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ESG INVESTING: NEW CHALLENGES AND NEW OPPORTUNITIES

Jekaterina Kuzmina
Marija Lindemane

ABSTRACT

Purpose. Environmental, social and governance (ESG) investing has gained substantial force over the past few years. Worldwide, 21 trillion USD have been spent on sustainable strategies according to Deutsche Bank estimates. The latest data from the industry suggest that ESG investing is growing, and this means new challenges and opportunities for financial market participants, for example thematic investing within ESG, which should be considered as an innovative approach. The goal of this paper is to study the historical development of ESG investing, identifying potential problems in recent years. Furthermore, it is necessary to forecast potential developments on the ESG investing horizon, and to propose and test an ESG investment strategy which could outperform the market.

Design/methodology/approach. A study of the historical development of ESG investing, identifying potential problems such as lower profitability, is performed based on a literature review. Moreover, a thematic ESG portfolio adjusted to the “silver economy” trend was constructed, and its performance and spread was tested over 5 years.

Findings. The research proves that the performance of the thematic ESG portfolio adjusted to the “silver economy” trend over the past 5 years includes the positive trend of the senior population and performs better than its benchmark – the SandP 500.

Originality/value. The paper contributes to development of investment strategy in the currently popular ESG environment, providing a reference point for both institutional asset managers and private financial market investors.

Keywords: ESG investing, healthcare and wellness, “silver economy”, investment strategy

INTRODUCTION

In recent years, society's and investors' expectations for industry and the business world have grown significantly. As a result, in the framework of high levels of insecurity, negative reactions to globalization, and suspicion of corporations, there is increasing pressure on the business and financial world to deliver not only added value to shareholders, but also social value to society. In response to these modifications of the rules on the “playing field”, there has been a significant increase in interest for so-called ESG investing in the past few decades, and now it represents an important topic for research, receiving academic and industry attention.

At this point, it is necessary to clarify that the abbreviation ESG stands for environmental, social and governance standards. ESG can be understood as a set of principles for a company's operations that investors hoping to demonstrate social responsibility apply to screen investment opportunities.

It should be noted that scientific and professional literature uses several terms to describe investors' social behaviour, so that as the first goal of the current research paper, the authors wish to clarify these terms, as there might otherwise be confusion and

misinterpretation. This goal will be achieved through a study of the scientific and professional literature, and the authors intend to contribute to a better understanding and awareness of the terminology used in the eyes of all the interested parties in both academic research and the business and financial world.

Regarding usage of the ESG investing approach, there are conflicting views – on the one hand, the approach is criticized for lack of stable performance; on the other hand, it is praised for delivering added value. Moreover, representatives of the financial market are showing increasing interest in the topic. As an example, the authors would like to remember the words of Michael Baldinger, who is the head of sustainable investing at UBS Asset Management: “*Incorporating sustainability metrics is no longer just a nice-to-have, or something to help you sleep at night. It's sound investment sense*”.

Paying attention to the existing debate between supporters and non-supporters, the authors intend to study the development of ESG investing, identifying potential problems, and to develop an ESG investment strategy, creating a thematic ESG portfolio adjusted to the “silver economy” trend with the intention of testing its performance in the middle term. The second goal will be achieved through a study of scientific and professional literature, proposing an analytical combination of professional and scientific views and interpretations. However, in order to achieve the third goal and in this way to contribute to the discussion on the field, the authors will develop an investment strategy and, using fundamental analysis, create an investment portfolio, testing its performance over different periods following the buy and hold strategy.

LITERATURE REVIEW AND CLARIFICATION OF TERMINOLOGY

Currently, the leading view on the financial market could be formulated as follows: a company's management, as well as potential investors and shareholders, should look beyond traditional financial metrics, but include ESG-related factors in the management, evaluation and, in particular, investment process. Scientific research supports this view. Several examples can be found in the literature and some of the latest research papers in the field are mentioned below. *De and Clayman (2015)* claim that integration of ESG into the portfolio management approach should add value as it allows one to decrease volatility and increase the risk-adjusted return of the investment portfolio in the post-crisis period. *Cooper et al. (2016)* propose to portfolio managers a simple approach for implementation of other forms of well-being in the context of portfolio goals addressing the issues of socially responsible return. *Chong and Phillips (2016)* have concentrated on ESG mutual fund performance and proved that ESG stock mutual funds outperformed the SandP 500 index in the period of time when the study was conducted. *Kocmanová et al. (2016)* claim that the ESG approach contributes to a company's added value; moreover, the authors propose a model for measuring sustainable value which assesses the environmental, social, and corporate governance contribution to the value creation process. *Fatemi et al. (2017)* show in their research paper that ESG strengths increase firm value.

Nevertheless, due to the fact that several groups, led by different motivations and expectations, are engaged in the process, the number of different terms used in the context is increasing, each highlighting a specific direction, but with substantial correspondence to one another. The first goal of the current article is to clarify the different terms used in the academic and professional literature, as this could lead to potential confusion and misinterpretation. Moreover, the overview should contribute to a better understanding and

awareness in the eyes of all the interested parties in both academic research and the business and financial world. Table 1 includes the most often mentioned terminology and proposes definitions according to the objectives of investment.

Table 1

Terminology Used in the Field

Terminology	Objective of Investment					Some Authors Contributing to the Research on the Topic
	Financial Objective (1)	Financial Objective (2)	Commitment to Social and Environmental Issues (1)	Commitment to Social and Environmental Issues (2)	Corporate Governance Issues	
Corporate Social Investment (CSI) = Responsible Investment (RI)	X		X			<i>Haigh and Hazelton (2004); Scholtens (2014); Van Dyk and Fourie (2015)</i>
Socially Responsible Investing (SRI) = Ethical Investing (EI)		X		X		<i>Bauer et al. (2006); Mollet and Ziegler (2014); Seele (2015); Charfeddine et al. (2016); Revelli (2017)</i>
ESG Investing = Sustainable Investing (SI)		X		X	X	<i>Himick (2011); Halbritter and Dorfleitner (2015); Schramade (2016); Sherwood and Pollard (2017)</i>
Sustainable and Responsible Investing (SRI)		X	X	X	X	Eurosif and some international investment banks

Source: created by the authors

It is worth considering that “Financial Objective (1)” should be interpreted as follows: the financial objective in the investment and management process is less emphasized even though it exists, meaning that both companies and investors tend to refrain from chasing unfairly high profit. “Financial Objective (2)” describes the situation when an increase in shareholders’ and stakeholders’ value is seen as a priority.

Under “Commitment to Social and Environmental Issues (1)”, one should understand a company’s willingness to contribute to and develop these issues, while under “Commitment to Social and Environmental Issues (2)” – the pressure to avoid particular industries or “sinners” predominates.

Studies suggest that broadly used terms include socially responsible investing (SRI) and ethical investing (EI; mainly in the UK), which are based on social criteria, for example avoiding certain scandalous industries such as tobacco or alcohol. Another common term is ESG investing, which includes criteria to match investments through the three main categories of environmental issues, social issues and corporate governance aspects. Recently ESG investing has become equal to sustainable investing (SI), while

sustainability can be achieved simultaneously on two levels: in the acting environment and in the world. A limited number of institutional investors, in describing their activities within CSR norms, use the term corporate social investment (CSI) as well as responsible investment (RI), which refers mainly to the practice of investment funds using an approach that combines investors' financial objectives with their commitment to social concepts like social justice, economic development, peace and others, as well as environmental matters. Sustainable and responsible investing (SRI) is used as an umbrella term; it has a broader scope in comparison to the other terms. Moreover, the term is recognized by such an important organization as Eurosif – the leading European association for the promotion and advancement of sustainable and responsible investment across Europe – contributing to the development of the approach.

To sum up, there is an extensive amount of terminology used in the field, so that both researchers and professionals have to be aware of certain slight differences and apply the abbreviations in the correct manner.

THEMATIC ESG INVESTING AND ITS DEVELOPMENT

According to recent research conducted by Deutsche Bank, ESG investing has become popular in the last few years, while on the global level around 21 trillion USD was invested in ESG strategies over the past three years (*Deutsche Bank (2017)*). Nevertheless, despite the increasing interest among some asset managers as well private investors, ESG investing is frequently deliberated as a risk management tool – some investors are likely to look at ESG scores provided by external data providers like Deutsche Bank or Barclays Capital and apply an additional screen to their investment process, excluding the “weak links”. Therefore, a significant part of investors still remains sceptical towards the ESG investing approach.

The same view is supported by the academic research, e.g. *Schramade (2015)* underlines that sustainable investing under the ESG approach is much less an application success than a marketing success. *Van Duuren et al. (2016)*, based on international research, claim that asset managers consider responsible investing options in their everyday work, while “*ESG information in particular is being used for red flagging and to manage risk*”. A similar conclusion can be found in a paper by *Przychodzen et al. (2016)* – the authors state that currently, inclusion of ESG principles by fund managers is mainly a method of risk mitigation (hedging motivation) and less a value creation tool.

However, not everyone is sceptical towards this investing approach. Moreover, it is necessary to consider that ESG investment is promoted on the international level – e.g. Eurosif (2016) proposes so-called ESG integration and defines it as “*inclusion by asset managers of ESG risks and opportunities into traditional financial analysis and investment decisions based on a systematic process and appropriate research sources*”. Furthermore, the organization proposes three categories for dividing the activities of portfolio managers to contribute to better comprehension.

Under category one – “*non-systematic ESG integration*” – ESG research and analyses should be made available to the majority of analysts and fund and asset managers; under category two, ESG research and analyses should be part of the valuation process conducted by analysts and by fund and asset managers; meanwhile, category three requires introduction of investment constraints based on the valuation process conducted by analysts and by fund and asset managers. Eurosif only considers categories two and three

to be consistent with the definition of ESG integration. Thus, broader engagement on the practical side is required.

Despite some positive voices from the literature, a high level of interest from professionals and support from international organizations, some financial market participants are still sceptical about ESG investing. The second goal of the present paper is defined as follows: based on the literature review, to study the development of ESG investing, identifying potential problems, such as lower profitability of the approach due to the limited number of investment opportunities in recent years.

Campbell and Slack (2011) claim that “*recognition of the materiality of environmental risks in banks is uncommon among sell-side analysts and that environmental narratives are often ignored and regarded as perfunctory*”. *Fatemi and Fooladi (2013)* argue that their current approach to shareholder wealth maximization, including a focus on environmental and social issues, is no longer a valid guide to creation of sustainable wealth for a wide range of shareholders; they see the necessity of a paradigm shift. *Halbritter and Dorfleitner (2015)* claim that investors should not expect abnormal additional returns by investments with regard to ESG factors. *Friede et al. (2015)* have carried out extensive research on ESG investing performance, finding that a large majority of studies report positive findings regarding the performance of ESG investing. However, the authors also note that favourable outcomes are achieved when differentiating for regions, markets and asset classes. Research conducted by *Auer and Schuhmacher (2016)* has shown that in all geographic regions – Europe, the USA and Asia-Pacific – inclusion of ESG does not deliver above-benchmark performance in comparison to passive stock market investments. A study performed by *Amel-Zadeh and Serafeim (2017)* shows that important obstacles to the use of ESG information in the investment process and to achieving satisfying financial results include the absence of internationally recognized reporting standards and, as a result, lack of reliability, quantifiability and timeliness.

Analysing the research findings and discussing the issue with several representatives of the investment industry professionally engaged in asset and wealth management, the authors conclude that the potential negative results from ESG investing and current scepticism toward the approach could be attributed to the limited number of investment opportunities on the ESG horizon. Therefore, it is necessary to forecast potential developments on the ESG investing horizon, such as concentration on a wider spectrum of thematic opportunities. Hypothesis I is formulated as follows: the ESG investing approach requires new investment strategies and a broader investment horizon in order to satisfy investors' needs and expectations of wealth creation.

In order to test the hypothesis, the authors have studied the views of different international banks regarding future ESG investing developments and can conclude that the ESG incorporation process is set to grow in the coming years. An increasing number of companies and, in particular, multinational corporations are going to provide reliable data concerning ESG scores and sustainability standards, including environmental, social and governmental issues. It is expected that an increasing number of asset managers will start integrating ESG into their fundamental research process (*Deutsche Bank (2017)*; *Deutsche Bank (2016)*; *Barclays (2017)*).

As a result, ESG will become a conventional investing tool, so that currently there is an evolving chance to see ESG as a value-creating thematic tool. Thus, one can consider that a new era of thematic ESG investing is starting as of 2017, while the number of

sectors and potential companies covered under ESG topics is set to increase exponentially. Plate 1 provides a schematic presentation of the “new wave” in ESG investing.

One can conclude that at the beginning of 2000, companies were mainly concerned about creating social change and having a positive environmental impact, while the degree of innovations and sustainable profits was low. As a result, investment opportunities on the ESG investing horizon were limited. Currently, one can see positive changes, such as favourable policies supporting the development and implementation of standards for social, environmental and governmental issues, increased innovations, a broader investment horizon, and a bigger profit pool across different sectors of the economy, which will contribute to greater appreciation of ESG investing in the coming years.

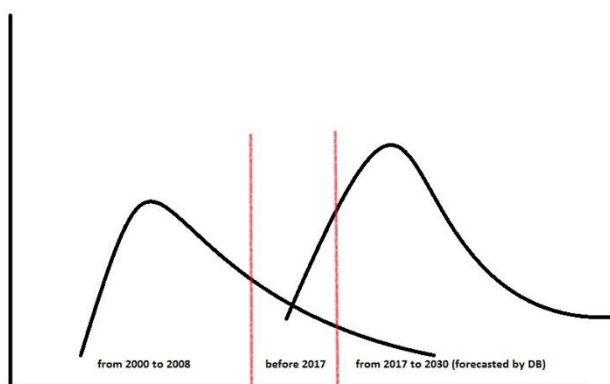


Plate 1. The Emerging Case for Thematic ESG Investing – Entering a New Era
Source: created by the authors based on Deutsche Bank and Barclays research

Because of new developments in the field, several new sectors should be included in ESG investing themes. Preliminary considerations are presented in Figure 1, but one has to consider that the list of potential topics is not complete and should be updated. In this proposal, the authors would like to concentrate in particular on the healthcare segment; the reasons for such a decision will be explained below.

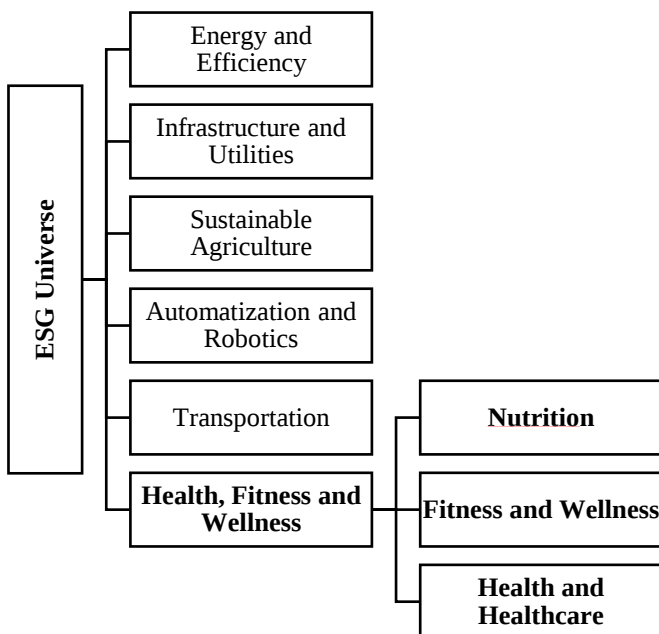


Figure 1. Thematic ESG Strategy, Adjusted Universe

Source: created by the authors

In recent decades, many studies in the fields of economics and demography have predicted the negative impact of the aging population on economic development in the coming years. According to statistics published by the United Nations, in the next 15 years, the number of individuals worldwide over the age of 60 is likely to rise by more than 50%, amounting to around 1.4 billion and making up about 20% of the total population. Moreover, it should be noted that even today the number of 65-year-olds is greater than the number of children under 5 years (*United Nations (2015)*).

On the one hand, the aging population is likely to create new challenges for the economy in both developed countries (such as Japan, Germany and Italy) and emerging markets (such as Russia and China), but on the other hand, new opportunities may be discovered. The reasons are to be found in the fact that the high proportion of the aging population in developed countries in particular is covered by private and/or governmental pension systems, so that purchasing power is likely to hold (*Societe Generale (2017)*).

As a result, the rise of the so-called “silver economy” will create additional opportunities for some specific sectors and the economy as such. For example, a paper by *Kyriakou and Belias (2017)* shows that an aging population is to become one of the biggest and most important market segments for the hospitality and travel industries in Greece. Another example can be found in research by *Zsarnoczky (2016)* focusing on the development of innovation strategies related to the ageing population and required services, which aim to provide “well-being through health monitoring, robotic assistance, electrical mobility or sport activities”. Thus, these sectors could expect significant momentum in their development and profitability. In order to gain returns from the trend

and address the necessities in a proper way, system adaptations should be enforced (for more details, see *Bran et al. (2016)* and *Klimczuk (2016)*).

Considering the growing role of the “silver economy” trend, the authors strongly support the inclusion of such topics as health and wellness in the ESG investing horizon. Moreover, the authors are eager to provide some additional explanations regarding the reasons for this sub-topic’s selection.

First, it is worth considering that nutrition should be considered as having a particular role within the healthcare and wellness topics, as it is one of the most stable sub-topics identified for a longer period of time and the new trend of organic products is set to conquer the market at large. Second, sportswear accounts for more than 1/7 of the total clothing market and according to estimates from the industry and investment bank analysts, its market size is set to increase from 4x to 5x before 2030. Third, the topic of healthcare, including medical supplies and devices, cannot be ignored. In this particular segment there are some significant changes taking place: for products to be successful on the market, it is not enough to have just regulatory approval; there is an emerging necessity for a well-developed management style – production not only with regard to potential costs, but also with regard to products’ features and added value (*Deutsche Bank (2017)*).

The authors expect that these sectors will be among the winners in terms of the abovementioned “silver economy” trend and consider their inclusion in the ESG investing framework as far as particular companies are managed in accordance with ESG standards.

INVESTMENT STRATEGY AND ITS RESULTS

The third goal of the current paper is developing an investment strategy and creating a thematic ESG portfolio adjusted to the “silver economy” trend with the intention of testing its performance over 5 years. Hypothesis II is defined as follows: the performance of the thematic ESG portfolio adjusted to the “silver economy” trend over the past 5 years captures the positive trend of the senior population and performs better than its benchmark – the SandP 500.

Summing up the conclusions from the literature review, thematic ESG investing is supposed to have diverse significance for asset and portfolio managers – while some individual investors on the financial market are hoping to make the world a better place to live in, managers are forced to uphold a stable financial performance. As a result, managers have to develop an appropriate strategy that will attract individual assets, but also provide a necessary and stable financial performance.

The authors propose the following investment selection approach with regard to thematic ESG investing, recognizing the value of fundamental stock analysis. The selection approach is to be considered as a bottom-up valuation tool in the search for international companies promising to provide positive results to investors in the middle term (from two to five years) and therefore to outperform the selected benchmark index – the SandP 500. The selection approach, which includes four steps, is presented in detail in Figure 2 below:

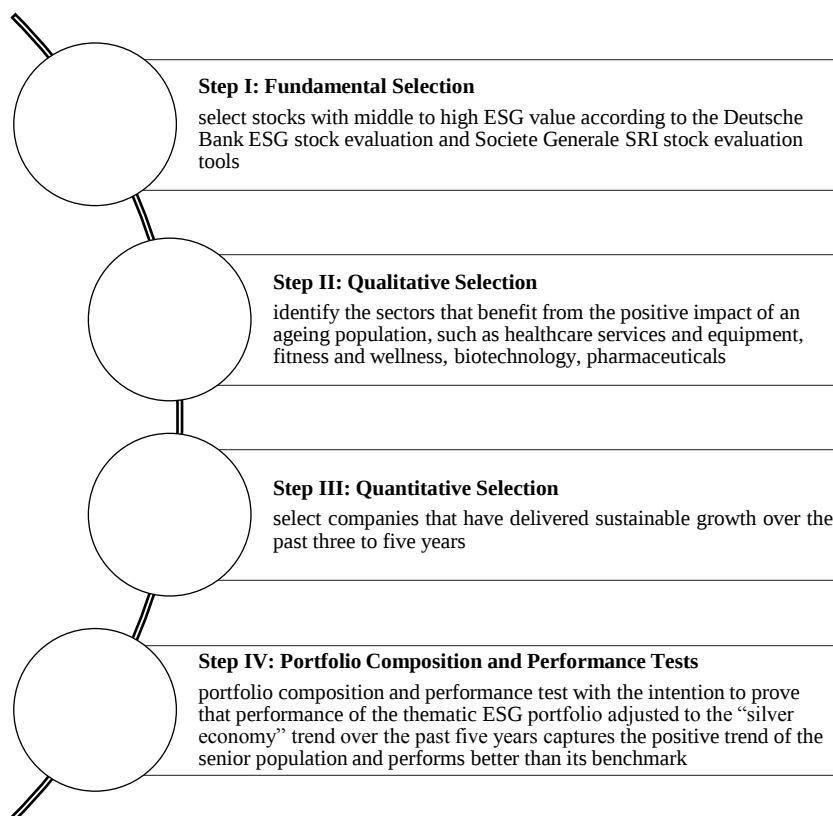


Figure 2. Thematic ESG strategy adjusted to the “silver economy” trend

Source: created by the authors

The following limitations to the investment strategy should be mentioned:

- ✓ No transaction costs and taxes are assumed.
- ✓ The investment portfolio is equally distributed (100 stocks of each company were bought in January 2012 regardless of the level of capitalization of each company).
- ✓ The authors evaluated the commitment of the companies to ESG standards, regardless of whether this constituted one-time activities or long-term sustainable development (for discussion, see *Kanji and Agrawal (2016)*); moreover, the amount of the companies’ investment in sustainable corporate governance is neither evaluated, nor determined, due to the absence of mechanisms to evaluate the performance (see *Rundle-Thiele (2008)*).

In order to verify if the investment portfolio built according to the developed strategy could outperform the selected benchmark index, a historical investment portfolio has been constructed and tested on historical market data from the period of January 2012 to May 2017.

By back-testing the performance of the portfolio over the past five years, one can see that the portfolio performed significantly better than its benchmark – the SandP 500. In the longer period – from inception – the portfolio’s performance (shown with the blue line) created value of 113.25% annually, while the benchmark’s performance (shown with the

red line) was less positive: +75.18% annually in the same period. One can follow the development of the selected strategy in Plate 2.



Plate 2. Performance of the Test Portfolio and the Benchmark Index from January 2012 to May 2017

Source: created by the authors in Google Finance

In the short run – one year's time – the situation was as follows (see the graph in Plate 3): the portfolio's performance (shown with the blue line) destroyed value, showing the result of -5.83% annually, while the benchmark (shown with the red line) created additional value: +15.52% over the same period. The failure of the selected portfolio could potentially be explained by the Brexit referendum, European political uncertainty and the US elections. A more forecastable situation caused the portfolio to return to the previously shown positive results (see the graph in Plate 4): the portfolio gained +6.83%, while the result of the benchmark was +6.38%.



Plate 3. Performance of the Test Portfolio and the Benchmark Index from May 2016 to May 2017

Source: created by the authors in Google Finance



Plate 4. Performance of the Test Portfolio and the Benchmark Index from January 2017 to May 2017

Source: created by the authors in Google Finance

Moreover, the authors evaluated the spread performance, and the spread's average was positive, highlighting long-term outperformance of the portfolio over the benchmark. It should be noted that most of the spread is progressing within the first standard deviation range, highlighting its low volatility in relation to the selected benchmark, while the following exception should be considered: heavily increasing volatility in 2016.

Having checked the portfolio's performance one can conclude that the research hypothesis has been proven – the investment strategy implementing the ESG concept and adjusted to the “silver economy” trend outperforms the market (represented by the SandP 500 index) in the middle term, so that the goals of the research – to develop a stock investment strategy and to prove the ability of this strategy to generate a good financial performance in the middle term – were achieved.

CONCLUSIONS

Based on the research, the authors are able to conclude that ESG investing has gained significant momentum over the past 3 years. Nevertheless, among portfolio and asset managers as well as some private investors, ESG investing is mostly considered as a risk management and exclusionary tool, so that further research is considered to be appropriate with the purpose of showing the sustainability of ESG investment strategy. Moreover, one can state that the investment world is entering a new era of thematic ESG investing and is in search of new market opportunities, while ageing populations should be considered as such an opportunity. It is a proven fact that the increasing retirement age and longer life expectancy have a positive effect on the overall spending pattern, supporting growth of particular sectors, so that ESG investment strategy should be adjusted to the current trend of the so-called “silver-economy” as the thematic ESG investment horizon expands.

In the second part of the paper the authors showed that thematic ESG investing adjusted to the abovementioned trend of the aging population could be considered as a successful investment strategy – by back-testing the performance of the portfolio over the past five years, with the portfolio gaining 113.25% annually, while the benchmark's performance (the SandP 500 index) was less positive (+75.18% annually) in the same

period. Nevertheless, in the short run the portfolio destroyed value and significantly outperformed the market index by 969 basis points in a twelve-month period. The authors conclude that the high volatility of the portfolio in the short run demonstrates the necessity for further adjustments (e.g. increasing the number of sectors; selection of an appropriate benchmark index) that should be tested in future research.

In order to contribute to the scientific discussion and propose further open questions for research, the authors wish to highlight the necessity of evaluating the commitment of companies to ESG standards – one-time activities or long-term sustainable development in the field – as having a potential impact on the business model and financial performance. Moreover, previously the authors noted that the amount of a company's investment in ESG activities is neither evaluated, nor determined, due to the absence of mechanisms, so that additional research on the field should be conducted.

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