in the Indian Institute of Management Ahmedabad. The research is developed by means of a difference-in-difference methodology to understand the impact of the Inflation Reduction Act on the cost of green bonds issued by U.S. firms in U.S. dollars, while two control groups of Non-U.S. green bond issuers are taken as counterfactual: in the first one

[60] According to the Interactive Data Platform by the Climate Bonds Initiative the United States, with a total amount of $64.4 billion green bonds issues in 2022, were passed by China, with a total amount of $85.4 billion green bonds issued, to claim the first position as the largest green bond market by country. See source at: https://www.climatebonds.net/market/data/.

are categorized green bonds issued in Euro by Non-U.S. firms; in the second one green all the green bonds expect those issued in USD by firms in the United States. The author explains that, thanks to the tax credits and grants included in the IRA, "the commercial and financial viability of firms involved in cleaner technologies and fuels will improve due to a reduction in the market and cash-flow risk" (Jain, 2023). This is particularly important as a reduction in the risks associated to an investment may lead to a lower cost of debt, especially for green instruments, such as green bonds issued to finance green projects. As a consequence to the reduction in the cost of debt, a reduction in the hurdle rate required by the management to decide whether to take or not a specific project could happen, which further allows them to take up much more investment opportunities than what would have happened without the passing of the IRA. The author shows that those green bonds issued after the implementation of the IRA, in the period going from September 2022 to March 2023, showed higher coupon rates, higher amount issued and higher premium with respect to those green bonds issued from January 2022 to August 2022. The increase in the coupon rate, moving from 3% before the IRA, to almost 4% after the IRA, is in line with the general global interest rate hikes adopted by Central Bank all over the world; the amount issued increased as well, with a total of $350.18 million raised after the IRA, an increase of almost 28% with respect to the 8 months before the IRA, where the amount issued stopped at $274 million; the most important characteristic is the one linked to the premium at issuance, which increased from a negative (discount) premium of 0.09% to a positive premium of 1.23%, showing the increase in the demand from investors in green bonds instrument after the IRA was implemented. Moreover, the author found that coupon rates went down by 1.23% for those firms in the first control group (Non-U.S. Euro issuers) and by 0.78% for those firms in the second control group (Non-U.S. issuers in other currencies), with a statistically significant decrease in yield at issuance found for U.S. issuers as well.

These results are particularly encouraging for the development of the green bond market also outside the United States, as they show how an expansionary tax policy, such as the IRA, aimed at improving the business environment, understood as a reduction in idiosyncratic risks for businesses in the clean energy, green buildings construction, clean transportation and infrastructure sectors, can actually help reducing the cost of financing and may lead them to take up much more sustainable investment opportunities and green projects than before. Although countries outside the United States may find economic and

political difficulties in applying expansionary policies such as the Inflation Reduction Act, because of their tax constraints, the IRA is helpful at the international level as it traces a sustainable path that may be followed to spur the development of the sustainable financial sector, while simultaneously supporting climate change adaptation and mitigation policy and help countries meet their sustainable goals.

2.3. The Impact of the Inflation Reduction Act on the Economy.

2.3.1. Estimation and Forecasts.

Although the Inflation Reduction Act may look like only as a stimulus package for fighting soaring inflation and a green catalyst, it also serves, as per the U.S. Department of Treasury, as a "key investment in our economic growth"[61].

According to the Congressional Budget Office (CBO) forecasts, using inputs from the Joint Committee on Taxation (JCT), the IRA will lead to a reduction in the budget deficit in the amount of $238 billion in the period 2022-2031, i.e. in the ten years during which the provisions of the Act will be valid. According to the total policy spending estimates over the 10-year period, $391 billion will be directed toward the energy and climate sector by means of tax credits and direct federal investment while $108 billion will be directed toward healthcare, forecasting a total of $499 billion in government spending. The total spending will be offset by an increase in revenue thanks to provisions such as the 15% Corporate Minimum Tax, the IRS Tax Enforcement Funding, the 1% excise tax on stock buybacks and others, totalling $457 billion and other $281 billion will be funded by means of healthcare sectors savings[62] (Congressional Budget Office, 2022).

According to an analysis proposed by the economic department of Moody's Analytics, "*Assessing the Macroeconomic Consequences of the Inflation Reduction Act of 2022*", published in August 2022, the impact of the Act over the 10-year budget horizon will be

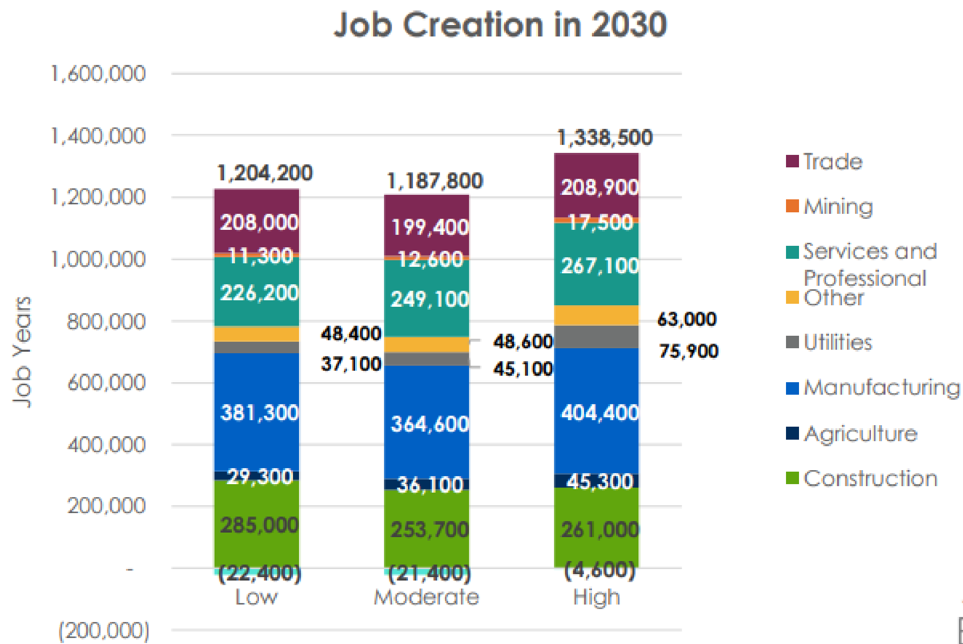
[61] U.S. Department of Treasury – "*The Inflation Reduction Act: Pro-Growth Climate Policy*" by Van Nostrand E., and Levinson A., November 13, 2023 - https://home.treasury.gov/news/featured-stories/the-inflation-reduction-act-pro-growth-climate-policy#_edn1.

[62] Committee for a Responsible Federal Budget – "*CBO Scores IRA with $238 Billion of Deficit Reduction*", September 7, 2022 - https://www.crfb.org/blogs/cbo-scores-ira-238-billion-deficit-reduction#:~:text=The%20Congressional%20Budget%20Office%20(CBO,over%20%24300%20billion%20through%202031.

deflationary, even though this impact will be modest. In fact, the impact on inflation will be marginal until 2025, with an increasing deflationary rate starting from the first quarter of 2026. The result of the analysis show that, by the end of 2031, “the consumer price inflation index will be 0.33% lower. […] This translates into a reduction in CPI inflation of 3.3 basis points per annum on average over the period” (Zandi, Yaros, & Lafakis, 2022). Affecting the inflationary rate will be those provisions in the Act such as the Medicare drug pricing reform, clean energy provisions, which could lead the typical American household to spend less than $300 per year on energy with respect to 2022 levels, and climate change provisions, which, by reducing emissions and physical risks for businesses and homeowners, will lead to lower property and casualty insurance rates and flood insurance rates. When it comes to the impact on the U.S. real GDP, the authors found an estimated positive increase of 0.2% by the end of 2031. Real GDP appear to be negatively affected by the provisions of the Act until the second quarter of 2025, which could mostly be linked to the negative effect generated by the supply-chain restraints that could last for some more years, the persisting inflation which could last until 2024, the new 15% corporate tax which may lead large corporations to pass some of the fiscal burden to consumers by raising prices in the short-term, and because investments will generate positive economic effects in not less than few years. By the middle of 2025, a positive increase in GDP growth will appear, lasting until the fourth quarter of 2031, with an average of 2 basis points growth per annum in real GDP over the period.

Energy Innovation, on August 23, 2022, presented an analysis on the domestic job growth as a consequence of the IRA’s provisions, with Figure 2 showing the findings from their modelling: an increase in net new jobs spread across the economy in 2030 is forecasted in the range between 1,204,200 (worst case scenario) and up to 1,338,500 (best case scenario), with a higher increase in sectors such as services and professional, manufacturing, trade and construction. The growth in clean investments and job creation is associated with a significant increase in real GDP as well, with findings by Energy Innovation estimating an increase of 0.65% in the worst case scenario and 0.77% in the best case scenario (Mahajan, Ashmoore, Rissman, Orvis, & Gopal, 2022).

Figure 2: Estimation of Job Creation in the United States Following Provisions of the Inflation Reduction Act.



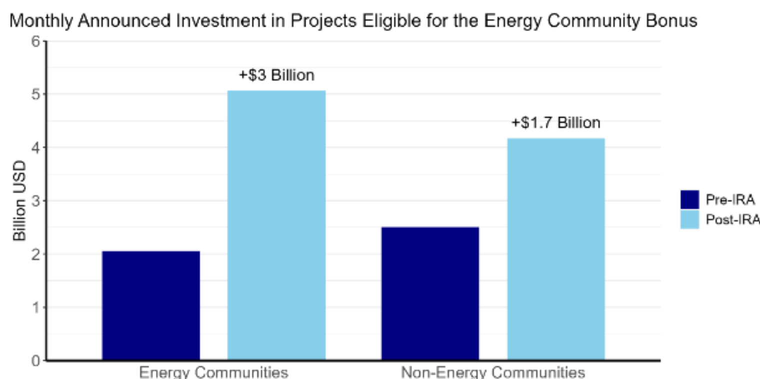
Source: Mahajan M., Ashmoore O., Rissman J., Orvis R., and Gopal A. (2022) – "Updated Inflation Reduction Act Modeling Using the Energy Policy Simulator" by Energy Innovation Policy & Technology. Available at: https://energyinnovation.org/wp-content/uploads/2022/08/Updated-Inflation-Reduction-Act-Modeling-Using-the-Energy-Policy-Simulator.pdf.

2.3.2. Empirical Evidence One Year after Implementation.

The research by Eric Van Nostrand and Matthew Ashenfarb, writing for the U.S. Department of Treasury, "*The Inflation Reduction Act: A Place-Based Analysis*", published on November 29, 2023, presents two key conclusions after more than one year since the Act was first published: clean bonus-eligible investments grew significantly after the IRA was passed, especially in what they call "Energy Communities", namely those U.S. areas with a remarkable history of fossil fuel production; and more than 80 percent of the total amount of clean investments in the country made in the period going from August 2022 to June 2023 have been directed to regions and counties more economically disadvantaged. Looking at the numbers, the authors show that, since the establishment of the IRA, 713 clean investment projects have been announced, totalling more than $101 billion. Moreover, the authors show that before August 2022, the announced bonus-eligible investments were worth about $2 billion per month in Energy Communities and $2.5 billion per month in other areas of the United States. While, after the IRA became law, clean investments increased to $5 billion per month in Energy

Communities and about $4 billion per month in non-Energy Communities, showing a particularly consistent increase in the announcement of investment in the Energy Communities, evidencing how the Act is efficiently producing numbers in line with the prediction and estimates made when the Act was first released.

Figure 3: Before-and-After IRA Clean Investments Announcement in the United States.



Source: U.S. Department of Treasury – "The Inflation Reduction Act: A Place-Based Analysis" by Van Nostrand E., and Ashenfarb M., November 29, 2023. Working on data from the Rhodium Group and MIT Center for Energy and Environmental Policy Research (CEEPR) Clean Investment Monitor. Available at: https://home.treasury.gov/news/featured-stories/the-inflation-reduction-act-a-place-based-analysis.

Moreover, looking at the socio-economic impact of the IRA, the authors found that: 81% of clean investment since the IRA passed have been implemented in those counties with below-average weekly-wages; 70% of clean investment have been implemented in those counties showing a below-average rate of employment; 78% of clean investment have been implemented in poorer counties with below-average median household incomes; and 86% of clean investments have been implemented in those counties with below-average college graduation rates. These numbers are particularly significant as they show that, after one year of the implementation of the Act, President Biden has been able to meet his goals of strengthening the U.S. economy by spurring clean investments in the country and simultaneously meeting the social goal of the Justice40 Initiative.

A report by the non-profit Climate Power[63] "*One Year of Our Clean Energy Boom*", published on July 25, 2023, and reflecting on the impact of the landmark climate and

[63] Climate Power is an independent strategic communication and paid media operations, founded by the Center for American Progress Action Fund, League of Conservation Voters, and Sierra Club, and is focused on building the political will and public support and influencing the national conversation for immediate, bold climate action. See source at: https://climatepower.us/about/.

energy investments generated by the IRA, shows that in 44 states of the United States, in just less than a year since the IRA became law, more than 170,600 new clean energy good-paying jobs have been announced or advanced, many of which "come with higher wages and good benefits without the requirement of a four-year degree – meaning they're accessible to most Americans"[64]. Moreover, $278 billion in new investments have been promoted by means of 272 clean energy projects. What is particularly important is that, although all the Republican Senators voted against the Inflation Reduction Act back in August 2022, the empirical evidence shows that the "majority of new clean energy projects, investments, and jobs announced in the last year are in districts currently represented by Republicans in the U.S. House of Representatives"[65], with more than 80% of total investments that have been advanced in Republican-held districts, totalling $224,892,423,365 from 151 projects and 95,866 new jobs created, against a 14% of total investments that have been allocated in Democratic-held districts from 95 projects and 64,418 new jobs created.

Moreover, a historical news has been announced by the U.S. Energy Information Administration on December 2, 2023: for the first time in the history of the United States renewable energy, mostly coming from solar and wind sources, will exceed coal power, with an estimated 688 billion kilowatt hours of electricity from solar and wind combined in 2024, up from 595 billion during 2023, against an estimated 599 billion of kilowatt-hours produced from coal sources in 2024, down from the 669 billion of kilowatt-hours produced during 2023[66]. These numbers represent a solid statement in the energy sector, showing the extent to which the provisions contained in the Biden's IRA are practically helping the country in revolutionizing its sources of energy supply, reducing its dependence on fossil fuels, and putting the country on track towards the target set forth by the Paris Agreement.

However, not everybody in the United States agrees with the positive economic estimates of IRA's provisions. This is the case for the research "*The Negative Economic Effects of the Inflation Reduction Act*", written by Casey B. Mulligan and published by the

[64] Climate Power – "*One Year of Our Clean Energy Boom*", July 25, 2023 - https://climatepower.us/wp-content/uploads/sites/23/2023/07/Clean-Energy-Boom-Anniversary-Report-1.pdf.
[65] See note 64.
[66] Bloomberg Green – "*Solar and Wind to Top Coal Power in US for First Time in 2024*" by Will Wade, December 12, 2023 - https://www.bloomberg.com/news/articles/2023-12-12/solar-and-wind-to-top-coal-power-in-us-for-first-time-in-2024?leadSource=uverify%20wall.

Committee to Unleash Prosperity[67] in August 2022. The study shows that "the legislation would raise tax rates on investment and work while reducing the productivity of capital and labor. As such, it would contribute to slow or negative economic growth over the next few years. […] the IRA legislation would add to inflation by reducing the aggregate supply of goods and services, which would further negatively affect employment and growth effects" (Mulligan, 2022). Looking at the numbers, the study highlights a reduction in annual GDP of 1.2%, employment will be reduced by 900,000 in the 10-year period during which the provisions of the Act will be valid, it will lead to a reduction in the average household income by roughly $1,200 and to an increase of 2.6 percent in the average marginal tax rate on corporate income and 1.8 percent in the average marginal tax rate on business income.

Another study by a conservative and center-right international research think thank is the one published by the Tax Foundation on August 10, 2022, named "*Details & Analysis of the Inflation Reduction Act Tax Provisions*". The study estimates that, over the long term, the provisions of the IRA "would reduce long-run economic output by about 0.2 percent and eliminate about 29,000 full-time equivalent jobs in the United States. It would also reduce average after-tax incomes for taxpayers across every income quintile over the long-run" and the "long-run impact on inflation is particularly uncertain but likely close to zero" (Durante, Kallen, Li, McBride, & Watson, 2022).

These two studies have been proposed in contraposition to those studies presented above, which showed that the IRA will indeed have a positive effect on the U.S. economy as a whole. Here it can be clearly seen how the estimates of IRA's impact on the economy differs widely if the studies are promoted by left-wing liberal organizations as opposed to those studies promoted by right-wing conservative organizations. This is a particularly interesting context to analyse, because the same ideological and political battle can be seen at the state level with respect to ESG-related legislation, with a fracture that is further widening between Democratic states that are willing to embrace environmental and

[67] The Committee to Unleash Prosperity is an organization that advocates for supply-side economics and seeks to educate policy makers and the public about increasing economic growth. The Committee was founded in 2015 by Stephen Moore, a habitué of conservative think tanks and adviser of the Republican Herman Cain's 2012 presidential campaign and the Republican Donald J. Trump's 2016 presidential campaign, the economists Arthur B. Laffer, former member of the Economic Policy Advisory Board during Reagan administration, and Steve Forbes, chair and editor-in-chief of Forbes Media and former candidate for the presidential election of the Republican Party in 1996 and 2000.

climate policies and ESG investing against Republican states that would seek to exclude them.

2.4. How are the States Reacting to the Act: Differences between Democratic and Republican States' Policies.

As evidenced in the previous paragraphs, the Inflation Reduction Act represents a tentative by the Biden-Harris administration to solve problems related to climate change adaptation and mitigation by stimulating investments into the clean energy and manufacturing sectors, spurring the U.S. competitiveness in strategic sectors, such as the energy and consumptions industries, whilst trying to improve the country's implementation of highly-demanded ESG factors into the financial sector by both U.S. and international investors to close the gap with other geographical regions of the world that have begun implementing ESG factors in the investment panorama much more years before. Looking at the numbers, it seems like something is moving in the United States when it comes to clean investments implemented and green finance solutions used by U.S. companies in the country.

However, a gigantic wave of anti-ESG and/or boycotting-ESG proposals are appearing in the legislative environment at the state level, with Congress and Senate representatives that are trying to take this action at the federal level too.

In the United States, the anti-ESG movement is mostly linked to the right-wing political party, i.e. the Republican party, and is coming from "conservative activists who oppose things like climate action; diversity, equity, and inclusion policies; better worker pay and benefits; and corporate CEOs speaking out on issues like abortion, voting rights, and gun violence"[68]. The movement supports alternative, or more traditional, methods in the business and investment environment, promoting factors that emphasize and prioritise financial returns, linked to the *fiduciary duty* of shareholders, over ESG factors. The key arguments of the anti-ESG movements relies on:

- Market Distortion and Inefficiency: the movement claims that, by focusing investments in ESG proficient companies, a potential disruption to the market

[68] Morningstar – "*Who's Behind the Right's Anti-ESG Campaign?*" By Jon Hale, October 14, 2022 - https://www.morningstar.com/sustainable-investing/whos-behind-rights-anti-esg-campaign.

efficiency could happen, as financial resources are redirected from profit-oriented undertakings, and investments decisions are not based on economic factors anymore.

- Lack of Standardisation: the lack of consistent and recognized ESG metrics, taxonomy, and effective regulatory provisions may distort investment decisions, as the absence of transparency and ESG-reporting hinders efficient comparisons between companies and industries.
- Greenwashing Concerns: a risk of companies overstating their ESG initiatives with the aim of attracting sustainable investors and wide their financing opportunities, while failing to address ESG topics is claimed to be present in the business environment.
- Investment Returns: the movement sustains that ESG-related investments, because of the lack of standardisation, the higher fees that are to be paid when executing ESG-related transactions and their long-run prospects, result in lower returns for investors. They also claim that the ESG campaign is impacting on the cost of capital of companies, resulting in (real or perceived) increases to the cost of financing.
- Fiduciary Duty of Shareholders: the inclusion of ESG concepts by companies may result in a breach in the fiduciary duty that is owed to their shareholders (and, in general, to all stakeholders) in maximizing shareholder value.
- Economic Growth: the shift of funds from traditional businesses, those that historically are more reliant on natural resources exploitation and fossil fuels utilization, to those more sustainable that embraced ESG requirements may lead to a distortion of economic growth between companies and industries, leading them to reconsider their business plan and find other funding opportunities[69].
- Political Issues: anti-ESG representatives and conservative politicians claim that ESG advocates, pushed by the positive momentum ESG investing is living both at the corporate and investment level, are using economic power to sustain their own political agenda.

[69] KnowESG – "*The Anti-ESG Movement Explained*", 26 August, 2023 - https://www.knowesg.com/featured-article/the-anti-esg-movement-explained#:~:text=Focus%20on%20Shareholder%20Value%3A%20The,in%20suboptimal%20outcomes%20for%20shareholders.

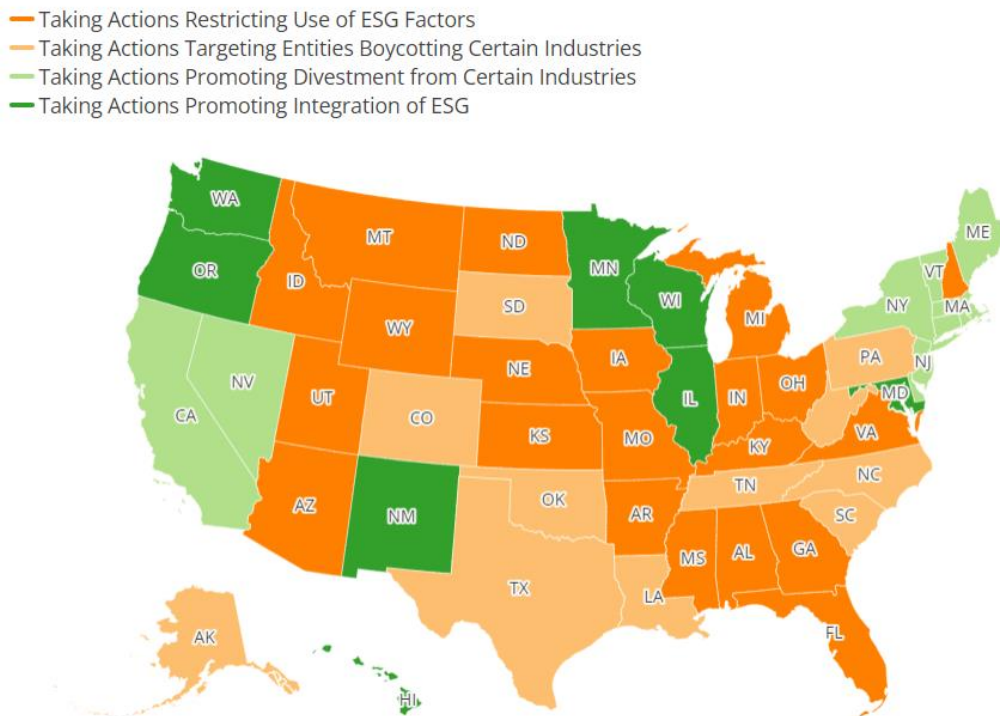
Anti-ESG state rules can be listed in three different categories:

1. Prohibition on ESG Discrimination: this rule denies the possibility to state entities to enter contract or have business with companies that are considered to be "discriminating" against certain industries, such as fossil fuels, firearms, tobacco, etc.
2. Prohibition on ESG Consideration: this rule prohibits state agencies to consider ESG factors or the pursuit of ESG goals when making state-sponsored investments. It is important to notice that this prohibition is valid only when the implementation of ESG factors goes against traditional financial considerations of risk-returns analysis, i.e. when the ESG investment promotes an "ideology" not connected to financial performance.
3. No Boycott Legislation: this rule instructs states entities to divest from, and refuse to contract and have business with, those companies that boycott certain companies or industries that fail to meet certain ESG targets or that have ties with non-ESG industries (for example, fossil fuels, drilling, firearms, tobacco, etc.).

According to the publication by Morgan Lewis "*ESG Investing Regulations Across the 50 States*", as of September 2023, 20 states effectively implemented "anti-ESG" rules across the United States, with 165 distinct anti-ESG rules that were introduced in 37 states in 2023 alone (with 14 states successfully enacting bills), with anti-ESG rules that have been advanced and passed predominantly in those states that are Republican-led (states where the right-wing party controls the governorship and both houses of the legislature). As it can be evidenced by Figure 4, the anti-ESG movement is on the rise, with the majority of U.S. states that has already taken regulatory actions restricting ESG or implementing anti-boycott rules in the investment panorama. Even though these anti-ESG bills adopted take several forms and differ with respect to fundamental provisions between states, what they all share in common is that, despite their label, none of these bills completely ban the use and adoption of ESG criteria in the investment decision-making. In fact, the key feature is that these bills place restrictions on how ESG can be implemented, linking their utilization to financial or pecuniary factors[70].

[70] K&L Gates – "*2023 ESG State Legislation Wrap Up*" by Dial L. C., Crowley D. F. C., McCoy J. R. and Chainey B. R., July 25, 2023 - https://www.klgates.com/2023-ESG-State-Legislation-Wrap-Up-7-19-

Figure 4: Current Map of ESG Implementation Across States



Source: Man Institute – "The State of ESG in the US: An Apolitical Survey" by Robert E. Furdak, May 2023, working on Bloomberg and Ropes & Gray LLP content; as of March 2023. Available at: https://www.man.com/maninstitute/the-state-of-esg-in-the-us.

Moreover, on March 16, 2023, Florida Governor Ron DeSantis, announced an alliance of 18 States, namely Alabama, Alaska, Arkansas, Georgia, Idaho, Iowa, Mississippi, Missouri, Montana, Nebraska, New Hampshire, North Dakota, Oklahoma, South Dakota, Tennessee, Utah, West Virginia, and Wyoming, to fight and push back the Biden's ESG agenda that, using DeSantis words "is destabilizing the American economy and the global financial system"[71]. The aim of this alliance is to lead a joint state-level effort to protect American citizens from the ESG movements that "threatens the vitality of the American economy and Americans' economic freedom, such as removing all state pension funds

2023#:~:text=Pro%2DESG%20Legislation&text=These%20bills%20do%20not%20directly,or%20adopt%20sustainable%20investment%20policies.

[71] Florida Government – "*Governor Ron DeSantis Leads Alliance of 18 States to Fight Against Biden's ESG Financial Fraud*", March 16, 2023 - https://www.flgov.com/2023/03/16/governor-ron-desantis-leads-alliance-of-18-states-to-fight-against-bidens-esg-financial-fraud/.

and state-controlled investments from firms that follow the ESG model of 'politics before fiduciary duty'"[72].

Florida is a curious case study as, during the DeSantis administration, it consolidated the role as being one of the most active U.S. states with regards to anti-ESG ruling. On May 2, 2023, DeSantis signed into law House Bill 3 (HB3), one of the most impacting bill in the anti-ESG panorama prohibiting state officials from promoting ESG criteria when investing public money and barring ESG bond sales, with the Florida's Governor commenting "we want them [i.e. asset managers] to act as fiduciaries. We do not want them engaged on these ideological joyrides"[73]. The bill will impact the Florida financial sector by:

- Prohibiting the use of ESG in all investment decisions at the state and local level, ensuring that fund managers only considers financial factors that maximize the highest rate of return.
- Prohibiting all state and local entities, including direct support organizations, from considering, giving preference to, or requesting information about ESG as part of the procurement and contracting process.
- Prohibiting the use of ESG factors by state and local government when issuing bonds, including a contract prohibition on rating agencies whose ESG ratings negatively impact the issuer's bons ratings.

The provisions of this bill formalizes and expands the provisions of the resolution that was passed by DeSantis, with support of the Trustees of the State Board of Administration (SBA), on August 2022, that requires that, when investing funds of the Florida Retirement System Defined Benefit Plan, investment decisions must be based only on pecuniary factors, leaving aside ESG or other ideological factors/interests and requests the SBA to not sacrifice financial returns or adding more risks when promoting any non-pecuniary factors. For the purposes of the legislation, the term *pecuniary factors* refers to those factors that are "expected to have a material effect on the risk or returns of an investment based on appropriate investment horizons consistent with the investment objectives and

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[72] See Note 71.
[73] Reuters – "*DeSantis Signs Sweeping Anti-ESG Legislation in Florida*" by Isla Binnie and Ross Kerber, May 3, 2023 - https://www.reuters.com/business/sustainable-business/desantis-signs-sweeping-anti-esg-legislation-florida-2023-05-02/.

funding policy of the retirement system or plan. The term does not include the consideration of the furtherance of any social, political or ideological interests”[74].

House Bill 3, “*An Act Relating to Government and Corporate Activism*”, given Florida’s status as one of the most frequent state investors in funds in the United States, will likely have a major impact on several asset managers, both at the public and private layer. In fact, asset managers who invest public money by means of Florida’s state or local agencies are now required to include a disclaimer in any external written communication, reporting the following words “*The views and opinions expressed in this communication are those of the sender and do not necessarily reflect the views and opinions of the people of the state of Florida*”. Moreover, asset managers are required to certify on a yearly basis that they are complying with the fiduciary duties, set forth by Florida resolution of August 2022, requiring that investment decisions are solely based on pecuniary factors and the bill “redefines the term “qualified public depository” (i.e., institutions that can accept and hold Floridian deposit funds) to include only those institutions that invest deposited funds solely on the basis of pecuniary factors. Relatedly, under HB3, these institutions cannot deny services on the basis of failing to satisfy certain ESG-related goals”[75]. Managers could face sanction by Florida’s state agencies if they fail to meet these requirements, and the Florida Attorney General may advance civil or administrative actions against those managers that do not meet the requirements of the legislation[76]. Moreover, Florida Governor DeSantis was also at the center of discussion when, in December 2022, decided to withdraw $2 billion worth of state assets from BlackRock, the world’s biggest investment company for Asset Under Management, over concerns about its ESG investment practices and strategy. This decision was justified “because they [BlackRock]

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[74] Florida Legislature – “*The 2023 Florida Statutes*” - http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0100-0199/0112/Sections/0112.662.html.

[75] Akin Gump Strauss Hauer & Feld – “*Florida Enacts Anti-ESG Legislation – House Bill 3 Explained*” by Martine E. Cicconi, Mark R. Herring, Stacey H. Mitchell, Brian Arthur Pomper, Ryan C. Anderson, and Christopher A. Treanor, May 19, 2023 - https://www.akingump.com/en/insights/alerts/florida-enacts-anti-esg-legislation-house-bill-3-explained#:~:text=On%20May%202%2C%202023%2C%20Gov,investment%20decisions%20and%20procurement%20processes.

[76] Ropes & Grey – “*“Where Woke Goes to Die”? – New Florida Restrictions on ESG to Create Challenges and Additional Requirements for Asset Managers and Other Financial Institutions*” by Joshua A. Lichtenstein, Michael R. Littenberg, Reagan Haas, Jonathan M. Reinstein and Alexa Voskerichian, April 27, 2023 - https://www.ropesgray.com/en/insights/alerts/2023/04/where-woke-goes-to-die-new-florida-restrictions-on-esg-to-create-challenges-and-additional.

have openly stated they've got other goals than producing returns"[77], referring to their ESG considerations in investment decisions. A BlackRock's spokesperson, Ed Sweeney, criticized the move by DeSantis, reporting that the firm is "surprised", given the high returns the company has delivered for Florida over the last years.

What's surprising is that, as evidenced by the article "*Focus: Business Fights Back as Republican State Lawmakers Push Anti-ESG Agenda*" published by Ross Kerber on Thomson Reuters on April 24, 2023, an increasing pushback from businesses and pension funds, legislators and public officials is happening at the state level in an attempt to account for climate change and protect investment returns when promoting ESG-related investments. Even though the financial impact of anti-ESG bills are not determinable yet, "Wall Street money managers" and state-agencies' asset managers are reportedly worried about potential loss of big businesses and financing and the increased perceived risks and liabilities are causing concerns in the financial sector if those anti-ESG are to be implemented. To date, one of the most important action being taken against an anti-ESG bill is the one by Kansas's legislators which, worried by the estimates that the anti-ESG bill in the state would cost $3.6 billion over ten years in lower pension system returns, softened the anti-ESG proposal advanced by the leading Republican party.

On the opposite side of the anti-ESG campaign we can find California. According to the U.S. Bureau of Economic Analysis of the Department of Commerce, California is listed as the largest state in the United States both in terms of population and Gross Domestic Product (GDP), accounting for more than 39 million of inhabitants and more than $3,598 trillion in GDP as of 2022. By this number, it can be expected that either a pro-ESG or anti-ESG bill would have meaningful impact on those businesses operating or headquartered in the state and, given the importance of California in the U.S. economic environment, those impacts would widen to the whole U.S. economy consequently. And, to this extent, this is what happened in California after the Democratic Governor Gavin Newsom announced, on October 7, 2023, the signing into law of three pro-ESG rules. The two Senate bills, SB-253 "*Climate Corporate Data Accountability Act*", and SB-261 "*Greenhouse Gases: Climate-Related Financial Risk*" are intended to create the "first

[77] Bloomberg Green – "*Florida Will Pull $2 Billion of Assets From BlackRock Over ESG*" by Danielle Moran and Saijel Kishan, December 1, 2022 - https://www.bloomberg.com/news/articles/2022-12-01/florida-will-pull-2-billion-of-assets-from-blackrock-over-esg?cmpid=BBD120122_BIZ&leadSource=uverify%20wall.

industry-agnostic U.S. regulations that mandate the corporate reporting of GHG emissions and climate risks in the United States"[78], while the State Assembly bill, AB-1305 "*Voluntary Carbon Market Disclosure*" that aims at preventing greenwashing concerns over emission claims for those entities with business operations within the state. According to the analysis made by Deloitte, approximately 5,000 companies in California will be required to disclose Scope 1, Scope 2 and Scope 3 GHG emissions and climate-related financial risks affecting their business and the measures the company adopted to reduce and adapt to these risks. These resolutions are particularly important as, applying to both public and private U.S. businesses, they would widen the spectrum of U.S.-based companies that will be subject to climate reporting requirements, given that, of the over 10,000 U.S.-based companies that could be subject to either one of the two Senate bills, more than 80 percent are privately held and hence not subject to the SEC's climate reporting requirements (this rule was introduced in Chapter 1). Most importantly, what all the three pro-ESG bills passed in California share in common is that they will introduce penalty for those companies that will not be compliant to the provisions of the bills: a fine of up to $500.000 in a reporting year will be introduced by SB-253; SB-261 establishes a fine of up to $50.000 per reporting year; a fine of $2,500 per day for each violation, up to a maximum of $500.000, is mentioned in AB-1305[79].

2.5. Conclusion.

Although the Inflation Reduction Act is not a law that explicitly mentions Environmental, Social and Governance criteria into its body, the Act represents a landmark initiative, representing the largest investment to fight climate change in U.S. history, brought forward by the Biden-Harris administration to invest in the productive capacity of the United States with regards to the clean energy, construction, and manufacturing industries. As a direct consequence of the provisions of the Act, the sustainable financial sector will be directly impacted, with multiple U.S. companies that will be involved in raising financing to promote investments, mostly by means of ESG-debt issuance, such as green bonds, climate and sustainable bonds, long-term sustainable loans, etc.

[78] Deloitte US – "*The Sweeping Impacts of California's Climate Legislation*" by DeloitteESGNow, October 10, 2023 (Updated December 5, 2023) - https://dart.deloitte.com/USDART/home/publications/deloitte/heads-up/2023/california-climate-legislation-sweeping-impacts#SL865248571-671295.

[79] See Note 78.

Moreover, green funds and the U.S. federal and state pension funds, being among the most important and heaviest investors in the U.S. landscape, will be directly involved in spurring the climate goals of the Biden-Harris administration. However, the influential anti-ESG propaganda, with divergent perspectives among regulatory decision makers at the federal and state level and extremely different approaches when it comes to ESG integration on the political level, poses a significant challenge and threat to the ambitious sustainability agenda of the President. As evidenced by the article "*How the US is Slowly Catching Up with Europe on ESG and Climate Policies*", published on April 4, 2023 by ING, the empirical evidence coming up from a survey of 300 international and wholesale investors with more than $27 trillion in AUM "shows that 47% of the investors are concerned about facing political/legal pressure on an anti-ESG basis if they implement ESG investing (versus 30% in Europe and 37% in Asia); while 54% of them expect to see more pressure against ESG investing in their domestic market in the future (versus 35% in Europe and 51% in Asia)"[80], with the 2024 U.S. presidential election approaching that will determine the future of ESG considerations in the country. These numbers shows that institutional investors, funds, fiduciaries investing retiree money in the pension system, as well as companies, are concerned about the significant financial, legal, operational, reputational and political threat that is posed by the surge of the anti-ESG movement. And even though anti-ESG measures are still relatively untested, as they have been implemented in the recent past, with the passing of time the uncertainty regarding their interpretation and, hence, implementation will fade away, and a possible winner will appear in the ESG panorama.

[80] ING – "*How The US Is Slowly Catching Up with Europe on ESG and Climate Policies*" by Coco Zhang and Maureen Schuller, April 4, 2023 - https://www.ing.com/Newsroom/News/How-the-US-is-slowly-catching-up-with-Europe-on-ESG-and-climate-policies.htm.

III. ESG Integration in the U.S. Financial Sector: Unveiling Strategic Impact Frontiers and Fighting Greenwashing in Green Funds.

As evidenced in the first chapter of this thesis, the first mainstream mention of the concept of Environmental, Social and Governance is considered to have appeared in the United Nations Global Compact's report by the *Who Cares Wins Initiative* "*Connecting Financial Markets to a Changing World*", published in 2004, with the aim of increasing the understanding of ESG risks and opportunities in the international financial sector. Since the 2004 UN publication, a lot have changed in financial markets, with an almost complete majority of institutional investors and asset managers that are now willing to consider ESG criteria into their investment process, in the attempt to exploit the return opportunities and mitigate those risks associated with the aim of improving financial performance.

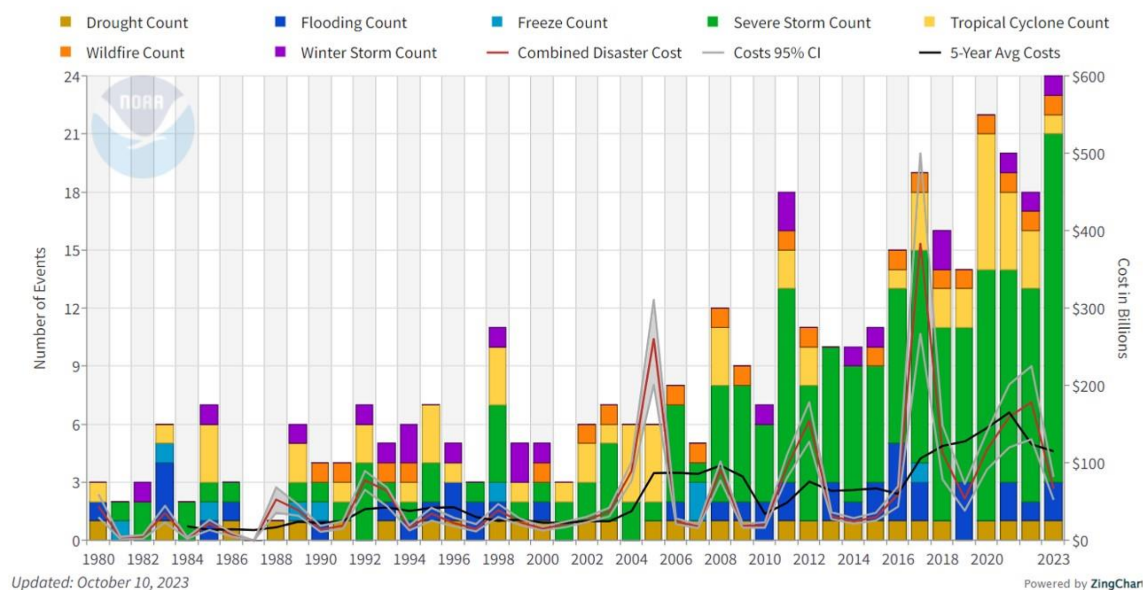
In this chapter, I want to focus on two industries within the U.S. financial sector that, given their characteristics as long-term investors in financial markets, are likely to be most impacted by ESG considerations of risk and returns opportunities and, simultaneously, are those mostly targeted by the anti-ESG campaign that is surging in the United States, namely the insurance industry and the pension system, both at the federal and industry level. Later in the chapter, I will focus on the performance of ESG-related and green fund in the United States and the risk of greenwashing, in order to understand how the ideological battle around the integration of ESG criteria is impacting the sustainable finance sector in the United States.

3.1. Assessing the Transformative Influence of ESG Criteria in the U.S. Insurance Industry.

According to the U.S. National Oceanic and Atmospheric Administration, as shown in Figure 5, the number and the related costs of climate change-related disaster events in the United States have been increasing since 1980's, with the cost of disaster events such as drought, flooding, freeze, storm, cyclones, and wildfire, in 2023 alone that have crossed $600 billion for the first time in U.S. history, and expectations of a rising of these costs in the near future as natural disaster become more frequent and extreme. In this context, the insurance industry has been impacted hugely by the negative effects of climate change, with the United States being the most exposed country all around the world,

accounting for 75% of global insured losses in 2022[81]. Climate disasters are creating excessive risks for insurance companies, both for the assets they own as institutional investors and the policies they offer as insurers.

Figure 5: U.S. Disaster Events in the Period 1980-2023 (CPI-Adjusted).



Source: U.S. National Oceanic and Atmospheric Administration, updated October 10, 2023. Available at: https://www.ncei.noaa.gov/access/metadata/landing-page/bin/iso?id=gov.noaa.nodc:0209268.

This is to say that for the insurance industry, climate change represents the single biggest risk, but at the same time the single biggest opportunity the industry will face in the coming years. In the array of climate-related risks, we can find three different types of risks:

- Physical Risks: "the possibility that the economic costs of the increasing severity and frequency of climate-change related extreme weather events, as well as more gradual changes in climate, might erode the value of financial assets, and/or increase liabilities" (Financial Stability Board, 2020).
- Transition Risks: "relate to the process of adjustment towards a low-carbon economy. […] Shifts in policies designed to mitigate and adapt to climate change

[81] PropertyCasualty360 – "*U.S. Accounted for 75% of Global Insured Losses in 2022*" by PC360 Staff Writer, January 27, 2023 - https://www.propertycasualty360.com/2023/01/27/u-s-accounted-for-75-of-global-insured-losses-in-2022/?slreturn=20230109164046.

could affect the value of financial assets and liabilities" (Financial Stability Board, 2020).

- Liability Risks: "might arise when parties are held liable for losses related to environmental damage that may have been cause by their actions or omissions. To the extent that this might reduce the value of such firms' liabilities, it might also have implications for the financial system" (Financial Stability Board, 2020).
- Litigation Risks: those risks resulting from legal actions taken against insurers or their customers.

These risks, combined with the uncertainty concerning their timing and magnitude, could give rise to "feedback loops", which might lead to a reduction in market participants' ability to properly price and manage these risks and to an increase in the probability of such risks being amplified within the financial markets.

According to the report "*Maximizing Impact: An Insurer's Guide to a Decarbonizing and Climate-Changed World*", drafted by Strategy&, part of the PwC Network, "unless properly integrated into insurers' risk assessments and underwriting processes, climate risks threaten the financial viability of insurers" (Rajan, Muhaimin, Guldbahar, & Doherty, 2023). And it is in this context that Environmental, Social and Governance criteria can help insurers, their clients and the society as a whole in mitigating and even preventing natural disasters in order to reduce insurance claims and premiums paid by individuals and undertakings, and improve insurance companies' profitability.

In a survey conducted by KMPG International in December 2022, 44% of insurance CEOs interviewed acknowledge that ESG considerations and their implementation into insurer's business plans improve financial performance, up from 40% of one year ago[82]. Consequently, insurance companies are trying to exploit ESG opportunities in order to reach sustainable targets, identify new markets and business opportunities and offer innovative products and policies, which could help them reach longer-term growth targets and strengthening their position in the market.

Insurers are leveraging ESG risks and opportunities both on their liability business and when they act as institutional investors, in the attempt to help their organization, their

[82] KPMG – "*ESG in Insurance: Strategy and Transformation*" by Hafeez S., Kuzemko H., Francis M., Todd N., Subban K., Botha M. and Merrey P. (KMPG in Belgium), May 2023 - https://assets.kpmg.com/content/dam/kpmg/be/pdf/2023/BE-ESG-in-Insurance-Strategy-Transformation.pdf.

clients and their stakeholders as a whole in their path toward ESG integration. According to a PwC survey, 85 percent of global insurers believe ESG will impact all functions of their business, with investments being the most impacted (91%), followed by risk and internal audit (90%) and underwriting (88%)[83]. They are doing that by:

- Creating ESG taskforces to measure and review progress on ESG objectives across the organization;
- Creating their own ESG rating scorecard as a screening tool in the investment process for assessing ESG-related risks and opportunities and embedding ESG criteria to help their clients better understand risks and opportunities.
- Committing to deliver net zero by the next decades by reducing their Scope 1, Scope 2 and Scope 3 emissions to manage future risks, reduce costs and enhance efficiency.
- Incentivizing portfolio companies to reach decarbonisation targets.

However, according to the report by the non-profit Ceres Accelerator for Sustainable Capital Markets[84] "*Changing Climate for the Insurance Sector: Research and Insights*", published in August 2023, the insurance sector has focused on ESG topics in order to respond to climate risks in their insurance business, but insurance companies have shown much less attention to this matter when managing their assets, evidencing that "insurers' "business as usual" is enabling, through investments, loans, and underwriting of carbon-intensive activities, the very climate change effects that are impacting their companies, their customers, and the communities they serve" (Ceres Accelerator for Sustainable Capital Markets; Persefoni; The Sustainability Institute by ERM, 2023). Nevertheless, the report highlights that, according to a recent survey of the insurance sector, "34 percent of North American insurers planned to increase their company's allocation of green and sustainable bonds in the next 12-24 months, while 51 percent of respondents intend to maintain their current allocation" (Ceres Accelerator for Sustainable Capital Markets;

[83] PwC – "*ESG: A Growing Sense of Urgency*" by PwC, 2022 - https://www.pwc.com/us/en/industries/financial-services/library/next-in-insurance-top-issues/esg-insurance-industry.html.
[84] Ceres is a nonprofit organization with over 30 years of experience working on climate issues. The Ceres Accelerator works to transform the practices and policies that govern capital markets in order to reduce the worst financial impacts of the climate crisis. It spurs capital market influences to act on climate change as a systemic financial risk, driving the large-scale behavior and systems change needed to achieve a just and sustainable future and a net zero emissions economy.

Persefoni; The Sustainability Institute by ERM, 2023), showing that, despite their investments and underwriting business in “brown” sectors, insurance companies in the United States are willing to embrace an investment strategy oriented toward ESG implementation in order to ensure that their underwriting portfolios align with the goals of the Paris Agreement.

With the aim of improving ESG implementation in the insurance industry and promoting the assessment and management of climate-related risks, regulatory actions have been undertaken in the U.S., mostly at the federal level. To date, the most important measure oriented toward the U.S. insurance sector has been the Climate Risk Disclosure Survey, which was adopted by the National Association of Insurance Commissioners (NAIC)[85] back in 2010, with the specific purpose of:

- Enhancing transparency about how insurers manage climate-related risks and opportunities;
- Identifying good practices and vulnerabilities;
- Providing a supervisory tool to assess how climate-related risks may affect the insurance industry;
- Promoting insurer strategic management and encourage shared learning for continual improvement;
- Enabling better-informed collaboration and engagement on climate-related issues among regulators and interested parties;
- Aligning with international climate risk disclosure frameworks to reduce redundancy in reporting requirements[86].

Since 2013, all states are asked to submit, on an annual basis, the survey to their domestic insurance companies that write at least $100 million in premium. In 2021, 15 states joined the disclosure survey initiative, namely California, Connecticut, Delaware, District of

[85] The National Association of Insurance Commissioners (NAIC) is the U.S. standard-setting and regulatory support organization that was created in 1871 to assist state insurance regulators, individually and collectively, in serving the public interest, by setting standards and regulatory best practices, acting as a forum to exchange information, providing regulatory support functions, and educating consumers, industry, and other government stakeholders about the U.S. system of state-based insurance regulation.

[86] National Association of Insurance Commissioners – “*Proposed Redesigned NAIC Climate Risk Disclosure Survey*” by the National Association of Insurance Commissioners (NAIC), March 2022 - https://content.naic.org/sites/default/files/inline-files/2022ProposedClimateRiskSurvey_0.pdf.

Columbia, Maine, Maryland, Massachusetts, Minnesota, New Mexico, New York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington, with more than 1,400 insurance companies that responded to the survey, capturing nearly 80 percent of the entire U.S. insurance market. In April 2022, in order to enhance transparency on insurance companies' climate risks assessment and management and to incorporate international best practices regarding the financial impacts of climate risks on the U.S. insurance market, the NAIC adopted a new standard in alignment with the international Task Force on Climate-Related Financial Disclosure (TCFD), requiring insurance companies to report on TCFD's four topics: governance, strategy, risk management, and metrics and targets.

Moreover, as already presented in the first chapter of this thesis, the Federal Insurance Office (FIO) of the U.S. Department of Treasury, in response to the President's Executive Order on Climate-Related Financial Risk issued on May 20, 2021, has submitted a Request for Information (RFI) in August 2021 to monitor and assess the significance of climate-related financial risks in the insurance sector, focusing on three main priorities:

1. Assess climate-related issues or gaps in the supervision and regulation of insurers, including their potential impacts on U.S. financial stability.
2. Assess the potential for major disruptions of private insurance coverage in U.S. markets that are particularly vulnerable to climate change impact.
3. Increase FIO's engagement on climate-related issues and leverage the insurance sector's ability to help achieve climate-related goals[87].

However, at the state level, the crusade against ESG adoption have hit the insurance industry too. In May 2023, the Republican-led state of Texas have adopted a bill, SB 833, according to which insurers in the state are prohibited from considering ESG model, score, factor or standard when setting rates for almost all forms of insurance, except when these considerations are financially material and follow sound actuarial principles, with other red states such as North Dakota and South Dakota that have advanced similar proposals. On May 2, 2023, the U.S. Senator Joe Manchin, the one whose vote eventually contributed to the signing of the Inflation Reduction Act into law in August 2022, headed a group of thirty eight U.S. Senators "in expressing concerns to U.S. Department of the Treasury Secretary Janet Yellen over the Federal Insurance Office's (FIO) recent efforts

[87] See Note 26.

to force the Biden Administration's environmental, social and governance (ESG) agenda onto the state-regulated insurance industry". The group of Senators stressed that the Biden administration is ignoring the actions that state insurers and regulators have already undertook regarding ESG factors implementation and climate risks mitigation, and that the strong effort in potentially adopting certain ESG strategies would lead to real world impacts, quantified in the form of higher compliance costs for state insurers and higher premiums for the American public[88]. According to Micheal Leonard, chief economist and data scientist at the Insurance Information Institute, "ESG is in the DNA of any insurance company. It would be very difficult for the insurance industry to insure in an economically viable and sustainable way without paying attention to environmental patterns"[89].

Despite the industry's concerns and opposition to such measures, other red states are expected to advance similar rules in the near future, as they see the implementation of ESG factors as a "woke" investment practice and an irresponsible effort with respect to the American public in pushing Biden's unrealistic environmental agenda.

3.2. Evaluating the Impact of ESG on U.S. Sustainable Retirement Investments.

Asset managers within the pension system have a corollary they need to respect when investing pension funds' money into capital markets: they must ensure employees that, upon retirement, they will receive a steady income for some decades that will serve as their own salary. To safeguard retirees' money, pension funds must follow two pillar when deciding the investment style they are to follow: prudence and diversification. To this extent, as for the case of insurance companies, pension funds' investment strategy must follow a long-term perspective of generating the highest rate of return by properly calibrating the risks related to the investments they undertake. It is in this context that the integration of ESG factors and, hence, the objective of creating a more sustainable and inclusive growth, fit the mandate of pension funds and of the retirement system globally. According to the book edited by P. Brett Hammond, Raimond Maurer, and Olivia S.

[88] Joe Manchin Website – "*Manchin Leads Effort to Block ESG Agenda in State-Regulated Insurance*", May 2, 2023 - https://www.manchin.senate.gov/newsroom/press-releases/manchin-leads-effort-to-block-esg-agenda-in-state-regulated-insurance.

[89] Politico – "*Anti-ESG Comes for the Insurance Industry*" by Jordan Wolman and Debra Kahn, March 7, 2023 - https://www.politico.com/newsletters/the-long-game/2023/03/07/anti-esg-comes-for-the-insurance-industry-00085844.

Mitchel "*Pension Funds and Sustainable Investments*", published in May 2023, "a main driver of the move to embrace ESG in pensions is the inherent need for long-term managers of corporate risks and opportunities to live up to their responsibilities as intergenerational stewards of capital" (Hammond, Maurer, & Mitchell, 2023). Therefore, the implementation of ESG factors within pension funds' investment strategy has been considered as a tentative to hedge against risks like climate risk and financial risk affecting market financial stability, while simultaneously identifying companies and/or financial securities with a long-term financial performance potential. However, in order to integrate ESG factors into their investment strategy to secure long-term financial returns, asset managers in pension funds need to navigate "within a web of pension regulation, the legal interpretation of fiduciary duty, and the organizational characteristics of pensions" (Hammond, Maurer, & Mitchell, 2023), which may represent or not a supporting factor. This is because the narrow mandates toward retiree that retirement plans and pension funds are required to respect in their business operations may "make it difficult for them to incorporate factors other than those of a financial nature" (Hammond, Maurer, & Mitchell, 2023).

In the United States, the most important regulation surrounding retirement and health plans in the private industry is the Employee Retirement Income Security Act (ERISA), enacted by the U.S. Congress on September 2, 1974. Title I of the Act establishes minimum standards that pension plan fiduciaries must follow when managing or controlling pension funds' assets, including fiduciary responsibility rules. Accordingly, plan fiduciaries are required to:

- Act prudently and diversify plan investments to minimize the risks of large losses, unless under the circumstances diversifying is not prudent;
- Act solely in interest of the plan's participants and beneficiaries;
- Act for the exclusive purpose of providing benefits to participants and beneficiaries and defraying reasonable expenses of administering the plan.

Given the difficulty in defining the financial materiality of ESG criteria in the investment decision-making process as to respect the ERISA's responsibility rules, the U.S. Department of Labor (DOL) has been active, since 1994, in providing guidance, by means of *Interpretive Bulletin*, to understand how ESG factors can be interpreted and integrated in the selection of investments. Historically, Democratic administrations have been much

more open to the implementation of ESG criteria in ERISA-regulated retirement plans, while Republican administration have been skeptical as to whether the implementation of ESG factors falls within the fiduciary requirements of plan sponsors.

In 1994, the Clinton Administration's Department of Labor published the first Interpretative Bulletin (IB 94-1), which targeted "Economically Targeted Investments" (ETIs), generally defined as "investments that are selected for the economic benefits they create in addition to the investment return to the employee benefit plan investor"[90], to correct and eliminate the misconception that investments in ETIs are incompatible with ERISA's fiduciary obligations. The Bulletin specified that investments in ETIs are not prohibited under ERISA's provisions, as long as these investments have an "expected rate of return that is commensurate to rates of return of alternative investments with similar risk characteristics that are available to the plan, and if the ETI is otherwise an appropriate investment for the plan in terms of such factors as diversification and the investment policy of the plan"[91], creating the so called "tie-breaker" standard, hence allowing the selection of sustainable funds as long as these have comparable rate of returns with respect to conventional funds.

In 2008, a second Interpretative Bulletin (IB 2008-01) was released by the Bush Administration's DOL, whose text modifies and supersedes the guidance set forth in IB 94-1. In light of ERISA's requirements that fiduciaries must act "solely in the interest of participants and beneficiaries", the DOL specifies that, before the selection of an ETIs, a proper quantitative and qualitative analysis regarding "the level of diversification, degree of liquidity, and the potential risk/return in comparison with available alternative investments"[92] must be concluded when considering alternative investments. The Bulletin stressed that it would be a violation of ERISA's provisions if a plan fiduciaries decides

[90] Federal Register – "*Interpretative Bulletin Relating to the Employee Retirement Income Security Act of 1974*" by the Department of Labor, Pension and Welfare Benefits Administration, June 23, 1994 - https://www.govinfo.gov/content/pkg/FR-1994-06-23/html/94-15162.htm.
[91] See Note 90.
[92] Federal Register – "*Interpretative Bulletin Relating to Investing in Economic Targeted Investments*", by the Department of Labor, Employee Benefits Security Administration, October 17, 2008 - https://www.federalregister.gov/documents/2008/10/17/E8-24551/interpretive-bulletin-relating-to-investing-in-economically-targeted-investments.

to accept reduced expected returns or greater risks to secure environmental, social and governance factors in the investment process.

In 2015, under the Obama Administration, a third Interpretive Bulletin (IB 2015-01) was published by the DOL, with the belief that "in the seven years since its publication, IB 2008-01 has unduly discouraged fiduciaries from considering ETIs and ESG factors"[93]. Given that ESG factors are potentially influential in the risk-return considerations of investment decisions by plan fiduciaries, the Interpretive Bulletin clarifies that "in these instances, such issues are not merely collateral considerations or tie-breakers, but rather are proper components of the fiduciary's primary analysis of the economic merits of competing investment choices. Similarly, if a fiduciary prudently determines that an investment is appropriate based solely on economic considerations, including those that may derive from environmental, social and governance factors, the fiduciary may make the investment without regard to any collateral benefits the investment may also promote. Fiduciaries need not treat commercially reasonable investments as inherently suspect or in need of special scrutiny merely because they take into consideration environmental, social, or other such factors"[94]. Hence, the DOL explains that, since ERISA's fiduciary obligations don't prevent fiduciaries from addressing ETIs and/or considering ESG factors, "the Department does not construe consideration of ETIs or ESG criteria as presumptively requiring additional documentation or evaluation beyond that required by fiduciary standards applicable to plan investments generally"[95].

Under the Trump Administration, the anti-ESG campaign became stronger than ever, with plenty of rules that targeted ESG investing and other climate-change consideration being upset. Among these, on November 13, 2020, the DOL published a final rule "*Financial Factors in Selecting Plan Investments*", which amended the ERISA's "Investment Duties" regulation[96], rejecting the notion that non-pecuniary factors can be

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[93] Federal Register – "*Interpretive Bulletin Relating to the Fiduciary Standard Under ERISA in Considering Economically Targeted Investments*" by Department of Labor, Employee Benefits Security Administration, October 26, 2015 - https://www.federalregister.gov/documents/2015/10/26/2015-27146/interpretive-bulletin-relating-to-the-fiduciary-standard-under-erisa-in-considering-economically.
[94] See Note 93.
[95] See Note 93.
[96] The Regulation states that a "fiduciary may not subordinate the interests of the participants and beneficiaries in their retirement income or financial benefits under the plan to other objectives and may not sacrifice investment return or take on additional investment risk to promote benefits or goals unrelated to interests of the participants and beneficiaries in their retirement income or financial benefits under the plan". However, if a fiduciary prudently concludes that competing

considered as "tie-breakers", generally requiring plan fiduciaries to select investments and investment course of action focus solely on "pecuniary factors", and, while not referring specifically to ESG factors, it is generally considered that the hazy terminology and the tone lead to a slowdown in the implementation of ESG criteria and other sustainable principles by plan fiduciaries, leading to a "chilling situation" as to ESG investing in plan investments.

However, with Biden becoming President of the United States in January 2021, the new DOL, having noted that the Trump's DOL rule regarding ERISA fiduciaries may have created uncertainty as to the consideration of climate change and of financially relevant ESG factors, announced a non-enforcement policy of the 2020 regulation in order to clearing up the confusion surrounding the 2020 amendments. On November 22, 2022, the DOL published a final rule "*Prudence and Loyalty in Selecting Plan Investments and Exercising Shareholder Rights*", which supersedes the prior Administration's amendments and clarify the application of ERISA's fiduciary responsibility duties when considering climate change and/or ESG factors in the selection of plan investments. Although the final rule retains the core principle that the focus of plan fiduciaries must be on relevant risk-return factors and they may not sacrifice investment returns or assume greater risks when promoting "non-pecuniary" factors, the final rule adds to the body of the text that the economic effects of climate change and other ESG considerations can be considered as relevant to the fiduciaries' risk-return analysis and that such considerations fall within the fiduciary duties of prudence and loyalty. As already evidenced in the first chapter in this thesis, both the U.S. House of Representatives and the Senate passed a resolution to overturn the DOL "*ESG Rule*", to which the President Biden responded by using his veto power over this resolution. Overall, these changes are expected to provide a consistent boost in ESG adoption and implementation in the investment process of ERISA's funds. Moreover, according the publication "*ERISA Fiduciaries May Consider ESG Factors in Selecting Investments and Exercising Shareholder Rights*", the 2022 DOL Final Rule will have a positive impact in increasing the salience of ESG factors in ERISA's investments decisions and, in addition, "even if the amendment to the ERISA regulations itself is modest, the cascading effect on the investment community will be

investments/courses of action equally serve the financial interests of the plan, the fiduciary is not prohibited from selecting the investment based on collateral benefits other than investment returns, as long as this investment shows a higher or equal risk-return profile. See more at: https://www.law.cornell.edu/cfr/text/29/2550.404a-1.

significant", citing second-order impact such as the provision of information concerning ESG factors by investment managers and the need to generate ESG data, ESG rating and similar metrics, which in turn can drive investment activity[97].

In June 2023 the first lawsuit targeting the implementation of ESG factors in private retirement plans was filed against an American Airlines defined contribution (401(k)) plan, with about $26.5 billion in assets at the end of 2021. The lawsuit, which is seeking class status, was filed in a Texas' federal court on behalf of the American Airlines pilot Bryan Spence and involves also Fidelity Investments Institutional and Financial Engines as defendants. According to the 43-page complaint, "defendants have breached their fiduciary duties in violation of ERISA by investing millions of dollars of American Airlines employees' retirement savings with investment managers and investment funds that pursue leftist political agendas through environmental, social and governance ESG strategies, proxy voting and shareholder activism — activities which fail to satisfy these fiduciaries' statutory duties to maximize financial benefits in the sole interest of the plan participants"[98], and the law firms that filed the suit – Hacker Stephens and Sharp Law – are also citing the low performance of the plan sponsor's ESG-focused investments with respect to the broader market over the past year, totalling more than 250 basis points per annum of underperformance. However, according to Greg Ash, partner at the U.S. legal firm Spencer Fane, even though this lawsuit will be closely watched as it has the potential to set a precedent for similar lawsuits, these will be "extremely difficult for plaintiffs to win given the ever-evolving nature of the DOL's rules on ESG investing and the fact-intensive nature of the claims".

While the ESG regulation and its implementation are at the center of discussion in the United States given the backlash that ESG investing is suffering, the topic is of particular interest at the international level too. In fact, as evidenced in the report by CREATE-Research and Amundi[99], the largest European asset management company, despite the

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[97] Mintz – "*ERISA Fiduciaries May Consider ESG Factors in Selecting Investments and Exercising Shareholder Rights*" by Jacob H. Hupart, Michelle Capezza, Thomas R. Burton, III and Megan Gates, November 30, 2022 - https://www.mintz.com/insights-center/viewpoints/2786/2022-11-29-erisa-fiduciaries-may-consider-esg-factors-selecting.
[98] Investment News – "*First 401(k) Lawsuit Over ESG Targets American Airlines' $26 Billion Plan*" by Emile Hallez, June 6, 2023 - https://www.investmentnews.com/industry-news/news/first-401k-lawsuit-over-esg-targets-american-airlines-26-billion-plan-238436.
[99] The report "*Pension Plans Confident ESG Investing is Re-firing its Engine*" is based on responses to a survey from 158 pension plans globally, with €1.91 trillion of Assets Under Management.

slowdown that ESG felt in 2022, given by the Russian invasion of Ukraine and the subsequent rising global inflation, "the consensus is that as a strategy, ESG will be marked by periodic setback due to a larger dynamic that has little to do with ESG investing per se. Most survey respondents (79%) believe that ESG factors will not hurt performance in the long term. As a result, appetite remains strong and ESG investing will continue to deepen its roots in the pension landscape. Over the next three years, 53% of respondents expect the share of ESG investing in their active portfolios to rise, and 49% expect a rise in their passive portfolios"[100]. What is evident by the results of the survey is that two broad sets of goals are now targeted by ESG investing practices: the first one is about "investment basics", such as minimising risks linked with ESG factors (57%), enhancing returns from ESG opportunities (53%), seeking both environmental and/or societal benefits and financial performance (51%), and reducing portfolio volatility (34%); the other set is about issues such as tackling trade-offs between the E, S and G pillars (49%) and lessen operational and reputational risks (34%). These numbers shows that, as according to the words of Professor Amin Rajan of CREATE-Research, ESG investing has now transformed, with investors that have now a strong focus not only to real world outcomes, but financial performance is now considered a central thematic. Accordingly, only 14% of the respondents are prepared to achieve ESG goals at the expense of portfolio returns. At the same time, while 53% of the respondents are concerned about the political and ideological battle evolving around ESG topics in the United States, "we expect to see policymakers continue to progress the ESG agenda" [101], stated Monica Defend, Head of the Amundi Investment Institute, when talking about the role of governments and regulators in incentivizing ESG adoption in the investment process.

3.3. ESG and Green Fund in the United States: Analyzing Performance with an Eye on the Greenwashing Concern.

Within the panorama of sustainable investing practices, ESG and Green fund have attracted a growing popularity in the investment industry in the recent past, not only by those investors that label themselves as "impact investors", "green investors",

[100] CREATE-Research and Amundi Asset Management– "*Pension Plans Confident ESG Investing is Re-firing its Engine*", December 1, 2023 - https://int.media.amundi.com/assets/pr-amundi-create-research-2023-final-pdf-a499-b6afb.html.
[101] See Note 101.

"sustainable investors" and similar, but in general within the whole investment ecosystem. Notwithstanding the growing popularity of critics targeting ESG investing as "woke" investment practices, according to a PwC report, total investment in U.S. ESG funds should more than double to $10.5 trillion by 2026, up from $4.5 trillion in 2021[102].

A peculiar characteristic of an open/closed mutual fund and/or Exchange Traded Fund (ETF) which integrate ESG factors in their portfolio decision-making process is that, according to a wide set of researches (Whelan, Atz, Van Holt, & Clark, 2021), since the ESG scrutiny adopted by asset managers can lead to better-informed investment decisions, ESG-related funds appear to potentially perform better than their "brown" counterparts, mostly linked to the risk mitigation potential, while simultaneously meeting environmental and/or societal objectives.

As already evidenced in the previous paragraph, after rallying for five consecutive years, 2022 was not a good year for ESG investing and green fund. However, the setback that ESG-related financial products have witnessed has little to do with the ESG factors per se, but it has to be attributed to some investment strategy's characteristics of such funds. For example, a lot of green funds have investments in so called growth stocks, i.e. stocks that trade at higher values with respect to their fundamentals, which have been hardly hit by the macroeconomic conditions of high inflation and rising interest rate, with the Russian invasion of Ukraine that destabilized the renewable energy sector and shifted the focus on oil, gas and other "sin stocks", further slowing down ESG labelled funds[103]. Consequently, the ten largest ESG funds by assets have all experienced double-digit losses, with eight of them falling even more than the S&P 500's 14.8 percent decline, with the performance of these funds that compares with the average 12 percent decline of ESG funds with more than $500 million of assets in 2022, as according to data by

[102] PwC – "*ESG-Focused Institutional Investment Seen Soaring 84% to US$33.9 Trillion in 2026, Making Up 21.5% of Assets Under Management: PwC Report*", November 10, 2022 - https://www.pwc.com/gx/en/news-room/press-releases/2022/awm-revolution-2022-report.html#:~:text=ESG%2Dfocused%20institutional%20investment%20seen,assets%20under%20management%3A%20PwC%20report.

[103] According to the Nasdaq contributor Todd Shriber, many ESG funds are chock full of value stocks, which have been punished by raising interest rates, and consequently asset managers avoided these assets to embrace value-oriented strategies. Moreover, these funds are light on energy stocks, which becomes problematic when energy is the best-performing sector in the S&P 500 for the second consecutive year. See source at: https://www.nasdaq.com/articles/these-esg-etfs-could-bounce-back-in-2023.

Bloomberg[104]. However, in the first half of 2023, given the widespread expectation of a decreasing inflation all over the world, and consequently the belief that the Federal Reserve and other central banks will lower interest rates sooner than expected, the performance of ESG-related indexes on global equity markets bounced back, as according to Morningstar research and InvestmentNews data. For example, the Morningstar U.S. Sustainability Leaders Index registered, as of June 2023, a positive return of 28 percent year-to-date, 14.6 percent annualized over three years and 14.2 percent for five years, relative to a 20.5 percent return over a year for the Morningstar U.S. Large Cap Index, 14.4 percent over three and 12.1 percent over five years, with similar results for the global versions of these products. The S&P 500 ESG Index has posted returns of 22.5 percent year-to-date relative to 21 percent increase of the broader S&P 500, showing overperformance also on a three and five years basis. The bounce back is not a shocking news given that, according to the words of Thomas Kuh, Head of ESG Strategy at Morningstar Indexes, "sustainable investors have a long time horizon, so short-term market movements will not alter their convictions"[105], meaning that sustainable investors, despite the losses in 2022, showed no intention of altering their asset allocation with respect to ESG factors. Another example of ESG rebound in 2023 has been the ESG-focused ETF that tracks the performance of the S&P500, the SPDR S&P 500 ESG ETF EFIV, which returned nearly 22 percent year-to-date and charged on investors 10 basis points, showing that "a very slight premium – but relatively strong performance can be achieved using an ESG approach"[106]. However, the high prices of green funds with respect to other comparable products don't seem to represent a concern for sustainable investors. In fact, according to the paper "*How Do Investors Value ESG?*", published by Baker M., Egan M. and Sarkar S. K. of the Harvard University in November 2022, investors are willing to be charged higher prices when investing in ESG funds, that is quantified in a 20 basis points difference with respect to non-ESG fund, with the value that is placed on ESG factors that "has increased nearly threefold over our sample period,

[104] BNN Bloomberg - "*Big ESG Funds Are Doing Worse Than the S&P 500*" by Tim Quinson, Bloomberg News, December 7, 2022 - https://www.bnnbloomberg.ca/big-esg-funds-are-doing-worse-than-the-s-p-500-1.1855951#:~:text=In%202022%2C%20the%20approach%20did,the%20S%26P%20500's%2014.8%25%20decline.

[105] Morningstar Indexes – "*ESG Comeback*", May 24, 2023 - https://indexes.morningstar.com/insights/index-ip/blt7a37ea380bea0962/esg-comeback.

[106] InvestmentNews - "*ESG Returns Rebound, Taking Some Gas Out of Performance Debate*" by Emile Hallez, June 16, 2023 - https://www.investmentnews.com/esg/news/esg-returns-rebound-taking-some-gas-out-of-performance-debate-238932.

from 9 basis points in 2019 to 28 basis point in 2022" (Baker, Egan, & Sarkar, 2022). As a consequence, given the higher costs of operating such funds, ESG funds charge, on average, an expense ratio that is 5.85 basis points higher than non-ESG funds.

3.3.1. ESG Funds Regulation.

In order to fight misleading and/or false claims by ESG funds' sponsor, regulatory agencies have decided to enhance clarity and transparency amid the rise of ESG-related investment practices by implementing binding regulations with respect to registered funds names and other related disclosure requirements.

In the United States, in May 2022, the Securities and Exchange Commission (SEC) proposed two rule changes in order to fight greenwashing practices in the investment industry to respond to the growing concerns around some funds seeking extra profit when implementing ESG factors without accurately reflecting such commitments in their investment strategy. The proposed amendment to the Investment Company Act of 1940, focusing on the so-called fund "Names Rule", which currently requires that at least 80% of a fund's portfolio matches the asset advertised by its name, will be enhanced by widening the rule's scope so that all those funds which focuses on investments particular characteristics or a thematic investment focus, such as "ESG", "Sustainable", "Green", "Socially Responsible", "Ethical", "Impact", "Good Governance" or that focuses on terms such as "Growth" or "Value"[107], will be required to adopt an 80 percent investment policy. The amended rule will also require a fund to review its portfolio assets' treatment at least quarterly and will include a specific time frame of 90 days to get back in compliance if such rule is breached. Moreover, the amendments will target disclosure requirements for the terminology used when labelling a fund and an additional reporting and recordkeeping requirements. On September 20, 2023, when the SEC adopted the proposed amendments, SEC Chair Gary Gensler commented: "Today's final rules will help ensure that a fund's portfolio aligns with a fund's name. Such truth in advertising promotes fund integrity on behalf of fund investors"[108]. The amendments will be effective

[107] Latham & Watkins – "*SEC Adopts Changes to Names Rule for Registered Funds*", October 19, 2023, Client Alert Commentary Number 3174 - https://www.lw.com/people/admin/upload/SiteAttachments/SEC-Adopts-Changes-to-Names-Rule-for-Registered-Funds.pdf.

[108] U.S. Securities and Exchange Commission – "*SEC Adopts Rule Enhancements to Prevent Misleading or Deceptive Investment Fund Names*", Press Releases, September 20, 2023 - https://www.sec.gov/news/press-release/2023-188.

on December 11, 2023, and will require funds with net assets over $1 billion to comply with the new rule within 24 months, while those with net assets of less than $1 billion within 30 months. The SEC estimates that, thanks to these new amendments, the percentage of registered funds that will be under the scope of the new "Names Rule" will increase from 60 to 76 percent.

The SEC approach to this naming convention is a tentative to align with the EU financial products sustainability claims rules which are contained in the Sustainable Finance Disclosure Regulation (SFDR) which, as anticipated in Chapter 1, aims at fighting greenwashing concerns when offering sustainable financial products to market participants. According to the tight SFDR requirements, under Article 6 should be classified those products with no particular sustainability scope; under Article 8 should be classified those products that promote, among others, environmental or social factors or a combination of these factors; under Article 9 should be classified those products that have as a clear objective a sustainable investment. More specifically, in December 2023, the European Securities and Markets Authority (ESMA), the EU's financial markets regulator and supervisor, released an update of its guidelines on ESG and sustainability-related terms in fund names, which are expected to be effective from the second quarter of 2024. The new guidelines include, similar to the U.S. SEC regulation, a threshold of at least 80 percent of fund assets that are required to align to the sustainability characteristics included in funds' names, the introduction of a Paris-aligned benchmark (PAB) exclusions of companies involved in "sin" activities, such as weapons or tobacco production and exploration, production or refining of fossil fuels, and the requirement of investing "meaningfully" in sustainable investments that align with the SFDR definition. The updates to the ESMA's guidelines on fund names was born as a necessity to clear up the difficulty that investors face in choosing sustainable investment products[109]. In fact, as according to an ESMA's study released in October 2023, the proportion of funds active in the European Union that include ESG-related language in their names have increased by more than four times in the last ten years, with a share of ESG-related assets under management that have reached 14 percent in the European Union in 2023, compared to the 3 percent share in 2013. Consequently, as stated by ESMA in the report, "however,

[109] ESG Today – "*EU Markets Regulator Updates Proposed Rules for Fund Names Using "ESG" or "Sustainability" Terms*" by Mark Segal, December 18, 2023 - https://www.esgtoday.com/eu-markets-regulator-updates-proposed-rules-for-funds-names-using-esg-or-sustainability-terms/.

all else being equal, strong investor demand for ESG products also incentivise greenwashing behaviour among asset managers. […] The risk of greenwashing, especially in the financial industry, is becoming of increasing concern to regulators both in the EU and abroad" (European Securities and Markets Authority, 2023).

Even though some dissenters claim that the SEC's amendments to the Name Rule, given its subjective interpretative characteristics, may result controversial, making ESG products no longer a viable investment option, advocates of ESG investing claim that the new rule would have a beneficial effect, leading to a transformation of the landscape around "green" investments, targeting the investors' transparency risk.

3.3.2. Greenwashing Examples in the Financial Industry.

Even though, from a regulatory perspective, a single recognised definition of "greenwashing" does not exist in any legislation, it is common knowledge that the term refers to the use of misleading labels or advertising/marketing practices to create an inappropriate image of a company or company's products' environmental credentials, usually to boost its reputation, oriented towards consumers or investors.

Looking at the numbers published by the ESG data firm RepRisk released in October 2023, 148 greenwashing cases in the global banking and financial services sector were reported as of September 2023, up from 86 in 2022, a 70% increase year-on-year. Even though according to the European Banking Federation these findings seems like allegations rather than verified greenwashing cases[110], the growing concern that regulatory agencies are showing seems to be justified, with regulators that are increasingly aware of the scale of the greenwashing problem.

In the United States, the SEC's approach to greenwashing, thanks to the work of the newly launched Climate and ESG Task Force within its Division of Enforcement[111], has focused on misconducts, misstatements, omissions and fraud regarding the ESG claims of sustainable financial products and compliance issues. In order to shield investors and

[110] Reuters – "*Banks Behind 70% Jump in Greenwashing Incidents in 2023 – Report*" by Tommy Reggiori Wilkes, October 3, 2023 - https://www.reuters.com/sustainability/banks-behind-70-jump-greenwashing-incidents-2023-report-2023-10-03/.

[111] U.S. Securities and Exchange Commission – "*SEC Announces Enforcement Task Force Focused on Climate and ESG Issues*", Press Release on March 4, 2021 - https://www.sec.gov/news/press-release/2021-42.

consumers from greenwashing risks, the SEC has been active in promoting actions against financial companies active in the country.

For example, in May 2022, the SEC charged BNY Mellon Investment Adviser, Inc. a $1.5 million penalty for "misstatements and omissions about Environmental, Social, and Governance (ESG) considerations in making investment decisions for certain mutual funds that it managed". The SEC investigation found that, from July 2018 to September 2021, the company represented that "all investments in the funds had undergone an ESG quality review, even though that was not always the case. The order finds that numerous investments held by certain funds did not have an ESG quality review score as of the time of investment"[112].

In November 2022, Goldman Sachs agreed to pay a $4 million penalty, as well as a cease-and-desist order and a censure, after a SEC's investigation found that the bank's asset management division misled customers over the ESG integration into two mutual funds and one separately managed account strategy, which managed combined $238 million of assets in 2020. The SEC stated that the company failed to comply to written ESG policies and procedures, completing certain ESG questionnaires for evaluating companies included in the funds after the security selection process was already completed[113].

In another case, in September 2023, the SEC imposed a fine to the registered investment adviser DWS Investment Management America Inc. (DIMA), a subsidiary of Deutsche Bank AG, of total $25 million for two different charges, one relating to a failure to develop a mutual fund Anti-Money Laundering (AML) program, and the other related to proved materially misleading statements regarding the incorporation of ESG factors into research and investment recommendations for ESG integrated products. The SEC's investigation found that, from August 2018 until late 2021, DIMA, while marketing itself as a leader in integrating ESG factors into its investment strategy, "failed to adequately implement certain provisions of its global ESG integration policy as it had led clients and investors to believe it would. […] DIMA also failed to adopt and implement policies and procedures reasonably designed to ensure that its public statements about the ESG

[112] U.S. Securities and Exchange Commission – "*SEC Charges BNY Mellon Investment Adviser for Misstatements and Omissions Concerning ESG Considerations*", Press Release on May 23, 2022 - https://www.sec.gov/news/press-release/2022-86.

[113] Financial Times – "*Goldman Sachs to Pay $4mn Penalty over ESG Fund Claims*" by Joshua Franklin and Patrick Temple-West, November 22, 2022 - https://www.ft.com/content/0e2b6e41-4113-437f-824b-80d7acd29579.

integrated products were accurate"[114]. For its ESG misstatements, DIMA agreed to a cease-and-desist order, censure and a $19 million penalty.

In the United States, investigations surrounding the use of ESG factors into asset management companies' strategies have also been initiated by Attorney-General at the state level. For example, as according to an article published in the Nasdaq website in late December 2023, the attorney-general Jonatthan Skrmetti of the U.S. state of Tennessee sued BlackRock, Inc. "for allegedly breaching consumer protection laws by misusing environmental, social and governance ("ESG") factors in its investment strategy", claiming the company has been inconsistent and not transparent when declaring whether it focused exclusively on ESG factors or investment returns. The lawsuit reports "For years […] BlackRock has misled consumers about the scope and effects of its widespread ESG activity. BlackRock has downplayed the extent to which ESG considerations drive its investment strategies across all holdings, even in non-ESG funds and overstated the extent to which ESG considerations can affect companies' financial performance and outlook."[115] Even though the results of the investigation are not publicly available yet, the action may have a critical impact on the fate of ESG incorporation by other asset managers and, in general, in how the public will perceive ESG factors, given that BlackRock is the biggest asset manager worldwide and one of the earliest supporter of ESG integration in the financial environment, with other agencies, such as the SEC, that may be prompted to intervene and start new investigations on BlackRock and other financial companies' ESG claims.

Moreover, BlackRock, together with other asset managers such as the U.S. State Street and the U.K. Legal & General Investment Management, have been at the center of discussions after a research by the Common Wealth thinktank revealed that these companies were among some whose ESG funds were significantly exposed to fossil fuel companies. Results of the research showed that, as of April 2023, the three companies held almost $1 billion in bonds issued by fossil fuel companies in their ESG funds, with

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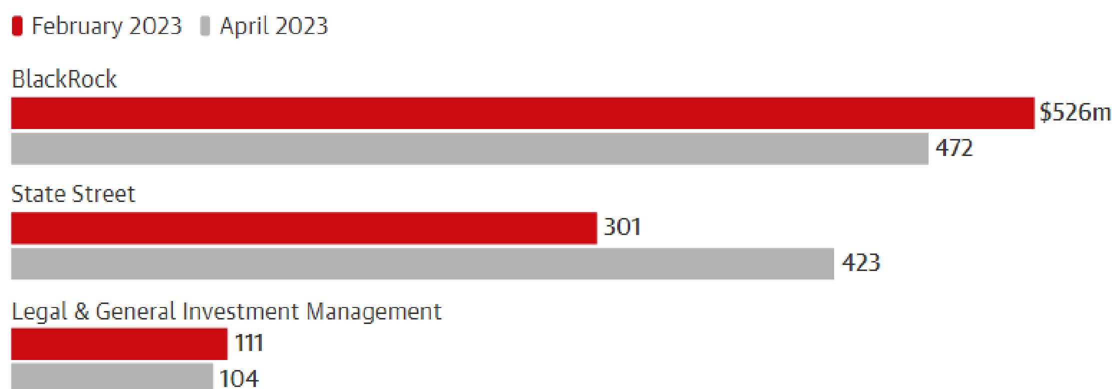
[114] U.S. Securities and Exchange Commission – "*Deutsche Bank Subsidiary DWS to Pay $25 Million for Anti-Money Laundering Violations and Misstatements Regarding ESG Investments*", Press Release on September 25, 2023 - https://www.sec.gov/news/press-release/2023-194.

[115] Nasdaq – "*BlackRock (BLK) Sued for Allegedly Misleading ESG Strategy*" by the Zacks Equity Research, December 19, 2023 - https://www.nasdaq.com/articles/blackrock-blk-sued-for-allegedly-misleading-esg-strategy.

BlackRock's "brown" exposition that grew significantly in the period February 2023 – April 2023, as it can be evidenced in Figure 6.

Figure 6: ESG Funds Exposition to Fossil Fuel Firms: Comparison between February 2023 and April 2023.



Source: The Guardian - "Green Investment Funds Pushing Money into Fossil Fuel Firms, Research Finds", using data from a research by Sophie Flinders (Common Wealth), May 2, 2023. Available at: https://www.theguardian.com/business/2023/may/02/green-investment-funds-pushing-money-into-fossil-fuel-firms-research-finds.

BlackRock, as Legal & General Investment Management, responded to the accusations by claiming that their sustainable financial products are highly diversified, including both funds that explicitly exclude fossil fuels or those that target fossil fuel companies that are actually transitioning, and this is why they appear to be highly exposed to the fossil fuel sector. However, the director of Common Wealth, Mathew Lawrence, said that "the findings, though shocking, are not unexpected. This is a feature rather than a bug from the ESG logic, which is concerned less with driving real material change in the economy, including decarbonisation, and instead is focused on managing financial risk and reducing financial impacts"[116].

The Common Wealth findings follow another report, published on August 27, 2021, by another U.K.-based climate change thinktank, InfluenceMap, that accused the majority of green funds of falling short on their ESG and climate-change claims in their investment strategy and portfolio selection. Although the InfluenceMap's report was more focused

[116] The Guardian – "*Green Investment Funds Pushing Money Into Fossil Fuel Firms, Research Finds*" by Phillip Inman, May 2, 2023 - https://www.theguardian.com/business/2023/may/02/green-investment-funds-pushing-money-into-fossil-fuel-firms-research-finds.

on detecting misalignments with Paris Treaty provisions by 723 self-labelled sustainable equity funds and on their fossil fuel intensity, the research results found that a large portion of the equity funds scrutinized showed misalignment levels similar to the market indices they track, thus appearing to provide limited climate benefits. As in the Common Wealth research, the InfluenceMap report found shortcomings in the ESG funds of some of the world's largest asset managers, including, among others, UBS Group AG, BlackRock Inc., and State Street Corporation, citing that a BlackRock "fossil fuel screened" fund and a State Street Corporation "fossil fuel reserves free" fund held shares in Marathon Petroleum and Phillips 66 - "two of the world's most egregious fossil fuel lobbying companies preventing policy-based climate action"[117]. According to InfluenceMap, the findings of the report "highlight a lack of consistency and often poor transparency on the alignment of many ESG and climate-themed funds with global climate targets"[118].

Another study by the sustainability data and technology platform ESG Book, focusing on self-labelled 420 ESG funds and 95 climate funds, found that 14 percent (73 out of 515) of these funds show an emissions intensity ratio that is higher than the average recorded across the 36,000 funds ESG Book tracks, with 15 funds that exceeded the threshold of 400 tons of carbon dioxide equivalent per million dollars of revenue, a number that is more than double with respect to the average. Moreover, the ESG Book's analysis found that a vast majority of the 95 climate funds scrutinized actually invested in fossil fuel and mining companies, such as Sheel, Exxon Mobil and BHP Group[119].

In this context of increasing greenwashing business cases, the tight regulatory trajectory that both U.S. and EU agencies are following seems more than justified. However, from a corporate perspective, the increasing scrutiny that regulatory agencies are placing on businesses' ESG credentials may bring adverse consequences. Among these, one that is becoming increasingly prevalent in recent times is the concept of "green-hushing".

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[117] Time – "*Thinking of Investing in a Green Fund? Many Don't Live Up to Their Promises, a New Report Claims*" by Amy Gunia, September 20, 2021 - https://time.com/6095472/green-esg-investment-funds-greenwashing/.

[118] InfluenceMap – "*Climate Funds: Are They Paris Aligned?*", an InfluenceMap report, August 2021 - https://influencemap.org/report/Climate-Funds-Are-They-Paris-Aligned-3eb83347267949847084306dae01c7b0.

[119] Reuters – "*'Always Check the Label': ESG Funds Not as Green as They Seem – Study*" by Juliette Portala, October 4, 2022 - https://www.reuters.com/business/sustainable-business/always-check-label-esg-funds-not-green-they-seem-study-2022-10-03/.

3.3.3. Increased Regulatory Scrutiny and the "Green-Hushing" Countereffect.

While the concept of greenwashing is now a firmly established notion at the general public level, a new negative sustainability term is spreading at the business level. The term "green-hushing" stands, as according to Xavier Font, professor of sustainability marketing at the University of Surrey in the U.K. and author of the article, published in 2016, "*Greenhushing: The Deliberate Under Communicating of Sustainability Practices by Tourism Businesses*", as "the phenomenon of under-communicating the sustainability practices in which a business engages […] to mitigate a potential disconnection between their perception of customer expectations and their own operational position concerning sustainability issues" (Font, Elgammal, & Lamond, 2016).

The term has grown popularity in late 2022, when the world's leading climate solutions provider and carbon project developer South Pole released its annual report "*Net Zero and Beyond: A Deep-Dive on Climate Leaders and What's Driving Them*", where it discovered that one in four companies among more than 1,200 large companies with net zero targets surveyed have set science-based emission reduction targets, or plan to in the next year, but are not willing to publicise them. The decision, which is at heart of how green-hushing works, doesn't come from a lowered corporate sustainable and climate ambition, with three-quarters of surveyed companies that indeed have increased their net zero budgets since December 2021, South Pole research finds, but it is driven by an increasing scrutiny by media operators, rising NGO critique and threat and fear of lawsuits that is deterring companies from voluntarily disclose their targets and actions taken.

In the United States, and especially on Wall Street, things are even more complicated, with green-hushing that is emerging amidst a broader conservative backlash against ESG objectives and initiatives. A great example of how green-hushing is working comes from BlackRock's CEO Larry Fink who, retracting on his own words in the 2022 Annual Letter to CEOs where he put sustainability at the core of BlackRock's strategy and business development, has now decided to stop using the term ESG, saying that it has become too politicized and "entirely weaponised … by the far left and weaponised by the far right"[120].

[120] Reuters – "*BlackRock's Fink Says He's Stopped Using 'Weaponised' Term ESG*", by Isla Binnie, June 26, 2023 - https://www.reuters.com/business/environment/blackrocks-fink-says-hes-stopped-using-weaponised-term-esg-2023-06-26/.

This comes with Fink's word confirming that, despite leaving references to ESG topics aside, BlackRock's stance on sustainability and climate change would not change and that it would continue to advise investors and partners on sustainability opportunities and risks. Faced by a mounting pressure by Republican U.S. politicians over the use of ESG factors in the securities selection and investment process, at the end of December 2022 Vanguard Group Inc., a direct competitor of BlackRock and one of the biggest asset managers worldwide, has decided to withdraw from the Net Zero Asset Managers (NZAM) initiative, an investment-industry international initiative launched in late 2020 whose aim is "to supporting the goal of net zero greenhouse gas emissions by 2050 or sooner, in line with global efforts to limit warming to 1.5 degrees Celsius; and to supporting investing aligned with net zero emissions by 2050 or sooner"[121], which counts more than 315 signatories with $57 trillion in Asset Under Management. Vanguard stated that the decision to exit from the initiative is driven by a need "to demonstrate independence and clarify its views for investors" and that the quitting "will not affect our commitment to helping our investors navigate the risks that climate change can pose to their long-term returns"[122].

Among the many negative consequences, green-hushing can lead companies to become less ambitious as to their sustainable goals, can put companies at odds with their stakeholders' ESG objectives and expectations, can also lead to a lost opportunity of inspiring positive change and knock-on effect in the sector and in the whole economy, and can reduce the possibility of attracting investment and financing by socially responsible and green investors[123].

And this is what is happening in Europe, where asset managers have turned to "green-hushing" on the sustainable funds they manage amid concerns of an increasingly stringent regulatory actions and investors' scrutiny, mostly due to the lack of a clear methodology for the determination of sustainable investments under SFDR requirements and the newly

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[121] Net Zero Asset Managers – "*The Net Zero Asset Managers Initiative*" - https://www.netzeroassetmanagers.org/.

[122] Reuters – "*Vanguard Quits Net Zero Climate Effort, Citing Need for Independence*" by Ross Kerber and Noor Zainab Hussain, December 7, 2022 - https://www.reuters.com/business/sustainable-business/vanguard-quits-net-zero-climate-alliance-2022-12-07/.

[123] Penningtons Manches Cooper – "*Greenwashing and the Rise of Green-Hushing*" by John Zadkovich, January 18, 2023 - https://www.penningtonslaw.com/news-publications/latest-news/2023/greenwashing-and-the-rise-of-green-hushing#_edn5.

released ESMA guidance regarding funds' name presented above. According to the Financial Times, "forty four sustainable funds removed the label from their brand name during the first half of 2023, in contrast to 2022, when 99 funds added "sustainable" to their name, as per consultancy firm Broadridge's data. The Dutch ABN Amro, the French Société Générale, the Swiss UBP Asset Management are among the asset managers that decided to drop the term "sustainable" from their product offerings, citing regulatory concerns and the willing to circumvent potential misunderstandings, an issue that appears to be as significant as greenwashing, according to Adrian Whelan, global head of market intelligence at Brown brothers Harriman[124].

Moreover, on 15 February, 2024, JP Morgan Chase's and State Street's investment arms decided to quit the Climate Action 100+ group (CA100+), a "global investor coalition pushing companies to rein in climate-damaging emissions"[125], after the group asked participants to increase their commitment over laggards. At the same time, BlackRock, after entering the coalition in 2020, decided to transfer its membership to its international arm (BlackRock International), limiting its involvement, for fear of breaching antitrust law or fiduciary duty, amid growing pressure from Republican politicians in the country. As reported by Reuters, "the decisions together remove nearly $14 trillion of total assets from efforts to coordinate Wall Street action on tackling climate change"[126]. Despite the loss of 13 firms by CA100+ over the years, its overall membership increased to more than 700 firms, with 60 new entries that joined in the fall. The departures well represent how green-hushing is hitting the U.S. sustainable financial sector, with Richard Field, consultant for leadership advisory firm Russell Reynolds Associates, citing that "the departures are in line with how many company have grown less vocal about environmental, social and governance (ESG) issued even as they continue to see benefits in an energy transition and diverse workforce"[127]. As one could expect, the news have been received very well by Republicans, with a group of Republican attorneys general co-lead by Montana's Austin Knudsen, calling it a "great news" and hoping for "every

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[124] Financial Times – "*Asset Managers Turn to 'Green Hushing' on Sustainable Funds*" by Chloe Leung, September 26, 2023 - https://www.ft.com/content/c3168f01-b918-48ae-9fe3-35902adb7874.
[125] Reuters – "*JPMorgan, State Street Quit Climate Group, BlackRock Steps Back*" by Simon Jessop and Ross Kerber, February 16, 2024 - https://www.reuters.com/sustainability/sustainable-finance-reporting/jpmorgan-fund-arm-quits-climate-action-100-investor-group-2024-02-15/.
[126] See Note 125.
[127] See Note 125.

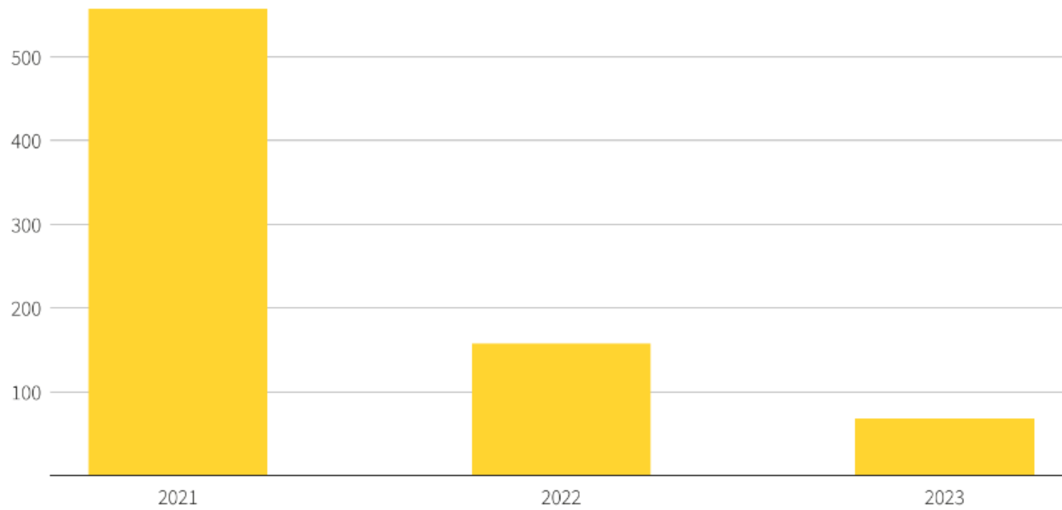
asset management firm to follow suit" citing potential unlawful coordination among CA100+ participants as for what regard ESG integration and implementation. On the other hand, several environmental groups highly criticized the moves, including the Sierra Club, with Rebecca Kowalski, company director from Overstory Finance and member of the ESG Clarity Committee, saying the departures "smacks of cowardice and as a result her firm will be reviewing its position in a JP Morgan fund"[128].

3.3.4. How Are Investors Reacting to the Political Fuss Surrounding ESG Topics and to the Greenwashing Concern? Evidence in the United States.

As evidenced in the previous paragraph, despite the rallying in 2023 given by the recovery of tech stocks, sustainable funds experienced a significant decline in demand globally, mostly due to political controversies, ESG backlash and apprehensions surrounding greenwashing. As displayed in Figure 7, whose data are retrieved from London Stock Exchange Group (LSEG) Lipper, a provider of global, independent fund performance data, as of November 30, 2023, new global inflows in funds classified as "responsible investing" interrupted at $68 billion, a huge decline with respect to the $158 billion of new inflows for all 2022 and $558 billion for all 2021[129].

[128] ESG Clarity – "*Investor "disappointment" as JPMAM and State Street Exit CA100+*" by Natalie Kenway, February 16, 2024 - https://esgclarity.com/investor-disappointment-as-jpmam-and-state-street-exit-ca100/.
[129] Reuters – "*ESG Funds Suffer Weaker Demand Despite Help from Tech-Sector Performance*" by Ross Kerber, Tommy Wilkes and Isla Binnie, December 21, 2023 - https://www.reuters.com/sustainability/sustainable-finance-reporting/esg-funds-suffer-weaker-demand-despite-help-tech-sector-performance-2023-12-21/.

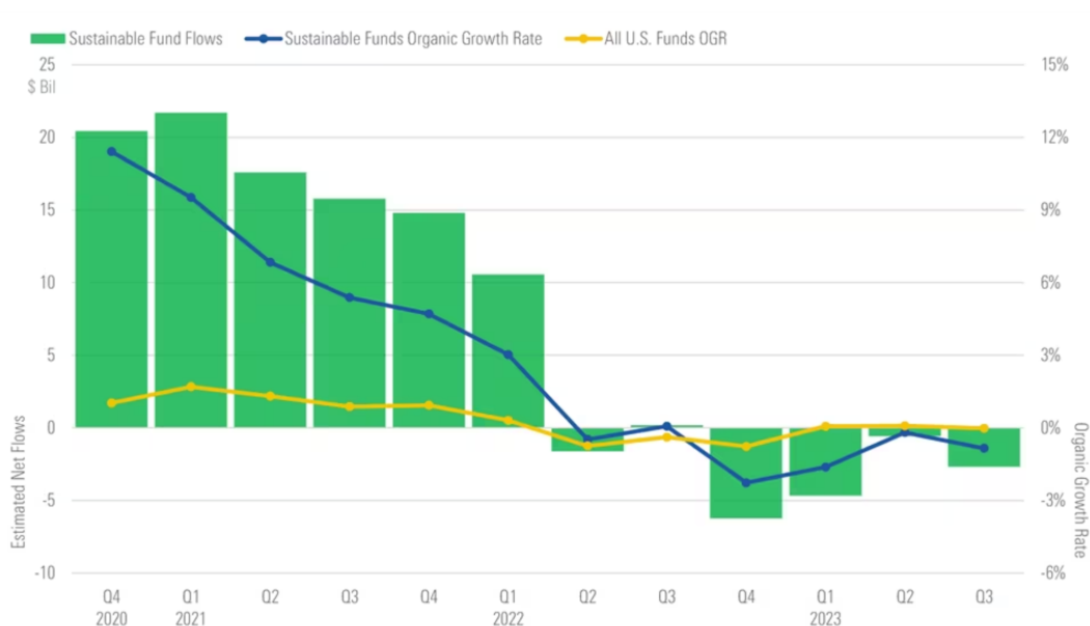
Figure 7: "Responsible Investing" Fund New Inflows in the Last Three Years, Billions of Dollars.



Source: LSEG Lipper, Reuters Graphics, data as of November 2023. Available at: https://www.reuters.com/sustainability/sustainable-finance-reporting/esg-funds-suffer-weaker-demand-despite-help-tech-sector-performance-2023-12-21/.

In the United States, according to Morningstar, in the third quarter of 2023, investors withdrew $2.7 billion from U.S. sustainable funds, totalling $14.2 billion over the past year, with the numbers that are tied largely to the decisions by some of the largest asset managers in the country to close ESG funds amid greenwashing allegations, political concern and decreasing investors' ESG interest. Although the demand has shrank for conventional funds as well, the relative decline was more consistent for sustainable products, as it can be evidenced in Figure 8. According to the data provided by Morningstar, the organic growth rate of sustainable funds, calculated as "net flows as a percentage of total assets at the start of a period", have been lower with respect to overall U.S. funds, showing a contraction of 0.85% as opposed to an almost flat 0.02% for overall funds during the period, that has led total assets in sustainable funds below the $298.8 billion mark, a 17% decrease with respect to the all-time record of $358.2 billion registered at the end of 2021.

Figure 8: U.S. Fund Flows: Comparison between Sustainable and Overall U.S. Funds. Data as of September 30, 2023.

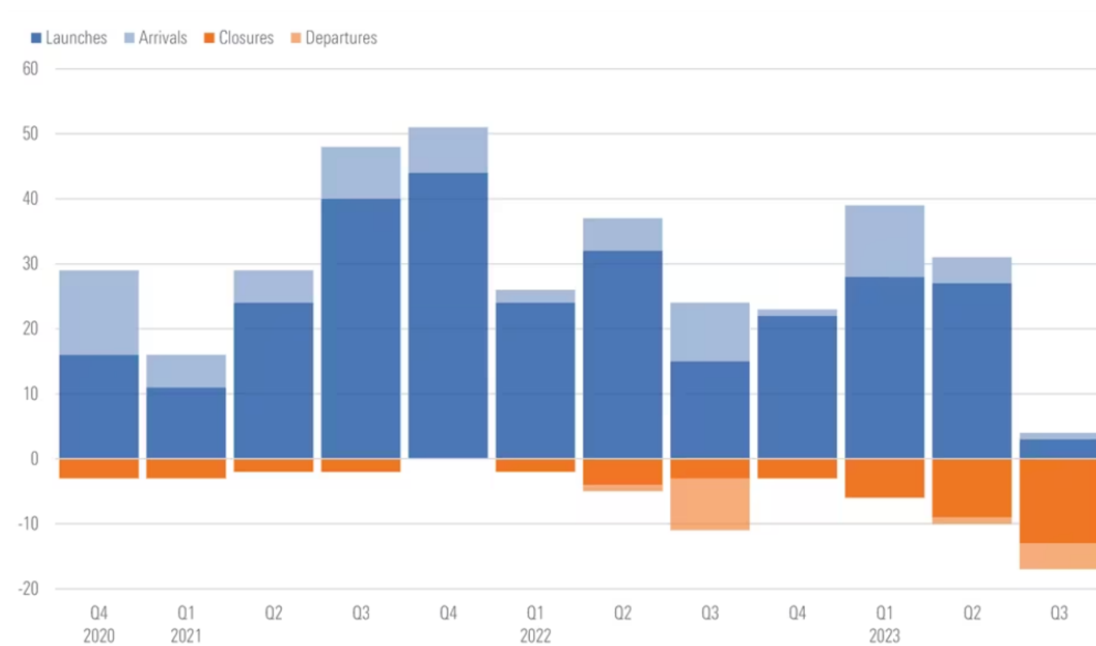


Source: Morningstar Direct, Manager Research. Available at: https://www.morningstar.com/sustainable-investing/sustainable-funds-hit-by-weaker-demand-amid-rising-energy-prices-political-backlash.

Moreover, for the first time in recent history, more sustainable funds departures occurred with respect to arrivals. More precisely, as displayed in Figure 9, in the third quarter of 2023, "three new sustainable funds launched, and one existing fund was added to the sustainable funds landscape. […] During the same period, 13 sustainable funds closed and four funds moved away from ESG mandates"[130], an example of how "green-hushing" is hitting the sustainable financial sector in the near past. BlackRock Inc., State Street Corp., Columbia Threadneedle Investments, Janus Henderson Group Plc, Hartford Funds Management Group Inc. and Goldman Sachs are among the largest U.S. asset managers that have decided to close sustainable mutual funds and ETF in 2023.

[130] Morningstar – "*Sustainable Funds Hit by Weaker Demand in Q3 2023*" by Alyssa Stankiewicz, October 23, 2023 - https://www.morningstar.com/sustainable-investing/sustainable-funds-hit-by-weaker-demand-amid-rising-energy-prices-political-backlash.

Figure 9: New Sustainable Funds Launches and Closures, Data per Quarter as of September 30, 2023.



Source: Morningstar Direct, Manager Research. Available at: *https://www.morningstar.com/sustainable-investing/sustainable-funds-hit-by-weaker-demand-amid-rising-energy-prices-political-backlash.*

However, despite the bad news, ESG continues to be a trending topic among the majority of biggest asset managers. In fact, according to the results of the Sage Advisory Service "2023 ETF Stewardship Survey", a survey which included 19 ETF providers that collectively manage more than $28 trillion of assets across their full product offerings, ESG continues to be a number 1 or number 2 firm's priority for seven out of eleven respondents, who also expect ESG to be a growth area for the next year, despite the increasing criticism and investors' scrutiny the sector has faced in the recent past[131].

2024 will be a critical year for the future of ESG investing in the United States, with the outcome of the 2024 U.S. presidential elections that holds the potential to exert a substantial influence on the ESG investing landscape, consequently shaping investor appetite. A new administration's policy priorities and stance on sustainability issues can

[131] Business Wire – A Berkshire Hathaway Company – "*Sage Advisory Releases Results of 2023 ETF Stewardship Survey: ESG Perseveres Even as Asset Manager Transparency Gives Way to Opacity*" by Chris Sullivan, November 8, 2023 - https://www.businesswire.com/news/home/20231108627975/en/Sage-Advisory-Releases-Results-of-2023-ETF-Stewardship-Survey-ESG-Perseveres-Even-as-Asset-Manager-Transparency-Gives-Way-to-Opacity.

significantly impact the regulatory environment and market dynamics surrounding ESG investments. If the elected leadership emphasizes ESG initiatives, it may lead to increased support for sustainable practices and investments. Conversely, a government less focused and even adverse to ESG integration may result in a more challenging environment in the sustainable finance sector, potentially affecting investor sentiment and appetite. Hence, investors keen on ESG considerations should closely monitor candidates' positions on climate change, social equality, and corporate responsibility during the election season. As political landscapes evolve, the political direction set by the winning candidate can set the tone for regulatory frameworks, incentives, and market conditions that either encourage or hinder the growth of ESG investing, with investors that will likely adapt their strategies accordingly. The 2024 presidential elections thus serve as a pivotal moment for shaping the future of ESG investing and determining the level of investor enthusiasm for socially responsible and sustainable financial opportunities.

Conclusion

This study aimed at clarifying the U.S. willingness and the consequent regulatory framework regarding the implementation of Environmental, Social and Governance (ESG) factors into the financial industry and at understanding the consequences of stringent regulatory requirements on financial markets and investors' sentiment both at the federal and state level.

In Chapter 1, by exploiting the work of Latapì Agudelo, Jóhannsdóttir and Davídsdóttir (2019), a comprehensive exploration of the evolution of the concept of Corporate Social Responsibility (CSR) into Environmental, Social, and Governance (ESG) criteria has been made, highlighting CSR transformation from a philanthropic attitude towards a more holistic commitment to sustainability and environmental safeguard, focusing on the dynamic academic landscape in the United States and on the publications which succeeded one another starting from the second half of the 20th century, to investigate which have been the most important drivers that helped CSR transformation into its latest conceptualization. The term ESG has been presented, showing the most important factors that helped ESG overlap CSR in the business and financial environment. The contemporary sovereign regulatory framework shaping the ESG discussion has been analysed, providing valuable insights into the diverse ESG-approach and regulatory actions both in the United States and European Union, to show that, despite being one of the precursors of CSR and sustainable development, there is still a lot of work to be done in the United States.

In Chapter 2, the research delved deeper into the U.S. sustainable regulations' history, with a particular focus on the Biden-Harris Administration's Inflation Reduction Act (IRA). This legislation not only showcased the commitment of the U.S. government to sustainability but also illustrated the potential impacts on financial markets, presenting the impact the Act had on green market indices in the country with respect to "brown" market indices, and on one of the most common ESG-related financial products, Green bonds. A research on the forecasted IRA's impact on the overall U.S. economy and the actual results one year after its implementation has been presented, both in terms of GDP impact and actual job creation, to show that the empirical results turned out to be more optimistic than expected. The examination of state-level reactions, particularly the nuanced differences between Democratic and Republican states' legislation and the

characteristics of the anti-ESG movement, added depth to the understanding of the Act's reception and implementation and ESG future direction.

In Chapter 3, the focus of the research has been switched towards the U.S. sustainable financial sector, with a comprehensive evaluation of those industries that will be mostly impacted by ESG considerations, given their long-term focus, namely the insurance and the retirement industry, exploring the integration of ESG criteria and their strategic impact and their respective regulatory framework in the country. The willingness of integrating ESG criteria by U.S. insurance companies' CEOs has been presented, highlighting how the importance of an efficient evaluation of ESG risks and opportunities will be fundamental for the industry's future performance. The difficult interpretation of ERISA's provisions, in terms of fiduciary duty, when considering non-financial aspects, such as ESG strategies, in retirement investments has been analysed, showing that, despite the ESG backlash that hit the retirement industry, the consensus is that ESG appetite remains strong. The analysis of ESG and green funds illuminated the delicate balance between regulatory scrutiny, instances of greenwashing, and the resultant investors' sentiment, with an emphasis on the empirical results which suggests that, indeed, higher financial performance could be reached by seeking ESG strategies. A critical analysis of ESG funds' security allocation run by some of the biggest asset managers in the country was carried out, evidencing how greenwashing concern could trigger more stringent regulatory actions, which eventually impact willingness to invest.

This thesis contributes to the ongoing discourse on ESG by providing a comprehensive analysis of legislative developments in the United States, their impact on financial markets and the whole economy, and the challenges posed by greenwashing. The intricate interplay between regulatory frameworks, economic impacts, and investors' reactions underscores the complex nature of sustainable finance and ESG integration in the country, where the politicization of the term ESG is leading companies and investors as well to shy away from it. However, with new sustainability regulations on the horizon both in the United States and in the European Union, 2024 could likely be the year of a shifting mindset and increased corporate actions, with the long-awaited SEC's Climate Rule, which is considered, according to Wes Bricker, PwC's US Trust Solutions Co-leader, "as a "necessary step" in providing investor-grade, decision-useful information […] and an "important step to prevent greenwashing and to make sure everyone has access to the

same quality of information"[132]. Moreover, 2024 will be a crucial year for the future development of ESG considerations all over the world, with almost half of world's population that will be called to express their vote in their respective countries. The outcomes of such elections will have a fundamental long-term impact on global economies, supply chain dynamics, energy prices and ongoing wars and conflicts, eventually influencing Environmental, Social and Governance development in the United States and in the whole world.

[132] Sustainability – "*ESG Regulation: What Companies Should Prepare for in 2024"* by Kate Birch, January 7, 2024 - https://sustainabilitymag.com/esg/esg-policy-and-regulation-what-to-prepare-for-in-2024.

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