

UNIVERSAL APPLICABILITY OF
SUSTAINABILITY-DERIVED VALUE
CREATION – ALIGNING SUSTAINABILITY
WITH SHAREHOLDER INTERESTS

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Abstract

The purpose of this study is to explore the relationship between sustainability and shareholder value creation. We are living in a world facing increasingly rapid climate change. And no matter how hard we try, we still end up falling short of reaching agreed upon targets of climate treaties. A big part of the reason why is an underlying unwillingness of businesses to strive for anything but maximizing shareholder value. Thus, in order for us to drive change systemically, we have to find a way to align sustainability with shareholder interests, and we have to do it on a universal scale.

In this study I attempt to answer the question of “*Can organizations maximize shareholder value while implementing sustainable strategy, regardless of their prior engagement in sustainable operations?*”. To do this, I start by discussing the various definitions of shareholder value and how it can be measured. I then look at the concept of sustainability and how it can be applied to business. Finally, I discuss the applicability and financial viability of sustainable investments and how they can vary for different types of companies.

The study finds that businesses can become more sustainable without sacrificing their bottom line under certain conditions. This is however not always a given since sustainable initiatives sometimes do lead to lower returns. For example, sustainable businesses might face a point of diminishing returns when it comes to creating consumer good-will through sustainability. Additionally, the study finds that while companies that are not focused on sustainability might see higher-than-average returns from sustainable investments, the relationship between sustainability and risk remains inconclusive.

The study’s findings showed that sustainable strategy can be used to help maximize value for shareholders of most companies. For companies that are already sustainable, I found that they can continue to create value by focusing on reducing costs or managing risks, while avoiding investments that lead to diminishing returns. For companies that are neutral, I found that they can create value by investing in sustainable initiatives that focus on long-term growth. For companies that are actively unsustainable, I found that they can create long-term value by gradually transitioning to a more sustainable business model.

Keywords Sustainability, Shareholder value, Climate change, Stakeholders, Value creation

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1 Introduction

The endless economic growth we have been enjoying for the past centuries since the late 1700s would not have been possible without the advent of the industrial revolution and the discovery and burning of fossil fuels (Jevons, 1865; Britannica, 2018; Jones, 2021).

Before this time the world was only accustomed to a mostly zero-sum game (with positive-sum outcomes being rare but possible) (Smith, 1776), meaning a situation in which there is only something to be won by taking it away from someone else. The main vehicle for value creation back then was conquest and colonialism, and the maximization of exports as outlined in mercantilist policy.

Some would argue that not a lot has changed. Instead of us pillaging other peoples and nations, it is mainly mother nature herself that is being pillaged nowadays. By feeding capitalism's never-ending thirst for endless growth, we are polluting our environments, which leads to a loss of biodiversity and rapidly advancing climate change (U.S. Global Change Research Program, 2018; Friedlingstein *et al.*, 2022). Ultimately impacting those of us most, who are the least fortunate (World Meteorological Organization, 2022).

Others are arguing that the burning of fossil fuels is merely a transitional period, which we will leave in our past in the coming decades by utilising green technologies (Rau, Toker and Howard, 2010; Solomon and Krishna, 2011; Copenhagen Economics, 2017). According to them these technologies will let us usher in an age of truly endless growth without the added asterisk of an impending climate-doom.

Unfortunately, however, it seems like not enough is being done - at least not in a timely fashion. According to the 2022 United Nations Environmental Programme (UNEP) Emissions Gap Report, there is “no credible pathway to 1.5C in place”, referring to the limit of global warming agreed upon in the Paris Agreement of 2015, which is a legally binding international treaty on climate change (UNEP, 2022, Abstract). According to the IPCC, “a warming of 1.5 degrees will result in large-scale drought, famine, heat stress, species die-off, loss of entire ecosystems, and loss of habitable land, throwing more than 100 million into poverty” (IPCC, 2018, p. 1).

While there is meaningful change going on and the status quo seems to be shifting toward favouring a more sustainable future; and while there are more and more new start-ups popping

up with mission-statements to address these issues, the fact remains that until recently, most established organizations didn't see the value in making their operations more sustainable (Winston, 2022).

That is because organizations are not necessarily motivated by ethical considerations or by thoughts of "doing what is right", since for most firms their sole objective is to maximize shareholder value (Friedman, 1970). And shareholder value has traditionally been perceived as being antithetical to sustainability-related efforts (Laughland and Bansal, 2011).

Thus, in order for us to drive change systemically, we have to find a way to align sustainability with shareholder interests, and we have to do it on a universal scale.

Therefore, my research question is: "*Can organizations maximize shareholder value while implementing sustainable strategy, regardless of their prior engagement in sustainable operations?*".

In my thesis I will be tackling this issue head on by looking at research showing findings on firms in different industries implementing sustainable initiatives, and on their ability to create value.

In chapter two I start by writing a synthesis on the subject of *Maximizing Shareholder Value*, outlining what is meant by this concept, and how I will be utilizing it in this paper. I will be doing the same for *Sustainability in Business* in chapter three.

Moreover, I will investigate the opportunity costs incurred by choosing to invest in those initiatives, since creating shareholder value is not enough when the goal is *maximizing* shareholder value.

Finally, I will look for ways to apply my findings to different kinds of organizations. To do this, I will group all organizations into categories, divided according to their level of sustainability. These include the *Sustainably Integrated Businesses* which are organizations that have shown themselves to be capable of being sustainable, the *Neutral Businesses* which are neither sustainable nor significantly unsustainable, as well as the *Actively Unsustainable Businesses* which have built their business-models around practices that are inherently harmful to the environment.

The purpose being finding out if it is possible for any kind of organization to make sustainable decisions while simultaneously maximizing shareholder value.

This study's tentative conclusion to the research question was affirmative in nature, albeit to a varying degree depending on the circumstances of the organization in question. This variability can roughly be categorized into three distinct outcomes depending on the type of organization, which I will further delve into in chapter four.

2 Exploring shareholder value maximization

In order for us to determine the relationship between sustainability and value creation, we have to first have a clear picture of what the phrase "maximizing shareholder value" (MSV) actually entails.

In the business world, MSV is used as a goal for senior managers to focus on (Lazonick and O'Sullivan, 2000). The basic idea is that if the company can increase its value to shareholders, then everyone benefits. The problem is that there is no agreed-upon definition of MSV, and the concept is often conflated with other goals such as short-term profit maximization, or the pursuit of a higher share price (Rappaport, 1986). This chapter will attempt to provide a clearer understanding of MSV by discussing its various definitions and implications.

There are a number of ways to measure a company's value to shareholders. The most common method is to look at the market value of the company's shares, which is the price that investors are willing to pay for them (Fernández, 2002; O'Connell and Ward, 2020). This can be measured by the stock market or by private market transactions. Another common method is to look at the company's earnings, which can be measured by its net income or by its cash flow (Dobbin and Zorn, 2005; Gruca and Rego, 2005). For the sake of simplicity, I will be focusing on the former in the context of this study.

Once the value of the company has been determined, the next step is to consider how to increase it. One common way to do this is to focus on short-term profits, which can be achieved by cutting costs or increasing prices. However, this approach can be detrimental in the long run, as it can lead to a decline in the quality of the company's products or services (Clifton and Hershey H., 2016). With the forward-looking nature of this paper due to its focus on sustainability, a more suiting approach would be to focus on long-term growth, which can be

achieved by investing in new products, expanding into new markets, or improving the company's efficiency (Rappaport, 2006). According to Rappaport, this helps a company to be profitable and to have a good chance of continuing to be profitable in the future. This also helps the company to have a sound financial structure, meaning that it has enough cash to pay its bills and meet its obligations.

In the following chapters, I will be studying if and how sustainability could play a role in some of these fronts, and if that would be enough to offset any incurred expenses, including possible opportunity costs.

3 Sustainability in Business

3.1 Sustainability Through the Lens of Measurement Frameworks and Standards

The concept of sustainability has been gaining increasing attention in business and management literature in recent years. A search of the Business Source Complete database using the terms “sustainability” and “business” yields over 35,000 results. Sustainability is now widely recognized as a key strategic issue for businesses and organizations (Bansal and Roth, 2000; Hart and Dowell, 2011; Porter and Kramer, 2011; Epstein and Buhovac, 2013; Winston, 2022).

There is no single definition of sustainability, but the term is generally used to refer to the need to meet the needs of current generations without compromising the ability of future generations to meet their own needs (Brundtland, 1987). In other words, sustainability is about having foresight and investing in the long-term.

The concept of sustainability has been applied to a wide range of issues, including economic development, environmental protection, social justice, and corporate social responsibility. In this study my approach is not to focus on just a subset of these, but instead to take all these different facets of sustainability into account, depending on the frameworks that are used to measure sustainability in the sources referenced.

A number of initiatives, frameworks and measurement standards have been launched in recent years to promote and measure sustainable development and corporate sustainability, including the United Nations Sustainable Development Goals (SDGs), the ISO 14001 standard for Environmental Management Systems, and different Corporate Social Responsibility (CSR) Standards just to name a few. Scholars have both praised and criticized many of these initiatives, frameworks and standards for being both effective tools for managers and investors to measure environmental impacts of companies, and simultaneously falling short in many aspects (de Colle, Henriques and Sarasvathy, 2013; Jankalova, 2016; Fransen, Kolk and Rivera-Santos, 2019).

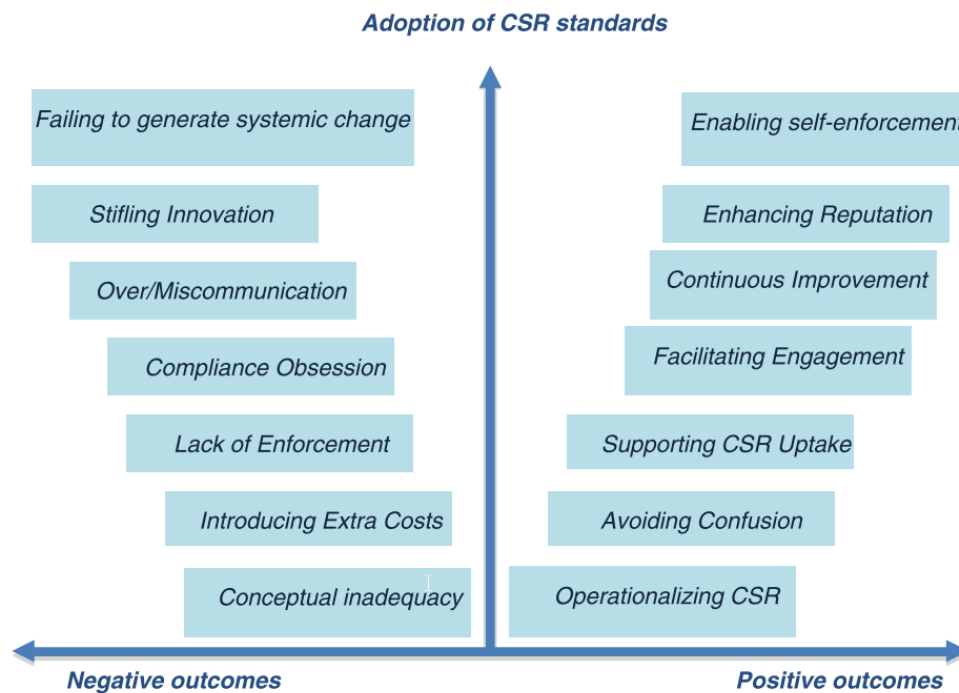
In chapter 3.2, to illustrate this phenomenon, I have chosen to highlight it in the context of Corporate Social Responsibility (CSR) standards. CSR standards lend themselves as great examples of systems that can be both invaluable and useful at times while also falling short at others, due to them being as widespread and diverse in practice as they are. However, I could have just as well chosen any other sustainability-measuring framework for this illustration, as they all share similar strengths and weaknesses.

3.2 The Strengths and Weaknesses of Corporate Social Responsibility Standards

In their paper de Colle et al. (ibid.) went into great detail on both positive and negative potential aspects of the adoption of CSR standards and argued that CSR standards can often lead to the “emergence of a thoughtless, blind and blinkered mindset” (p. 177), which goes against the organization’s goal of the enhancement of social responsibility. These positives and negatives have been highlighted in Figure 1.

Figure 1

Adoption of CSR standards



Note: By de Colle, Henriques and Sarasvathy, 2013, p. 180

These aspects highlighted in Figure 1 can be summarized as follows:

1. *Failing to generate systemic change*: CSR alone might not be enough to solve societal problems, since it only works on a corporate scale, and doesn't for example address public policy.
2. *Stifling Innovation*: Standards might suggest the usage of predefined processes, and thus inhibiting the creation of new and creative solutions to problems.
3. *Over/Miscommunication*: Companies might be encouraged to share as much data as they can to meet reporting requirements, which leads to them being unable to effectively communicate their actual social performance to stakeholders.
4. *Compliance Obsession*: The nature of CSR can lead to companies focusing on compliance or conformity to rules, which leaves less room for decision-making based on company values, which would in some cases be more effective.
5. *Lack of Enforcement*: CSR standards are voluntary and not a legal requirement. This might lead to poor levels of effectiveness of the standard.

6. *Introducing Extra Costs*: CSR implementation costs, and the cost of getting external certifications, can be very high, especially for small and mid-size companies.
7. *Conceptual inadequacy*: There are methodological problems in trying to quantify complex and ethical issues into measurement standards. There is also significant overlap present between multiple different standards, which leads to increased confusion over terminology.
8. *Enabling self-enforcement*: Employees and managers are more likely to act responsibly if they feel that they will be recognized for it, lessening the need for enforcement costs such as outside control or sanctions.
9. *Enhancing Reputation*: The adherence to CSR standards can increase public and stakeholder perception of the company.
10. *Continuous Improvement*: CSR standards can be continuously improved and built upon.
11. *Facilitating Engagement*: CSR standards promote an atmosphere for partnerships and engagement between the company and its stakeholders.
12. *Supporting CSR Uptake*: The creation of CSR-standards leads to the adoption of CSR practices, which further promotes and spreads the uptake of CSR standards as a whole.
13. *Avoiding Confusion*: By establishing widely accepted and commonly used processes and practices, CSR standards help lessen confusion when it comes to the use of methodologies and the language surrounding them.
14. *Operationalizing CSR*: CSR standards help turn abstract concepts and values into practical solutions and frameworks.

De Colle et al. (ibid.) argue that these aspects lead to a *Paradox of Corporate Social Responsibility (CSR) standards*, arising in problems in the forms of *deceptive measurements*, *responsibility erosion* and *blinker culture*.

According to de Colle et al. (ibid.) the *problem of deceptive measurements* arises when CSR standards are used to measure abstract characteristics such as intellectual capital or human development. In other words, trying to measure the unmeasurable. Another dimension of this problem is the vagueness that is oftentimes present in the concepts that CSR standards try to measure. This vagueness can lead to the organization that is being audited, to cherry pick areas at which it is easiest to excel and earn higher scores, instead of actually trying to fix core areas where their highest risks were likeliest to occur.

The problem of responsibility erosion arises from the behaviour associated with achieving compliance to rules and schemas laid out in Corporate Social Responsibility (CSR) standards. The sole object of decision-making becomes doing things in a way that adheres precisely to the rules. This outsources all of the responsibility to the CSR standards and leads to “a tendency towards a quasi-automatic thinking, by which individuals ask themselves ‘Am I following the rule?’ instead of ‘Am I doing the right thing?’” (de Colle et al., *ibid.*, p. 158).

According to de Colle et al., *The Problem of Blinkered Culture* arises, because CSR standards promote the focusing on the implementation process of the standards. This causes organizations to face primarily inward and overlook the needs and concerns of stakeholders.

Due to this inherent multiplicity of the different frameworks and standards, and the multitude of strengths and weaknesses encompassed therein, I have opted not to focus on just a singular one for this thesis. This would have limited me in terms of source material, which would have prohibited me from giving this study the general scope it has now. Instead, for the purposes of this study, I will choose which framework to utilize on a case-by-case basis, depending on which one’s strengths and weaknesses best align with the question at hand.

4 Bridging the Gap – How Maximizing Shareholder Value and Sustainability can come together

4.1 Sustainable Strategies for Maximizing Shareholder Value

There are a number of ways businesses can implement sustainable initiatives while maximizing shareholder value (Bocken *et al.*, 2014). Whilst there are numerous such examples, for this thesis several stand out and shall be highlighted here. One way is to focus on reducing costs. A sustainable business is often more efficient, and therefore has lower costs (Bocken *et al.*, 2014). For example, a sustainable business might use less energy, water, and materials. This can lead to lower production costs and lower prices for consumers (Dobiás and Macek, 2014).

Another way businesses can implement sustainable initiatives while maximizing shareholder value is by focusing on risk management. A sustainable business is often better at managing

risks because it takes a long-term view (Lee and Faff, 2009). For example, a sustainable business might be less likely to pollute, because it knows that this would damage its reputation and lead to costly fines. Bocken et al. (ibid.) have outlined a comprehensive list of examples for ways in which companies can develop sustainable business models. They did this in the form of sustainable business model archetypes, outlined in figure 2.

Figure 2

The sustainable business model archetypes

Groupings	Technological			Social			Organisational	
	Archetypes	Archetypes	Archetypes	Archetypes	Archetypes	Archetypes	Archetypes	Archetypes
	Maximise material and energy efficiency	Create value from waste	Substitute with renewables and natural processes	Deliver functionality rather than ownership	Adopt a stewardship role	Encourage sufficiency	Repurpose for society/environment	Develop scale up solutions
Examples	Low carbon manufacturing/solutions	Circular economy, closed loop	Move from non-renewable to renewable energy sources	Product-oriented PSS - maintenance, extended warranty	Biodiversity protection	Consumer Education (models); communication and awareness	Not for profit	Collaborative approaches (sourcing, production, lobbying)
	Lean manufacturing	Cradle-2-Cradle	Solar and wind-power based energy innovations	Use oriented PSS- Rental, lease, shared	Consumer care - promote consumer health and well-being	Demand management (including cap & trade)	Hybrid businesses, Social enterprise (for profit)	Incubators and Entrepreneur support models
	Additive manufacturing	Industrial symbiosis	Zero emissions initiative	Result-oriented PSS- Pay per use	Ethical trade (fair trade)	Slow fashion	Alternative ownership: cooperative, mutual, (farmers) collectives	Licensing, Franchising
	De-materialisation (of products/packaging)	Reuse, recycle, re-manufacture	Blue Economy	Private Finance Initiative (PFI)	Choice editing by retailers	Product longevity	Social and biodiversity regeneration initiatives ('net positive')	Open innovation (platforms)
	Increased functionality (to reduce total number of products required)	Take back management	Biomimicry	Design, Build, Finance, Operate (DBFO)	Radical transparency about environmental/societal impacts	Premium branding/ limited availability	Base of pyramid solutions	Crowd sourcing/funding
		Use excess capacity	The Natural Step	Chemical Management Services (CMS)	Resource stewardship	Frugal business	Localisation	"Patient / slow capital" collaborations
		Sharing assets (shared ownership and collaborative consumption)	Slow manufacturing			Responsible product distribution/promotion	Home based, flexible working	
		Extended producer responsibility	Green chemistry					

Note: By Bocken et al., 2014, p. 48

I will provide a short summary of each of Bocken et al.'s sustainable business model archetypes in Figure 2. For a more comprehensive overview, consult the source material.

1. *Maximise material productivity and energy efficiency Definition:* The practice of utilizing resources more efficiently. This means one can do more with less all while generating less emissions, waste and pollution.

2. *Create value from 'waste'*: The practice of repurposing waste streams into valuable resources in the production chain.
3. *Substitute with renewables and natural processes*: Increases business resilience by circumventing growth limits resulting from non-renewable processes and resources while simultaneously reducing environmental impacts.
4. *Deliver functionality, rather than ownership*: Focuses on delivering services that can satisfy customer needs without them having to own physical products.
5. *Adopt a stewardship role*: The process of proactive engagement with stakeholders, to ensure their health and well-being in the long-term.
6. *Encourage sufficiency*: The process of finding solutions that actively reduce both production and consumption.
7. *Re-purpose the business for society/environment*: Abandoning shareholder value maximization as the primary goal of the business in favour of social and environmental goals.
8. *Develop scale-up solutions*: The process of delivering large-scale sustainable solutions to maximize environmental and societal benefits.

These are just some of the ways in which companies can bring sustainability into their strategy, and no solution is a one-size fits all. When thinking about implementing sustainable initiatives, companies should consider their options carefully. Regardless of the specific methods used, implementing sustainable initiatives oftentimes leads to a more positive public perception of the firm. This lets the company charge premium prices for their products and services because consumers are willing to pay more for products that are environmentally friendly (Trudel and Cotte, 2009). Additionally, it has been shown that sustainable businesses tend to have employees who are more engaged because they believe in the company's mission (Epstein and Roy, 2001). According to Epstein et al., this can lead to higher employee productivity and lower turnover.

Finally, sustainable businesses are better able to weather economic downturns (Przychodzen and Przychodzen, 2013). This might be because consumers are still willing to spend money on products and services that are environmentally friendly, even when they are cutting back on other expenses.

4.2 The Opportunity Costs of Sustainable Investments

When deciding whether to make an investment or not, managers need not only evaluate the risk-adjusted return on the investment, but also consider the returns of alternative investments. Even if the investment was deemed “profitable”, another investment might prove itself even more so. This is called the opportunity cost of the investment. As defined by Black, Hashimzade and Myles (2009, p.105) the opportunity cost is “the cost of something in terms of an opportunity forgone. Opportunity cost is given by the benefits that could have been obtained by choosing the best alternative opportunity.”

Cai, Cooper and He (2021) surveyed data of around 3100 U.S. companies for their ESG-scores. ESG-scores are defined as “an objective measurement or evaluation of a given company, fund, or security’s performance with respect to Environmental, Social, and Governance (ESG) issues” (Miller, 2022, para. 1). According to Miller (ibid.) there are different rating platforms that have their own evaluation criteria that differ from one another, but they all address at least one of the three ESG categories.

Cai et al. (ibid.) found that investing in companies that are exclusively above average in their ESG-scores, would indeed lead to incurred opportunity costs. This sort of positive screening would reduce portfolio diversification benefits, increase volatility, and lead to lower risk-adjusted returns and higher transaction cost penalties. On the other hand, Cai et al. (ibid.) also found that by screening for companies that have below average ESG-scores, one can avoid opportunity costs while simultaneously investing more sustainably. This leads me to conclude that while it is possible to make sustainable investments without incurring opportunity costs, this is not always a given. Following this line of reasoning, sustainable investments seem to lead to less associated opportunity costs for unsustainable companies than for their sustainable counterparts, which suggests that there might be a point of diminishing returns when it comes to sustainable investments.

Traditionally, the law of diminishing returns is defined as coming into effect when “equal quantities of capital and labor are applied successively to a given plot of land, the output resulting from these applications will increase monotonically at first up to a certain point, after which further applications will result in steadily decreasing product increments tending to zero” (Shephard and Färe, 1974, p. 287). In other words, additional outputs stop increasing at the same rate as additional inputs, eventually plateauing at the point of diminishing returns. In the

context of sustainability and this study, it is meant as the diminishing returns from sustainable investments in the form of shareholder value. I will further discuss the effect of diminishing returns of sustainability in chapter 4.3, specifically in the section about *sustainably integrated businesses*.

4.3 Different Results for Different Companies

While I have established that there are ways in which businesses can generally become more sustainable without sacrificing their bottom line, I still have yet to fully explore if these measures are yielding the same results when applied to different types of companies. I will now attempt to divide companies into three different categories, based on their level of sustainability. These include *Sustainably Integrated Businesses*, *Neutral Businesses*, and *Actively Unsustainable Businesses*. I had two reasons for deciding on this categorization for distinguishing between companies in this study.

One is due to the fact that existing research mainly focuses on either one of the two ends of the sustainability-spectrum, that is companies that are either very sustainable or very unsustainable. Or alternatively, the research focuses on a more generalizing perspective, which takes into account the wider market including all types of companies. Because of this, the distinction between companies on the basis of their “level of sustainability” seemed natural.

The other reason being the realization that this is such a wide and far-reaching topic, that a one-size-fits-all solution is not feasible, and it instead calls for more nuance when it comes to reaching any kind of meaningful conclusions and/or recommendations

Sustainably Integrated Businesses:

On first glance, it would seem logical to reason that for companies that have already positioned themselves as sustainable entities, it should be easier to rationalize new investments toward new sustainable operations, as these investments coincide with the businesses’ value propositions and business models right off the bat. Companies like this may also have already proven their ability to make profitable sustainable investments, further strengthening this line of reasoning.

Ultimately however, I was unable to find any supporting evidence that would back this hypothesis. In fact, I found evidence that seems to suggest that the opposite might be true, in the sense that sustainable companies might be facing a point of diminishing returns when it comes to added value from creating consumer good-will through sustainability (Trudel and Cotte, 2009). According to Trudel and Cotte (ibid.), sustainability-derived benefits can also be achieved by only “partial” sustainability. A company can for example expect to reach similar results from selling a shirt which was fully ethically sourced, and from selling one that was only 25% ethically sourced. This would suggest that a company might not see comparably high returns from subsequent sustainable investments, as opposed to what they saw the first times around.

This notion of diminishing returns is further supported by the findings of Cai, Cooper and He (2021), which show a correlation between the amount of opportunity costs of sustainable investing and the level of the firm’s sustainability, where unsustainable businesses can become more sustainable without having to forgo higher alternative returns on investment, whereas the more sustainable business potentially can’t.

These findings suggest, that for companies in this category to maximize their shareholder value, they would have to consider focusing on managing risk and/or on lowering costs, while making investments that are in line with their previous investments in terms of sustainability, instead of making large investments towards becoming even more sustainable.

Neutral Businesses:

Przychodzen and Przychodzen (2013) found that in the years of 2006-2010 only 17% of Standard & Poor’s (S&P) 500 companies were sustainable. Meanwhile according to research by (CDP, 2022), only 1.5% or 200 out of 13000 companies scored their best possible “A” score when it comes to climate change related sustainability in 2021. This suggest that most companies would fall in the *Neutral Businesses* category.

Neutral Businesses are businesses, that one hand aren’t necessarily focused on providing their products and services in a sustainable manner, but on the other hand they are not significantly unsustainable in the way they operate and produce their goods and services either. Companies in this category could make their operations more sustainable but are unwilling to do so if it meant sacrificing the maximization of shareholder value. Thus, for these companies to invest

in sustainable operations, one would have to prove to them that sustainability would lead to higher-than-average returns, and/or lower risk.

In fact, a growing body of research shows, that companies that act sustainably regularly outperform the wider market (Bansal and Roth, 2000; Trudel and Cotte, 2009; Lee and Faff, 2009; Hart and Dowell, 2011; Porter and Kramer, 2011; Przychodzen and Przychodzen, 2013; Epstein and Buhovac, 2013; Dobiás and Macek, 2014; Gómez-Bezares, Przychodzen and Przychodzen, 2017; Beck *et al.*, 2021; Kyaw, Thomsen and Treepongkaruna, 2022).

When it comes to risk mitigation however, the evidence is more conflicting (Boutin-Dufresne and Savaria, 2004; Lee and Faff, 2009; Gómez-Bezares, Przychodzen and Przychodzen, 2017). According to Gómez-Bezares et al. (*ibid.*), sustainable companies are exposed to higher risk than their non-sustainable counterparts, at least during times of financial uncertainty, such as the Global Financial Crisis of 2008-2009.

On the other hand, Lee and Faff (*ibid.*) argue that companies lagging in Corporate Social Performance (CSP), that is a framework which is used to measure Corporate Social Responsibility (CSR), which in itself a form of sustainability self-reporting (Wood, 1991), are facing higher levels of idiosyncratic risk, or unique risk, than their CSP-leading counterparts. This notion seems to be supported by research done by Boutin-Dufresne et al. (*ibid.*). Their findings show that the adoption of Corporate Social Responsibility can “help diminish the overall business risk of a company, and even improve its long-term risk-adjusted performance.” Boutin-Dufresne et al. (*ibid.*, p.57).

Thus, for companies in the *Neutral Businesses* category, it would be advised to focus on long-term sustainable investments since precedent suggests that they tend to offer higher average returns than investments without the sustainability aspect. They should also be keeping a close eye on risk-management since the relationship between risk and sustainability is frequently contested and not yet fully understood (Boutin-Dufresne and Savaria, 2004; Lee and Faff, 2009; Gómez-Bezares, Przychodzen and Przychodzen, 2017).

Actively Unsustainable Businesses:

With some companies there are underlying tensions between the pressure they face “to contribute to the social goal of climate change mitigation, and the need to perform financially and meet obligations to shareholders in activities that directly contribute to climate change”

(Halttunen, Slade and Staffell, 2022, p. 1). Halttunen et al. dub this phenomenon as the sustainability transition paradox. According to them, companies dealing with this paradox have their main source of revenue and their entire business model dependant on polluting activities such as oil extraction. While these companies can pivot and diversify to include sustainable products in their portfolio, the fact remains that the only way for them to reach net sustainable operations, would be for them to significantly reduce their main profit drivers.

According to Beck et al. (2021), companies faced with this conundrum have three courses of action available to them: They can either opt to do nothing and continue as they were, without investing into sustainable operations. Alternatively, they can gradually transition towards being sustainable by implementing sustainable transition strategy. Their last option would be to change their whole business model by getting rid of all unsustainable operations in favour of sustainable ones. For reference, in the energy sector companies following these strategies are called resource specialists, integrated energy players, and Low Carbon Pure Players, respectively (Beck *et al.*, 2021).

Out of these three courses of action, the second, that is the gradual sustainable transition strategy, seems to be the most feasible for most companies in the *Actively Unsustainable Businesses* category, since refusing to grow with the times will inevitably lead to being underpriced by low-cost renewables or run out of business by carbon taxes or other restrictive climate policies and laws somewhere down the line (Semieniuk *et al.*, 2022). And again, for most companies in this category, changing up their whole business model at once would not make any business sense, and lead to large-scale losses. This leaves us with second course of action, that is being a transition business, or an integrated player, which while not exactly sustainable in the strictest sense of the word – would be the way to go for most companies in this category, both in terms of long-term maximization of shareholder value and increasing sustainability.

5 Conclusions and Discussions

The purpose of this paper was to investigate the potential for organizations to make sustainable decisions while maximizing shareholder value. It attempted to answer the question of “*Can*

organizations maximize shareholder value while implementing sustainable strategy, regardless of their prior engagement in sustainable operations?''. To do this, I first looked at the concept of shareholder value and how it is typically measured. I ended up using the definition provided by Rappaport (2006), because of its focus on long-term growth. I then looked at the concept of sustainability and how it is being applied in business. Due to the vast number of frameworks and standards related to sustainability, and all the different strengths and weaknesses related to each of them, I decided against using just a single one for the purposes of this study, and instead opted for a case-by-case-basis approach. I explored the work of de Colle, Henriques and Sarasvathy (2013), who laid out a comprehensive overview of the strengths and weaknesses of corporate social responsibility standards. Finally, I looked at if and how sustainable initiatives can be used to create value for shareholders of different kinds of companies.

My findings showed that sustainable strategy can be implemented to help maximize value for shareholders of most companies. For companies that are already sustainable, I found that they can continue to create value by focusing on reducing costs or managing risks while avoiding investments that lead to diminishing returns (Trudel and Cotte, 2009; Cai, Cooper and He, 2021). For companies that are neutral, I found that they can create value by investing in sustainable initiatives that focus on long-term growth (Boutin-Dufresne and Savaria, 2004; Lee and Faff, 2009; Gómez-Bezares, Przychodzen and Przychodzen, 2017). For companies that are actively unsustainable, I found that they can create long-term value by gradually transitioning to a more sustainable business model (Halttunen, Slade and Staffell, 2022; Beck *et al.*, 2021).

The findings of this study have a number of implications for businesses and managers. This study has shown that most organizations can make sustainable decisions while maximizing shareholder value. This is true to varying degrees, depending on the type of organization. Therefore, it is important for managers to recognize the type of business they are leading when making strategic decisions, in order to best leverage the opportunities and risks associated with sustainable investments. Overall, these findings however suggest that organizations do not have to sacrifice profitability in order to be sustainable and vice versa.

The fact that the relationship between risk and sustainability is frequently contested and not yet fully understood, highlights a need for even further research (Boutin-Dufresne and Savaria, 2004; Lee and Faff, 2009; Gómez-Bezares, Przychodzen and Przychodzen, 2017). Subsequent research on the matter could focus on answering the question of why existing research has

reached such a myriad of conclusions depending on the paper. To do this, researchers could for example examine the methodologies and data sets used and determine if narrowing the frames of reference could lead to more consistent results.

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