
How do Venture Capitalists from a small market consider Environmental, Social and Governance factors in their investment decision?

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Biographical Note

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Abstract

While Europe is leading in sustainable finance, Portugal, a small economy, lags even though it is progressing. Since there is a growing trend related to incorporating Environmental, Social and Governance (ESG) considerations in Venture Capitalists' (VCs) investment decisions, this study seeks to address a significant gap in the literature and knowledge in this area by trying to understand how VCs in Portugal consider ESG factors through interviewing eleven industry experts. ESG considerations are a complex and controversial topic, which explains the different levels at which Portuguese VCs integrate ESG factors into their investment decisions. While some consider these aspects to be crucial and use ESG frameworks to evaluate potential investments, others believe the topic is overvalued and note that most startups already take these principles into account. The main drivers of ESG integration among interviewed VCs' representatives are market trends, legislation, investor pressure, ESG's benefits, and the fact that those factors align with the firm's values. Although not all VCs use formal ESG frameworks, many implicitly exclude harmful businesses and industries. VCs also highlighted the importance of the Social and Governance factors. They acknowledged the relevance of ESG throughout the entire investment process, with some emphasising it in the early stages, such as Opportunity Identification and Due Diligence. Challenges of ESG integration include startups' immature state, as they struggle to capture and measure ESG indicators accurately, the lack of a standardised ESG framework, the conflict between potential returns and ESG considerations, and complex legislation. The benefits mentioned are market acceptance, enhanced value propositions, the attraction of investors, top talent, clients and better commercial contracts, regulatory compliance, risk mitigation, and promoting innovative, sustainable solutions that positively impact financial returns.

Keywords: Environmental, Social and Governance factors, Venture Capital, investment decision

Resumo

Apesar de a Europa liderar o mercado das finanças sustentáveis, Portugal, uma pequena economia, está atrasado, ainda que esteja a progredir. Tendo em conta a crescente tendência para a incorporação de considerações Ambientais, Sociais e de Governação (ASG) nas decisões de investimento dos investidores de Capital de Risco (CR), este estudo procura colmatar uma lacuna significativa na literatura e no conhecimento nesta área, tentando compreender como é que os investidores de CR em Portugal consideram estes fatores através de entrevistas a onze especialistas do sector. As considerações ASG são um tema complexo e controverso, o que explica os diferentes níveis em que os investidores de CR portugueses integram os fatores ASG nas suas decisões de investimento. Enquanto alguns os consideram cruciais e utilizam quadros ASG para avaliar potenciais investimentos, outros acreditam que o tópico é sobrevalorizado e constataam que a maioria das startups já tem em conta estes princípios. Os principais impulsionadores da integração de ASG entre os entrevistados são as tendências do mercado, a legislação, a pressão dos investidores, os seus benefícios e o facto de estes fatores se alinharem com os valores da empresa. Embora nem todas as Sociedades de CR utilizem abordagens formais de ASG, muitas excluem empresas e sectores prejudiciais. Estes investidores também destacam a importância dos fatores sociais e de governação e reconheceram a relevância dos fatores ASG ao longo de todo o processo de investimento, tendo alguns realçado a sua consideração em fases iniciais, como a Identificação de Oportunidades e a Due Diligence. Entre os desafios à integração dos fatores ESG, referem o estado imaturo das startups, pois exibem dificuldades em captar e medir com exatidão os indicadores ASG, a falta de um quadro ASG standardizado, o conflito entre estas considerações e potenciais retornos e a complexidade da legislação. Os benefícios mencionados são a aceitação pelo mercado, o fortalecimento das propostas de valor, a atração de investidores, talento de topo, clientes e melhores contratos comerciais, conformidade regulamentar, a mitigação de riscos e a promoção de soluções inovadoras e sustentáveis que têm um impacto positivo nos retornos financeiros.

Palavras-chave: Fatores Ambientais, Sociais e de Governação, Capital de Risco, decisão de investimento

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1. Introduction

The present work aims to understand how the Venture Capital (VC) companies in Portugal consider Environmental, Social, and Governance (ESG) factors in their investment decisions. Even though the ESG concept is not new, its relevance in the Venture Capital landscape has arisen recently, particularly influenced by regulatory and social obligations.

Sustainable Finance emerged as a considerable global trend, with Europe and the United States occupying the leading positions in sustainable investing between 2020 and 2022 (Global Sustainable Investment Alliance, 2023). Despite extensive efforts to adopt this approach, Portugal lags in sustainable investment practices. This context highlights the importance of understanding how ESG considerations are used in the investment decisions of VCs that operate in Portugal. This is the main aim of the present research.

To address this research question, a comprehensive review of pertinent literature is undertaken, which explores, in its first section, the context of Sustainable Finance within the Portuguese landscape and clarifies its temporal evolution. Moreover, the second segment of this chapter examines the specific directives imposed on VCs in Portugal concerning ESG considerations, emphasising the regulatory framework and guidelines that VC investments must respect. The concluding segment of the Literature Review chapter illustrates the incorporation of ESG considerations within VC investment decisions and its growing interest. This section is subsequently compartmentalised into five sub-sections. The initial sub-section clarifies the drivers of ESG incorporation on the investment decision of VCs. Subsequently, the second and the third sub-sections provide insights into which ESG criteria are contemplated by VCs and the stage of the investment process in which they consider it, respectively. Finally, the concluding sub-sections draw inferences about the challenges and benefits of integrating ESG aspects in the VCs' investment decision process. Following this comprehensive examination of the literature, this research seeks to provide valuable insights into the evolving role and impact of ESG considerations in the investment decisions of VCs, notably by interviewing several managers of VCs operating in Portugal.

Chapter 3 presents the research questions that this work intends to answer, as well as the methodology employed in this work. The explanation for utilising the chosen methodology, alongside an elucidation of the interview's objectives, is provided. A comprehensive description of the data collection method, the participants, and the data analysis procedures is also given.

Regarding the research findings, they are presented in the fourth chapter of this work, and they show the evolving nature of ESG considerations in the investment decision of VCs in Portugal. In Chapter 5, there is a discussion concerning the results exposed in the previous chapter. It compares what was obtained in the results with what is mentioned in the existing literature, as well as additional aspects regarding the drivers, the ESG criteria considered, the stage in which those are considered, and the challenges and benefits related to the integration of ESG in VCs' investment decision.

In the final chapter, the main conclusions of this research are presented.

2. Literature Review

Sustainable finance is a growing trend worldwide, although Portugal still lags in terms of the numbers achieved in Europe. When considering ESG criteria by VCs in Portugal, the regulatory authority has been trying to promote and supervise it, following European standards. The awareness and importance of considering ESG criteria in the investment decision of VCs has been increasing, as it brings benefits to both VCs and startups, but there are some challenges that these entities still must overcome.

To address this problem, this section offers a theoretical review of the existing literature to realise to what extent VCs consider ESG in their investment decisions. Firstly, the Portuguese context regarding Sustainable Finance and the VCs' obligations regarding ESG in Portugal are presented. Following this, the existing literature regarding the drivers of ESG consideration by VCs, including the criteria considered, the stage of the investment process in which it is considered, and the challenges and benefits of their integration, are further examined.

2.1. The Portuguese Context on Sustainable Finance

According to Global Sustainable Investment Alliance, in Europe, sustainable investing has experienced an increase from USD 12 trillion to USD 14 trillion between 2020 and 2022. Despite that, its growth in terms of sustainable investing could not keep up with the broader market growth. In Europe, this has been a longer-term trend where there has been a decrease, by around 5% each year, in the percentage of assets defined as sustainable. One of the reasons behind this may be the increasing regulatory requirements concerning disclosures and a shift in the reporting approach that is more risk-averse as the industry evolves and sustainable investing approaches and definitions become more mature (Global Sustainable Investment Alliance, 2023).

Even though Europe and the United States represent the most sustainable investing from 2020 to 2022, the Portuguese scenario regarding this investment approach is still in its early stages. Although the first socially responsible investment fund was launched in 1971 and the first ESG index was introduced in 1990 (Stein, 2024), in Portugal, the first socially responsible mutual fund, “Caixagest Investimento Socialmente Responsável”, was created only in January of 2017 by Caixa Gestão de Ativos (Caixa Geral de Depósitos S.A., 2023). The Fund's main objective is to provide participants with access to a diversified portfolio of

assets with varying degrees of risk/return by seeking to invest in companies that show best practices in areas such as respect for human rights, environmental impact, or human resources management and to exclude entities involved in sectors considered controversial. Later, on November 26, 2018, Banco Santander, S.A. established a sustainable investment fund in Portugal. Managed by Santander Asset Management, the fund aims to provide, through a single vehicle, access to a diversified portfolio with specific characteristics, maximising risk-adjusted returns in a socially responsible investment (SRI) framework (Banco Santander, S.A., 2023). Also, on November 20, 2018, Comissão de Mercado de Valores Mobiliários (CMVM), the Portuguese Securities Market Commission, registered the first social entrepreneurship company, Mustard Seed Maze - Sociedade de Empreendedorismo Social, S.A (MSM). Maze co-invested with the EU through its first fund, Mustard Seed MAZE Social Entrepreneurship Fund I (MSM). This fund is a VC instrument that offers equity products that support impact ventures in their early stages of expanding their solutions throughout Portugal and Europe. In addition to offering funding, the MSM fund supports the companies that are part of its portfolio with access to talent and investor networks. It also assists them in establishing impact measurement and management capacity (Polidoro *et al.*, 2022).

In a statement, CMVM said that, even though anyone is able to invest in social entrepreneurship companies or funds, the amounts they can invest depend on whether they are a professional investor. Investment in social entrepreneurship is the investment of capital in companies or other entities that develop sustainable solutions to social problems to achieve a return on investment measured in social impact for the benefit of the community, in parallel with generating a financial return for investors. CMVM adds that this type of investment is an innovation in comparison to the characteristics and objectives of traditional investment funds, since their main focus is generating a financial return for investors (Barbosa, 2018). Additionally, in 2020, four Portuguese companies were invited to join the Dow Jones Sustainability Indices (DJSI) family: EDP, Galp, Jerónimo Martins and Banco Comercial Português. The DJSI, one of the world's leading sustainability indices, was founded in 1999 as the first non-financial performance benchmark for listed companies worldwide. In addition to economic and financial indicators, these indices assess criteria such as transparency, corporate management, investor relations, social and environmental responsibility, and management quality. In a 2020 statement, EDP highlighted that it remained one of the most sustainable energy companies on the DJSI. It points out that the new recognition of EDP as one of the most sustainable utilities in the world by the DJSI, emphasizes that the company

keeps aligned with sustainable development and the combat against climate changes (Silva, 2020).

According to CMVM, in 2021, implementing adequate conditions for a dynamic and credible sustainable financing market in Portugal is a strategic priority. To do this, CMVM aims to cooperate with investors and market participants to promote the mobilisation of private capital to support the shift to a more inclusive, green, resilient and sustainable economy. Nevertheless, the crucial part that the financial sector, companies, investors and regulators must play in this transition must be seen as an opportunity, without prejudice to the operational, regulatory and supervisory challenges that must be faced in the coming years. As an essential element in expanding the market for sustainable financing, the consistency, reliability, and comparability of sustainability information are critical for investor trust and stakeholder credibility. However, the implementation and oversight present complications due to sustainability's innovative nature and quick regulatory procedures (Comissão do Mercado de Valores Mobiliários, 2021).

Later, in 2023, BCSD Portugal conducted research to evaluate the maturity in terms of sustainability of Portuguese companies, analysing 67 firms. Remarkably, 93% of the companies in the study integrate sustainability responsibilities into their mission. However, only 11% have reached maturity stages that are considered advanced. Micro and small companies are mainly in their early stages and focus on environmental and social concerns and topics associated with governance, which have shown significant development throughout the years. The study further indicates domains in which improvement must be accomplished in relation to sustainability, specifically in strategic planning and information systems integration. The Journey 2030 framework shows that most companies are in the early stages, focusing on recognising and establishing sustainability initiatives (BCSD Portugal, 2023).

Launching new ESG indices is part of Euronext's strategy called "Growth for Impact 2024", as was revealed by Camille Leca, Euronext's Head of ESG Sustainable Finance. The goal is to assist the market participants in adopting sustainable practices by creating local adaptations of ESG indices allied with the benchmarks of each country. Concerning PSI ESG, Leca notes that the group explored the possibility of launching PSI ESG by carrying out studies and discussions with the PSI Index Committee in 2022. However, PSI's current small size, which is composed of only 15 listed businesses, poses a challenge for Euronext in obtaining essential mass and representativeness (Carvalho, 2022).

To ensure that ESG information is integrated into financial asset management in Portugal, as it is currently in many European countries, greater involvement from regulators and the stock exchange (CMVM, Banco de Portugal, Euronext Lisbon) is necessary. Banks and fund managers will likely introduce more products with an ESG classification. Portugal is a developed country with a lack of options, so big Portuguese corporations need to begin or carry on their sustainability path to become more ethical, competitive, sustainable, and responsible businesses (Tavares, 2020).

Regarding the disclosure duties on sustainability, the final model for reporting on voluntary non-financial information disclosure was released by CMVM. The method aims to standardise information on ESG aspects and was developed for the 29 Portuguese stock exchange issuers who are required to provide this report. Significant topics that include gender equality, work practices, and anti-money laundering initiatives are addressed. This model intends to support investors and the development of the country's market by simplifying reporting requirements and providing a uniform structure for sustainability issues (Abreu, 2021).

2.2. VC obligations regarding ESG in Portugal

As reported by *Diário da República*, Venture capital funds are intended to acquire equity and debt capital instruments in high development potential companies, in order to benefit from their value increase (*Diário da República*, 2015). The name of these funds contains the words “Venture Capital Fund” or the abbreviation “VCF” and their constitution depends on former registration with the Portuguese Securities Market Commission (CMVM), and Venture capital activity is regulated by law and is also subject to supervision by CMVM.

Following the Portuguese Securities Code, VC companies, VC fund management companies, and social entrepreneurship companies are entities subject to CMVM supervision and they must provide the CMVM with any cooperation requested (*Comissão de Valores Mobiliários*, 2017).

Based on the Report on Venture Capital Activity of 2022 published by CMVM, The European regulatory framework on sustainability has experienced a considerable deepening in recent years, with the European Commission and European Supervisory Authorities issuing several guidelines on the disclosure of sustainability-related information in the financial services sector, posing additional challenges for the VC funds management entities. As

CMVM recognises these challenges and sustainability is one of its priorities, it has developed supervisory initiatives for both VC funds management entities and the managed VC funds (Comissão do Mercado de Valores Mobiliários, 2023).

Portuguese VC funds are subject to Regulation (EU) 2019/2088 concerning Sustainability-related disclosures in the financial services sector. The regulation regarding disclosures, is part of the sustainable finance legislative framework, and requires financial market participants and advisers to report on how they incorporate ESG factors into their decisions and advice with transparency. It ensures that statements of sustainability and climate-friendliness meet actual standards, focusing on averting greenwashing. This regulation pressures businesses to make and disclose to the financial markets the strategic decisions that enhance accountability, discipline, and efficiency. Moreover, it increases the competition in the sustainable finance segment. It enhances sustainability performance-related information to investors, policymakers, supervisors, academia, and civil society organisations (EUR-Lex Publications Office of the European Union, 2023).

Greenwashing is a technique used by companies and organisations to transmit an image of sustainability when, in reality, they have a negative environmental impact (Caixa Geral de Depósitos, 2022).

In recent years, the European Union has issued guidelines that are being incorporated into national laws, demanding corporations comply with progressively rigorous ESG criteria providing additional disclosures to the market and stakeholders. Isabel Ucha, the president of Euronext Lisbon, expressed concerns in a recent interview with Expresso SER regarding challenges that many businesses are currently experiencing and would face going forward in 2024 to comply with this “avalanche” of updated regulations. According to her, the requirements are diverse, complicated, and tough for businesses to cope with and respond to (Carvalho, 2023).

2.3. ESG consideration in the VCs investment decision

VCs represent an essential way of leading businesses towards innovation, and they will be essential in providing funding for the next generation of extremely innovative companies (Monika *et al.*, 2015). Progress regarding sustainability is no exception.

According to Bocken (2015), despite increasing interest in sustainable business practices, these businesses are still relatively new. Venture capital investment is crucial for the growth of long-lasting startups. The “sustainable” venture capital research field is still in its

early stages. More research must be conducted to gain a deeper understanding of how venture capital may help in the development of sustainable enterprises.

Understanding the difference between ESG investing and impact investing is essential. According to Hornberger (2023), ESG investing is the inclusion of environmental, social, and governance (ESG) aspects in the assessment of an asset's performance. This is a different strategy from impact investing in which there is an intentional pursuit of investments that present quantifiable solutions to the United Nations Sustainable Development Goals (SDGs) and that is focused on the resolution of global challenges. (Hornberger, 2023).

VC provides a unique chance to promote the development of upcoming businesses by providing funds and offering crucial advice during scaling. Embracing ESG factors at an early stage of the venture capital lifecycle is essential to enable businesses to face obstacles as they grow. However, just a few of the top 50 funds have made public commitments to ESG, according to a Stanford Social Innovation Review article, and an Amnesty International analysis discovered that major VC firms largely disregard human rights issues when making investment decisions. Notwithstanding this gap among top funds, evidence indicates an increasing number of funds focusing on ESG action and collaborating through industry initiatives (Madzou *et al.*, 2022)

2.3.1 Drivers of the ESG integration in the VC Investment decision

Principles for Responsible Investment (PRI) and Venture ESG conducted a study, with 104 general partners of VCs interviewed, regarding the development of ESG incorporation in the venture capital industry. It was concluded that the primary drivers behind the interest in ESG incorporation are the concern of VC firm employees, the belief that ESG incorporation enhances a fund's risk/return profile, and the senior leadership of these businesses, apart from the increased regulation. 72% of respondents stated that their company has an ESG or responsible investing policy. Most of those did not say they were thinking about getting one. Many policies are not disclosed to the public, making it impossible to evaluate their level of rigour, monitoring, and execution (Dunbar, 2020).

Sustainability and ESG factors are also growing in prominence in the startup context, which aligns with an overall trend in business circles. Aditi Singh, head of Amazon Web Services' direct-to-consumer startups, underlines the increasing momentum in this field by pointing out that big and small companies are modifying their business plans and products to be more sustainable. According to a survey conducted by Amazon Launchpad, 59% of

European VC and early-stage investors have turned down offers because of sustainability concerns. This demonstrates an obvious influence of sustainability on investment decisions (Sifted, 2022).

Glasgow Financial Alliance for Net Zero (Gfanz), the world’s largest climate finance grouping, decided to launch a VC arm. This reflects the increasing pressure faced by VCs in order to protect their investors from risks regarding the energy transition. In other words, there is pressure to comply with environmental goals. Gfanz took a careful approach with its 23 new VC members, pushing them to “*encourage and assist portfolio companies to set net-zero carbon emission goals*” despite allowing them to keep investing in potential high emitters. Gfanz’s new grouping seeks to develop ESG tools appropriate for early-stage investments instead of establishing a precise decarbonisation objective. Market forces are already pushing VCs towards climate-friendly investments, and the main reasons behind this are the US Inflation Reduction Act and the EU Green Deal Industrial Plan, which offer increased incentives in this matter (Bryan *et al.*, 2023).

In addition, Nita (2023) defends that Limited Partners (LPs), who actively include ESG principles in their investment strategies, significantly influence the VC landscape. Also, according to Chronowska (2022), LPs can substantially impact the consideration of ESG in the venture capital environment.

2.3.2 Stage of the VC investment process in which VCs consider ESG

The stage at which VCs consider ESG is mainly limited to the due diligence stage. ESG is only integrated throughout the entire investing process by venture capitalists who follow an active ownership strategy. It is concluded that, given the growing significance of ESG and the growing influence of startups, for whom their investors must possess sustainable expertise, the adoption of ESG is, over time, essential to maintain competitiveness. VCs do not apply ESG screening as a tool to create value (“positive screening”). Instead, they consider these criteria while conducting the due diligence as an exclusion instrument (“negative screening”) (Lange *et al.*, 2023).

According to Botsari and Lang (2020), even though seven out of ten VCs already incorporate ESG, their integration is primarily done at the due diligence stage rather than throughout the entire investment process. Early and growth stage VCs can improve their decisions by conducting an ESG due diligence, as it takes a comprehensive and long-term company perspective. The long-term reasoning is vital for venture capital because of the

longer-term horizons of their investments. Because VCs invest in new technologies, products, and platforms that may differ from traditional frameworks, venture capitalists may find it challenging and time-consuming to identify material issues in any given scenario. This may be a reason for VCs' slow adoption of ESG due diligence. Nevertheless, using an ESG framework that assesses material issues by sector may help investors determine the issues that can significantly impact the company in the future. The VC industry must additionally consider the wider technological and regulatory landscape as it is constantly evolving (Madzou *et al.*, 2022).

2.3.3 ESG criteria used in the VC investment decision

Concerning the ESG criteria integrated into the VC investment decision, the survey results conducted by Principles for Responsible Investment (PRI) and VentureESG show that the respondents consider social and governance factors more significant than environmental ones. This finding aligns with previous investor dialogues and emphasises the importance of starting a discussion with the sector regarding the environmental implications of technology. Most respondents indicated that they considered ESG factors when making investment decisions and conducting due diligence. Fewer individuals consider them when preparing for the exit (Dunbar, 2020).

According to a survey conducted by the European Investment Fund (EIF), ethical and social factors are the main drivers of ESG engagement for both venture capitalists and business analysts. The reasons behind adopting ESG are the external pressure on investors to address sustainability issues and the appeal of sustainable investments from a financial perspective. Although VC and investment firms are starting to realise the significance of ESG criteria, additional proof is still needed to show how effective ESG is for long-term investments (Chronowska, 2022).

2.3.4 Challenges of ESG integration in the VCs investment decision

The VC industry's application of ESG is still in its earliest phases due to several challenges, such as a lack of reliable resources, knowledge, and tools for assessing ESG performance (Chronowska, 2022). As stated by Nita (2023), the consideration of the ESG principles by the VCs has been facing some challenges, such as the investors' reluctance regarding the long-term value creation, the fact that consistent methodologies, expertise, and reliable resources are demanded by the ESG consideration, which can pose difficulties for smaller VCs, and its implementation can also be very challenging for younger ventures, as they face

higher costs and complexities. To address these issues, creating mechanisms for ESG integration and evaluation tailored specifically to startups is fundamental. Nevertheless, VC firms are adapting, incorporating ESG into their processes and creating instruments for thorough assessment.

According to Lin's (2022) research, the challenges faced by sustainable VC funds are fundraising difficulties and a maturity discrepancy compared to traditional VC funds, additionally, investors perceive sustainable VC funds as having a less appealing risk-to-return profile due to prolonged holding periods and limited exit opportunities. The absence of knowledge regarding sustainable investing practices, particularly in ESG risk management, presents an additional barrier hindering rational fund allocation. Recommendations are provided to address these issues. Sustainable VC funds might need to alter their strategies and contract terms to attract investment. At the same time, governments can contribute by establishing clear guidelines for sustainable finance and broadening funding sources. Public-private partnerships and updates to higher education curricula are also suggested to build a strong foundation of sustainable investors. The challenge involves developing a profitable and sustainable portfolio during the investment stage. Lin (2022) proposes that sustainable VC funds should use corporate governance rights to promote sustainability within their portfolio companies by employing corporate engagement and shareholder activism strategies. Moreover, staged financing in venture capital investments offers greater control over investments, acting as an insurance policy against greenwashing and weak disclosure of sustainability information. Fund managers are encouraged to consider sustainability by the significant shift to including ESG factors in fiduciary duty (Lin, 2022).

Nonetheless, difficulties continue to exist during the exit phase, as the absence of optimal exit strategies constrains profitable exits. To accelerate the Initial Public Offering (IPO) process, a sustainability board for businesses that prioritise sustainability is proposed. For consistency and comparability, it is recommended that standardised sustainability disclosure criteria be used, using frameworks such as the TCFD recommendations that act as a global basis for effective climate-related disclosures and the Sustainability Accounting Standards Board' (SASB) sustainability accounting standards. In addition, it is suggested that government policies promote third-party sustainability rating agencies to enhance confidence among investors. Lin's comprehensive study finally recommended the establishment of a sustainable investing ecosystem that includes fund managers, portfolio companies, and investors. Investors add capital into the ecosystem by funding sustainable businesses chosen

by VC fund managers, and, with appropriate management and advice from experts, the value of the investments increases. At every step of the venture capital cycle, the importance of sustainability education and awareness is underlined (Lin, 2022).

In addition, according to Dubar (2020), although awareness is increasing and collaborative work amongst venture capital firms is in progress, the venture capital market lacks formal, standardised ESG incorporation. Bryan and Levingston (2023) also highlight the lack of an established framework to measure carbon emissions in the VC landscape in opposition to what happens in the banking, insurance and asset management sectors. Michael Liebreich, who founded Bloomberg's New Energy Finance research service and is an angel investor in over a dozen clean-tech start-ups, added that carbon may not be the best metric to assess the start-ups' capacity to change the world. According to him, VCs should not worry too much about ESG scores and net zero goals when deciding which start-ups to take a punt on. Michael Liebreich suggests that instead of aiming for high ESG scores, start-ups should be examining for critical points.

The type and stage of investment impact the extent to which attention is given to ESG issues in the VC sector. An EIF survey found an evident rise in ESG integration as investment stages go from seed to early stage and growth. This increase is due to the accessibility to more information, which simplifies the inclusion of ESG aspects. Compared to their early-stage competitors, growth-stage VCs are more willing to consider environmental issues through active ownership or cross-shareholding agreements. According to a poll conducted among the VC General Partners (GPs) of management companies headquartered in the EU27, the United Kingdom, and other European countries, only 19% of seed and early-stage investors adopted similar strategies, compared to 31% of growth-stage investors (Chronowska, 2022).

2.3.5 *Benefits of ESG integration in the VCs investment decision*

According to Sifted (2022), sustainable business practices strengthen companies while remaining consistent with ethical principles. Sustainability is a key component of several VC organisations' investing strategies, including Synthesis Capital which is a London-based VC firm that specialises in sustainable FoodTec startups, shares the opinion that sustainability is essential and, therefore, only makes investments in businesses that are developing alternative protein solutions to address issues with the global food system.

Sustainability and return on investment are correlated. An Amazon's research states that companies with good sustainability profiles may command a valuation that is 16% higher than that of their competitors. This highlights that venture financing is a marathon, not a sprint, and sustainability is essential to profitability and operational continuity. Beyond financial metrics, sustainability has an impact on talent acquisition and retention. Companies with a defined sustainability strategy tend to attract and retain environmentally conscientious individuals. Despite possible opposition, investors understand that ESG investing is becoming increasingly important, given the evolving dynamics of the business environment (Sifted, 2022).

VC is shaped significantly by LPs, who actively incorporate ESG principles into their investment strategies. This proactive approach offers substantial benefits besides signalling market commitment. Effective ESG efforts from LPs increase funding opportunities, attract high-quality portfolio firms, and contribute to successful exits. Adopting ESG gives businesses a competitive advantage by enabling them to stand out in a crowded market, draw in talent that supports their values, and reduce legal and compliance expenses by being environmentally conscious. By reducing reliance on volatile resources, embracing sustainability also improves long-term resilience during economic downturns (Nita, 2023).

The benefits of incorporating ESG into investment strategies include attracting top talent, reducing ecological footprints, and ensuring long-term value creation. The ESG also benefits startups by drawing socially conscious consumers and investors, promoting environmental sustainability, reducing costs, and representing a competitive advantage. Through the inclusion of ESG in the principles of funds, investment process, and reporting requirements, LPs can play a decisive role in considering ESG in the venture capital landscape. Transparency, compliance with global standards, and enhanced risk management are expected to be achieved due to the growing consideration of ESG despite its uncertainties and obstacles. From a portfolio perspective, the ESG performance and incorporation can also be beneficial since it increases the possibility of better exits or follow-on fundraising rounds, particularly through an IPO, as stock exchanges and listing authorities require higher standards for ESG disclosure. Based on a 2020 McKinsey & Company study, investors would be willing to pay about 10% more for a company with an overall good ESG record in an eventual M&A scenario (Chronowska, 2022).

ESG incorporation tends to be driven by senior leaders of venture capital firms, and it can be fundamental for companies to differentiate themselves in an increasingly competitive market (Dunbar, 2020). Lange and Banadaki's (2023) research also indicate that VCs have benefited greatly from startups that integrate the ESG element in performance and commercialisation. Limited Partners must be aware of their vanguard role and influence as leaders. They can actively impact the implementation and incorporation of ESG considerations throughout the investment process. However, the absence of a standardised framework and the lack of resources constitute the main barriers to ESG consideration in the venture capital sphere (Lange *et al.*, 2023).

3. Research Questions and Methodology

The literature review presented in the last chapter highlights the growing importance of ESG considerations in the investment decisions of VCs, as well as its drivers, challenges and benefits. The stages of the VC process in which these factors were considered discussed, including the type of criteria most considered. As the situation in Portugal is still unclear, this study further examines the ESG factors considered by local VCs.

3.1. Research Questions

This study aims to examine the extent to which VCs in Portugal integrate ESG factors into their investment strategies. It seeks to understand (i) the motivations behind ESG consideration, (ii) the timing of its incorporation, (iii) the perceived challenges and benefits, and (iv) the specific ESG criteria prioritised by VCs.

The central research question is: *How do VCs in Portugal consider ESG in their investment decisions?*

The related sub-questions are:

1. *How do VCs in Portugal make investment decisions in general?*
2. *How did VCs in Portugal make the past/ most recent investment decisions?*

These first two sub-research questions seek to establish context by delving into the typical decision-making processes of VCs and gaining insights into their historical and recent investment decisions, which provides a comprehensive understanding of VCs' evolving strategies and priorities over time. Additionally, two other sub-questions are considered:

3. *How do VCs in Portugal determine which, when and the drivers to consider ESG criteria in their investment decisions?*
4. *How do VCs in Portugal assess the consideration of ESG criteria?*

The last two sub-research questions aim to provide clearer insights into the core issue this study seeks to address by examining the drivers, challenges, and benefits, as well as the timing and specific ESG factors considered by VCs in Portugal.

3.2. Methodology

This study intends to understand how VCs in Portugal consider ESG in their investment decisions, as the topic of ESG has been gaining importance in the investment sphere. As the existing research lacks promise for producing the significant data required for quantitative research, qualitative interviews are suitable for obtaining empirical data under these

conditions. Hence, semi-structured interviews with the... were used to collect relevant data. This technique is extensively employed in research due to the expectation that subjects are more open to sharing their perspectives in a flexible interview setting, as opposed to, for instance, a questionnaire (Flick, 1998).

3.2.1 Procedures of data collection

In the present investigation, data collection was conducted through in-depth semi-structured interviews. This methodological approach is suitable for clarifying participants' perspectives on complex subjects (Patton, 2014) and providing insight into the cognitive processes by which individuals attribute meaning and order within their lived experiences and the broader world. The semi-structured interview format combined a predefined grouping of open-ended questions with the possibility for respondents to elaborate on additional topics, thereby fostering a comprehensive exploration of their viewpoints.

The interviewees were targeted to business representatives working at a Portuguese VC firm and holding positions directly related to the investment process. The interview's structure was divided into four sub-research questions. The first two sub-research questions, "*How do VCs in Portugal make investment decisions in general?*" and "*How did VCs in Portugal make the past or most recent investment decisions?*" aim to contextualise the regular decision-making procedures employed by VCs, as well as to give valuable insights into their most recent investments. The third sub-research question, "*How do VCs in Portugal determine which, when and the drivers to consider ESG criteria in their investment decisions?*" intends to explore the drivers, the timing and which ESG criteria are being considered by Portuguese VCs. The last sub-research question, "*How do VCs in Portugal assess the consideration of ESG criteria?*" aims to clarify the challenges and the benefits that arise from the ESG consideration in the investment decision of VCs in Portugal.

Finally, other questions addressed participants' roles within their organisations, their years of experience in the VC sector, their organisations' years of experience in this sector, the sectors in which their organisations prefer to invest, the approximate total value of assets under management by their organisations, and the stages of development of a company in which their organisations prefer to invest.

All interviews were conducted in the Portuguese, which enabled a clearer comprehension of the questions and fostered a relaxed atmosphere for the interviewees. This linguistic choice also facilitated the expression of opinions and emotions, allowing a deeper

investigation of cultural nuances. Given the demanding work schedules of the participants, the interviews were conducted via video call and lasted between 25 and 40 minutes. Furthermore, it is essential to note that anonymity and confidentiality were ensured.

3.2.2 *Participants*

The final set of research participants included 11 VC experts, and their characteristics are presented in Table 1.

Table 1 - Interviewees' Characteristics

Interviewees' Characteristics		
Question	Interviewees	Response
What position do you occupy in your organisation?	1	Co-founder and General Partner.
	2	Partner.
	3	Director of Investments.
	4	Executive Committee member and Partner
	5	Investment manager.
	6	Partner.
	7	Partner.
	8	Investor Manager.
	9	Senior Associate.
	10	Partner.
	11	Principal of the fund
How many years of experience do you have in the VC sector?	1	14 years.
	2	Five years.
	3	Ten years.
	4	Ten years
	5	25 years
	6	Four years.
	7	20 years.
	8	13 years.
	9	Three years.
	10	13 years.
	11	>4years.

As observed in Table 1, the interviewees hold various senior positions within their organisations, including Co-founder and General Partner, Partner, Director of Investments, Executive Committee Member, Investment Manager, Senior Associate, and Principal of the fund. Their experience in the sector varies from 3 to 25 years. Nonetheless, the majority of the interviewees have over a decade of experience.

Table 2 presents the characteristics of the VC the interviewees represented.

Table 2 - VC Firms' Characteristics

VC Firms' Characteristics		
Question	Interviewees	Response
How many years of experience does your VC firm have in Venture Capital?	1	Three years.
	2	Six years.
	3	20 years.
	4	~20 years.
	5	35 years.
	6	Four years.
	7	~25 years.
	8	15 years.
	9	24 years.
	10	Seven years.
	11	Five years.
In which industries or sectors does your firm primarily focus on investments?	1	We don't have any concentration; we're quite diversified across various verticals.
	2	Generally, tech, information and communication technologies, and blue economy.
	3	Anything involving technology: ICT, information technology, life science, new materials, clean tech. There isn't a standardisation of industry names, but all industries are prone to technological development.
	4	We are agnostic in terms of sectors. We invest in almost everything, as long as it has a business model, is a technology company with global ambition and is digital based.
	5	We basically invest in everything - life science, digital... literally, as long as there is a good opportunity, we are there to invest.
	6	My company is relatively agnostic and invests in technology in companies where the "technology" factor is a differentiator. They are not necessarily only technology; they can be marketplaces where technology is relevant.
	7	IT, software.
	8	My organisation manages a generalist VC fund.
	9	B2B SaaS (Software as a Service)
	10	Technology.
	11	Everything related to impact: climate, health, education. We are quite agnostic regarding the type of impact, and we can consider anything with a strong impact case. However, the areas I mentioned are well-represented in our portfolio.
What is the approximate total value of assets under management by your VC firm? (€ million)	1	75
	2	200
	3	10
	4	50
	5	300
	6	100
	7	470
	8	50
	9	300
	10	>500
	11	45

VC Firms' Characteristics		
Question	Interviewees	Response
At which stage of a company's development does your VC firm prefer to invest?	1	Between the early stage and growth stage, there is more in Early than in Growth.
	2	Early-stage.
	3	Seed-stage and Early-stage.
	4	Seed-stage and Early-stage.
	5	Our sweet spot is Seed. But we invest from pre-seed to series A.
	6	Seed-stage and Early-stage.
	7	From Seed to Growth-stage.
	8	Seed-stage and Early-stage.
	9	Seed-stage and Early-stage.
	10	We invest in all of them (From Stage to late stage).
	11	Early-stage.

As observed in Table 2, the VC firms in which the interviewees work differ varied in experience, industry focus, asset value, and preferred investment stages. Experience ranges from relatively new firms with just 3 to 6 years of experience to more expert firms with over 20 to 35 years in venture capital. Regarding industry focus, some firms have a diversified approach, while others concentrate on specific sectors such as technology, life sciences, or B2B SaaS. The assets under management vary widely, from €10 million to over €500 million. Additionally, the preferred investment stages range from the seed stage to the early stage, with some firms investing in all stages.

3.2.3 *Procedures of Data Analysis*

Each interview was recorded, transcribed into Portuguese, and translated into English. The qualitative data underwent content analysis (Krippendorff & Bock, 2009). Following the translation process, each interview was carefully reviewed, and the main themes were identified and coded following the interview guidelines and existing literature (Auerbach & Silverstein, 2003). Then, by using a qualitative approach, the data obtained were analysed, enabling the extraction of valuable information and the comprehension of the intricacy of the phenomena (Aires, 2011).

4. Research Findings

In this section, the main results obtained from the semi-structured interviews regarding the ESG factors in the investment decision-making of VCs in Portugal are presented. For a better understanding of the results, they are organised and grouped into different sections and subsections, answering each research question.

4.1. How do VCs make investment decisions (in general)?

VCs in Portugal use a variety of sources to identify investment opportunities, which include direct contacts with founders and entrepreneurs, partnerships with other ecosystem stakeholders (such as accelerators, incubators, research centres, other investors, and consultants working for companies seeking capital), participation in industry events, proactive research, and data analysis model technologies.

The interviewed VCs were also asked to identify the key criteria for rejecting an investment. Firstly, the lack of a viable business model was highlighted as a critical factor. The founding team was also consistently identified as crucial, requiring a competent, experienced, and resilient team. The potential market size was also mentioned as a rejection criterion, avoiding opportunities in markets deemed too small or limited. Ethical values and alignment with VCs' principles also influence the rejection of investment opportunities. Other criteria revealed are the lack of relevance of the identified opportunity, the absence of a clear product-market fit, insufficient product distinctiveness, competition, inadequate traction, unfavourable commercial terms, and intellectual property concerns. Furthermore, alignment with the fund's investment policy, geographic considerations, round size, industry sector, and the company's stage of development also play a fundamental role in the decision-making process. The criteria for accepting investments are fundamentally the same, with favourable assessments in these aspects leading to the approval of investments.

4.2. How did VCs make the past/most recent investment decisions?

When questioned about the origin of their most recent investment opportunity, the VCs' answers reflected a combination of the sources for identifying investment opportunities.

Regarding the information requested from startups, the interviewed VCs typically solicit a wide-ranging set of details, which include product information, founding team profiles, financial data, technological aspects, and legal and fiscal considerations. Additionally, they

seek data on the target market, competition, and the company's business model. These requests occur in stages, beginning with an initial presentation commonly known as a pitch deck, progressing to a more detailed business plan, and, when possible, getting access to a "data room", followed by additional information needed during the investment evaluation process.

However, not all the requested information is always received in a complete or organised manner, with many startups providing incomplete, poorly structured, or disorganised data. The quality and format of the information received may vary depending on the stage of development and maturity of the startup. Often, VCs need to collaborate with startups to obtain the necessary information, which may involve multiple iterations of information requests and reviews. In some cases, VCs also conduct their research to validate the information startups provide, particularly concerning the target market and potential customers.

4.3. How do VCs in Portugal determine which, when and the drivers of ESG consideration?

4.3.1 *Drivers of the ESG integration in the VC Investment decision*

Some of the interviewed VC organisations adopted ESG practices since they started operating, such as the organisations of interviewees II and IV. Interviewee II's organisation, for instance, was founded in 2018 and immediately adhered to the United Nations Principles for Responsible Investment (UNPRI). In the case of Interviewee IV's firm, ESG criteria were always considered in their investment decision. However, it is stated that there has been a growing concern regarding these criteria, particularly related to compliance with environmental and ethical standards and the diversity of the teams in which they invest.

Other VCs are already in the process of becoming formally ESG compliant, as Interviewee V, for instance, states, "*informally, we were already doing it or trying to do it, and so we think it makes sense to have this validation as well*". Interview III confesses that their organisation only began integrating ESG criteria in 2022, using an "ESG questionnaire" when conducting the Due Diligence and then updating this information periodically.

There are also VCs that, even though they do not formally integrate ESG considerations, end up informally considering them, influenced by regulations and market trends. Interviewee I highlighted that, even though their organisation is not registered as an ESG fund, about 25% of their investments can already be classified as ESG since many innovations in

the market are related to ESG concerns. Interviewee VI shares this view and states that, although their organisation is not an impact fund, they recognise the importance of environmental sustainability, particularly in areas with high growth potential, such as energy transition.

Interviewee IX confesses that their organisation does not consider ESG an investment criterion. However, they have initiatives to implement sustainable practices in their office, such as reducing the use of plastic, for instance. Additionally, their organisation manages a fund that receives funding from a European institutional investor. Because of that, they must contemplate specific ESG aspects, even if these are not key investment criteria.

Interviewee VII mentions that they consider these criteria since EU regulation demands the adoption of ESG policies and adds that Regulation (EU) 2019/2088 requires the publication of their Sustainability Policy.

Finally, according to the responses of some interviewees, there is an association and confusion between ESG considerations and impact funds.

“I consider the metrics in the sense that I must believe that they’re not lying and that they’re making honest and accurate calculations about the impact they’re having. Suppose it is generating value and generating the benefit they say it is generating from that perspective. In that case, it’s important to us, but I’m not investing. There are impact funds that are investing in projects that necessarily have to have these metrics, and these metrics are very important to them so that they can then report on their activity, too; the only difference is that I’m not registered as an ESG fund. So, for me, it’s irrelevant to take these metrics then and prove to the world that I, as a fund, am materially impacting the planet.” (Interviewee I)

“The environmental part, or if you like, environmental sustainability, is relevant because some areas with the greatest growth potential are in this area, even as a matter of energy transition, etc. But we’re not an impact fund; in other words, it’s not a criterion, and we don’t position ourselves that way, even because some funds are too ESG and have had worse results.” (Interviewee VI)

“It’s not a criterion for us, (...) of course it’s a positive thing when the company does some ESG and impact things. We’re not an impact fund.” (Interviewee IX)

Overall, only three out of the 11 interviewees, namely Interviewees I, VI, and IX, state that they do not consider ESG factors in their investment decisions. However, they all state that they do not invest in companies or industries that are “anti-ESG” or “unsustainable”, as mentioned by Interviewee VI. The remaining interviewees either already incorporate ESG factors into their investment theses formally or are in the process to do it by obtaining the

appropriate validation like Interviewee V's organisation or by launching new funds with stricter ESG criteria, as Interviewee IV's organisation.

One of the main goals of this study is to understand the drivers of ESG consideration in the investment decisions of Portuguese VC firms. Regarding this matter, for Interviewee I, the consideration of these criteria occurs only in businesses where these criteria are specifically inherent to the nature and type of business in which they invest, which reflects, as previously mentioned, a growing market trend of adopting more sustainable and ethical practices. This market trend is also highlighted by Interviewee VI and Interviewee IX, who mention that startups are a few steps ahead when considering ESG factors.

For Interviewees II, III, IV and X, considering ESG criteria is a strategic decision that aligns with the values of their VC firms. They believe that ESG considerations are *“fundamental because if we really want to continue to have a habitable planet and an economy that grows, we must have these concerns and these demands to have increasingly sustainable business solutions that allow us to coexist within the planet. We must leave a better planet and world for the next generations. Social demands, fairness, diversity and equality are important principles that guide our activity”*, as stated by Interviewee IV, and *“the businesses of the future are all from Article 7 upwards, so either they are concerned with not harm, or they actively contribute to good. Never less than that”*, as mentioned by Interviewee III, or as argued by Interviewee X, they consider ESG in their investment decisions *“because we understand that this will be increasingly relevant and therefore has a financial impact on the investment itself”*. Therefore, the recognition of ESG aspects as a prevailing market trend, alongside the acknowledgement by VCs of their significance in fostering a socially and environmentally healthier society, are key drivers for integrating ESG criteria into investment decisions by VCs in Portugal.

These Interviewees (i.e., II, III, IV and X) and Interviewee VII also mentioned that adopting ESG criteria is driven by regulations and legal standards that mandate VCs to include sustainable practices in their operations.

“Obviously, there is also much legislation that forces us to start incorporating a series of information requests into our entire business”. (Interviewee III)

“Regulation helps because it obliges, because let's be honest, there are things we probably wouldn't do as quickly if it weren't for legislation. It's always a big boost.” (Interviewee IV)

“Investment decisions take into account ESG criteria to comply with the Fund Management Regulations and good market practice criteria.” (Interviewee VII)

Interviewees II, III, and IV also uncovered that ESG considerations are part of their fiduciary duties. Furthermore, Interviewees II and V declared that the integration of these criteria in the investment process is crucial since it allows the mitigation of risks and also enhances investment returns.

“(...) because it is recognised within our investment mandate that taking ESG factors into account is part of our fiduciary duty to our investors. In other words, our fiduciary duty is to look after the best interests of our investors and obtain the best possible returns. This fiduciary duty leads us to take these practices into account because these practices are recognised as risk mitigation factors. In other words, when considering companies’ environmental, social, and governance factors, I consider the potential risks. Therefore, I often look for opportunities to improve these practices to mitigate the risks and increase my profitability. If you want me to be more specific, (...) data protection and privacy protection are two aspects that are included in our ESG assessment in the governance section, and which are factors that are relevant to data security and the activity of companies, especially when we are working in tech sectors, and so, when I do this assessment, I see that this company already has the necessary mechanisms in place, this takes the risk out of the investment and I have more confidence that they can achieve their objectives.” (Interviewee II)

“For example, the whole issue of governance is critical for us. We’re a small shareholder, but we’re making a big financial effort, so we’ve always had to put governance rules in place so that we don’t lose money simply because of bad management. Another thing is whether the project succeeds, but not because of bad management, incorrect management practices, etc.” (Interviewee V)

Some interviewees, such as Interviewees I and VI, recognise that sustainability is becoming a market expectation. Meeting these criteria can offer competitive advantages for the invested startups, especially in attracting investors for future funding rounds. For instance, Interviewee VI argues that *“When we’re talking about VC, we’re talking about companies that typically have a higher than the normal growth rate, and would probably reach profitability sooner if they grew less because they invest a lot in their growth, and for that, they typically need new investors, and that’s where the issue of the sustainability of the growth equation itself and the ability to attract investors comes in, for example, in energy transition areas, impact on climate change, etc., where we need to understand whether this project, in 18/24 months, is at a stage where specialist investors who normally have more refined ESG criteria, will be interested or not.”*

Also, Interviewee IX revealed that their organisation is raising a new fund, and, during its fundraising activity, they have noticed that investors are increasingly asking about topics related to ESG. Moreover, despite the fact that these considerations usually do not play a significant role during the investment decision process of Interviewee IX’s VC firm, once

investments are made, their investors and stakeholders require them to collect information related to ESG, such as the number of portfolio companies which have an ESG policy, the gender and ethnic diversity among the portfolio companies as well as in their boards' composition and their total energy consumption. Thus, according to the conducted interviews, another aspect that influences the consideration of ESG criteria is the pressure from investors, particularly institutional investors, as mentioned by Interviewees V, VI and IX. Interviewee VI even mentioned that the ESG principles “*are in the top five concerns of our institutional investors*”.

4.3.2 ESG criteria considered

The interviewees were also asked to provide examples of ESG metrics and indicators they use in their investment decisions. Their responses revealed that not all VCs utilise a formal ESG framework or scoring system for assessing these aspects, as Interviewees II, III, VII, VIII and X use, for instance, ESG questionnaires for potential investments. Some VC firms, such as the ones where Interviewees I, VI, and IX are employed, incorporate ESG criteria into their investment processes implicitly by investing in businesses whose nature relates to ESG factors, for example, in areas such as climate tech and digital healthcare, as mentioned by Interviewee I, or by excluding harmful businesses. Other VCs are transitioning to become formally ESG compliant or are going to launch new funds with stricter ESG criteria, as the organisations of Interviewees IV and V already have some considerations regarding this theme in their investment decision.

It is also important to highlight that while ESG criteria are not crucial investment factors for all the interviewed VCs, negative screening is a common practice among VCs to exclude certain industries and companies from their portfolios based on “*not harm*” criteria, as mentioned by Interviewee V, for instance. Various industries or activities were mentioned in the interviews where investors are unwilling to invest. These include:

- Manufacture, distribution, or sale of weapons, ammunition, radioactive materials, alcohol, tobacco, or gambling.
- Use of harmful or exploitative forced or child labour.
- Distribution or display of obscene content.
- Illegal tracking, data abuse, or poor user data protection in the Ad-tech industry.
- Non-compliance with regulations or recent investigations/sanctions.
- Promotion of coal and oil industries.

- Research on human cloning, genetic modification, human embryos, or GMOs.

Regarding the VCs whose investment thesis presupposes the consideration of these factors or who consider them informally, the following metrics and indicators are highlighted:

Environmental:

- Sourcing of renewable energy.
- Emission reduction policy.
- Compliance with environmental laws in countries of operation.
- Occurrence of environmental incidents in the last two years.
- Conduct any environmental impact assessment of company operations in the last two years.
- Implementation of initiatives to reduce energy consumption.

Social:

- Gender diversity on boards and in the composition of management bodies.
- Gender pay gap.
- Workplace safety and hygiene policies.
- Presence of a policy on human rights and labour standards.
- Existence of inclusion and diversity policies.
- 50% or more of FTEs are on temporary contracts.
- 50% or more of FTEs are in higher or specialised education.

Governance:

- Timely presentation of financial information.
- Data privacy policies.
- Basic regulatory compliance.
- The presence of a statutory auditor in the company.
- Regular meetings of the board of directors.
- The existence of a defined governance structure, including independence and diversity of decision-making bodies.

- Association of ESG factors with performance management and allocation of variable remuneration.
- Alignment of executive compensation with value generation for shareholders in the medium/long term, not just the short term.
- Audit of company accounts.

Moreover, Interviewees II, V, and X emphasise social and particularly governance factors. They argue, *“Data protection and privacy protection are two aspects that are included in our ESG assessment in the governance section, and which are factors that are relevant to data security and the activity of companies, especially when we are working in tech sectors”*, *“what we consider in terms of ESG, has more to do, once again, with governance”*; and *“the Social seems more important to us, and so does Governance”*, respectively. Interviewee IV highlights the relevance of team diversity and states, *“Basically, social demands, fairness, diversity and equality are important principles that guide our activity”*.

However, Interviewee VII states that their VC firm has always considered ESG Criteria, *“especially at the Environmental level”*.

When asked about the weight attributed to ESG criteria compared to other investment criteria in their decision-making process, some Interviewees consider ESG criteria important from the outset of the investment process and apply exclusions and value-specific metrics concerning governance, sustainability, and business ethics such as Interviewees II, III, IV, V, VIII, X, and XI. Others emphasise financial return as their primary objective, as in Interviewees I, VI, VII, and IX. Additionally, due to the early stage of the startups that VCs analyse, accompanied by its high mortality rate, some interviewees suggest that ESG criteria may have a lower weight in this stage and, because of that, prioritise factors such as the adaptability and growth potential of the companies.

Interviewee VI argues, *“Going back to the ESG issue, and we’re talking about companies whose probability of dying is relatively high, the fact that potentially in 10 years, they’ll be a unicorn that spends tons of energy on their servers, is a relatively small concern because for us, the probability of them getting there...we pray that they get there and that it will be a problem”*. Interviewee VII adds that *“investment decisions are made taking into account the potential return that this investment will give the Fund and not by ESG criteria”*. Interviewee IX concludes by stating that the weight of these criteria *“is very low”*.

4.3.3 Stage of the VC investment process in which VCs consider ESG

Firstly, it is evident that most of the interviewees recognise the importance of ESG criteria throughout the entire investment cycle, from the initial screening phase to the continuous monitoring of the invested companies.

“I think we’re always looking at them, until the end of the due diligence, we’re always analysing that. Then, obviously, if we invest in the company, we monitor it regularly.” (Interviewee I)

“All of them. When we include ESG in the investment process, we do it at all stages, from negative screening, which comes in right away, but then we do due diligence, where we check if it is like that or not, then we do it in the investment phase, then in the portfolio monitoring part where we are monitoring to improve the performance and ESG of the companies to improve the risks, and in the report we make to our investors, and in the exit where there is a final assessment of the impact and sustainability part.” (Interviewee II)

“In the DD and then during the monitoring of the company. It is necessary to establish the baseline scenario and then see how it evolves.” (Interviewee VIII)

“In all of them, throughout the entire process.” (Interviewee X)

Although Interviewee IV recognises the importance of integrating ESG criteria throughout the entire process, they highlight its relevance in the initial phases.

“During the whole process, especially right at the beginning, and then during the due diligence, which is where it’s really analysed. Then there’s a commitment: we accompany the projects and are an active partner, according to what the founding team needs.” (Interviewee IV)

Interviewees VI and VII also mention that they consider these criteria during the Opportunity Identification and Due Diligence phases.

“I think that in the later stages, it’s no longer a concern. We’ve already validated that it’s in one of the areas we consider suitable, and then we worry more about the criteria I’ve already mentioned. So, identifying opportunities and due diligence.” (Interviewee VI)

“Identification or Due Diligence.” (Interviewee VII)

However, Interviewee 5 highlights the importance of considering these aspects in the Negotiation phase.

“(…) but I think the idea is for these criteria to be considered at a time when we have already decided to invest and when we are setting up the investment and, in essence, for us and the promoters to agree on how the company should evolve to improve sustainability practices.” (Interviewee V)

Finally, Interviewee XI states that these criteria are mainly considered during the Investment Decision and Portfolio Management stages.

“The ESG part in particular, without being an impact, comes mainly into the portfolio management part and the investment decision part because as we are an article 9 fund, there is something called PAIs, and part of the PAIs are many ESG metrics, and this also has to be reflected in our Investment Memo.” (Interviewee XI)

When asked about advising startups on ESG considerations, some VCs admit that they do not provide such advice.

“No, we don’t do that kind of advice proactively.” (Interviewee I)

“So far, I confess we haven’t.” (Interviewee V)

“No, not usually, it’s something we don’t typically do in our phases.” (Interviewee VI)

“No.” (Interviewee VII)

On the other hand, some VC firms actively collaborate with startups, emphasising the importance of ESG criteria from the beginning and encouraging the development of internal controls for their analysis and improvement.

“With much patience and much hope. Typically, it’s always a very complex process because the companies have no structure, and the overwhelming majority have no interest. They’re much more interested in surviving and having enough money to get through the next six months, and the ESG part, most of the time, doesn’t seem important to them. It’s always a complex conversation in which we’re mainly talking about the risks and opportunities. What this means is that in these early stages, it may not seem very important. Still, as soon as you get a little further along the value chain, they need to raise more money with other larger investors who are typically more obliged to report even more complexly. These questions will come up, and they must be prepared. So, we’re trying to work with them, not just on risk mitigation, but on preparing for the next investment rounds in which these criteria will be essential.” (Interviewee II)

“Yes, it’s been a joint effort, and it’s all very recent. Even at the beginning, when we analysed the projects and asked for these [ESG] questionnaires, we stressed how important it is for the start-up to have forms of internal control to analyse these parameters and improve them. We know that, on the one hand, we all have a role to play in contributing to a better future. On the other hand, companies and start-ups are becoming more and more valuable because if they are suppliers to a big client, a big company if a bank finances them, they will be asked precisely the same questions, and they will also be evaluated. They may not be able to work with a certain client if they don’t meet certain metrics, so we make them aware of this importance early and bring the issue to the table with the start-ups.” (Interviewee III)

“By monitoring the ESG questionnaire.” (Interviewee VIII)

“Yes, by advisory. In our influence on companies, we often talk about the importance of this when they are not aware of it.” (Interviewee X)

Furthermore, there are interviewees who, despite providing this advice to startups, note that the startups themselves are increasingly doing so.

“More now, lately, than at the beginning. Generally, they all already integrate them. Nowadays, we don’t need much. We can make it more obvious and advise on one thing or another, but in general, they already integrate them, and they’re already trying to show evidence because they know it’s fundamental.” (Interviewee IV)

“We tend to do it more and more because of this part of the reporting, as we are asked to do. But nowadays, almost all of them are already there. In other words, in these basic KPIs that we need, almost all of them are measuring them, and it’s something that we see more and more in the start-ups, which is talking about it, talking about this issue and. Therefore, I think that the start-ups are further ahead than us in this area; we have a long way to go because we’re a bit behind, but we’re going to do it.” (Interviewee IX)

4.4. How do VCs in Portugal assess the consideration of the ESG criteria?

4.4.1 Challenges of ESG integration in the VCs investment decision

During the interviews, VCs were also asked about the impact of ESG factors on their investment decisions.

For some VCs, these factors **are important but not decisive**:

“It’s positive, but it’s not decisive.” (Interviewee I)

“As I say, they have a positive impact. In terms of governance, we prefer to invest in companies that are properly structured and have good governance practices.” (Interviewee V)

“They are considered but not critical.” (Interviewee VIII)

Other VCs highlight these factors as **being decisive** in the investment decision:

“Besides the exclusionary issue, the investment criterion has an impact. Then, it varies a little from fund to fund. For example, in our fund dedicated to the blue economy, the part of the contributions to the sustainable development goals is fundamental, so it is a criterion in the decision.” (Interviewee II)

“We have a series of exclusion policies in which anything that falls within those exclusions if it turns out that it’s happening in that business, we don’t invest. It’s very decisive.” (Interviewee III)

“As I said, they will have more in the next fund. In this one, we’re not obliged, but we always look at them with concern. Anything that could harm the environment we don’t invest in is not worth it. So, it ends up being decisive, but it’s not yet measured, but from now on, it will be.” (Interviewee IV)

However, there are VCs, like Interviewees VI and IX, who argue that these factors have a **neutral impact** on their investment decision, and others, like Interviewee VII, emphasise that *“the investment decision is essentially about assessing the potential return on investment”*.

VCS were also asked to what extent their investors were willing to sacrifice financial returns to align with ESG considerations. Some of them stated that their investors are not particularly concerned with ESG factors and do not consider them a determining criterion; as Interviewee I mentions, *“For our investors, it’s irrelevant, we don’t have investors who are concerned about this, who put this as one of the criteria. There are other funds where their thesis and mandate are to invest in ESG projects, and they also have investors who are more interested in this, but not in our case”*.

Interviewee II argues that **there is no such trade-off** since, even though they consider ESG, **they focus on achieving market returns**. However, they recognise that their investors know they might not invest in potentially more profitable opportunities since there is an ESG exclusion criteria.

On the other hand, some emphasise that financial investors do not sacrifice profitability since ESG factors are seen as contributors to their fund’s internal rate of return (IRR).

“A financial investor will never want to give up profitability. We work with venture capital funds; we don’t have an impact fund, so we’re talking about a type of investor looking for a return. Obviously, as a management company, we evaluate various company parameters and value them in different ways to achieve an objective return. If it’s important for us that the company has mechanisms to control and improve ESG-related parameters, this contributes to the IRR of the fund itself. So, we encourage it for that reason. It’s not a question of sacrificing.” (Interviewee III)

“I don’t think any of them, in general, would invest in a polluting industry, for example. Most of them are even looking to finance innovative, sustainable businesses, but they want the financial returns, but not at any price. But I can’t measure it.” (Interviewee IV)

“I don’t think so. We have some institutional investors who are very sensitive to the issue of sustainability, and so what they are aware of is the context in which we are investing. Still, if we were to make a clearly anti-sustainable investment, in other words, one that went against ESG principles, that would be a problem.” (Interviewee VI)

“In our venture capital fund, this is not the case. In other words, we are still a venture capital fund, from which it is expected that there will be a venture capital return; the only difference is that we invest in sectors with an impact. Therefore, we invest at the intersection of companies that have a venture capital return and those that have an impact, so our LPs, because they are LPs in a financial product that is venture capital,

there is no trade-off. Frankly, I think our reason for existing is to justify that this trade-off is not necessary.”
(Interviewee XI)

Moreover, the interviewed VCs were also questioned about the impact they believe ESG considerations have on financial returns. **Some investors consider this impact to be positive.**

“I think it’s positive, yes. I see it more from the perspective of having materially relevant and positive ESG indicators, which greatly influence the company’s value proposition and indirectly greatly influence the financial capacity to have better results.” (Interviewee I)

“Yes, it has an impact because, in the short term, or shorter than medium term, anyone who doesn’t take these factors into account seriously and systematically will find it difficult to stay in the market, so it has a tremendous impact. Then, various levels depend on the investment policy of each fund. In the instruments we manage, with our sustainability policy, yes.” (Interviewee III)

“It’s becoming more and more positive.” (Interviewee IV)

“My view is that sustainability in general has a very positive impact on financial returns, but each case is different, and the most relevant factors are very different in each case.” (Interviewee VI)

“In the medium term, we think it will have a positive impact.” (Interviewee VII)

“So, on a quantitative level, I think it’s too early to have proof because our companies are still very early. In my opinion, it’s a positive impact (...) because I think many stakeholders need to see ESG policies to make investment decisions.” (Interviewee XI)

Other VCs argue that the **impact of considering ESG on financial returns is neutral.**

“My opinion at this point is neutral. Quite frankly, I don’t see any major differences at this point. I would say that what we may have seen in the public markets is that the oil companies have had great results lately, perhaps above the market. All the ESG funds can’t be invested in them, but on the other hand, the tech companies comply with these ESG factors and have had even better returns. I would say that in the private market, at this point, it doesn’t matter because all the big investors are putting sustainability criteria into their decision factors, whether it’s negative screening, positive screening, ESG integration, benchmarking and so on..., I would say that at this point, it’s starting to make no difference. That might have been true five years ago.” (Interviewee II)

“I would say neutral. I don’t have much visibility on this, but I would say neutral.” (Interviewee IX)

“It’s neutral”. (Interviewee X)

Only Interviewee VIII mentions that *“the perceived impact will be negative”*, and Interviewee V confesses that *“I have no practical experience of this variable”*.

Identifying the critical challenges of the ESG consideration during the investment decision process of Portuguese VCs was another objective of the present study. One of the challenges mentioned more frequently was the **early stage of startups**, which poses a significant problem for implementing ESG criteria since startups, in their initial stages, generally lack the structure or resources to meet ESG demands. This limitation makes it difficult to calculate ESG indicators and obtain reliable data, as mentioned by Interviewees I, II, III, V, VI, VIII, X, and XI. Additionally, these companies are often focused on product creation and quick growth, which, according to Interviewee IX, may conflict with the incorporation of ESG criteria. For Interviewee V, it also imposes on **small and immature companies** an extra *“bureaucratic burden”* in addition to what they usually require from startups, that is, for instance, *“you have to have an accountant, you have to have a statutory consultant”*.

Another significant challenge mentioned during the interviews is **regulation**. Interviewee III mentioned that the lack of standardisation and harmonisation of the tools needed to obtain ESG data efficiently and cheaply represents one of the most relevant concerns. Moreover, the credibility and accuracy in capturing and calculating ESG indicators and the difficulty in comparing them were also identified as critical challenges by Interviewee I. Additionally, Interviewees IV and XI highlighted the **complexity of regulations as obstacles** and the fact that their application is often blind and inconsistent. European legislation was criticised by Interviewee III for its legal and bureaucratic character, which does not facilitate the understanding and practical application of regulations.

“I think there’s a big challenge in attesting to the credibility of the way you capture and calculate these indicators and proving that you’re doing it in a coherent and well-done way, and even whether they follow some standard that exists in the market so that they can then be compared with other realities, other companies or other activities. I think it’s still challenging to understand if it’s being well measured, well done, and recognisably correct and validated by someone. Maybe there should be more capacity and identities to help validate these things. Standardisation and comparability are still a long way off. (Interviewee I)

“The challenges are, on the one hand, to standardise and harmonise tools that make it possible to obtain this data more quickly, efficiently and cheaply, (...) another thing that could be better is the way the legislation is communicated at the moment, it’s very legal and very bureaucratic, and some more practical support documents could be created (I’m talking about European legislation, which is what applies to us), so there could be tools and materials to explain and communicate the regulations more understandably and not

so focused only on the legal part. The information itself, throughout the regulations, is sometimes not the same; there are contradictions, so sometimes it's tough to understand what is needed and what isn't because within the regulations themselves, there are differences in definitions, and everything is still very ambiguous.” (Interviewee III)

Finally, the conflict between the **potential return on investment and the integration of ESG criteria was mentioned as a challenge** by Interviewee VII. The exclusion of certain industrial sectors due to ESG criteria considerations, which reduces the pool of possible investments, and the difficulty in promoting diversity among founders and around the area of computer programming, for example, were pointed out by Interviewees IV, V and VI as factors that could limit the range of potential investments.

4.4.2 Benefits of ESG integration in the VCs investment decision

This study also intends to detect the benefits that arise from considering ESG factors in investment decisions. One of the benefits mentioned is **its positive impact on market acceptance and value proposition**. According to Interviewee I, since consumers and companies increasingly value ESG issues, having positive ESG indicators can lead to greater market acceptance and positively impact the companies' value proposition. Also, for Interviewee III, startups that already incorporate ESG principles are better positioned to access new funding and clients and demonstrate maturity and readiness to handle investors who demand ESG information. This idea is reinforced by Interviewee XI, who argues that considering ESG factors **benefits startups in attracting financing and top talent**, securing better commercial contracts with “*key industry stakeholders*”, and ensuring regulatory compliance.

Additionally, **risk mitigation is highlighted** as an essential benefit that leads to a more appealing risk/return profile. For Interviewee II, companies implementing good ESG practices tend to have lower operational costs and more effective human resource policies. This opinion is further supported by Interviewee VI, who mentions that concerns regarding ESG help “*filter out opportunities that could potentially cause us problems*”.

The **sustainability of investments, increased liquidity, and social contribution** are also highlighted as benefits by Interviewee X. Promoting healthier and more ethical teams is another advantage, leading to more innovative and sustainable solutions, which will positively impact investment returns, as highlighted by Interviewee IV. According to Interviewee

V, **improving efficiency** through structured processes and continuous improvement is another advantage. Interviewee VII also added compliance with fund management regulations and market best practices that ensure conformity and market reputation.

It is important to note that Interviewee IX could not identify benefits arising from considering ESG factors in the investment decision.

Regarding the inclusion of ESG considerations in the fiduciary duties of asset managers and institutional investors, most Interviewees, namely Interviewees II, III, IV, V, VIII, IX, and XI, acknowledge the **importance of incorporating ESG factors into their fiduciary duties voluntarily**. Indeed, Interviewee VIII emphasises that *“ESG issues are increasingly relevant for the future and should therefore be implemented and nurtured by both companies and managers.”*

However, there are Interviewees who, while recognising the relevance of integrating these aspects, **disagree with their compulsory adoption**.

“Mandatory and compulsory, I don’t think so. I think there must be positive incentives for them to be incorporated, there must be advantages for those who incorporate them and use them, and if the advantages are materially large, this brings in many more investors, and all the players in the industry become more aware that they need to incorporate this.” (Interviewee I)

“I think the question has the logic of “must”, and I’m against the idea that these criteria should be mandatory. I think that if we were to do it seriously, we’d be limiting a lot of what we could invest in.” (Interviewee VI)

Finally, Interviewee X has a different opinion and states, *“Do I think it should be a fiduciary duty? I don’t think so. Because I think our role as asset managers is to comply with the laws, and it’s up to entities bigger than us to define the standards we must meet.”*

5. Discussion, Limitations and Implications

In this chapter, the research findings are discussed according to the literature. The content of the expert interviews is analysed, considering what is explored and defended in the existing literature. This chapter is divided into sections according to the sub-research questions that were previously presented. The limitations and implications of this research are also presented in this chapter.

5.1. How do VCs make investment decisions in general?

The interviewed VCs usually identify investment opportunities through many sources. Diversifying the deal flow sources is a common strategy mentioned that ensures the access to a wide range of investment opportunities.

The criteria used by VCs to accept or reject an investment opportunity are composed by both financial and non-financial aspects. Although ESG factors are not yet considered determining criteria in investment decisions for the VCs interviewed, alignment with the ethical values and principles of the fund is mentioned by some, demonstrating a growing trend towards the incorporation of ethical values and sustainable principles in evaluations, and therefore a more responsible Venture Capital market.

5.2. How did VCs make the past/most recent investment decisions?

The interviewed VCs usually request comprehensive information from startups and at different stages of the investment process, from initial pitches to detailed analyses of business plans and access to data rooms. The VCs interviewed did not mention the collection of information related to ESG aspects during this phase.

5.3. How do VCs in Portugal determine which, when and the drivers of ESG consideration?

5.3.1 *Drivers of the ESG integration in the VCs investment decision*

According to the interviews conducted, the concerns of VCs in Portugal regarding the integration of ESG factors in their investment decision have been growing. Although the interest in sustainable business practices is increasing, these businesses are still relatively new (Bocken, 2015). Furthermore, the implementation of ESG at an initial stage of the VC lifecycle helps businesses face obstacles during their development (Madzou *et al.*, 2022).

It should be noted that, according to the responses of some VCs, there is an association and even confusion between ESG investing and impact investing, suggesting a lack of knowledge regarding these topics.

Concerning the drivers of ESG consideration by VCs in Portugal, one aspect mentioned in the interviews is that these considerations constitute a market trend. This was also identified by Bryan and Levingston (2023), who mention that there are market forces influencing VCs to consider these factors, and by Sifted (2022), which highlights that ESG factors are becoming more prominent in the context of startups and emphasises this idea by saying that there has been a growing momentum in this ground.

Several interviewees highlighted that adopting ESG criteria is driven by the increased regulations and legal standards, which mandate companies to incorporate sustainable practices into their operations, aligning with what is presented by Dunbar (2020). It can be inferred that the consideration of ESG factors by VCs in Portugal may be more a result of regulatory and market pressures than an adoption based on a belief in their relevance and advantages.

The interviewees also pointed out the mitigation of risks and enhancement of investment returns as drivers. This was also highlighted by Dunbar (2020), who stresses that there is the belief that incorporating ESG factors enhances the risk/return profile of funds.

Investor pressure, particularly from institutional investors, is also mentioned as a driver since some investors require VCs to report information regarding ESG concerns. In the fundraising activity of the VCs themselves, investors are also increasingly asking about these aspects. This aligns with Nita (2023) and Chronowska (2022), who highlight that LPs play an important role in shaping the VC sphere concerning ESG considerations.

In addition to the drivers identified in the interviews, which are also discovered in the existing literature, this study found additional drivers, which include alignment with the values of their VC firms. Since ESG factors reflect their fundamental principles, the view is that these criteria and sustainability are essential for the well-being of society and contribute to more innovative solutions and businesses. Furthermore, it is pointed out that these considerations are increasingly distinctive in attracting investors for startups. Thus, access to certain investors with stricter ESG criteria is possible, constituting a competitive advantage.

5.3.2 *ESG criteria considered*

Even though the use of a formal ESG framework or a scoring system for evaluation is not adopted by all the interviewed VCs, many incorporate ESG criteria into their investment analysis process informally or implicitly, as was previously mentioned. This suggests a growing awareness of the importance of ESG factors in the investment decision-making process, an intensification of the promotion of sustainability, and the pursuit of a positive social impact.

Even though the interviewees who recognise ESG criteria as part of their investment strategy provided examples of metrics and indicators for each of the environmental, social, and governance factors presented in the Research Findings section of this study, some interviewees emphasised the importance of social and governance factors. This aligns with what Dunbar (2020) mentioned regarding the results of the survey conducted by Principles for Responsible Investment (PRI) and VentureESG, which show that social and governance factors are considered more significant than environmental ones. In contrast, one of the interviewees confessed that the environmental level is the one that their VC firm considers the most important.

The interviewees assign different weights to ESG criteria compared to other investment criteria in the investment process, demonstrating that the consideration of these criteria in investment decisions is a complex process, which explains the diversity of perspectives and priorities of the interviewed investors.

5.3.3 *Stage of the VC investment process in which VCs consider ESG*

According to the interviewees' responses, it can be concluded that VCs in Portugal recognise the importance of ESG criteria throughout the entire investment process, from the identification of investment opportunities to their monitoring and eventual exit.

Nevertheless, some interviewees emphasise these criteria in the earlier stages, specifically during the Opportunity Identification and Due Diligence phases, which aligns with the existing literature. Specifically, Botsari and Lang (2020) conclude that although most VCs already consider these aspects, this consideration occurs primarily during the Due Diligence phase and not throughout the entire process.

In contrast, one of the interviewees stated that ESG criteria are mainly considered during the Investment Decision and Portfolio Management stages, and another highlighted the importance of considering them in the Negotiation phase.

Concerning the advice provided to startups on ESG considerations, some VCs do not provide proactive guidance, while others take a patient stance, recognising the complexity of implementing these considerations for early-stage companies but acknowledging their long-term benefits. The results also highlight the importance of tailored strategies to address each startup's specific needs and contexts for effective ESG integration.

5.4. How do VCs in Portugal assess the consideration of the ESG criteria?

5.4.1 *Challenges of ESG integration in the VCs investment decision*

The results show a diversity of perspectives regarding the impact of ESG factors on VCs' investment decisions, and their investors' willingness to sacrifice returns for ESG alignment. They highlight the evolving nature of ESG integration in the VC industry, with different perceptions and implementation stages demonstrating that ESG considerations are still developing.

Moreover, there is no consensus about the perceived impact of ESG considerations on financial returns, which indicates a lack of empirical evidence and practical experience to standardise views on this issue within the industry.

Several challenges to integrating ESG in VCs' investment decisions were identified during the interviews, and one of them is that startups, due to their early stage, lack the structure and resources to meet ESG demands, and it is important to note that the majority of the interviewed VCs prefer to invest in early stages. This challenge is also highlighted in the existing literature by Nita (2023), who mentions that ESG consideration requires consistent methodologies, expertise, and reliable resources, which can be challenging for smaller VCs and younger ventures facing higher costs and difficulties.

The lack of standardisation, ESG framework, and the tools needed to obtain ESG data efficiently and cheaply and ensure comparability are significant concerns for the interviewed VCs. This aligns with Dunbar (2020), who notes that the VC market lacks formal and standardised ESG incorporation despite the increasing awareness and collaborative efforts among VC firms.

The conflict between ESG criteria and potential return on investment was further mentioned as a challenge. This is also noted by Nita (2023), who suggests that investors are hesitant about long-term value creation associated with ESG principles.

In addition to challenges found in existing literature, this study identifies additional issues regarding ESG considerations by VCs in their investment decisions. The increasing complexity of regulations and their inconsistent application, especially within European legislation, were criticised for their legal, bureaucratic and even ambiguous nature. Moreover, startups at initial stages focus more on product creation and rapid growth than on ESG integration, which may not be a priority in these initial stages. Also, ESG incorporation can add a bureaucratic burden to startups beyond what VCs already demand. Finally, excluding certain businesses and sectors reduces the pool of investment opportunities, and some ESG indicators, like promoting diversity among founders and in the tech sector, are difficult to meet.

5.4.2 *Benefits of ESG integration in the VCs investment decision*

One of the most mentioned benefits of considering ESG in the investment decision of VCs was market acceptance and value proposition, as consumers and companies increasingly value ESG issues. This means that for the interviewed VCs, integrating these criteria is seen as fundamental in attracting investors and clients by startups. This is supported by Chronowska (2022), who highlights the capture of interest from socially conscious consumers and investors, which translates into a competitive advantage.

The interviews also highlighted benefits such as attracting top talent and securing better commercial contracts. These benefits are also noted in the literature by Sifted (2022), Nita (2023), Chronowska (2022), and Lange & Banadaki (2023), who suggest that startups integrating ESG benefit in terms of performance and commercialisation.

Therefore, attracting investors, clients, and top talent and the possibility of negotiating better commercial contracts positively impact the startups' performance, which will consequently benefit the results of the VCs that have invested in them.

Compliance with fund management regulations and market best practices is another significant benefit mentioned in the interviews. Furthermore, it reduces legal and compliance expenses by being environmentally conscious, as stated by Nita (2023), and leads to better compliance with global standards and enhanced transparency, as argued by Chronowska (2022).

It is also important to note that risk mitigation is another advantage mentioned in the interviews, as considering ESG reduces operational costs and makes investments' risk/return profiles more attractive. Chronowska (2022) also argues that enhanced risk management is

expected due to the growing consideration of ESG and that startups benefit from this as it allows cost reduction. However, this view contrasts with Lin (2022), who states that sustainable VC funds have a perceived less appealing risk/return profile, resulting in fundraising difficulties, and with the interviewee who suggested that there may be a conflict between potential financial returns and ESG integration. Regarding the fundraising difficulties suggested by Lin (2022), this view is contradicted in the interviews since it is mentioned that during the VC firms' fundraising activity, investors are increasingly asking about ESG-related issues.

Promoting healthier and more ethical teams that lead to more innovative and sustainable solutions, which will positively impact investment returns, as well as improving efficiency through structured processes and continuous improvement, are additional advantages identified by the interviewees. It also points out the sustainability of investments and their social contribution. Moreover, the fact that one Interviewee could not highlight any benefits related to ESG integration in VCs' investment decisions suggests a lack of awareness, knowledge, and even interest in the topic.

The results highlight the need for a balanced approach that considers the benefits of ESG integration and the potential downsides of mandatory requirements and raise questions for further research, such as the impact of incentives on the adoption of ESG practices by VCs.

5.5. Limitations and suggestions for future research

Although the findings of this study are informative and help understand how VCs in Portugal consider ESG factors in their investment decisions, the sample may also not be representative of all VC firms in Portugal, given the diversity of sectors and investment stages in which the participants' companies prefer to invest. It included only 11 venture capital professionals in Portugal, which occupy different positions in their companies and have different years of experience. These differences may limit the possibility of generalising the results to the sector as a whole.

This limitation could be resolved by carrying out a new study with a larger and more diverse sample of VC professionals in Portugal, encompassing companies with different preferences regarding investment stages and sectors.

5.6. Theoretical and Practical Contributions

The findings of this research have some practical implications and enrich the existing literature, which is still very limited. This study complements the existing literature by exploring the ESG criteria considered by VCs in Portugal, the stage of the investment process when they are considered, as well as their drivers, challenges and benefits.

The fact that some interviewees seem to confuse ESG investing with impact investing and the inability to point out the benefits of their consideration shows that VCs should have educational and informational initiatives regarding these issues.

Additionally, the existing legislation is perceived as complex and ambiguous, so regulators should provide complementary documents to help VCs understand and comply with it, in addition to standardising and harmonising the tools for capturing and calculating ESG indicators to facilitate data collection and ensure its comparability. It should be noted that these tools should cater to the different contexts and stages of development of startups.

Some of the VCs' responses also highlighted the lack of robust empirical evidence on the impact of ESG considerations on financial returns. This gap suggests that more research and data are needed to unequivocally demonstrate the benefits of ESG considerations on the financial returns of VC investments. Without this evidence, it may not be easy to convince all investors of the value of adopting ESG practices.

Finally, further research should be carried out in order to understand if the existence of incentives has a positive impact on the consideration of ESG criteria by VCs in Portugal.

6. Conclusion

The main objective of this study was to understand how VCs in Portugal consider ESG criteria in their investment decisions. To do this, interviews with eleven professionals in the field were conducted, and a semi-structured interview script was designed based on the existing literature on the subject.

VCs recognised many sources for identifying investment opportunities, including direct contacts with founders and entrepreneurs, partnerships with other ecosystem stakeholders, participation in industry events, proactive research, and data analysis model technologies. Additionally, the business model, the founding team profiles, the potential market size, alignment with the ethical values of the fund, the relevance of the identified opportunity, the product-market fit, distinctiveness of the product, the competition, traction, the commercial terms, and intellectual property aspects are the key criteria that VCs consider for accepting or rejecting an investment.

The interviewed VCs mentioned that they usually request a comprehensive range of information from startups, including product details, team profiles, financial metrics, technological insights, and legal considerations, along with market analysis and competition assessment. This information is required and obtained progressively. Nevertheless, startups may not always provide all the required information in an organised way.

The interviews show the evolving nature of ESG considerations, from VCs who assume they do not consider these criteria or do not consider them crucial, prioritising financial returns, to VCs for whom integrating these aspects is part of their investment thesis.

The main drivers of ESG integration in the investment decision of the VCs in Portugal are the fact that it is a market trend, the legislation that requires them to consider and report information related to these issues, the pressure from investors, particularly from institutional investors, and the benefits that these considerations provide to the VCs. Additionally, ESG factors are part of some VCs' fundamental values.

Although not all VCs use a formal ESG framework or scoring system, many incorporate these criteria implicitly by excluding harmful businesses and industries. VCs also provided examples of metrics for each of the Environmental, Social and Governance factors. However, some of them emphasised the relevance of Social and Governmental factors.

VCs in Portugal recognise the importance of integrating these aspects throughout the investment process. However, some highlight their importance at earlier stages, namely in Opportunity Identification and Due Diligence.

Regarding the challenges face by VCs in order to consider ESG, several aspects were highlighted, such as the immature state of startups since they do not have the structure to obtain reliable information and calculate ESG indicators, the lack of standardisation and harmonisation of the tools needed to obtain and calculate ESG data efficiently, the conflict between potential return on investment and ESG considerations, the fact that legislation is increasingly complex and ambiguous and that if ESG consideration is done too intently, the pool of potential investments may considerably reduce, are also seen as challenges.

As for the benefits, VCs mentioned the market acceptance and the enhancement of the value proposition, the attraction of investors, top talent and clients, as well as better commercial contracts, compliance with regulations and best market practices, risk mitigation that makes the risk/return profile of the investment more appealing, and the promotion of teams that lead to more innovative and sustainable solutions, that will consequently impact positively the financial returns.

In sum, the VC industry in Portugal is increasingly recognising the importance of ESG factors and the benefits they provide. VCs seek to integrate these considerations into their investments, even though they are in different stages and have different opinions regarding this topic. However, there is still a long way to go, mainly in standardising an ESG framework that allows these indicators to be captured and calculated efficiently, having clearer legislation, and VCs themselves taking initiatives to promote awareness regarding these issues.

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Appendix – Interview Structure

Table 3 - Research Questions, Interview Themes and Questions to Participants

The Research Question	Subsidiary Research Question	Topic/Themes/Tree Nodes	Questions to Participants
HOW DO VCS IN PORTUGAL CONSIDER ESG IN THEIR	I_HOW DO VCS MAKE INVESTMENT DECISIONS? (in general)	I1_HOW: Do VCs become aware of and decide on their investments?	1. In the past few years, can you describe how you became aware of investment opportunities?
			2. What investment criteria have been dom-

The Research Question	Subsidiary Research Question	Topic/Themes/Tree Nodes	Questions to Participants
INVESTMENT DECISIONS?			inant (or key) to REJECT an investment? Why? Do all decision-makers follow this? Why?
			3. Inversely, what investment criteria have been dominant (or key) to ACCEPT an investment? Why?
	II_ HOW DID VCs MAKE THE PAST/MOST RECENT INVESTMENT DECISIONS?	II1_HOW DID VCs become aware and decide their last investments?	Reporting to the last investments 4. How did you become aware of the most recent investment opportunity?
			5. What kind of information did you require, and have you received it all?
	III_HOW DO VCs IN PORTUGAL DETERMINE WHICH, WHEN AND THE DRIVERS OF ESG CONSIDERATION?	III1_WHY ESG Criteria is considered?	6. Since when has your organisation sought to integrate sustainable investing or ESG criteria into the investment process?
			7. Why do you consider ESG criteria?
		III2_WHICH ESG Criteria is considered?	8. In your last complete investment, have you considered ESG criteria? Could you please give examples of the metrics considered?
			9. How do you weigh these criteria against the other criteria you also use?
		III3_WHEN IS ESG Criteria considered (or not)?	10. In your present investments, are you considering ESG criteria? Which criteria?
			11. During which phase of the VC investment process do you

The Research Question	Subsidiary Research Question	Topic/Themes/Tree Nodes	Questions to Participants
			consider ESG criteria the most? Why?
			12. Do you typically advise start-ups in the integration of ESG criteria? How?
	IV_ HOW DO VCs ASSESS THE CONSIDERATION of ESG Criteria	IV1_ WHAT ARE THE CHALLENGES OF Considering (or not) ESG Criteria?	13. What impact do ESG factors have on your organisation's investment decision?
			14. To what extent are your investors willing to sacrifice financial returns to align with ESG considerations? (measured in percentual decrease of the IRR)
			15. In your opinion, what is the perceived impact of ESG consideration on the financial returns?
			16. What are the most critical challenges of ESG consideration in your investment decision?
		IV2_ WHAT ARE THE BENEFITS OF Considering (or not) ESG Criteria?	17. And benefits?
			18. Do you think ESG considerations should be part of the fiduciary duties of asset managers and institutional investors? Why?
PARTICIPANTS	INTERVIEWE Characteristics		19. What position do you occupy in your organisation?
			20. How many years of experience do you have in the VC sector?

The Research Question	Subsidiary Research Question	Topic/Themes/Tree Nodes	Questions to Participants
		VC FIRM Characteristics	21. How many years of experience does your VC firm have in Venture Capital?
			22. In which industries or sectors does your firm primarily focus on investments?
			23. What is the approximate total value of assets under management by your VC firm?
			24. At which stage of a company's development does your VC firm prefer to invest?