

# Sustainable Investment: Consequences for Psychological Well-Being

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**Abstract:** This paper sets the stage for research on sustainable investment (SI) related to psychological well-being (PWB). It recognizes the threat of current global consumption levels to exceed the planetary boundaries and asks what roles financial markets may play in reducing these threats without compromising PWB. SI integrates environmental (E), social (S), and governance (G) factors alongside financial factors in investments in company shares and bonds as well as through active engagement in companies. Barriers to ESG integration include lower short-term financial performance, higher financial risks, and insufficient ESG screening by investors. A brief review of PWB shows that reliable and valid measurement methods have been developed, that the resulting measures complement economic and social national welfare indicators, and that health, sufficient material welfare, income equality, and non-material consumption are important determinants of PWB. The challenge is to globally reduce private material consumption levels in affluent countries. It is suggested that one role SI may play is in investing or actively engaging in companies that efficiently meet an increasing consumer demand of non-material consumption. Future research should address this role of SI.

**Keywords:** sustainable investment; psychological well-being; unsustainable consumption; conceptual analysis; review



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## 1. Introduction

The over-spending on private material consumption by people in industrialized countries and in the growing middle and upper classes of developing countries constitutes a serious threat of exceeding the planetary boundaries [1,2], does not seem to boost individual happiness [3], and may expose citizens to inequalities in material welfare known to negatively affect their well-being [4]. In this paper, focusing on sustainable investment (SI) and psychological well-being (PWB), we analyze what future consequences financial investment may have for a sustainable reduction in consumption levels without placing at risk citizens' long-term PWB. Primarily, our argument is that investments and active engagements should be made in a growing number of companies that provide substitutes to material consumption. We end with noting the need for additional conceptual analysis as well as theoretical and empirical SI studies addressing our suggestions.

Sustainable investment refers to the integration of environmental (E), social (S), and governmental (G) factors in financial investment decisions [5]. Other terms with similar or identical meanings include ethical investment, responsible investment, socially responsible investment, and impact investment. For analyses of the differences, see [6,7]. An increase in SI during the last few decades has been observed [8,9]. This increase is internationally recognized by the establishment of the United Nations' Principles of Responsible Investment [10]. Collective beliefs inferred from mass-media coverage in a study [7] show how integration of ESG factors emerged from 2005 and on preceded by ethics concern (1985–1991), "green niche" concerns (1992–1997), and social responsibility concerns

(2001–2004). The same study also traced the transition of the investor community's focus from definition (What is SI?) through justification (Why do SI?) to implementation (How to do SI?). A simplification that we adopt in this paper is that SI has indirect effects on sustainable development through financing the production of sustainable goods and services. Specifically, the influences are through (i) investors (capital markets) who finance company activities by buying and selling stocks and bonds and (ii) shareholders who exercise their rights of share ownership over company management [11]. In a future perspective, an increase in sustainable production is necessary although not sufficient to globally attain the sustainability goal if consumption levels are not reduced [12–14]. In the last section, we raise the issue of how SI may contribute to reduced consumption levels.

In capitalistic economies, financial investment needs to be profitable. Investing in sustainable production may not pay off in the shorter term. A higher uncertainty would therefore be associated with SI returns. Two recent reviews of SI research [15,16] suggested that non-financial returns (hence equated with integration of ESG factors) have not been an important focus for investors, although there are exceptions. One motivation for some investors is that alternative investments to SI run high future risks if current production and consumption patterns continue to exert pressures on the planetary boundaries [11]. Another motivation is a long-term investment horizon. As an example, long-term sustainability consequences are found to be important to private retirement investors [17–19]. Institutional investors in pension funds may likewise have a long-term investment horizon [20]. Taking into account life-cycle analyses and product durability is another example [21].

An issue facing SI is determining what production is sustainable and how PWB directly or indirectly is influenced. A too-limited approach is to only target the production. In this paper, we argue that SI should also include what effects products and their consumption have. Investments in innovations are likewise an important part of SI if the prospect is to change production (e.g., fossil-free steel production) or products and their consumption (e.g., electric vehicles) in the direction of increased sustainability.

PWB may still be considered by investors to be a non-financial return that is particularly difficult to operationalize. Yet, we show in the following section how PWB is related to health, material wealth, and consumption, all depending on financial outcomes. We also show that PWB is itself a measurable construct. Some governments use PWB measures as a complement to economic and social national welfare indicators [22].

The remainder of this paper has three sections. In the first section, impediments to sustainable investment are analyzed. Then follows a section reviewing recent research on PWB. Finally, the question is raised of how SI can reduce consumption levels without threatening but increasing PWB.

## 2. Sustainable Investment

### 2.1. Goal Conflicts

Integrating ESG factors in financial investment decisions refers to the consideration of environmental, social, and governance factors alongside financial factors. Investments in companies should thus take into account their performance with respect to environmental factors such as conservation of natural resources, abating carbon emissions and climate change, and reducing air and water pollution; social factors such as people and relationships, custom satisfaction, and personal integrity; and governance factors such as standards for running companies, board composition, and auditing [15]. In addition to not knowing how to take these factors into account relative to financial factors, the issue is how the ESG factors should be weighed. It is argued that environmental factors receive less weight than social and governance factors [15]. A reason may be the higher difficulty in the short term to assess environmental factors involving uncertain future consequences [23].

Integration of ESG factors has furthermore not consistently been shown to have positive effects on financial performance [24–26]. It has been argued that that low short-term financial performance is a barrier to the integration of ESG factors [27]. Investors may interpret their fiduciary duty as excluding the fact that societies demand companies to

act in ways that improve environmental, social, and governmental factors [28]. Another factor is increased risk if ESG integration limits diversification by narrowing investment options [29,30]. This may partly be offset by the fact that many companies reporting ESG integration have a less aggressive risk profile [31].

A requirement for resolving the conflict between financial performance and ESG integration is that investors know what the long-term positive ESG returns are. It was accordingly proposed [11] that information about sustainability should be disseminated to capital markets. ESG reporting and indexing (see next subsection) are measures that have been implemented. It was further proposed [11] that incentives to adopt a long-term investment horizon should be encouraged and the reverse discouraged. Awareness of ESG factors among investors also needs to be fostered.

## 2.2. ESG Reporting and Indexing

ESG, or non-financial reporting (NFR), has been developed in response to UN and governmental demands on companies to improve their social and environmental record and to disclose how they take into account non-financial factors. Previous research shows that NFR has different names and belongs to different types of reporting reflecting its long history. Environmental reports were first published in the late 1980s by companies in the chemical industry, which, because of serious image problems, were forced to make working conditions and environmental impacts open to public monitoring. Examples of other names include sustainability reports, social responsibility reports, social and environmental reports, and integrated reports [32]. A study has demonstrated that the meaning of NFR is still ambiguous and multifaceted since there is no shared understanding and definition [33]. While more recently referring to social and environmental information, some still conceive of NFR as less inclusive pertaining to corporate social responsibility issues, intellectual capital information, or information external to financial statements. Yet, evidence reveals that most companies use the Global Reporting Initiative (GRI) [34] to comply with regulations [35,36].

The GRI was established in 1997 promoted by the Organization for Economic Cooperation and Development (OECD), the United Nations Global Compact, and the International Organization for Standardization (ISO). It has created an international standard for NFR to offer companies as well as governmental and non-governmental organizations an easy-to-use, scalable, and straightforward framework. The general idea is that “what gets measured gets done”. A goal is thus to provide companies with information so that they can make continuous improvements in all of the three areas: environmental, social, and governmental. Promoting disclosure of ESG is believed to ultimately benefit both the company and its stakeholders by enhancing external and internal decision making, achieving more transparency, and improving companies’ environmental record and social legitimacy.

GRI reporting implies that companies have a responsibility that supersedes their contractual duties to shareholders and other stakeholders. Such a responsibility includes externalities to the environment and society [37], thus overcoming a narrow market view of accountability. Evidence indicates that firms reporting information on their ESG accountability activities are less likely to engage in misconduct [38]. The disclosure also acts to prevent punishment by the stock market when misconduct occurs [39]. Previous research has furthermore demonstrated that NFR contributes to improved financial performance of companies as well as creating a competitive advantage [24,40,41]. Several explanations have been proposed of the relation between NFR and company financial performance. One is that NFR provides improved transparency, increased trust, and legitimacy among stakeholders and investors which will reduce the cost of re-financing the company or bring in more capital. Some empirical support was reported by [42] who found a positive correlation between sustainability score and cost of capital. Another explanation is that disclosure of ESG information is perceived by investors as an indicator of how companies control business risks [31]. Two additional explanations are that companies striving for higher ESG ratings have lower future costs of adapting to coming legislation of improved

environmental and social protection and that they are more likely to be ahead of their competitors in adopting best practice [43].

The development of NFR has furthermore been facilitated by a growing interest among institutional and private investors practicing SI. Contingent on this interest, several ESG indexes have in parallel been developed. Such indexes differ from ESG reporting in being provided by independent rating agencies who acquire, evaluate, and compile information about companies and their markets. Today there are more than 1500 equity, fixed-income, and climate ESG indexes that play an essential role in enabling investors to identify sustainable investment opportunities and to benchmark performance. Addressing ESG issues has become a risk-management concern for investors, shareholders, and governments; addressing these issues has for investment companies become a component of a competitive strategy [44]. Although, in the early 1990s, a majority was indifferent, over time investment companies have started to use ESG ratings and communicate about the topic both internally and externally [45]. ESG factors are now viewed to be important, in particular because of being increasingly believed to have financial weight in investment portfolios [46] and being considered to be crucial for success [47].

### 3. Psychological Well-Being

Well-being is a complex and multifaceted construct [48]. A distinction is frequently made between objective and subjective measures of well-being. Whereas the former refers to standards of living, the latter captures psychological, social, and spiritual aspects based on judgments people make about their lives [49]. When these measures include psychological aspects (e.g., happiness), they are referred to as measures of psychological well-being (PWB). Subjective well-being, or SWB is another more commonly used term. The most important difference is that SWB has historically not included eudaimonic well-being [50,51]. This difference is not important for the arguments in this paper. We use the term PWB to emphasize the relation to psychology.

The World Health Organization (WHO) defines health as complete physical, mental, and social well-being and not merely the absence of disease or infirmity [52]. In a similar vein, PWB cannot be equated with the mere absence of psychological distress [53]. Empirical studies show that, in general, the relation between self-reported positive and negative psychological states is only moderately negative [54]. Furthermore, psychological distress and well-being are believed to have different biological correlates [55].

Three theoretical dimensions of PWB have been proposed [49]: hedonic well-being (e.g., feeling happy, more frequently experiencing positive affect than negative affect), evaluative well-being (e.g., being satisfied with life as a whole or with life domains such as work, family, and leisure), and eudaimonic well-being (e.g., finding purpose in life, feeling a sense of mastery and autonomy). Although these constructs refer to subjective judgments or experiences, reliable and valid objective measures of each have been developed [56–58].

PWB has been contrasted to material wealth. If material wealth has the important role that it is supposed to have at the citizen level, this may justify the use of economic national indicators for assessing the state of well-being of a society. The gross domestic product (GDP) per capita is one possible indicator of an individual citizen's well-being, but others have been developed (e.g., income, spending, assets), standardized, and used. A general criticism of the GDP is that it, in fact, provides limited information about citizens' well-being [59]. A similar argument made by [60] is that economic indicators exclude many potentially important factors, for instance, social capital, environmental pollution, and fair and effective government.

Social national indicators are used to complement economic indicators (for examples, see [22]). The rationale is that such indicators assess life circumstances that are important for citizens' well-being [61]. The selection of indicators would optimally be based on theory. One proposed theory implies that people need capabilities (e.g., education, health) to have a good life [62]. Related to this theory is the Human Development Index used by the UN

in international comparisons. In many countries worldwide, different systems of social national indicators have been implemented in policies.

The relationship between measures of PWB, economic indicators, and social indicators is, in general, positive although modest [63]. Therefore, it has been argued that PWB measures complement the economic and social national indicators [22]. PWB measures may also inform about what citizens consider to be the relative importance of different material resources, thus providing a guide to public policy implementation as well as a method for evaluating their outcomes. In the following, we briefly review research showing how PWB is related to health, material wealth, and consumption. All these outcomes have important influences on economic and social indicators.

### 3.1. Health

Growing evidence suggests that the PWB dimensions are associated with subsequent chronic disease and mortality although not with recovery from illnesses [64]. Potential mechanisms explaining the associations include stress-buffering effects, development of healthy habits (e.g., physical activity), and quitting unhealthy habits (e.g., smoking) [65]. It is not always clear whether these longitudinal relationships remain after control of other factors (e.g., socioeconomic status) that influence both PWB and health outcomes. Yet, recent meta-analyses [66] show that after statistical adjustment for potential confounders, life satisfaction, positive affect, purpose in life, and optimism are protective against premature mortality. It has also been shown that specific health conditions such as heart attacks and strokes reduce PWB [63]. Therefore, the association of PWB with health outcomes is likely to be bidirectional [67].

Whether or not the causal direction can be determined, an association between PWB and health outcomes that is not confounded is important to consider in public health policies [49] with the goal of increasing PWB in a society. Yet, the causal direction is essential for determining what policies to implement. It is also important to know for public and private investments. A reasonable conclusion is that bad health cannot be compensated for by increasing PWB, but good health is not necessarily sufficient for high PWB.

### 3.2. Material Wealth

In economics, material wealth is the dominant objective indicator of well-being [68]. Material wealth is assumed to be positively related to utility which is the term traditionally used in economics for well-being. Happiness has later become a more commonly used term [69]. Happiness has been assessed at national levels in studies conducted worldwide [70]. The results [71,72] demonstrate a substantial effect of material wealth (usually proxied by income) on the difference in average happiness between affluent and poor countries. However, within already affluent countries, material wealth has a diminishing influence. A paradoxical finding first noted by [73] is that average happiness has, in some affluent countries, increased less than the GDP over time. A possible explanation is the relative income hypothesis that citizens compare themselves to others in evaluating their happiness. Related studies have shown that inequality of income distributions in affluent societies negatively affects PWB, in particular among low-income citizens perceiving inequality [4]. Another possible explanation is that people adapt to wealth increases by raised aspirations [57]. A third possible explanation is that both rich and poor people in affluent societies are forced into or choose hectic lifestyles leading to negative experiences of time pressure [74,75].

### 3.3. Consumption

The well-being effect of material wealth depends on markets offering goods and services that citizens are able to choose and consume such that they maximize their utility. This raises three questions: (i) Do markets provide goods and services that have the potential to satisfy citizens? (ii) Are citizens able to make choices that maximize their

utility? (iii) Finally, even if (i) and (ii) are true, is PWB influenced? Related to this is that, as amply documented [76], people frequently make choices that have negative long-term consequences for themselves.

In order to answer the first question, it is necessary to take a step back and ask: Why should material wealth be important for PWB? An obvious answer is that people have basic needs (of food, drink, clothes, shelter, security) that must be met to make their lives livable. However, psychosocial prosperity becomes more important when material wealth increases [77]. Presumably for this reason, increases in material wealth become more strongly reflected in changes in hedonic and eudaimonic well-being; in affluent societies, these dimensions of PWB thus appear to be less influenced by income than evaluative well-being [78,79].

The second question has two answers. First, it has been documented that markets with large assortments of products may prevent people from making the right choices [80]. Paradoxically, mistakes increase by regulations requiring that consumers are fully informed about complex products [81,82]. The second answer is also an answer to the third question: people do not seem to spend their money in the right ways because they do not know what makes them happy [83]. Less wealthy people may imitate more wealthy people who appear happy with their material possessions. However, it has been questioned [84] that a material living standard exceeding a certain level makes people happier. Therefore, people falsely anticipate that they would be happy themselves [85]. An additional drawback is that people adapt fast to new material possessions [86]. This results in lost interest in the owned product and a desire to purchase a new one. Consumer loops fueled by aggressive marketing of new products and new models of old products may be understood in this way.

A fourth question asks whether current consumption is sustainable. We refer here to depletion of energy, depletion or destruction of other natural resources (air, minerals, fresh water, plants, biodiversity), and greenhouse gas (GHG) emissions causing climate change [21,87]. The resulting planetary-boundary stress is primarily caused by the wealthiest nations' excessive material consumption and the production of goods and services it drives [12–14]. The recognition that consumption levels are unsustainable has a long history [88]. Despite this early recognition, [89] argued that actions have been taken on the basis of a case-by-case analysis of damage to the environment caused by particular products instead of focusing on the aggregated consumption. If it was possible to influence people to reduce their desire for novel products, this would decrease levels of consumption and production. Material resources (food, drink, clothes, shelter) are necessary for subsistence, but people may not gain happiness from material resources (e.g., luxury cars, large houses, fashion clothes) they acquire to communicate their identity and socioeconomic status [3]. A potential intermediate solution may be the emerging, more sustainable alternatives to traditional markets that offer second-hand goods and services at lower prices. In particular, younger, less affluent people are attracted by a sharing economy in which (frequently online) secondary markets are available for goods and services to be exchanged among strangers instead of being purchased [90]. Markets for rentals of different products are other potential substitutes that may suppress purchases of material goods [91]. One should also be informed by the analysis in [13] considering the lower level of resource use needed to ensure a decent living standard for all people (social sustainability) as well as the upper level of resource use for not exceeding the planetary boundaries (ecological sustainability).

#### **4. Impacts of Sustainable Investment on Psychological Well-Being**

Evidence is accumulating that current consumption levels in affluent countries and among affluent people in developing countries are not sustainable and do not importantly contribute to PWB [12–14]. This statement needs to be qualified by the fact that poverty exists in both affluent and poor countries. Inequalities in affluence also contribute to lower PWB [4]. Although international institutions, governments, and non-profit organizations representing consumers are indispensable to increase sustainable consumption worldwide, companies are essential actors in the process. Therefore, financial investments and active

engagement in companies whose businesses are sustainable should have important effects. We suggest here some changes in SI. Since these suggestions are primarily based on the PWB research reviewed above, they are offered as issues that SI research should address.

The relation of SI to PWB is both unspecified and infrequently considered. We showed how PWB relates to health, material wealth, and consumption. Even though these relations imply that PWB is high in societies with wealthy and healthy citizens having the opportunity to consume what they need and desire, such societies are not sustainable. We suggest that SI needs selection criteria for deciding in which companies to invest or actively engage in order to reduce unsustainable consumption levels without losses in citizens' PWB.

It has tacitly been assumed that a positive relation between material wealth and PWB depends on markets offering an abundance of luxury goods and services. A counter-example is that, contrary to what people themselves believe, purchases of experiences in which they engage tend to lead to higher PWB than purchases of goods in which they, after a while, lose interest [86]. Therefore, financial investment and active engagement in companies in the evolving experience industry is a possible alternative choice. Furthermore, an increase is observed in more sustainable alternatives to traditional markets that offer second-hand goods and services at lower prices [90] or rentals of products [91]. Companies operating in second-hand and rental markets are therefore candidates of financial investment and engagement.

SI increases minimum wages and improves working conditions, not the least in underdeveloped countries, but does not promote wage equalization [92]. Both higher minimum wages and wage equalization are important determinants of PWB [4]. Future research should also investigate how SI may be changed to increase wage equality.

## 5. Conclusions

The consequences of SI are usually addressed from a global or corporate environmental, social, and ethical perspective. Fewer attempts have been made to address the impact SI has on individual citizens' PWB. The paper highlights the links between SI and PWB. It also selectively reviews research on PWB to show how SI relates to sustainable levels of private material consumption and how this in turn relates to citizens' PWB. If SI (e.g., ESG indexes) explicitly incorporates PWB outcomes, the relation to the traditional conceptualization of SI needs to be revisited, in particular that unsustainable ever-increasing material wealth is the single important goal. The paper offers suggestions of how SI may change but also recognizes the need for additional conceptual analysis as well as theoretical and empirical SI research.

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