International Business and Global Economy 2023/2024, no. 42, pp. 37–48

Edited by the Institute of International Business, University of Gdańsk
ISSN 2300-6102
e-ISSN 2353-9496 https://doi.org/10.26881/ibage.2023.42.03

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Motivation factors for sustainable investment in Germany – a generational comparison

Amidst the growing global environmental issues, sustainable investment is gaining significance. This study examines the correlation between generational dynamics and preferences for sustainable investment in Germany. Employing the generational approach, the analysis explores how traditionalists, baby boomers, generation X and generation Y perceive and utilize sustainable investment opportunities. The research indicates a significant generational divide in the acceptance of sustainable finance. Millennials and generation X show a higher propensity for such investments compared to baby boomers and traditionalists. The study explores the motivational factors that influence investment decisions in different generations and uncovers different patterns that shape attitudes towards sustainable finance. Participants from previous generations prioritise long-term financial returns, while millennials and generation X show a stronger preference for impact investing that aligns with sustainability goals. Additionally, baby boomers and traditionalists show less inclination towards sustainable investment and emphasise financial returns and incentives over sustainability concerns. These findings highlight the significance of customizing strategies to involve various generational cohorts in sustainable finance initiatives. By comprehending the distinct motivations and preferences of each generation, stakeholders can create specific interventions to promote wider participation in sustainable investing and establish a more inclusive and environmentally aware financial landscape.

Keywords: sustainable, investments, generation

IEL classification: G11, O01, G40, D01

Introduction

In recent years, there have been significant global environmental and climatic changes, leading to increased public awareness of environmental challenges and the importance of resource efficiency [Han et al., 2020, pp. 1 ff.]. Simultaneously, environmental, social and ethical considerations have become more integrated into the financial sector. The terms "socially responsible investment" (SRI) and "sustainable investment" refer to investments that consider environmental and social impacts.

These investments aim to promote economic and societal development while preserving the natural environment [Chiţimiea et al., 2021, p. 1]. The momentum of sustainable investment is remarkable, indicating a growing recognition of environmental, social and governance (ESG) factors among investors [Dornseifer, 2022]. In 2021, sustainable funds in Europe had a combined net asset value of nearly 2 trillion EUR, a substantial threefold increase compared to 2019, and a 71% increase from 2020 [zeb, Morningstar, 2022]. The COVID-19 pandemic has increased the importance of sustainable and socially responsible investments. In 2020, there was a significant increase in impact investing. Additionally, the market has matured compared to previous years, with more investors prioritizing strong impact management frameworks [International Finance Corporation, 2021]. In Germany, interest in sustainability has been consistently increasing, as demonstrated by the rising search frequency of the term Nachhaltigkeit ("sustainability") from 2004 to 2022 [Google Trends]. This frequency doubled between 2019 and 2022. According to a study by the German Federal Environment Agency, 65% of Germans consider environmental and climate protection highly important, with 70% maintaining this stance even during the COVID-19 pandemic in 2020. The survey on environmental consciousness highlights growing concerns about environmental quality and identifies key policy areas where respondents view environmental and climate protection as essential [Lehmphul, 2022]. The growing interest in socially responsible investment can be attributed to several factors. Firstly, there is a growing societal awareness of sustainability. Investors are increasingly drawn to companies that positively impact the environment and society. Additionally, SRI have shown to be both sustainable and profitable. Historically, during crises, SRI funds have often outperformed conventional funds [Raghunandan, Rajgopal, 2022; Thanki et al., 2022; Vicente-Molina et al., 2018].

An intriguing aspect of the dynamic field of sustainable investment involves the influence of generational differences on investment preferences and actions [Klaffke, 2014, p. 9]. Generational differences stem from various factors such as historical events, economic conditions and the constantly evolving social landscape. Recognizing these differences is crucial, enabling us to gain valuable insights into private individuals' sustainable attitudes, motives and behaviours.

This article delves into the generation approach, a framework exploring how various generational cohorts, including traditionalists, baby boomers, generation X and generation Y, perceive and engage with sustainable investment opportunities in Germany. To highlight the importance and relevance of this study, it is necessary to examine the broader context of generational impact on sustainable investment decisions. Recent events and societal shifts have transformed the landscape of sustainable investing. For example, climate change challenges have become more pressing, and there is a more robust demand for responsible corporate behaviour [World Economic Forum, 2021]. The progressive investment landscape calls for continued

investigation into how various age groups approach sustainable investments. In the German context, understanding the impact of generational dynamics on sustainable investment is crucial. Germany is a nation renowned for its economic strength and dedication to environmental sustainability, lending unique significance to the role of generational cohorts in shaping investment decisions.

The landscape of sustainable investment has rapidly changed in recent years amidst the world's growing challenges of climate change, social injustice and environmental impact. This has resulted in mounting awareness of sustainability in investment and a sharper focus on ESG criteria. Subsequently, this trend has had a significant impact on investor perceptions and assessments of sustainable investments, particularly among different generations.

I firmly believe that thoroughly comprehending the current attitudes and preferences of various generations toward sustainable investment is imperative for effectively targeting investment strategies, financial products and policies.

The aim of the study is twofold, as are the research questions. Firstly, does a significant difference exist in the propensity for sustainable investment across various generational cohorts? Secondly, how do motivation factors shaping investment choices in sustainable investments differ among different generational groups?

1. Generation approach

Human actions and thoughts are often subdivided into generational classifications and, for this reason, are included in this chapter. Although a generational classification can never be the sole explanatory pattern, this approach guides the understanding of different ways of thinking and acting among people of different classified age groups [Klaffke, 2014, p. 9]. A generation is "a series of birthdays of a group of people" [Berkup, 2014]. And a classification by generation is "the generational cohorts or groups, who belong to the same age group, experience or will experience the similar life experience in the years accordingly they may shape their lives" [Berkup, 2014]. Thus, a generation is defined as a group of people who were born in a certain period of time, and having grown up at the same time and been affected by the same historical events (World War II, fall of the Berlin wall, attack on 11 September 2001, etc.), are generally assumed to have common characteristics and views [Berkup, 2014]. Thus, in the historical-social perspective, generations can be holistically characterized by common values. In general, values document what an individual, group, society or generation considers desirable [Klaffke, 2014, p. 9]. The generational classes differ partly due to different experts' views of formative historical events and different influences [Berkup, 2014]. An often used US generational system distinguishes four generations [Klaffke, 2014, p. 10]:

- traditionalists,
- baby boomers,
- generation X,
- generation Y.

When the Anglo-American system is applied to German society, adjustments are often made in the age definitions. Due to the socio-economic consequences of World War II, the baby boom in Germany started about ten years later (1955–1965). Thus, various classifications have been created, including a division into five groups (war children, consumer children, crisis children, media children, net children). Further distinctions have been made by other researchers, such as Klaffke [2014, p. 11]:

- economic miracle generation (1946–1955),
- baby boomer generation (1956-1965),
- golf generation (1966–1980),
- Internet generation (from 1981).

In the following, however, a classification based on the US pragmatic literature is applied with temporal and minor name changes. The systematization applied here extends beyond previous categorizations, in which the group of young people is divided into generation Y and generation Z, because the conditions of socialization have changed significantly in recent years, particularly in connection with mediatization. In the early 1990s, children did not yet have permanent access to electronic media. In contrast, the formative phase of adolescence today is characterized by ubiquitous Internet use [Klaffke, 2014, p. 11]. Figure 1 is a generation tableau that shows the classification up to and including generation Z, since generation Z is the last generation allowed to make investments per German law. After generation Z come generation alpha (2010–2024) and generation beta (2025–) [Schnetzer, 2022].

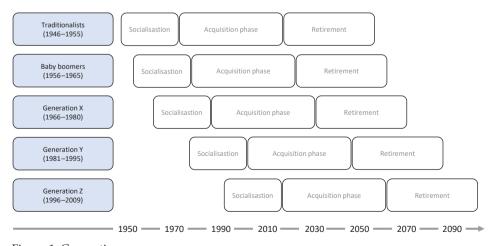


Figure 1. Generations

Source: Own illustration based on: [Schnetzer, 2022; Klaffke, 2014, p. 12].

According to the socialization hypothesis, a person's fundamental values are formed mainly in childhood, adolescence and early adulthood. This is proven by numerous studies which show people of the same age to have similar memories. For example, a Swedish study on generation Y found that the terrorist attacks on 11 September 2001 were the most crucial significant event for this age group [Klaffke, 2014, p. 9].

The traditionalist generation was born between 1946 and 1955. In terms of politics and society, they grew up during the Cold War. The years of the economic miracle, to mention just one example, made many people in (West) Germany dream of lasting and increasing prosperity. Full employment and an expanding welfare state gave citizens the highest possible level of social security. Furthermore, this generation demanded the emancipation of private life and further changes in the rigid German social structures. In their working lives, they also witnessed the decline of Taylorist organizational structures in companies and the beginning of employee-oriented personnel management [Klaffke, 2014, p. 11].

Baby boomers are the next generation after the traditionalists. They were born between 1956 and 1965 and are a large group due to their strong birth rates, which is why they are crucial for the consumer and advertising world and government investments in schools and universities. In the most formative period, they experienced the moon landing, the oil crisis and the beginning of economic stagnation. In addition, baby boomers in (West) Germany experienced the period of RAF terror in the 1970s. Some of this generation turned to the peace, environmental and anti-nuclear movements during their youth and student years and took a critical look at the wages in the 1980s. Baby boomers are considered well-connected and currently occupy most leadership positions in business and politics, significantly shaping social life. By 2030, most baby boomers will have retired, causing a sharp decline in the German workforce.

For generation X in Germany, born between 1966 and 1980, the fall of the Berlin Wall and the Chornobyl disaster are among the most formative collective events [Klaffke, 2014, p. 12]. This generation is also often called the golf generation, referring to its sheltered upbringing and individualistic way of life. Generation X experienced the bursting of the new economy bubble at the end of the 1990s, accompanied by rising unemployment and the economization of further parts of society. Nowadays, more and more members of this generation occupy management positions in companies.

After generation X comes generation Y (1981–1995), significantly affected by the 9/11 attack in 2001. Y comes directly after the previous letter X, but it is also pronounced like the word "why", referring to generation Y's tendency to question everything. For generation Y, globalization and increasing uncertainty play an important role, as do the Internet and the growing diversity of options in the

consumer and media area. Generation Y is currently one of the best-educated generations, better than any age group before [Klaffke, 2014, p. 13].

Generation Z belongs roughly to the 1996 to 2009 birth cohort. It is also called the Internet generation because it is the first generation to grow up entirely in the digital age. For this generation, smartphones, computers and the ubiquitous Internet are the new standard. These new possibilities have brought about new ways of communicating and self-presentation.

In recent years, there has been a significant increase of public responsibility for growing up, including expanding childcare facilities and all-day schools [Klaffke, 2014, p. 14]. Generation Z is often called the Greta generation [Haunss, Sommer, 2020, p. 229]. In the summer of 2018, Greta Thunberg went on strike in front of the Swedish Parliament in Stockholm, holding a self-painted sign that read "Skolstrejk för klimatet" ("School strike for the climate"). Six months later, the first global climate strike was held on 19 March 2019 [Knigge, 2021]. As such, generation Z is the first politically active generation in a long time. Greta Thunberg from Stockholm, who was a teenager at the time, is the initiator of the global climate strike and the political movement Fridays for Future that emerged from it. The Fridays for Future movement represents generation Z as a whole [Haunss, Sommer, 2020, pp. 228–230].

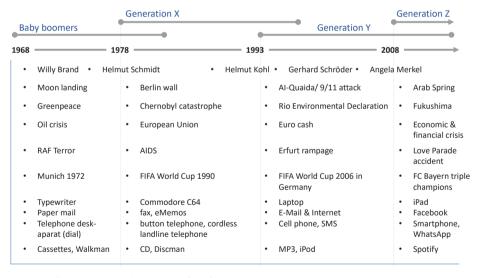


Figure 2. Generations – formative developments Source: Own illustration based on: [Klaffke, 2014, p. 15].

Due to their different experiences in the formative phase of life, particular generations have different ways of thinking about the world [Schnetzer, 2022]. Figure 2 shows a rough overview of the developments that occurred in the formative phases of the presented generations.

2. Survey explanation and methodology

The online survey was conducted as part of my doctoral dissertation. Only the relevant data from the comprehensive dataset will be used in this article. The survey was pretested for technical validity by independent individuals prior to administration. After receiving approval from the Ethics Committee, the survey's main objective was to collect around 200 responses while avoiding the collection of personal identifiers and minimizing ethical risks. To achieve this, measures were taken to exclude minors from participation, and no personal data was requested. The survey consisted of 13 thematic domains for data collection and was formulated in German. Participant consent was obtained by providing a link to a survey platform. The survey questions were mostly structured on a Likert scale ranging from 1 to 7, where 1 indicated "strongly disagree" and 7 indicated "strongly agree".

The survey methodology was inspired by a prior study by Reyhanloo et al. [2018], which investigated the primary motivations driving private investors to engage in land degradation neutrality initiatives. Based on this foundation, the survey applied several conceptual frameworks.

The dataset included demographic information such as gender, age, education, investment experience, engagement in sustainable activities, reasons for avoiding sustainable projects, willingness to invest in sustainability (as a dependent variable), investment behaviour and strategies, intention to invest in sustainability, scores on the New Ecological Paradigm Scale and motivational factors driving sustainability investments. The survey aimed to explore motivation factors relevant to private and non-commercial investors, targeting German citizens and individuals above 18 years old.

A snowball sampling methodology was used to access diverse population segments, starting with the existing network or community and expanding through referrals from primary connections. In addition, the survey used snowball sampling to take advantage of the complex social dynamics present in human networks. This allowed participants to act as recruiters, expanding the survey's reach beyond what could be achieved through random sampling methods. Trust was found to be a crucial factor in survey participation, as individuals were more likely to engage when approached by familiar and reputable sources. Within the framework of snowball sampling, participants assumed the role of advocates, endorsing the survey's credibility within their respective networks. This sampling strategy aims to improve response rates and foster candid feedback by creating a conducive environment where participants feel comfortable sharing their perspectives and experiences with trusted peers.

The survey was conducted online from 15 February to 10 May 2023, for a total of 85 days, and received 222 responses. 221 responses were suitable for analysis, as

one participant admitted to not genuinely engaging with the survey. Participants were guaranteed complete anonymity and informed that the collected data would only be used for scientific research purposes, not for commercial gain. Participants were not offered any incentives, except for the option to receive a summary of the pivotal findings upon request. The survey was initially promoted within my primary network and later extended to secondary networks through various channels, including LinkedIn. At the time of the survey, I was employed at Zurich Group Germany. Additionally, social media platforms such as Instagram and WhatsApp were used for survey promotion. Moreover, a 32-second promotional video in German was created to explain the survey's goals, target audience, background, and encourage participation. This video received 5,154 views on LinkedIn, estimated to have been watched by 1,466 individuals, with a total viewing duration of 297.3 minutes [Klouth, 2023].

3. Results

The study examined participants from different generations, who were divided into six cohorts based on their year of birth. The cohorts were defined as follows:

- born before 1946 (11 participants),
- born in 1946–1955 (11 participants),
- born in 1956–1965 (30 participants),
- born in 1966-1980 (46 participants),
- born in 1981-1995 (92 participants),
- born in 1996–2009 (31 participants).

This division enabled a differentiated analysis of the survey results along the different generations in order to identify and understand potential differences or patterns in the responses.

Generation Y (1981–1995) and generation Z (1996–2009) have made the most sustainable investments so far (61%), followed by generation X (1966–1980; 48%), baby boomers (1956–1965; 47%), and those born before 1946 (45%). Thus, less than half of the latter three generations have made sustainable investments. Strikingly, 18% of traditionalists (1946–1955) have made sustainable investments.

Table 1 provides a generational comparison of the main reasons for making sustainable investments. "Wealth gain" is the most decisive for all the generations. Except for the traditionalists and baby boomers, "identity/trait" is the least important. For these two generations, "sustainability consciousness" is the least important.

Table 1. Reasons for making sustainable investments – a generational comparison

Main reason for making sustainable investments	before 1946	1946–1955	1956–1965	1966–1980	1981–1995	1996–2009
wealth gain	4.34	4.14	4.75	4.15	4.67	4.90
identity/trait	3.06	2.09	3.29	2.63	3.11	2.97
emotional attachment	3.95	2.60	3.82	3.73	4.09	3.44
sustainability consciousness	3.27	2.00	2.90	4.00	4.54	3.58
social influence	3.55	2.30	3.44	2.93	3.30	3.16

Source: Own elaboration.

Table 2 shows the motivation factors for making sustainable investments. Participants belonging to the pre-1946 generation showed a pronounced tendency to place highest importance on "high financial return (long-term)" (mean score of 5.91). At the same time, intrinsic psychological motivators, notably "self-fulfilment" (5.82) and "positive emotions" (5.73), emerged as salient determinants of investment preferences within this generational stratum. Traditionalists manifested a high valuation of "incentives" (5.27) and "high financial return (long-term)" (5.00) as crucial factors dictating sustainable investment choices. Conversely, factors such as "risk-taking trait" (1.73), "preference for sustainability" (1.73), and "negative emotions" (1.55) played the least important role in guiding their investment preferences. Baby boomers placed highest value on "high financial return (long term)" (5.27) and "incentives" (4.87). Factors such as "sense of responsibility for a sustainable future" (2.90) and "negative emotions" (2.77) had the least impact on shaping this generation's investment preferences. Generation X attached greatest importance to "high financial return (long-term)" (4.76) and "desire for having an impact on a sustainable future" (4.65) and was least guided by factors such as "social pressure" (2.41) and "negative emotions" (2.33). Generation Y was most strongly motivated by "high financial return (long-term)" (5.49) and a "desire for having an impact on a sustainable future" (5.07). Conversely, factors such as "negative emotions" (2.97) and "social pressure" (2.50) were found to have a muted impact on this generation's investment preferences. Generation Z attached greatest importance to "high financial return (long-term)" (5.68) and "incentives" (5.32), and was least motivated by factors such as "negative emotions" (2.61) and "social pressure" (2.52).

Table 2. Motivation factors for making sustainable investments – generational comparison

))	1			
Main motivation for making sustainable investments	before 1946	1946–1955	1956–1965	1966–1980	1981–1995	1996–2009	Total
high financial return (long-term)	5.91	5.00	5.27	4.76	5.49	5.68	5.33
high financial return (short-term)	4.18	3.64	4.70	3.26	3.93	3.94	3.90
portfolio diversification	3.45	2.64	4.17	4.20	4.49	4.65	4.26
incentives	3.82	5.27	4.87	4.39	4.76	5.32	4.76
social norm ("affiliation to trend")	3.64	2.36	3.90	3.76	4.41	4.03	4.01
desire for social recognition	3.36	2.64	3.17	2.63	3.00	2.94	2.94
social pressure	3.64	1.91	3.27	2.41	2.50	2.52	2.62
risk-taking trait	2.18	1.73	3.43	2.85	3.82	3.45	3.33
self-fulfilment	5.82	4.73	4.47	4.15	4.61	4.68	4.57
personal connection	5.00	3.64	4.33	4.11	4.47	4.00	4.29
positive emotions	5.73	4.64	4.70	3.93	4.51	4.68	4.51
negative emotions	3.00	1.55	2.77	2.33	2.97	2.61	2.69
kin altruism	4.36	2.27	4.03	4.24	4.64	3.48	4.18
philanthropy	2.64	2.00	3.60	3.93	4.02	3.10	3.65
biophilia	4.00	2.55	4.00	4.22	4.33	3.32	4.01
concern (surrounding "sustainable issues")	2.82	2.00	3.73	4.37	4.39	3.74	4.01
preference for sustainability	3.00	1.73	3.00	4.07	3.77	3.42	3.54
desire for having an impact on a sustainable future	3.64	2.82	4.03	4.65	5.07	4.29	4.55
sense of responsibility for a sustainable future	3.27	2.00	2.90	4.00	4.54	3.58	3.88

Source: Own elaboration.

Conclusions

The article's research questions were twofold. Firstly, is there a significant difference in the propensity for sustainable investments across various generational cohorts? Secondly, how do motivation factors shaping sustainable investment choices (particularly long-term financial return, impact on sustainable future, incentives and risk-taking traits) differ among different generational groups?

Notably, generation Y and generation Z demonstrate a higher inclination towards sustainable investments, with over 60% of respondents from these cohorts already engaged in such endeavours. On the other hand, less than half of baby boomers and traditionalists have invested in sustainable finance. This suggests a generational divide which may require targeted interventions to encourage greater participation among older demographics.

Regarding the second research question, the analysis shows clear motivational patterns. Participants from the pre-1946 generation prioritize long-term financial returns, indicating a pragmatic approach to investment decisions. Traditionalists emphasize incentives and financial returns while exhibiting less inclination towards risk-taking or sustainability preferences. Baby boomers similarly emphasize financial returns, with some consideration for incentives, yet demonstrate a lower sense of responsibility toward a sustainable future. Generation X seeks to make impactful investment choices that align closely with long-term financial goals and sustainability aspirations while displaying less susceptibility to social pressures or negative emotions.

Sustainable investment motivations vary across generational cohorts, highlighting the importance of tailored approaches to address diverse preferences and priorities. Using these insights, stakeholders can create more effective strategies to promote inclusivity and engagement in sustainable finance initiatives for all age groups.

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