

# *Internal and External Drivers of Sustainable Entrepreneurship*

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## *Abstract*

*Despite the fact that many researchers have emphasized the importance of sustainable entrepreneurship, there is still a hazy grasp of the notion. In today's society, progress in the direction of sustainability is critical. That is why it is essential to understand what inspires and drives entrepreneurs to undertake sustainable business activities. Therefore, this systematic literature review identifies and summarizes the individual drivers of sustainable entrepreneurship and categorizes them into internal and external ones. This study classifies four (values, corporate image, financial factor, and employees) vital internal drivers and five (competitors, geographical area, customers, communities, government) external drivers of sustainable entrepreneurship. Furthermore, this study also addresses several barriers, each attributed to a specific driver.*

**Keywords:** Sustainable Entrepreneurship, Internal and External Drivers, Systematic Literature Review.

## **1 Introduction**

### **1.1 Practical Relevance**

The development towards sustainability plays a decisive role in today's society. Daily reports on climate change, increasing carbon dioxide (CO<sub>2</sub>) emissions, and biodiversity loss show the negative consequences and impacts on the environment (Shepherd & Patzelt, 2010). In the prevailing literature, corporate actions are considered to play a key role in sustainable change. They can help counteract the problems condemned by pollution, emissions, and excessive resource consumption (Sanwar & Cheng, 2017). Furthermore, entrepreneurial actions can improve people's education, socio-economic status, and physical and mental health (Shepherd & Patzelt, 2010). Currently, there is no clear definition of the concept of sustainable entrepreneurship.

The United Nation (UN) Commission defines sustainable development as 'the development that meets the needs of the present without compromising the ability of future generations to meet their needs (Brundtland, 1987). Dean and McMullen (2007) also use this definition for the term sustainable entrepreneurship. Masurel (2006, p. 191) defines sustainable entrepreneurship as 'leading the firm in making balanced choices

between profit, people, and the planet.' The concept is popularly referred to as triple-bottom-line (e.g., Schlange, 2006). In both cases, it is daunting that sustainable entrepreneurship combines the economy, ecology, and society. In order to promote sustainability in the three areas, it is essential to know what motivates and drives entrepreneurs to undertake sustainable business activities (Schlange, 2006). In addition, this can provide better knowledge about setting the right incentives for policy-makers to drive change towards sustainability (Tranfield, Denyer, & Smart, 2003; Parrish, 2010).

### **1.2 Current Research Status**

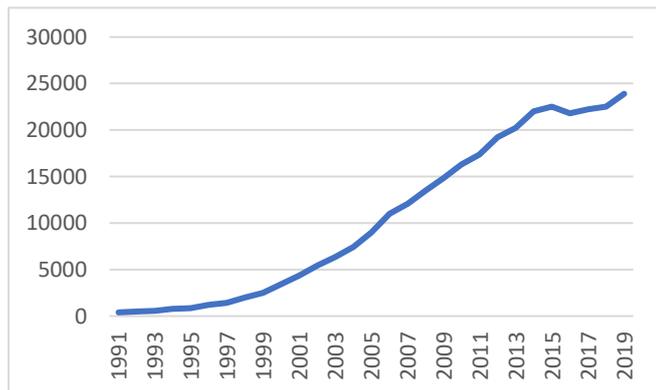
The literature on sustainable entrepreneurship is still tiny at present yet increasingly developing (Patzelt & Shepherd, 2010). Gast, Gundolf, and Cesinger (2017) also reflect this in the systematic literature review on sustainable entrepreneurship. Gast et al. (2017) found that research in this area has two particular focuses. On the one hand, special attention was paid to drivers of conducting business in an ecologically sustainable way and, on the other hand, to strategic actions of ecologically sustainable enterprises. The literature so far did not identify all the single drivers in an aggregated way. A Google Scholar search for 'sustainable entrepreneurship' indicates increasing attention for

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the broader literature since the late 90s, as indicated by figure 1. This confirms results by Gast et al. (2017), who also found increasing attention since 1996.

### 1.3 Research Question and Aim

The present systematic literature review examines the internal and external drivers of sustainable entrepreneurship and, if applicable, what potential obstacles are mentioned in the literature. This systematic literature review aims to summarise the individual drivers of sustainable entrepreneurship



**Figure 1:** Google scholar results for “sustainable entrepreneurship”  
Source: Google scholar

identified and categorize them into internal and external ones. We also identified barriers, where applicable. Thus, the already predominant literature on the topic of sustainable entrepreneurship shall be aggregated at a higher level. Knowing what constitutes internal and external drivers may help policymakers set the right incentives since external incentives (taxes, subsidies) might not work effectively if drivers are mainly internal and vice versa.

### 1.4 Structure of the Paper

The following section two explains the research design and clarifies what a systematic literature review is and why this form of the review was chosen. Subsequently, the selection criteria for the articles are depicted, and the term ‘sustainable entrepreneurship’ is defined.

An overview of the selected articles is given in the third section, and descriptive properties are presented graphically. In the fourth section of the review, the results collected in the research are presented, and the research question is answered. The literature is then critically reviewed, and

weaknesses are identified. The last section summarizes the systematic literature review and is intended to close the research gap. In addition, an outlook for further research is given and linked to the previous weaknesses from section four.

## 2 Methodology

### 2.1 Research Design

The research approach is the systematic literature review. According to Cook, Mulrow, and Haynes (1997), it offers a replicable, transparent, and scientific process, minimizing error and bias. Furthermore, it aims to answer specific, often narrow, questions in depth.

Denyer and Neely (2004) and Thorpe et al. (2005) called for more methodological rigor in conducting literature reviews in management science. For example, reviews in the management literature are usually ‘narrative’ and tend just to describe the literature. They are based on discretion and biases of the individual researcher (Fink, 1998; Tranfield, Denyer & Smart, 2013). In contrast, the systematic review enhances the legitimacy and authority of the resulting evidence (Tranfield et al., 2003). By systematically conducting our review, we decided to follow that call to increase methodological rigor.

Our research aims to address the gap of aggregating the literature dealing with drivers on a higher level to give a thorough overview of what drives sustainable entrepreneurs. This overview gives helpful guidance for policymakers in incentivizing sustainable entrepreneurship. The overview also intellectually expands the academic literature. According to Tranfield et al. (2003), the systematic approach aims to inform policymakers and practitioners and enhance the knowledge base. Therefore, a systematic literature review is well suited regarding our research gap and twin ambition to be practically relevant for policymakers and to aggregate the academic knowledge one level higher.

### 2.2 Selection Criteria

The selection of relevant literature was carried out based on several criteria. In the process of the selection, criteria such as time, language, journal, ranking, methodology, synonyms, and databases were used. Regarding the time criteria, only

literature from 1996 onwards was considered. Gast et al. (2017) indicated that the broader topic of ecologically sustainable entrepreneurship received increasing scholarly attention from 1996 onwards. The notion of increasing scholarly attention since 1996 is also consistent with a google scholar search for ‘sustainable entrepreneurship’. Therefore, we settled for 1996 as our beginning date. Only English literature was used, as the selection of literature was not country-specific but international. In the quest for literature, we only considered peer-reviewed journals. The rankings were deliberately disregarded since the research area of the present systematic literature review is very young and therefore immature. Regarding methodology, no restrictions were made. Methodologies cover qualitative, quantitative, conceptual, and mixed methods, qualitative studies being the most dominant. The literature search took place on Google Scholar, Science-Direct and jstor. The literature search was conducted using combinations of the following keywords and synonyms. Only articles containing the word ‘driver’ - or a synonym, such as ‘motivation’ - were selected.

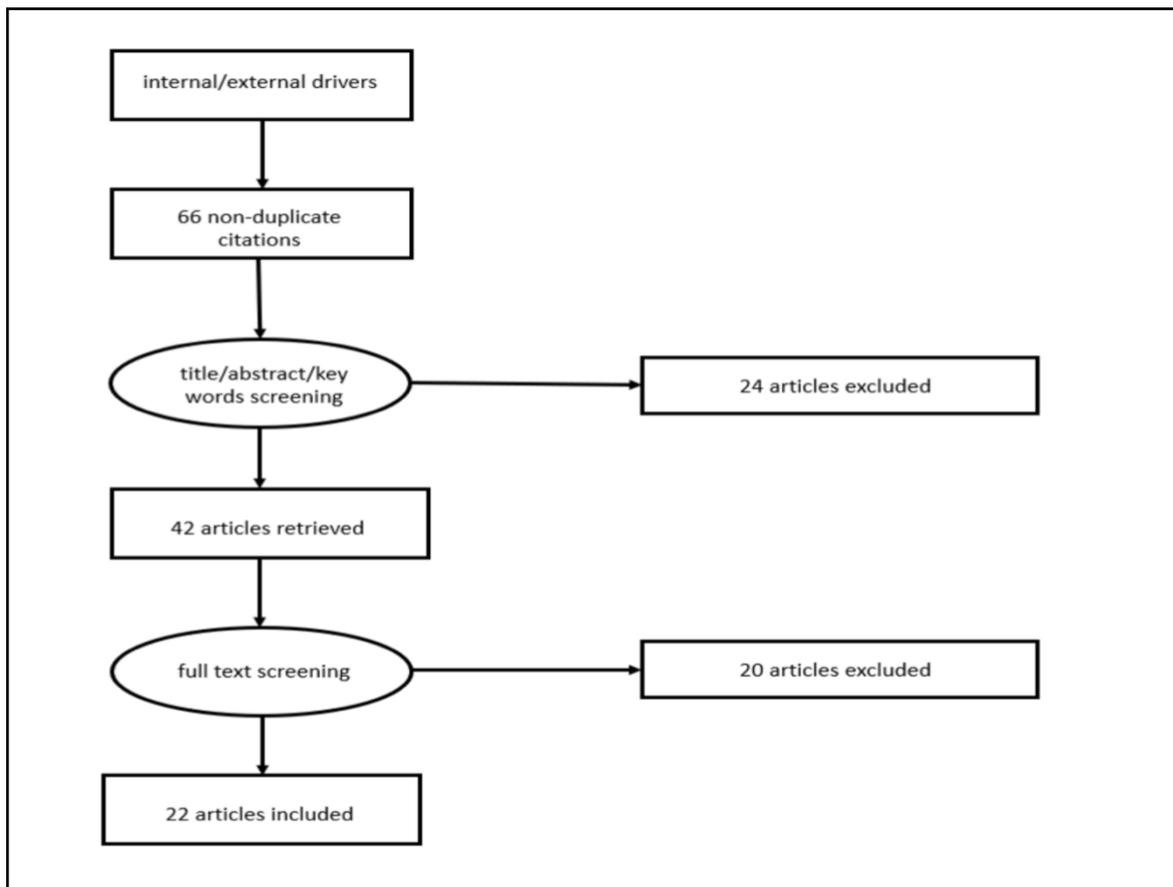
Drivers	Sustainable	Entrepreneurship
why	environmental	entrepreneurs
driving forces	green prison	business
factors	ecological	management
influence	ecopreneurship	ecopreneurs
reason	social	SME
motivation	corporate social responsibility	

**Table 1:** Keywords used in the search process  
**Source:** Own visualization

### 2.3 Research Procedure

#### 2.3.1 PRISMA Flow Diagram

As depicted in our PRISMA flow diagram (figure 2), 66 non-duplicate citations were screened using the keywords external-/internal drivers’ and combinations of the keywords. After title, abstract,



**Figure 2:** PRISMA flow diagram  
**Source:** Own visualization

and keyword screening, 24 articles were excluded, and 42 articles remained. The next step was a full-text screening. In this step, 20 articles were excluded. Finally, 22 articles remained.

### 2.3.2 Data Analysis

Several authors distinguish between internal and external drivers (e.g., Lee, 2009; Lozano, 2015) or a synonym of drivers, such as ‘triggers’ (e.g., Azzone & Noci, 1998), ‘forces’ (e.g., Pastakia, 2002) and ‘influences’ (e.g., Schlange, 2006), while having different or no definitions of the terms. Gast et al. (2017) speak of micro-level drivers, which can be regarded as internal, and meso- and macro-level drivers, considered external.

In this paper, based on Gast et al. (2017) and Pastakia (2002), internal drivers refer to the entrepreneur's ideals and the strategic approach within the company's organization, and external drivers refer to the environmental factors in which the business is embedded.

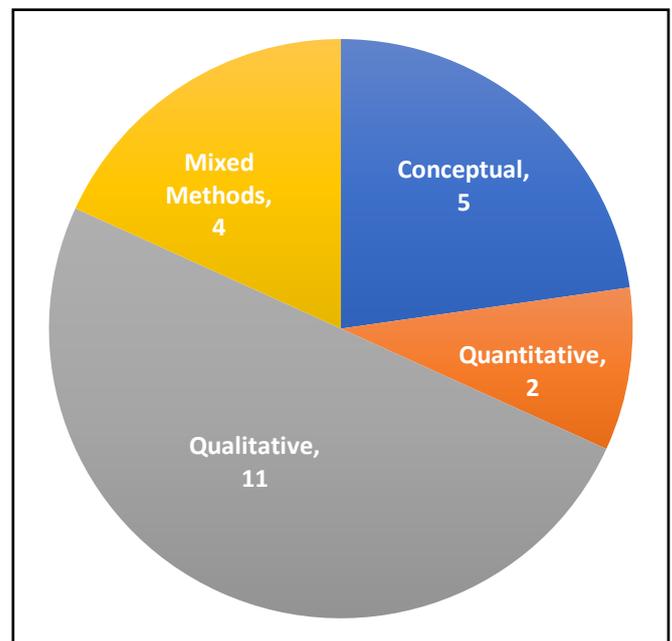
We chose the construct of drivers being either ‘external’ or ‘internal’ since policymakers (e.g., EU) regularly must decide on incentives for sustainable entrepreneurship. If the drivers are predominantly external, financial incentives (tax breaks, subsidies) would be more effective than education about sustainable entrepreneurship. If the drivers are predominantly internal, then financial incentives could be ineffective. In the case of drivers being prevalently internal, education in schools about sustainability might pose the most effective way of tackling sustainability-related issues. A systematic literature review might solve this task. For example, Tranfield et al. (2003) stress how systematic literature reviews pose reliable information that is especially suited for policymakers since the systematic nature of the review yields reliable information.

### 3 Selected Articles

The final sample consists of 22 articles. The first article in the sample was written in 1998. Subsequently, the literature needed some time to

take off. There seems to be no growth trend in the literature dealing with drivers, as indicated by a somewhat steady growth of published papers. This is contrary to the broader trend of sustainable entrepreneurship literature receiving increasing attention. However, in 2009, 2010, and 2011 there is a peak with three papers published each year. The most dominant journal is the *Journal of Business Venturing* (five articles), one of the prime journals in the field. Two articles have been published each in the *Journal of Cleaner Production*, *Entrepreneurship: Theory and Practice*, *Greener Management International*, and

*Small Business Economics*. Regarding the methodological mix of the sample, eleven papers are using a qualitative approach (figure 3). Five papers applied a conceptual method, while four papers applied mixed methods. Only two papers utilize quantitative methods. The relative overweight of qualitative and conceptual studies, as opposed to quantitative studies, hints that our field of literature is still young and undeveloped. Qualitative studies are most relevant for dealing with areas that lack theoretical deepness (Edmondson & McManus, 2007).



**Figure 3:** Descriptive analysis of the final 22 articles  
Source: Own visualization

The literature has an international focus, with no single country standing out. Six papers have no country focus since they are conceptual studies. Five papers deal with an international sample, meaning a sample spanning several regions. The international literature is consistent with the notion

that sustainability issues (e.g., climate change) are international issues that naturally ignore borders. In the sample, emerging countries (e.g., Nigeria, India, Tunisia) are as present as developed countries (e.g., Switzerland, Finland).

The drivers identified were government (eleven articles), individual values (eight articles), customer (ten articles), financial reasons (six articles), brand image and reputation (five articles), communities (four articles), competitors (five articles), geographical influence (three articles) and finally employees (three articles).

## 4 Results

Figure 4 visualizes the internal and external drivers identified in the literature. The red lines indicate drivers that were identified, besides being drivers, as potential barriers.

tranquillity between the entrepreneur and other people and nature. By being in this relationship of equanimity, enterprises serve as effective means of enhancing and sustaining the quality of human and natural resources. In India, for example, entrepreneurs who believe humankind should live in harmony with nature reject chemical farming which means that their sustainable engagement is triggered by their ethical values and traditions (Pastakia, 2002). Ecopreneurs can be motivated by spreading their green values through educational strategies (Kirkwood & Walton, 2010).

On the other hand, an entrepreneur becoming aware of environmental issues and embeds sustainability in the company can feel morally and ethically obligated. Thus, the entrepreneur contributes to corporate sustainability (Lozano, 2015). Patzelt and Shepherd (2010) highlighted the role played by personal threats. They stressed how

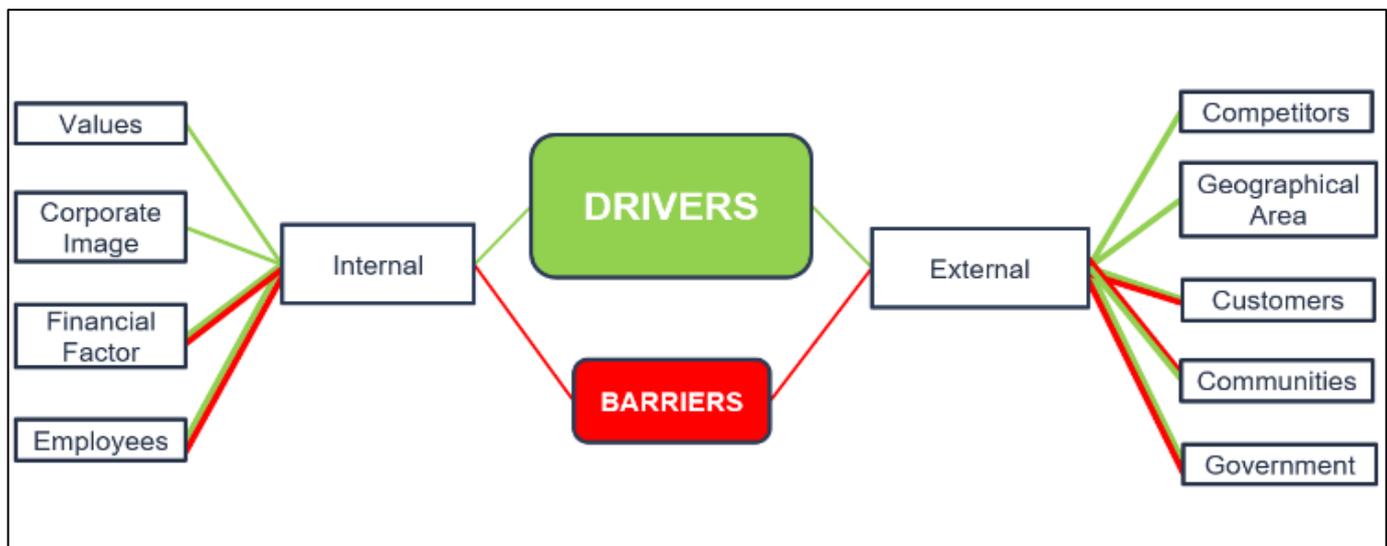


Figure 4: Internal and external drivers and barriers of sustainable entrepreneurship  
Source: Own visualisation

### 4.1 Internal Drivers

#### ➤ Personal Values

The driver named most often is the personal values of the entrepreneur. This driver can be looked at from different views. On the one hand, a sustainable enterprise can be led on the basis of individual values that include sustainability (Spence, Gherib, & Biwole, 2011; Shepherd and Patzelt, 2011). Their values can be described as ‘the desire to change the world and to improve the quality of the environment and life’ (Linnanen, 2002). Parrish (2010) highlights the value set of

entrepreneurs’ increased knowledge about sustainability increases their threat awareness and drives them to sustain the business.

#### ➤ Employees

Several authors stress the role employees play as a driver for sustainable entrepreneurship. Zhang, Bi, and Liu (2009) identified employee demand as one of the drivers to engage in green management initiatives. Sustainability can lead to better working conditions and, therefore, satisfy employees' needs and expectations and reduce the ratio of employee turnover (Masurel, 2006; Lee, 2009). According to

Masurel (2006), it also leads to an improvement in the motivation of the employees.

#### ➤ *Financial Factor*

The financial factor as a driver can be looked at from two perspectives: the entrepreneur and the enterprise. From the entrepreneur's perspective, the desire to make money can be a driver (Linnanen, 2002). Kirkwood and Walton (2010) suggested that the financial aspect for ecopreneurs is about making a living and not about large financial gain. In their case studies, examining ecopreneurs companies in New Zealand, the respondents found it important to make enough money to be sustainable and to support their families and lifestyle. From the perspective of the enterprise, Lee (2009) and Zhang et al. (2009) name cost savings/reduction as a driver, which results from eco-efficiency. This aspect, therefore, is a competitive advantage and overlaps with the driver competitors. Furthermore, Zhang et al. (2009) also consider costs as a barrier.

#### ➤ *Corporate Image*

Having a green brand image (Gandhi, Thanki, & Thakkar, 2017) or improving the corporate image (Masurel, 2009) or reputation (Zhang et al., 2009; Lawal, Rowland, & Omisade, 2016) is another internal driver. A sustainable company can be viewed as a company that cares not only for the customer but also for the environment, which creates a green corporate image (Pastakia, 2002).

### 4.2 External Drivers

#### ➤ *Government*

In our sample, the external driver for sustainable entrepreneurship named most often is the government (e.g., Masurel, 2006; Schlange, 2006; Lee, 2009; Lozano, 2015). Environmental regulations have increased rapidly over the past 25 years (York & Venkataraman, 2010). The government's goal is to improve and nourish the environment by enacting laws and regulations and enabling policies (Pastakia, 2002; Zhang et al., 2009; Hoogendoorn, Guerra, and van der Zwan, 2014). For instance, adopting environmental certification such as international organization for standardization (ISO), which gives a framework for firms when implementing environmental practices,

is intended as a significant contribution to reduce environmental footprints (Azzone & Noci, 1998).

Moreover, the government can also positively affect sustainable entrepreneurs through government support, such as subsidies and taxes (Zhang et al., 2009). Spence, Gherib, and Biwolé (2011) stress how while internal drivers are prevalent among sustainable entrepreneurs, they might be insufficient if not paired with governmental (external) incentives.

#### ➤ *Customers*

Customers can be an external driver of sustainable entrepreneurship by demanding eco-friendly products (Zhang et al., 2009; Lee, 2009; Hoogendoorn et al., 2014; Pastakia, 2002). The increasing environmental awareness of customers leads to the rising interest in green products and services (Linnanen, 2002; Gast et al., 2017). Sustainable businesses aim both to keep the current clients by offering products matching their needs and expectations and attracting new customers by building a sustainable image (Masurel, 2006). Lee (2009) also states that key buyers request that manufacturers provide proof that their products are eco-friendly, for example, in the form of the ISO 14001 certification. Through this requirement, some businesses will be reluctant to adopt green practices (Lee, 2009). Thus, it is conceivable that the driver government also influences customers and negatively impacts firms in its decision to implement sustainable behaviours.

The information available to the customer about the products and services offered also plays a role since information asymmetries can lead to market failure and thus to a loss of customers (Dean & McMullen, 2007). As a result, they stress that sufficient customer information about products and services from companies can ensure that companies can concentrate on certain competitive advantages to expand or develop them.

#### ➤ *Community*

Another influence may be the company's environment since the demand and pressure from local communities can drive companies to go green (Zhang et al., 2009; Lawal et al., 2016). Also, pressure groups can influence businesses by activism, e.g., by non-governmental organizations

(NGOs) (Azzone & Noci, 1998; York & Venkataraman, 2010). NGOs aim to address the concerns, such as environmental pollution and climate change, directly. These organizations believed, among other things, that firms do not take enough responsibility for environmentally harmful practices and that the government failed to prevent this behaviour (York & Venkataraman, 2010).

#### ➤ *Competitors*

The competitors' behaviour can drive firms to behave more sustainably by adopting environmental-friendly practices. Companies can create differentiation and get a competitive advantage (Zhang et al., 2009; Pastakia, 2002; Lee, 2009). Furthermore, the implementation of eco-friendly practices can reduce costs and risks (York & Venkataraman, 2010). The achievement of environmental performance opens up opportunities for businesses by concluding new business contracts and increasing sales (Lee, 2009). Hence, businesses try to identify green opportunities by developing eco-friendly alternatives such as the zero-emission car or the packaging solution to minimize waste through creative design (Pastakia, 2002). Similar to this notion, Cohen and Winn (2007) examined how market imperfections (for example, ignorant competitors) can foster sustainable entrepreneurship opportunities.

#### ➤ *Geographical Area*

The environment a company operates in can also be a driver of sustainable entrepreneurs. In this context, a differentiation between local, regional, and global environmental problems can be made (Schlange, 2006). A local issue is, for example, wastewater treatment or pollution. Global environmental concerns are, for instance, climate change (Linnanen, 2002). Sunny and Shu (2019) examined geographical clustering dynamics. Their findings suggest that the regional clustering of sustainable entrepreneurs sets a reinforcing relationship between capital and firm formation in motion due to spill-over in knowledge, human capital, and service networks.

#### **4.3 Interrelation Between Drivers**

The notion that internal drivers and external drivers influence each other is glaring. For example, if high external drivers for sustainable entrepreneurship

exist, they could affect internal organizations and entrepreneurial values (Pastakia, 2002). Entrepreneurs now have the incentive to reshape their internal values and internal organizational structures. Conceptually, Pastakia (2002) suggested that external drivers might change the vision of entrepreneurs. The argument can also be turned around. Internal drivers might translate to higher external drivers. For example, the government and, therefore, the people influence tax incentives and subsidies. If personal values about sustainable entrepreneurship persist in society, they might translate to higher external pressure.

The (quantitative) issue of ranking drivers has been dealt with several times in the literature (e.g., Masurel, 2006; Hoogendoorn et al., 2014; Gandhi et al., 2018). Masurel (2006) identified employees ('working conditions'), government ('legislation'), and individual values ('moral duties') as being the most important drivers for small and medium-size enterprises (SMEs). Examining a sample of Indian manufacturing SMEs, Gandhi et al. (2018) found brand image, government ('legislation'), and individual values ('management commitment') to be the most important drivers.

#### **4.4 Barriers**

##### ➤ *Financial Factor*

A barrier mentioned in the literature is the issue of the 'Green Prison dynamic.' According to this dynamic, green entrepreneurs bear the cost of sustainable behavior but benefit society as a whole (Pacheco, Dean, & Payne, 2010). From a strict game theory perspective, the individual rational behavior would not sustain the business, thereby reaping a cost-benefit. This dynamic naturally poses a barrier to sustainable entrepreneurship. Pacheco et al. (2010) foremost dealt with the issue of escaping this dynamic and derived several solutions. For example, businesses should set up individual industry rules with competitors. The rules increase credibility and brand image, and the green behavior pays off.

Linnanen (2002) and Zhang et al. (2009) also determine costs as a barrier. On the one hand, difficulties for ecopreneurs can arise when searching for investors who believe in their visions. On the other hand, many investors believe that environmental businesses lack knowledge of

financial markets and therefore do not pursue the investor's interests (Linnanen, 2002).

#### ➤ **Government**

Although the government might be one of the key external drivers of sustainable entrepreneurship, it can also be a barrier to it at the same time. Zhang et al. (2009) name the absence of legal demand or the lack of government support as barriers against engaging companies in environmental initiatives. In addition, comprehensive legislation can serve as a barrier. Pastakia (2002) gives the example of numerous tests for bio-efficacy that must be carried out by recognized research facilities and financed by the entrepreneur. This barrier, therefore, can overlap with the barrier Financial Factor.

#### ➤ **Consumers**

When consumers are not aware of the consequences of their environmentally harmful acts, it can be challenging to convince them to buy green products or services (Linnanen, 2002). Even if there is high awareness, such as in countries like the USA, there are low percentages of green consumers (Pastakia, 2002). According to Pastakia (2002), this could be due to consumer resistance to green products and services during the market entry. Consumers are less likely to switch to eco-friendly products if these also require a change in their 'entire system', regarding the product or even a change in the consumer's lifestyle.

#### ➤ **Employees and Communities**

Furthermore, Zhang et al. (2009) suggest that barriers to sustainable entrepreneurship for SMEs lie in the lack of demand from employees and local communities. Since employees or pressure from communities has also been previously named drivers, the literature indicates that several internal and external drivers can also function as barriers.

### **4.5 Critical Reflection of the Existing Literature**

It is evident and stressed in the literature that the whole field of sustainable entrepreneurship is still in an early stage but emerging (Patzeld & Shepherd, 2010). Consistent with that notion, the lack of quantitative methods in the narrower literature dealing with drivers hints at undeveloped literature. Qualitative studies are most relevant for

dealing with areas that lack theoretical deepness (Edmondson & McManus, 2007). For example, Linnanen (2002) lacks rigor in describing how the data were gathered. Pastakia (2002) suggested that internal drivers might be more superior when driving sustainable entrepreneurship. However, the interrelatedness assesses whether internal or external drivers are more important.

## **5 Conclusions**

### **5.1 Research Contributions**

We aggregated the single drivers on a higher level and categorized them as internal or external. The classification between internal and external helps policymakers to incentivize sustainable entrepreneurship most effectively. The literature rarely deals with the issue of whether external or internal drivers are more important. A notable exception is Pastakia (2002). While he suggested that internal drivers might be more critical, we convey the idea that internal and external drivers are interchangeable. External drivers (e.g., incentives) might change internal company structures, such as personal values. The other way is also possible: Internal drivers (e.g., personal values, etc.) will influence external forces (e.g., government policy) via channels such as democratic elections. The drivers cited most often are government, customers, and individual values. As anecdotal evidence, this indicates their relative importance among other drivers. Quantitatively, the literature ranked individual drivers against each other (e.g., Masurel, 2006; Hoogendoorn et al., 2014; Gandhi et al., 2018). Employees, government, and individual values were consistently found to be the most important drivers. We identified several barriers which can be all assigned to a specific driver.

It has emerged that the absence of a driver can be a barrier. Whereas, for example, the demand of customers for eco-friendly products can drive a sustainable business, the lack of demand of customers, in turn, can prevent a business from becoming sustainable.

### **5.2 Future Outlook**

The issue of differences between developing and developed countries needs to be addressed by future research. The question remains whether the

same drivers are important in undeveloped countries such as Nigeria or Tunisia, as in developed countries like Canada or Switzerland. Scraping the surface of this question, some quantitative studies looking at different countries distinguish their results depending on the region. For example, Hoogendoorn et al. (2014) found that environmental practices by SMEs are more present in northern European states, as opposed to southern- and eastern European states. However, the different results from different regions are not the focus of their work. Therefore, work dealing singularly with differences among drivers depending on the region remains to be done.

The literature dealing with the narrow topic of drivers needs to catch up to the faster-emerging literature dealing with sustainable entrepreneurship in general. The growth trend of the broader field is not reflected in the narrower field dealing with drivers.

## References

- Azzone, G., Noci, G. (1998). Seeing ecology and “green” innovations as a source of change. *Journal of Organizational Change Management*, 11(2), 94-111.
- Brundtland, G. H., (1987). ‘Report of the world commission on environment and development - our common Future’, UN.
- Cohen, B., Winn, M. (2007). Market imperfections, opportunity and sustainable entrepreneurship. *Journal of Business Venturing*, 22(1), 29-49.
- Cook, D. J., Mulrow, C.D. and Haynes, R.B. (1997). Systematic reviews: Synthesis of best evidence for clinical decisions. *Annals of Internal Medicine*, 126(5), 376-380.
- Dean, T.J., McMullen, J.S. (2007). Toward a theory of sustainable entrepreneurship: Reducing environmental degradation through entrepreneurial action. *Journal of Business Venturing*, 22(1), 50-76.
- Denyer, D., Neely, A., (2004). Introduction to special issue: innovation and productivity performance in the UK. *International Journal of Management Reviews*, 5(3-4), 131-135.
- Edmondson, A., McManus, S. (2007). Methodological fit in management field research. *Academy of Management Review*, 32(4), 1246-1264.
- Fink, A. (1998). Conducting literature research reviews: From paper to the internet. *Thousand Oaks, CA: Sage Publications*, London.
- Gandhi, N. S., Thanki, S. J., Thakkar, J. J. (2018). Ranking of drivers for integrated lean-green manufacturing for Indian manufacturing SMEs. *Journal of Cleaner Production*, 171, 675-689.
- Gast, J., Gundolf, K., Cesinger, B. (2017). Doing business in a green way: A systematic review of the ecological sustainability entrepreneurship literature and future research directions. *Journal of Cleaner Production*, 147, 44-56.
- Hoogendoorn, B., Guerra, D., van der Zwan, P. (2014). What drives environmental practices of SMEs? *Small Business Economics*, 44(4), 759-781.
- Kirkwood, J., Walton, S. (2010). What motivates ecopreneurs to start businesses? *International Journal of Entrepreneurial Behavior & Research*, 16(3), 204-228.
- Lawal, F. A., Worlu, R. E., Ayoade, O. E. (2016). Critical success factors for sustainable entrepreneurship in SMEs: Nigerian perspective. *Mediterranean Journal of Social Sciences*, 7(3), 338-346.
- Lee, K. (2009). Why and how to adopt green management into business organizations? - The case study of Korean SMEs in manufacturing industry. *Management Decision*, 47(7), 1101-1121.
- Linnanen, L. (2002). An insider’s experiences with environmental entrepreneurship. *Greener Management International*, 38, 71-80.
- Lozano, R. (2015). A holistic perspective on corporate sustainability drivers. *Corporate Social Responsibility and Environmental Management*, 22(1), 32-44.
- Masurel, E. (2007). Why SME invest in environmental measures: Sustainability evidence from small and medium-sizes printing firms, *Business Strategy and the Environment*, 16(3), 190-201.
- Pacheco, D., Dean, T., Payne, D. (2010). Escaping the green prison: Entrepreneurship and the creation of opportunities for sustainable development. *Journal of Business Venturing*, 25(5), 464-480.
- Parrish, B. (2010). Sustainability-driven entrepreneurship: Principles of organization design. *Journal of Business Venturing*, 25(5), 510-523.

- Pastakia, A. (2002). Assessing ecopreneurship in the context of a developing country: The case of India. *Greener Management International*, 38,93-108.
- Patzelt, H., Shepherd, D. A. (2010). Recognizing opportunities for sustainable development. *Entrepreneurship Theory and Practice*, 35(4), 631–652.
- Schlange, L. (2006). What drives sustainable entrepreneurs? 3rd Applied Business and Entrepreneurship Association International (ABEAI), Conference. Kona, Hawaii.
- Shepherd, D. A., Patzelt, H. (2011). The new field of sustainable entrepreneurship: Studying entrepreneurial action linking “what is to be sustained” with “what is to be developed”. *Entrepreneurship: Theory and Practice*, 35(1), 137-163.
- Spence, M., Gherib, J. B. B., Biwole, V. O. (2011). Sustainable entrepreneurship: Is entrepreneurial will enough? A north–south comparison. *Journal of Business Ethics*, 99(3),335-367.
- Sunny, S., Shu, C. (2019). Investments, incentives, and innovation: geographical clustering dynamics as drivers of sustainable entrepreneurship. *Small Business Economics*, 52(4), 905-927.
- Thorpe, R., Holt, R., Macpherson, A., Pittaway, L., (2005). Using knowledge within small and medium-sized firms: a systematic review of the evidence. *International Journal of Management*, 7(4), 257-281.
- Tranfield, D., Denyer, D., Smart, P., (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207-222.
- York, J., Venkataraman, S. (2010). The entrepreneur–environment nexus: Uncertainty, innovation, and allocation. *Journal of Business Venturing*, 25(5), 449-463.
- Zhang, B., Bi, J., Liu, B. (2009). Drivers and barriers to engage enterprises in environmental management initiatives in Suzhou Industrial Park, China. *Frontiers of Environmental Science and Engineering in China*, 3(2), 210-220.

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