sciendo

NS global economics

ECONOMICS
Innovative and Economics Research Journal
Volume 11, Special 1, 2023
www.economicsrs.com

THE POTENTIAL OF INFORMAL INSTITUTIONS IN PROMOTING GREEN ENTERPRENEURSHIP (GE) AND SUSTAINABLE SOCIO-ECONOMIC DEVELOPMENT

P Eko Prasetyo[1], Azwardi[2], Nurjannah Rahayu Kistanti[3]

Received 17.09.2023. | Sent to review 27.09.2023. | Accepted 26.12.2023.

Original article

CC BY NC ND

[1] Department of Development Economics, Faculty of Economics and Business, Universitas Negeri Semarang, Indonesia

[2] Departement of Development Economics, Fakulty of Economic and Businnes, Sriwijaya University, Indonesia

[3] Department of Development Economics, Faculty of Economics and Business, Universitas Negeri Semarang, Indonesia

Corresponding Author:
P Eko Prasetyo

Email: pekoprasetyo@mail.unnes.ac.id

JEL Classification: B55, O35, P31, Z13

Doi: 10.2478/eoik-2023-0061

UDK: 502.171:620.97]:316.42

ABSTRACT

The continuity of the green environment, economy, and entrepreneurship is essential for sustainable development. Therefore, this research aims to explored the potential of informal institutions in promoting Green Enterpreneurship (GE) and sustainable socio-economic development. The method employed used microeconomic data rooted in local wisdom, social norms, and localized moral commitments from various regions of Indonesia. Data collection comprised surveys and structured interviews relevant to the research objectives. Quantitative data material was obtained by conducting a field survey of 150 household samples of green entrepreneurship respondents taken representatively in various regions using simple random sampling techniques. The design employed a two-stage mixed-method approach, including exploratory and explanatory designs. The result showed the significance of Green Enterpreneurship (GE) in mitigating the impacts of global climate change and economic crises, thereby contributing to the attainment of sustainable development goals. However, the main results of the research confirm that the capacity of formal institutions has not been able to navigate the complexity of these problems isssues is limited. Conversely, informal institutions, though capable of mitigating global climate change and advancing sustainable development, remained localized and lacked national and global integration and collaboration. Green Enterpreneurship (GE), as a form of social innovation, gave rise to new models of socio-economic solidarity within unique local communities. The research also underscored the pivotal role of informal institutions in facilitating these endeavors, thereby filling a void in high-quality new institutional economic theory

Keywords: *Informal Institutions, Green Enterpreneurship and Sustainable Socio-Economic Development*

1. INTRODUCTION

The concept of Green Enterpreneurship (GE) has proven increasingly effective in achieving sustainable development goals (SDGs), which is a fundamental pillar in sustainable development (Vasilescu et al., 2023). However, the theoretical foundation of this research remains relatively unexplored due to the complexity of the phenomenon (Misztal and Kowalska, 2023; Prasetyo et al., 2023). The process of fostering Green Enterpreneurship (GE) and establishing new institutional resource-based environments are indispensable drivers of sustainable socio-economic development. The innovative capacity and awareness of the millennial generation are key

factors in this endeavor (Nikolaou et al., 2018; Prasetyo et al., 2022a; Genoveva and Tanardi, 2022; Rudaku et al., 2023). Prior research has drawn attention to institutional gaps, particularly in supporting female entrepreneurs to mitigate gender disparities in Green Enterpreneurship (GE) (Prasetyo et al., 2023; Pindado et al., 2023). Despite this, Green Enterpreneurship (GE) is currently seen as a form of social innovation aimed at promoting sustainable, inclusive economic growth to reduce unemployment and poverty (Štilić et al., 2023; Prasetyo et al., 2023).

One of the primary objectives of the SDGs for 2030 is to expedite progress toward sustainable development by increasing peaceful, inclusive societies (Cassar 2022). This is to be achieved by establishing effective, accountable, inclusive, and just institutions at all levels (de Soysa and Jütting, 2023). These endeavors can be realized through the adoption of new institutional policy models that stimulate social innovation in the socio-economic development of disadvantaged communities (de Soysa and Jütting, 2023). Evaluations of new business models with innovative high-tech solutions have proven more effective in promoting social-economic solidarity (SSE) and enhancing the efficiency of sustainable socio-economic development (Kuzmak and Kuzmak, 2023; Prasetyo et al., 2023; Shyshkova et al., 2022). Accordingly, OECD countries have asserted that social economy acts as a driver of social innovation, subsequently supporting new economic models within society (OECD, 2022).

Recent investigations have examined the environmental impact of institutions on social entrepreneurship, with few on the role of Green Enterpreneurship (GE) (Prasetyo et al., 2022b). The moderate role of informal institutional potential in promoting Green Enterpreneurship (GE) and sustainable socio-economic development has remained unclear (Prasetyo et al., 2023). Preliminary research found that informal institutions have a greater impact on entrepreneurial opportunities than formal ones (Aparicio et al., 2016; Alwakid et al., 2021). According to empirical evidence, the quality of informal institutions has a more significant impact on the quantity and quality of entrepreneurship in developing countries compared to developed ones (Chowdhury et al, 2019; Sedeh et al., 2022; Zhuang and Sun, 2023). However, research focused on the empirical examination of informal institutions on Green Enterpreneurship (GE) as a form of social-economic innovation related to sustainable development is lacking. This is because informal institutions are known to have a more significant effect on economic, and organizational behavior by creating localized social norms and moral commitments (Zhuang and Sun, 2023).

Informal institutions have been shown to play a role in increasing public awareness of environmental issues (Shi and Xu, 2018; Zhang et al., 2019; Gaganis, 2021). However, the potential of informal institutions in this context has received less attention. The primary urgency of this research is to explore the role of informal institutions, particularly localized ones in developing countries like Indonesia, by promoting Green Enterpreneurship (GE) and achieving SDGs. The core issue at hand is how the interaction between informal institutions and new social innovations through Green Enterpreneurship (GE) can be conceptually and practically beneficial. The specific objective of this research is to elucidate the interaction in exploring the potential of informal institutions in driving Green Enterpreneurship (GE) and sustainable socio-economic development. The contributions of this research include providing an understanding of the role of informal institutions in filling the gap, which has remained untouched by formal institutions, both theoretically and practically. The argument here is that sustainable socio-economic development is a unique endeavor, requiring consideration of the spatial scale and the understanding of the underlying processes (Zetterberg et al., 2023). Consequently, there are no “magic bullet solutions” that can guarantee sustainable development at the local level (Mijajlović et al., 2021). Nevertheless, policy actions and interventions should effectively address the complexity of the issues, promoting inclusivity and fairness at all levels (de Soysa and Jütting, 2023; Zetterberg et al., 2023).

2. REVIEW LITERATURE

2. 1. THE RELATION OF FORMAL AND INFORMAL INSTITUTIONS

The absence of both formal and informal institutions has a direct impact on entrepreneurial productivity and serves as a hindrance to entrepreneurial behavior (Webb et al., 2023). Therefore, the roles of both formal and informal institutions are crucial for the development of a nation, even though prior literature has predominantly concentrated on formal institutions (Emilia, 2016; Ugyel, 2018; Prasetyo and Dzaki, 2020). The significance of informal institutions has been on the rise, particularly in their contribution to public services and increasing the competitiveness of a nation (Ugyel, 2018; Lindorfer et al., 2023; Candea et al., 2023; Prasetyo et al., 2021). As a result, new institutional theory literature has assumed institutions to be dynamic rather than static (Tae-Hee, 2019; Koning, 2016). In practice, institutions often coexist, comprising a mix of formal and informal elements (Fuentelsaz et al., 2021; Lee and Law, 2016). Formal and informal institutions operate in tandem by reinforcing each other, thereby making their interaction a pivotal aspect of the new institutional perspective (Lindorfer et al., 2023; Gërxhani and Cichocki, 2023). Nevertheless, previous research (North, 1990), has clarified that the most influential institutional factors are frequently found within the realm of informal institutions.

There is a notable emphasis on one of the most promising avenues for future research, which is to delve into the potential of integrating informal institutions into institutionalism (Tae-Hee, 2019; Koning, 2016). New institutional economics presents a valuable theoretical framework for understanding economic organizations and social culture as well as for introducing a distinctive approach to researching socio-economic and political dynamics (Tae-Hee, 2019; Dimaggio and Powell, 2013). In light of this, both formal and informal institutions must continue to occupy a central position within the new institutional perspective, both in theory and in practical applications (Prasetyo et al., 2022b; Lindorfer et al., 2023).

Extensive literature research has been carried out to explore the relationship between informal entrepreneurial orientation and institutional theory (Sorensen, 2017; Williams, and Bezeredi, 2018). In recent years, new institutionalist theories have emerged to elucidate the prevalence of entrepreneurship in the informal sector (Sorensen, 2017; Fabris, 2022; Mićić, and Mastilo, 2022; Kabir et al., 2023). Consequently, literature research that primarily focuses on examining the connection between entrepreneurial orientation and informal institutional theory remains relatively scarce (Prasetyo et al., 2022b; Sendra-Pons et al., 2022; Muralidharan and Pathak, 2017). The argument posited is that the failure of formal institutions has resulted in an asymmetry between formal rules and the values, norms, beliefs, and participation in the informal sector, as these aspects are not significantly influenced by formal institutions (Prasetyo et al, 2022b; Sorensen, 2017).

According to preliminary research, both formal and informal institutional approaches are important in affecting the stages of innovation performance of a nation (Lee and Law, 2016; Kurtulmuş et al., 2020). However, informal institutions, specifically through the dimensio (Lee and Law, 2016), of social capital, exhibit a positive and significant correlation with higher stages of innovation (Lee and Law, 2016). In terms of trust in the legal system and formal institutions, informal institutions negatively impact economic innovation performance (Kurtulmuş et al., 2020). This process increasingly underscores the intricacy of the fundamental theory regarding the relationship between informal institutions and social innovation in Green Enterpreneurship (GE) related to sustainable development models. Informal institutional approach is a complex and vital socio-economic phenomenon that is both intriguing and warrants further examination.

2. 2. THE RELATION OF INFORMAL INSTITUTIONS AND GREEN ENTERPRENEURSHIP

Research into the specific relationship between informal institutions and Green Enterpreneurship (GE) is gaining increasing significance, yet the existing standard literature in this domain remains limited (Prasetyo et al., 2023; Nikolaou et al., 2018; Alwakid et al., 2021; Kurtulmuş et al., 2020). Literature research has been conducted on the role of informal institutions in driving sustainable economic growth through the dynamic performance of female entrepreneurs (Cismaș et al., 2023; Prasetyo et al., 2023; Kabir et al., 2023; Godlewska, 2021). In addition, a global database and standardized theories have not been found, which has led to the need for further experimental examinations using various approaches to explore Green Enterpreneurship (GE) (Alwakid et al., 2021). The analytical context and theoretical foundation for such research can be rooted in resource-based institutional factors (Nikolaou et al., 2018). Therefore, there is need for concerted efforts to establish more consistent and uniform information concerning Green Enterpreneurship (GE) and its resultant impacts (Haldar, 2019).

Mitigating global climate change necessitates the cultivation of various capacities within informal institutions that are not only more effective but also accountable at the international, national, and local levels (de Soysa and Jütting). Literature findings have shown that various informal institutions are significant determinants of strong economic development (Saleem et al., 2022; Urbano et al., 2021; Williamson, 2009; Dubyna, 2021). The theoretical dimension for gauging informal institutions is often categorized through concepts like relationships, solidarity, trust, social norms, social capital, networks, and alliances (Williamson, 2009; Laskaiev et al., 2023; Matos et al., 2023). This is in addition to the sustainability of informal institutions depends on the foundation of informal network functions (Murimbika and Urban, 2023). The potential of local government institutions has not been extensively explored in existing literature, leading to much confusion and threats to the sustainability of local informal and local government institutions (Alexeev et al., 2021).

Contemporary literature research is gradually converging and highlighting the effectiveness and adaptability of informal institutions within international, national, and local strategies (Vasilescu et al., 2023; Prasetyo et al., 2022b; Minbaeva et al., 2023; Cristea and Caragiani, 2022). Therefore, informal institutions are now playing an increasingly vital role in balancing and filling the gaps left by formal institutions in the markets of developing countries (Vasilescu et al., 2023; Prasetyo et al., 2022b; Nguyen et al., 2019). These insitutions have influenced all aspects of international business, with limited attention in various literature (Minbaeva et al., 2023). The two-way causality between institutions and Green Enterpreneurship (GE) has only been confirmed in countries driven by innovation in the long term (Dau et al., 2022). Previous research has stated that fertility rates are negatively related to long-term inclusive economic development, including female workforce participation (Li et al., 2022).

However, specific research on the causality and effect of informal institutions on Green Enterpreneurship (GE) in innovation-poor and gender-unequal developing countries is still limited, thereby they must be concluded with caution. Regional disparities in sustainable development can be exacerbated by variations in the level of innovation within different communities (Samadi, 2019). Consequently, the potential of Green Enterpreneurship (GE), driven by social and economic solidarity, to harness resources is underutilized (Prasetyo et al., 2023). The argument put forth is that resource ownership is highly intricate, and the mechanisms of informal regulation are distinctive and difficult to measure precisely (Prasetyo et al., 2023; Debnath and Das, 2022). Previous research results show significant differences in the operational patterns

of Green Enterpreneurship (GE) between developed and developing countries (Prasetyo et al., 2023; Debnath and Das, 2022). Moreover, Green Enterpreneurship (GE) is predominantly undertaken by women, who still face gender bias (Vasilescu et al., 2023).

Gender equality within the diversity of entrepreneurship, viewed through the lens of institutional theory, is increasing significantly (Prasetyo et al., 2023). In principle, these informal institutions possess the potential to enhance the socio-economic well-being of women through entrepreneurial endeavors, particularly in rural areas (Kabir et al., 2023). However, unfavorable conditions may arise due to inadequate funding, labor market conditions, and socio-economic norms (Alpsahin, 2023). In practical terms, entrepreneurship is often characterized by uncertainty and failure. When entrepreneurial ventures face business failure, it places a substantial economic and social burden on individuals. The extent of this burden often varies according to the type of related institution, thereby affecting decision-making and entrepreneurial behavior (Peprah et al., 2023). Consequently, policymakers aiming to increase economic well-being through increased entrepreneurship need to carefully select the 'type' of entrepreneurship to focus on and subsequently choose more suitable policies (Guerrero and Lira, 2023). The urgency of this research becomes increasingly important in examining how informal institutions can support Green Enterpreneurship (GE) and sustainable rural socio-economic development in developing countries such as Indonesia. The objective of this research is to explore and identify this potential to support the achievement of SDGs.

2. 3. INSTITUTIONS, GREEN ENTERPRENEURSHIP (GE), AND SUSTAINABLE DEVELOPMENT

Institutionally, Green Enterpreneurship (GE) has become a significant momentum related to dynamic innovation performance in sustainable business activities (Lee et al., 2022; Thurik et al., 2023). Innovative performance in Green Enterpreneurship (GE) serves as a significant mediator in the connection between environmentally friendly dynamic capabilities and sustainable performance (Nordin and Hassan, 2019). Therefore, strategic policies and related institutions have been established to provide support for Green Enterpreneurship (GE) (Prasetyo et al., 2023; Appiah et al., 2023). Green Enterpreneurship (GE) has progressively integrated with various other disciplines to strengthen entrepreneurship and new institutional theories (Thurik et al., 2023). Integrated technical orientations that foster collaboration with the environment have promoted Green Enterpreneurship (GE) and the organizational capacity for institutional mitigation, thereby further supporting green innovation (Thurik et al., 2023). Previous research has confirmed the major roles played by educational institutions and the media in influencing entrepreneurs understanding of Green Enterpreneurship (GE) (Mukonza, 2020; Beiwei et al., 2023; Sulastiningsih et al., 2023). The results indicated that Gender and Social Inclusion (GESI), as well as community institutions, increasingly drive sustainable Green Enterpreneurship (GE) (Prasetyo et al., 2023).

The symbiotic relationship between Green Enterpreneurship (GE) and sustainable development underscores the need for robust institutional policy capacity (Nikolaou et al., 2018; Aurellia and Nuringsih, 2020). For instance, the results stated that Green Enterpreneurship (GE) influences green product development, which subsequently affects marketing performance (Alamsyah et al., 2023). Several models have not explored the potential of institutional capacity concerning the symbiosis of GE with sustainable development, both theoretically and practically (Prasetyo et al., 2022a). Green Enterpreneurship (GE) is fundamentally a component of social entrepreneurship, driven by the objective of mitigating environmental impacts to attain sustainable goals (Neumann, 2022). Meanwhile, the theoretical foundation of Sustainable Development

Goals (SDGs) remains underdeveloped (Prasetyo et al., 2022a; Wang et al., 2023). and there is no standardized theory of sustainable development that encompasses all aspects. Specifically, there has not been an in-depth exploration of the influence of the green market on sustainable development and its interconnectedness with Green Enterpreneurship (GE) (Wang et al., 2023).

Recently, there has been a growing increase in the fundamental concept of sustainable development through Green Enterpreneurship (GE) within the framework of new institutional theory (Alwakid et al., 2021; Swain and Yang-Wallentin, 2020). However, it is important to recognize that the embedded paradox of Green Enterpreneurship (GE) within institutional environments is a barrier to achieving SGDs (Swain and Yang-Wallentin, 2020). Understanding the various dimensions of institutional elements that shape both formal and informal institutions can have a significant impact on supporting and preventing entrepreneurial migration (Gupta and Dharwal, 2022). Informal institutions can serve as complements, substitutes, accommodative entities, or competitors to formal institutions (Minbaeva et al., 2023). When formal institutions are effective and align with informal institutions, they can complement each other (Prasetyo et al., 2023; Minbaeva et al., 2023). Conversely, when they are not in sync, they may assume an accommodative role (Minbaeva et al., 2023). In cases where formal institutions are ineffective but align with informal institutions, informal institutions can act as substitutes (Prasetyo et al., 2023). When they do not align, informal institutions tend to take on a more competitive role (Minbaeva et al., 2023).

Furthermore, one approach emphasized that informal institutions emerge as a response to the void left by formal institutions (Shu et al., 2021). Theoretically, the development of informal institutions is linked to the formal institutional environment in which entrepreneurship functions (Fuentelsaz et al., 2019). The absence of both formal and informal institutions has a detrimental effect on productivity and poses barriers to entrepreneurial activities (Webb et al., 2020). The intricate nature of institutions can have adverse consequences on resource use, leading to decreased productivity and reduced entrepreneurial competitiveness (Prasetyo et al., 2022b).

3. RESEARCH METHOD

The research method employed to address the problem and objectives involves a two-stage mixed methods research design comprising exploratory and explanatory designs. These designs aimed to explain the significant role of informal institutions and Green Enterpreneurship (GE) as models for creating innovations and driving sustainable development. Given the problem and objectives, the method is categorized by an exploratory approach, which is the initial step to identify and describe various related factors. In contrast, the explanatory design leans more towards statistically substantiating the roles played by these associated factors. The fundamental analytical model applied is multiple regression path analysis. As an initial step, after all variables have been explored and measured with the appropriate dimensions, various regression models are experimented with to determine the best simple model in the form of path analysis.

The choice to employ this experimental method is underpinned by the absence of a comprehensive global database and a standardized theory pertaining to the connection between institutional investigations and Green Enterpreneurship (GE) in the context of sustainable development (Alwakid et al., 2021). Additionally, the foundational concept of sustainable development still lacks robustness (Neumann, 2022), necessitating the exploration of various innovative approaches to generate more consistent and cohesive information (Haldar, 2019). This research used a standardized regression model in the form of path analysis, operating under the assumption that this model provides uniform and consistent standardized coefficient information. Tech-

nically, this path analysis model is considered not to violate classical assumptions, especially heteroskedasticity.

Subsequently, the operational definitions and measurement dimensions for each variable used are established using the Gini ratio index value technique. This technique has been extensively covered in prior research, and for academic ethical reasons, it does not need to be reiterated in this context. Consequently, the mixed methods research design commences with a qualitative method, featuring exploratory analysis, and is complemented by a quantitative method. The exploratory, descriptive quantitative analysis method is employed to elucidate each phenomenon that has been uncovered, measured, identified, and meticulously formulated within the experimental test.

The model presented in this paper was formed using key variables related to the research objectives. These include Green Enterpreneurship (GE), Social Entrepreneurship (SE), Informal Institutional (InIn), Standardization (St), Commercialization (Cz), Technology (Tg), Productivity (Pd), Investment (Iv), Social Capital (SC), Human Capital (HC), and Sustainable Development (SDGs). The objective is to provide a better understanding of the Green Enterpreneurship (GE) phenomenon and the role of informal institutions. Therefore, to facilitate the research activities, a relevant research design and a flowchart of steps derived from the framework and the roadmap were created. A structural equation model of path analysis regression equations was formulated for more accessibility as follows.

$$GE_i = \alpha_0 + \beta_1 SE_i + \beta_2 InIn_i + \beta_3 St_i + \varepsilon_1 \quad (1)$$

$$GE_i = \alpha_0 + \beta_1 SE_i + \beta_2 InIn_i + \beta_4 St_i + \varepsilon_2 \quad (2)$$

$$GE_i = \alpha_0 + \beta_1 SE_i + \beta_2 InIn_i + \beta_5 St_i + \varepsilon_3 \quad (3)$$

$$GE_i = \alpha_0 + \beta_1 SE_i + \beta_2 InIn_i + \beta_6 St_i + \varepsilon_4 \quad (4)$$

$$GE_i = \alpha_0 + \beta_1 SE_i + \beta_2 InIn_i + \beta_7 St_i + \varepsilon_5 \quad (5)$$

$$GE_i = \alpha_0 + \beta_1 SE_i + \beta_2 InIn_i + \beta_8 SC_i + \beta_9 HC_i + \varepsilon_6 \quad (6)$$

$$SDGs_i = \alpha_0 + \beta_1 SE_i + \beta_2 InIn_i + \beta_9 HC_i + \beta_{10} GE_i + \varepsilon_7 \quad (7)$$

4. RESULTS AND DISCUSSION

Informal institutions are understood as a set of moral ethics or unwritten norms, habits, and commitments embraced by a local community, emerging as a form of social-economic solidarity. Some examples of informal institutional organizations in Indonesia are informal labor unions or volunteer organizations that emerge during disasters caused by global climate change, COVID-19, or economic crises. Currently, the potential of these informal institutions is steadily expanding, transforming them into a fundamental pillar of regional and national economies and even a burgeoning political influence in Indonesia. Formal institutions often encounter limitations in grappling with the intricacies of various issues, including corruption. However, the function of informal institutions is complementary in nature, aimed at filling gaps rather than conflicting with formal institutions. These informal institutions are designed to achieve goals that should be carried out by formal institutions, which are often ineffective and sometimes ignored by existing formal institutions.

Furthermore, this research broadens the scope of informal institutions to address the deficiencies in formal institutional theory. It is guided by the aspiration to gain a deeper insight into the capabilities of informal institutions and the challenges posed by global development. The underlying premise is that, both in theory and practice, informal institutions exert influence on the direction of Green Enterpreneurship (GE) activities, thereby rendering them more effective. The research framework is primarily centered on the exploration of Green Enterpreneurship (GE) as a novel form of social innovation capable of mitigating the adverse consequences of global climate change and propelling sustainable development. From this perspective, the objective of this research is to offer a fresh perspective on how informal institutions can enhance the efficiency of Green Enterpreneurship (GE), thereby mitigating the detrimental effects of climate change and advancing the goals of sustainable socio-economic development.

This research operates under the assumption that Green Enterpreneurship (GE) represents a distinctive form of local socio-economic innovation primarily facilitated by informal institutions in Indonesia. Green Enterpreneurship (GE) emerged in response to the Indonesian government pro-green economy development strategy. However, the existing formal institutions are often incapable of effectively managing all pro-green economy activities as they should, which leads the Green Enterpreneurship (GE) to be primarily driven by the collective awareness and spirit of local communities. The transaction costs of Green Enterpreneurship (GE) were initially low when it first emerged, but currently, transaction costs are becoming increasingly higher with the rising role and political processes.

Furthermore, this research underscores that Green Enterpreneurship (GE) possesses distinct and localized sources of competitive advantage, making it a prevailing trend in sustainable development across various regions. The operationalization of Green Enterpreneurship (GE) remains challenging, both in theoretical and practical terms, primarily due to the absence of a standardized conceptual definition. Social entrepreneurship is an innovative endeavor primarily motivated by social equality goals and driven by solidarity. Green Enterpreneurship (GE) refers to innovative business endeavors that are more actively focused on mitigating the adverse effects of global climate change and economic crises while being grounded in economic solidarity (Prasetyo et al., 2023). The integration and amalgamation of these two concepts are often referred to as green social entrepreneurship (Prasetyo et al., 2021). Therefore, green social entrepreneurship is primarily focused on innovative entrepreneurs who aspire to mitigate the negative impacts of global climate change and economic crises but also to achieve socio-economic development goals that are environmentally friendly for the sustainable well-being of the community.

In essence, minor differences are primarily related to their main motivation rather than the associated activities. Fundamentally, both are driven by the spirit of socio-economic solidarity (SSE) to mitigate economic crises and global climate change while promoting environmental SGDs. The primary function is to be a positive response to the impacts of formal institutional policy implementation, as these institutions have not yet navigated more effectively, inclusively, justly, accountably, and peacefully to sustainably achieve community well-being and sustainability. The main goal of Green Enterpreneurship (GE) is to reduce the adverse effects of global climate change and economic crises on environmental, economic, and social damage.

Table 1. Results of standard coefficient analysis of local wisdom role in Green Enterpreneurship (GE)

Model		Unstandardized Coefficients		Standardized Coefficients	t-stc	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.114	.029		-3.914	.000		
	Social_Entrepreneurship	.416	.057	.382	7.273	.000	.535	1.868
	Informal_Institutional	.503	.081	.388	6.172	.000	.373	2.677
	Standardization	.245	.050	.267	4.925	.000	.502	1.991
2	(Constant)	-.098	.032		-3.013	.003		
	Social_Entrepreneurship	.432	.059	.396	7.262	.000	.539	1.857
	Informal_Institutional	.499	.095	.386	5.255	.000	.298	3.354
	Commercialization	.202	.057	.230	3.551	.001	.384	2.607
3	(Constant)	-.108	.032		-3.370	.001		
	Social_Entrepreneurship	.389	.062	.357	6.280	.000	.503	1.986
	Informal_Institutional	.553	.088	.427	6.249	.000	.349	2.867
	Technology	.203	.062	.215	3.272	.001	.378	2.644
4	(Constant)	-.099	.039		-2.512	.013		
	Social_Entrepreneurship	.389	.068	.358	5.763	.000	.447	2.236
	Informal_Institutional	.587	.104	.454	5.623	.000	.265	3.775
	Productivity	.144	.078	.162	1.847	.067	.224	4.468
5	(Constant)	-.114	.033		-3.426	.001		
	Social_Entrepreneurship	.457	.061	.419	7.441	.000	.533	1.875
	Informal_Institutional	.548	.104	.424	5.252	.000	.261	3.836
	Social_Invention	.148	.063	.160	2.352	.020	.367	2.724

Dependent Variable: Green Enterpreneurship (GE)

Source: processed by authors

Presently, Green Enterpreneurship (GE) in Indonesia has become increasingly important and relevant as a mitigation measure against the impacts of global climate change and a driver for achieving SDGs. In theoretical and practical terms, the existing literature is challenging to navigate due to the complexity of the discipline, which becomes more apparent when Green Enterpreneurship (GE) is linked with sustainable socio-economic development. This sustainable development is not limited to the sustainability of physical environmental development but mainly to socio-economic community well-being. Therefore, through an integrative examination that incorporates the role of existing informal institutions, this research attempts to introduce a new typology concerning the relation of these informal institutions in driving Green Enterpreneurship (GE) and sustainable socio-economic development. Based on the results of the path analysis in the three tables and Figure 1, this connection is now more easily understood empirically and theoretically. This research expands on the pathway of informalization within new institutional theory and entrepreneurial theory concepts, offering increasingly pertinent practical policy implications.

This research offers comprehensive insights into new institutional theory within the context of localization in developing countries like Indonesia, highlighting the increasing significance of informal institutions (North, 1990). It also attempted to present three groups of quantitative empirical models related to Green Enterpreneurship (GE) and the primary role of informal in-

stitutions. The discussion starts with the potential role of informal institutions in determining Green Enterpreneurship (GE), either partially with various other factors or its impact on sustainable development. The first focus, as shown in Table 1, examines the potential role of informal institutions in Green Enterpreneurship (GE). The second focus, presented in Table 2, delves into the determinants of factors that influence Green Enterpreneurship (GE). Lastly, Table 3 and Figure 1 provide a deeper understanding of the determinants driving sustainable socio-economic community development. The principal approach in this experimental research consistently considers the local environmental externalities in relation to SGDs. The main research focuses on the exploration of various determinant factors based on local wisdom, primarily reflected in informal institutions at the local community level. The complete results can be found in the various tables presented in this research.

Table 2. Determination values for factors affecting Green Enterpreneurship (GE)

Model	R Multiple	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.906	.821	.817	.112672	.821	185.424	3	121	.000	1.734
2	.898	.806	.801	.117479	.806	167.326	3	121	.000	1.792
3	.896	.803	.798	.118326	.803	164.365	3	121	.000	1.722
4	.890	.791	.786	.121745	.791	153.028	3	121	.000	1.777
5	.892	.795	.790	.120721	.795	156.322	3	121	.000	1.722

Dependent Variable: Green Enterpreneurship (GE)

Source: Processed by the authors

Based on the research results presented in Tables 1 and 3, it is evident that the variable of informal institutions exhibits the most dominant, positive, and significant standardized coefficients in almost all models, with the exception of model 2. This underscores that the role of informal institutions is a key driver in influencing Green Enterpreneurship (GE) and sustainable development. Model 2 stands out as an exception, where the role of informal institutions in Green Enterpreneurship (GE) is slightly smaller than social entrepreneurship, although it remains positive and significant. This phenomenon indicates that the primary and foremost goal of Green Enterpreneurship (GE) is not commercialization but is focused on motivating the spirit of socio-economic solidarity within the community. In the other models, the role of informal institutions remains the most dominant and significantly affects Green Enterpreneurship (GE) and the achievement of SGDs. Qualitative and quantitative research results consistently indicate that the existence of Green Enterpreneurship (GE) is unique and rooted in localized wisdom in Indonesian society, making it challenging to generalize, even though it adheres to its standards. In Table 2, the determinants of various factors affecting Green Enterpreneurship (GE) remain significant.

Based on the research findings presented in Table 3 and Figure 1, it is evident that the role of informal institutions and GE in driving the achievement of SGDs is informal and formal. In Table 3, the role of informal institutions remains the most dominant, significantly, and positively influencing Green Enterpreneurship (GE), as shown in models 6 and 7. This means that the potential of informal institutions and Green Enterpreneurship (GE) can increasingly drive the achievement of SGDs both directly and indirectly. Figure 1 underscores the paramount role of informal institutional potential, both directly and indirectly, in driving the achievement of SDGs. However, qualitative research results reinforce the idea that the role of informal insti-

tutions in this phenomenon tends to be complementary. There is a tendency for informal institutions to act as a substitute because the existing formal institutions are unable to navigate the existing conditions effectively.

Empirically, the effectiveness of informal institutional potential within Indonesian society is influenced by community characteristics such as solidarity, trust, social norms, social capital, and strategic alliances, which are in accordance with the behavioral character of the local community. Therefore, this empirical research supported earlier analysis that suggested informal institutions are often measured in these dimensions (Williamson, 2009; Matos et al., 2023; Adom and Ackom, 2023). This means that the connection between informal institutions and local community wisdom has successfully, peacefully and inclusively supported the achievement of SGDs with local sovereignty (de Soysa and Jütting, 2023). The connection between informal institutions and local regional wisdom potential within Indonesian society has been more flexible and effective in addressing the complexities of issues occurring within the community compared to the role of formal institutions.

Table 3. Results of path analysis models for increasing entrepreneurial opportunities

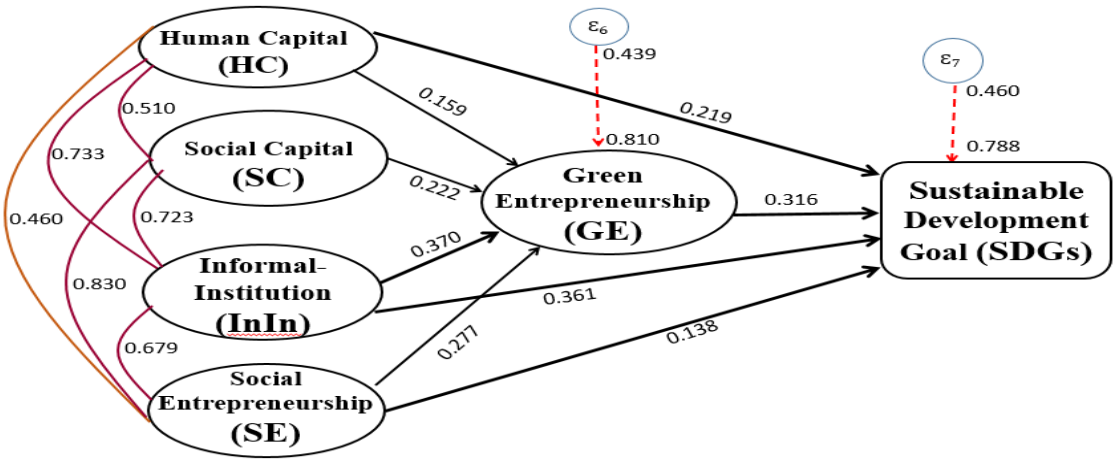
Model B		Unstandardized Coefficients		Standardized Coefficients	t-stc.	Sig.
		Std. Error	Beta			
6	(Constant)	-.129	.030		-4.357	.000
	Social_Entrepreneur	.301	.079	.277	3.800	.000
	Informal_Institutional	.479	.096	.370	4.978	.000
	Social_Capital	.255	.089	.222	2.870	.005
	Human_Capital	.167	.062	.159	2.710	.008
7	(Constant)	-.131	.030		-4.412	.000
	Social_Entrepreneurship	.143	.059	.138	2.408	.018
	Informal_Institutional	.445	.106	.361	4.200	.000
	Human_Capital	.219	.062	.219	3.530	.001
	Green Enterpreneurship	.283	.054	.316	5.263	.000

Dependent Variable model-6: Green Enterpreneurship (GE)

Dependent Variable model-7: Sustainable Development Goals (SDGs)

Source: Processed by the authors

Figure 1. Path analysis model for increasing Green Enterpreneurship and sustainable development



Source: Processed by the authors

The potential of resource-based connections based on local wisdom strength is increasingly providing outcomes for Green Enterpreneurship (GE) as a mitigation measure for various disturbances within the surrounding community. This means that the local potential based on socio-economic solidarity, trust, and strategic alliances is more capable of exploiting the use of local resources to optimize their potential. Therefore, this research is in accordance with previous examinations, which suggested the increasing importance of the connection between Green Enterpreneurship (GE) and informal institutions (Nikolaou et al., 2018; Alwakid et al., 2021; Lee and Law, 2016). It also confirms the dynamic role of gender in driving sustainable socio-economic development (Prasetyo et al., 2023; Kabir et al., 2023; Godlewska, 2021).

This research indicates that informal institutional potential can fill the capacity gaps of formal institutions that are unable to navigate all the issues within society, practically and theoretically. Empirically, the existence of informal institutions in Indonesia not only acts as a complement and accommodation but can also substitute roles not fulfilled by formal institutions. However, the existing informal institutions are localized and possess unique local wisdom potential that is challenging to generalize globally. It is recommended that they continue to be integrated and collaborate with various national and global resources to drive the achievement of sustainable socio-economic development goals.

Green Enterpreneurship (GE) is a new social innovation used to facilitate sustainable rural economic development. Its emergence is supported by the increasing collective awareness needed to mitigate the impacts of global climate change and economic crises. The potential of this unique form of Green Enterpreneurship (GE) as a basic model and resource for socio-economic solidarity in society will become increasingly important and sovereign in the future. This means that informal institutions are the key drivers of sustainable socio-economic development in Indonesia, and fill the gaps in the new high-quality institutional economics theory. Therefore, this research supports the existing literature that informal institutions are powerful determinants of future economic development (Saleem et al., 2022; Urbano et al., 2021; Williamson, 2009; Minbaeva et al., 2023; Nguyen et al., 2019).

Previous research stated that gender plays a significant role in raising awareness of global climate change (Prasetyo et al., 2023). In addition, the involvement of local intellectual authorities in informal institutions based on local community wisdom is crucial in driving sustainable development achievements. This means that a higher level of community education led to increased collective awareness, particularly regarding Green Enterpreneurship (GE). Therefore, the role of informal institutional potential in Green Enterpreneurship (GE) is increasingly important in driving sustainable development. This is in accordance with previous research that highlighted the importance of informal institutions in the development of entrepreneurial orientation, including Green Enterpreneurship (GE) and sustainable development (Vasilescu et al., 2023; Williams and Bezeredi, 2018).

The specific construction of the role of informal institutional potential is not well integrated. Therefore, this research considered Green Enterpreneurship (GE) as a form of social innovation rooted in local wisdom and its primary goal is to mitigate the impacts of global climate change, while achieving SGDs. The research is limited to the uniqueness and localized nature of Green Enterpreneurship (GE), hence it is challenging to generalize nationally and globally. Another weakness is gender bias, even though, in practice, women are more responsive to these issues, men are often appointed as leaders of informal organizations. These informal institutions are established to influence the consciousness and perspectives of the local community without regard to gender and socio-economic status. Therefore, integration and collaboration with all available resources are crucial for social sustainability because social sustainability is recognized as

a fundamental and integrated component of various activities and facilities within social structure theory (Barbalet, 2022).

5. CONCLUSION

In conclusion, the positive and significant role of informal institutional potential is the most dominant factor influencing Green Enterpreneurship (GE). Informal institutions have continued to play the most significant role in propelling the achievement of SGDs both directly and indirectly. Therefore, the role and function of informal institutional potential is considered the key factor in promoting Green Enterpreneurship (GE) and attaining sustainable socio-economic development goals. One of the methods used to provide insight into the complementary nature of informal and formal institutions in accordance with the pro-green and blue economy development policy strategies of Indonesia is through qualitative research findings. Qualitative research results also emphasized a tendency for informal institutions to serve as accommodative and simultaneously act as substitutes. This occurred when formal institutions were incapable of addressing and navigating the complexities of various issues, including the problem of corruption, which erodes public trust. As gaps in formal institutions worsened due to corruption, the proposition of informal institutional potential as an accommodative and substitutive force became stronger. Green Enterpreneurship (GE) has continued to drive the achievement of SDGs as various informal institutional organizations gained prominence.

Based on collective awareness, the research findings underlined the vital role of Green Enterpreneurship (GE) in mitigating the adverse effects of global climate change and economic crises in Indonesia. Green Enterpreneurship (GE), as a manifestation of social innovation, introduced fresh models of socio-economic solidarity aimed at alleviating various negative impacts. These impacts help to achieve socio-economic development for the sustainable well-being of society when formal and informal institutions work in tandem. The elements of social networks and solidarity, which are integral components of social capital, gain strength and can foster unity and local trust in mitigating these negative impacts.

From an academic perspective, this research provided novel insights into the contribution of informal institutions, which enriched the landscape of new institutional economics theory and rendered it more comprehensive. However, it is limited to the incomplete socio-economic data of communities at the national and global levels in various cases. This research also focused on using fundamental microdata as a measurement dimension for informal institutions based on the uniqueness of local wisdom. The process of generalizing the nature and roles of these institutions on a global scale became challenging since the behavior of each local community possesses unique characteristics that cannot be readily extrapolated to the national or global context. Therefore, future research needs to integrate formal and informal institutions at the national and global levels to provide solutions and navigate the challenges effectively. Integration and collaboration will strengthen the existing institutions because when formal and informal institutions are strong, the resource framework becomes more robust, and conflicts can be minimized.

ACKNOWLEDGMENT

Researchers would like to thank the Directorate General of Higher Education, DRTPM, Directorate of the Ministry of Education, Culture, Research and Technology of the Republic of Indonesia. For support for research costs in the basic research scheme (PDKN) based on announcement letter number 0162/E5.4/DT.05.00/2023 and research contract number 041/E5/PG.02.00.PL/2023 for the April 12, 2023 Fiscal Year and Research Implementation Contract number 77.11.5/UN37/PPK.6.3/2023.

Conflicts of Interest & Declaration.

The author is responsible and states; there is no potential conflict of interest of any kind in connection with this research, either before and after its implementation, and/or publication of this article. The authors have declared no competing interests in writing this research article.

Author contributions:

This article is the result of collaborative research, especially those coordinated by the research team listed in this article. All authors participated in the development of the research questions of the study: Conceptualization, Author-1 and Author-3; Methodology, Author-1 and A; data collection Author-1, Author- 2, & Author-3; Validation, Author-1; Data curation, Author-2 & Author-3; Formal analysis, Author-1.; Investigation, Author-3.; Resources, Author-2; Original draft preparation, Author-1; Review and editing,

REFFERENCE

Abed, A., & Al-Jokhadar, A. (2022). Common space as a tool for social sustainability. *Journal of Housing and the Built Environment*, 37(2), 399-421. https://doi.org/10.1007/s10901-021-09843-y

Adom, K., & Ackom, B. (2023). Towards a Greater Understanding of the Prevalence of Immigrant Entrepreneurship in the Informal Economy of Ghana: An Institutional Theory Perspective. *Journal of African Business,* 25(1), 1- 23. https://doi.org/10.1080/15228916.2023.2170860

Alamsyah, V.U., Regista, C., Arum Wijaya, G.H.A. (2023). Examining the antecedent of green entrepreneurship intention in business university students case of Indonesia. Enrichment: *Journal of Management,* 13(2), 1152-1163. https://www.enrichment.iocspublisher.org/index.php/enrichment/article/view/1410

Alexeev, M., Nurmakhanova, M., Polishchuk, L.I. (2021). Institutions and social capital in group lending. *Russian Journal of Economics,* 7(2), 269-296. https://doi.org/10.32609/j.ruje.7.76647

Alpsahin, C.U. (2023). Exploring a circular business model: Insights from the institutional theory perspective and the business model lens. The Int. *Journal of Entrepreneurship and Innovation,* 24(1), 58–69. https://doi.org/10.1177/14657503211055574

Alwakid, W., Aparicio, S., & Urbano, D. (2021). The Influence of Green Entrepreneurship on Sustainable Development in Saudi Arabia: The Role of Formal Institutions. *Int. J. Environ. Res. Public Health,* 18(1), 5433. https://doi.org/10.3390/ijerph18105433

Aparicio, S., Urbano, D., & Audretsch, D. (2016). Institutional factors, opportunity entrepreneurship and economic growth: Panel data evidence. *Technological Forecasting and Social Change,* 102(1), 45-61. https://doi.org/10.1016/j.techfore.2015.04.006

Appiah, M.K., Sam, A., Twum, E., & Godslove, E. (2023). Modelling the influencing of green entrepreneurship orientation on sustainable firm performance: a moderated mediation model. Economic *Research-Ekonomska Istraživanja,* 36(2), 1-21. https://doi.org/10.1080/1331677X.2023.2179094

Aurellia, J., & Nuringsih, K. (2023). The Role of Green Entrepreneurial Orientation and Self-Efficacy to Encourage Student Intention in Green Entrepreneurship. *International Journal of Application on Economics and Business*, 1(1), 199-207. https://doi.org/10.24912/ijaeb.v1i1.199-207

Barbalet, J. (2022). Conceptualising informal institutions: Drawing on the case of guanxi. *The British Journal of Sociology*, 74(1), 71-83. https://doi.org/10.1111/1468-4446.12984

Beiwei, L., Zhengliang, Y., & Hongtao, L. (2022). Factors Influencing Green Entrepreneurship of Returning Migrant Workers under the Dual-Carbon Background. *Security and Communication Networks,* 2022. https://doi.org/10.1155/2022/7611810

Candea, S., Rozalia Gabor, M., Veres, C. (2023). Blending One-Piece Flow and Layout Optimization in Automotive Industry. A Case Study. *Collection of Papers New Economy*, 1(1), 234-243. https://doi.org/10.61432/CPNE0101234c

Cassar, C. (2022). Addressing Transformative Education and Governance Through the Sustainable Development Goal 4: A Case Study. *Opportunities and Challenges in Sustainability*, 1(2), 105-115. https://doi.org/10.56578/ocs010203

Chaparro-Banegas, N., Escribano, A.M., Alicia Mas-Tur, A., & Roig-Tierno, N. (2023). Innovation facilitators and sustainable development: a country comparative approach. *Environment, Development and Sustainability,* 25(4), 1-29. https://doi.org/10.1007/s10668-023-03055-w

Chowdhury, F., Audretsch, D.B., & Belitski, M. (2019). Institutions and Entrepreneurship Quality. *Entrepreneurship Theory and Practice,* 43(1), 51-81. https://doi.org/10.1177/1042258718780431

Cismaș, L. M., Boțoteanu, G. I., Cojocaru, T. M., & Gruescu, R. M. (2023). Significance of Corpo-

rate Non-Financial Information Disclosure for Sustainable Economic Growth. *Journal of Green Economy and Low-Carbon Development*, 2(1), 1-10. https://doi.org/10.56578/jgelcd020101

Cristea, M. & Caragiani, E. S. (2022). Reframing Poverty Within the Sustainable Development Strategies. Empirical Evidence at the European Union Level. *Opportunities and Challenges in Sustainability*, 1(2), 86-94. https://doi.org/10.56578/ocs010201

Dau, L.A., Chancar, A.S., Lyles, M.A., & Li, J. (2022). Informal institutions and international business: Toward an integrative research agenda. *Journal of International Business Studies, 53*(6), 985–1010. https://doi.org/10.1057/s41267-022-00527-5

de Soysa, I., & Jütting, J. (2023). Informal Institutions And Development: Think Local, Act Global? OECD *Development Centre and Development Assistance Committee*, https://instruct.uwo.ca/economics/317b-570/Institutions_worldbank.pdf

Debnath, A., & Das, S. 2022. Inter-relationship among Female Labour - Force Participation, Fertility and Economic Development: Evidences from India. *Economic Affairs,* 67(04), 673-680. https://doi.org/10.46852/0424-2513.4.2022.33

Dimaggio, P., & Powell, W. W. (2013). The Economics of Social Institutions: Institutional isomorphism and collective rationality in organizational fields. In J. Davis, & A. Christoforou (Eds.), *The Economics of Social Institutions* Edward Elgar Publishers. https://doi.org/10.2307/2095101

Dubyna, M., Panchenko, O., Bazilinska, O., Donkohlova, T., Shpomer, A., & Rudenko, O. (2021). The Role of Informal Institutions in the Development of the Financial Services Market. Int. *Journal of Comp. Science & Network Security*, 21(11), 207-215. https://doi.org/10.22937/IJCSNS.2021.21.11.29

Emilia, O.W. (2016). The new institutional economics–main theories, e-Finanse: *Financial Internet Quarterly, 12*(1), 78-85. https://doi.org/10.14636/1734-039X_12_1_008

Fabris, N. (2022). Impact of COVID-19 Pandemic on Financial Innovation, Cashless Society, and Cyber Risk. *ECONOMICS - Innovative and Economics Research Journal*, 10(1), 73-86. https://doi.org/10.2478/eoik-2022-0002

Fuentelsaz, L., González, C., & Maicas, J.P. (2019). Formal institutions and opportunity entrepreneurship. The contingent role of informal institutions. *BRQ Business Research Quarterly,* 2019(22), 5-24. https://doi.org/10.1016/j.brq.2018.06.002

Fuentelsaz, L., González, C., Maicas, J.P. (2019). Formal institutions and opportunity entrepreneurship. The contingent role of informal institutions. *BRQ Business Research Quarterly,* 22(1), 5-24. https://doi.org/10.1016/j.brq.2018.06.002

Gaganis, C., Papadimitri, P., Pasiouras, F., and Ventouri, A. (2021). Informal Institutions and Corporate Reputational Exposure: The Role of Public Environmental Perceptions. *British Journal of Management,* 32(4), 1027–1061. https://doi.org/10.1111/1467-8551.12461

Genoveva & Jason Tanardi. (2022). Green Entrepreneurship: A New Paradigm for Millennials in Indonesia. *International Journal of Sustainable Development and Planning,* 17(4), 1133-1140. https://doi.org/10.18280/ijsdp.170410

Gërxhani, K., & Cichocki, S. (2023). Formal and informal institutions: Understanding the shadow economy in transition countries. *Journal of Institutional Economics,* 19(5), 656-672. https://doi.org/10.1017/S1744137422000522

Godlewska, M. (2021). The Impact of Interplay between Formal and Informal Institutions on Innovation Performance: *Evidence from CEECs. Engineering Economics,* 32(1), 15-26. https://doi.org/10.35808/ersj/2907

Guerrero, M., & Lira, M., (2023) Entrepreneurial university ecosystem's engagement with SDGs: looking into a Latin-American University, *Community Development,* 54(3), 337-352.

https://doi.org/10.1080/15575330.2022.2163411

Gupta, M., & Dharwal, M. (2022). Green entreprneurship and sustainable development: A conceptual framework. *Proceedings,* 49(8), 3603-3606. https://doi.org/10.1016/j.matpr.2021.08.148

Haldar, S. (2019). Green entrepreneurship in theory and practice: insights from India. Int. J. Green Economics, 13(2): *International Journal of Green Economics* 13(2), 99-119. https://doi.org/10.1504/IJGE.2019.103232

Kabir, I., Abdullahi, Y.A., & Naqshbandi, M.M. (2023). Measuring entrepreneurial orientation and institutional theory for informal enterprises: scale validation. *Quality & Quantity,* 57(1), 1439-1463. https://doi.org/10.1007/s11135-022-01357-1

Koning, E.A. (2016). The three institutionalisms and institutional dynamics: Understanding endogenous and exogenous change. *Journal of Public Policy*, 36(4), 639-664. https://doi.org/10.1017/S0143814X15000240

Kurtulmuş, B.E., Alev Katrinli, A., & Warner, B. (2020). International Entrepreneurial Orientation and Performance of SMEs: The Mediating Role of Informal Institutional Framework. *SAGE Open,* 10(4), 1-9. https://doi.org/10.1177/2158244020983294

Kuzmak, O., Kuzmak, O. (2023). Social Responsibility of Business Towards Sustainable Development: Case of Ukraine. *Collection of Papers New Economy,* 1(1), 126-148. https://doi.org/10.61432/CPNE0101126k

Laskaiev, O., Lagodiyenko, O., Lagodiienko, V., Ivanchenkova, L., Romanashenko, I. (2023). Prospects for the Development of the ESG Concept in the Face of New Challenges. *Collection of Papers New Economy,* 1(1), 179-195. https://doi.org/10.61432/CPNE01011791

Lee, C.K., Wiklund, J., Amezcua, A., Bae, T.J., & Palubinkas, A. (2022). Business failure and institutions in entrepreneurship: a systematic review and research agenda. *Small Business Economics,* 58(1), 1997–2023. https://doi.org/10.1007/s11187-021-00495-4

Lee, W.C., & Law, S.H. (2016). The Roles of Formal and Informal Institutions on Innovations Activity. *Jurnal Ekonomi Malaysia,* 50(2), 167–179. http://dx.doi.org/10.17576/JEM-2016-5002-14

Li, D., Wei, L.Q., Cao, Q., & Chen. (2022). Informal institutions, entrepreneurs' political participation, and venture internationalization. *Journal of International Business Studies,* 53(6), 1062–1090. https://doi.org/10.1057/s41267-021-00402-9

Lindorfer, R., d'Arcy, A., & Filatotchev, I. (2023). When Institutional Plates Collide: The Dynamic Impact ofInformal Institutions on Capital Market Development. *Journal of Risk and Financial Management,* 16(3). https://doi.org/10.3390/jrfm16030178

Matos, M.M., Lombana-Coy, J., & Mesıas, F.J. (2023). Creation of shared value in cooperatives: informal institutions' perspective of small-sized banana growers from Colombia. *Journal of Economics, Finance and Administrative Science,* 28(55), 134-159. https://doi.org/10.1108/JEFAS-09-2021-0186

Meylani, B.C., & Prasetyo, P.E. (2023). The Impact of International Crude Oil Prices on the Monetary Sector in Indonesia. *International Journal of Sustainable Development and Planning,* 18(6), 1707-1714. https://doi.org/10.18280/ijsdp.180606

Mićić, L., & Mastilo, Z. (2022). Digital Workplace Transformation: Innovative Approach after COVID-19 Pandemic. *ECONOMICS - Innovative and Economics Research Journal*, 10(2), 63-76. https://doi.org/10.2478/eoik-2022-0014

Mijajlović, M., Puška, A., Stević, Ž., Marinković, D., Doljanica, D., Jovanović, S. V., Stojanović, I., & Beširović, J. (2020). Determining the competitiveness of spa-centers in order to achieve sustainability using a fuzzy multi-criteria decision-making model. *Sustainability,* 12(20). https://doi.org/10.3390/su12208584

Minbaeva, D., Ledeneva, A., Maral, M.T., & Horak, S. (2023). Explaining the Persistence of Informal Institutions: The Role of Informal Networks. *Academy of Management Review,* 48(3), 556-574. https://doi.org/10.5465/amr.2020.0224

Misztal, A., & Kowalska, M. (2023). Factors of green entrepreneurship in selected emerging markets in the European Union. Environment, *Development and Sustainability,* 25(12), 13819 – 13836. https://doi.org/10.1007/s10668-023-03811-y

Mukonza, C. (2020). An Analysis of Factors Influencing Green Entrepreneurship Activities in South Africa. https://doi.org/10.1007/978-3-030-44180-7_3

Muralidharan, E., & Pathak, S. (2017). Informal institutions and international entrepreneurship. *International Business Review,* 26(2), 288-302. https://doi.org/10.1016/j.ibusrev.2016.07.006

Murimbika, M., & Urban, B., (2023) Institutional and self-efficacy effects on systemic entrepreneurship: evidence from South Africa, *Journal of Small Business & Entrepreneurship,* 35(2), 284-305. https://doi.org/10.1080/08276331.2020.1764739

Neumann, T. (2022). Impact of green entrepreneurship on sustainable development: An ex-post empirical analysis. *Journal of Cleaner Production,* 377(22). https://doi.org/10.1016/j.jclepro.2022.134317

Nguyen, A. T., Do, T. H. H., Vu, T. B. T., Dang, K. A., & Nguyen, H. L. (2019). Factors affecting entrepreneurial intentions among youths in Vietnam. *Children and Youth Services Review,* 99(C), 186–193. https://ideas.repec.org/a/eee/cysrev/v99y2019icp186-193.html

Nikolaou, I. E., Tasopoulou, K., & Tsagarakis, K. (2018). A Typology of Green Entrepreneurs Based on Institutional and Resource-based Views. *The Journal of Entrepreneurship,* 27(1), 111-132. https://doi.org/10.1177/0971355717738601

Nordin, R., & Hassan, R.A. (2019). The Role of Opportunities for Green Entrepreneurship Towards Investigating the Practice of Green Entrepreneurship among SMEs in Malaysia. *Review of Integrative Business and Economics Research,* 8(1), 99-116. https://sibresearch.org/uploads/3/4/0/9/34097180/riber_8-s1_08_s18-156_99-116.pdf

North, Douglass C. (1990). Institutions, institutional change and economic performance. *Cambridge university press,* 152(24), 141-146. https://doi.org/10.1017/CBO9780511808678

OECD (2022). Recommendation on the Social and Solidarity Economy and Social Innovation. *Meeting of the Council at Ministerial Level,* 9-10. https://www.oecd.org/cfe/leed/social-economy/social-economy-recommendation/

Peprah, C., Peprah, V. & Ocloo, K.A.(2022). Improving the socio-economic welfare of women through informal sector activities in Ghana. *Environment Development Sustainability,* 24(3), 1-24. https://doi.org/10.1007/s10668-022-02161-5

Pindado, E., Alarc´on, S., S´anchez, M., Martínez, M.G. (2023). International entrepreneurship in Africa: The roles of institutional voids, entrepreneurial networks and gender. *Journal of Business Research* 166(11). https://doi.org/10.1016/j.jbusres.2023.114109

Prasetyo, P.E., Azwardi & Kistanti, N.R. (2023). Gender equality and social inclusion (GESI) and institutions as key drivers of green entrepreneurship. *International Journal of Data and Network Science,* 7(1), 391–398. http://doi.org/10.5267/j.ijdns.2022.9.008

Prasetyo, P.E., Pujiati, A., Setyadharma, A., & Kistanti, N.R. (2022a). The Spirit of Social Entrepreneurship and Institutional Environment as Drives of Sustainable Economic Growth. *International Journal of Sustainable Development and Planning,* 17(8), 2485-2492. https://doi.org/10.18280/ijsdp.170816

Prasetyo, P.E., Setyadharma, A., & Kistanti, N.R. (2022b). The role of institutional potential and social entrepreneurship as the main drivers of business opportunity and competitiveness. *Uncertain Supply Chain Management,* 10(1), 101-108. https://doi.org/10.5267/j.uscm.2021.10.006

Prasetyo, P.E., Setyadharma, A., & Kistanti, N.R. (2021). Integration and collaboration of determinants of entrepreneurial competitiveness. *Uncertain Supply Chain Management,* 9(3), 585-594. https://doi.org/10.5267/j.uscm.2021.6.002

Prasetyo, P.E., & Dzaki, F.Z. (2020). Institutional performance and new product development value chain for entrepreneurial competitive advantage. *Uncertain Supply Chain Management*, 8(4), 753-760. https://doi.org/10.5267/j.uscm.2020.7.004

Rudaku, A., Toska, A., Gleason, K., & Zeqiri, J., (2023). Returned Entrepreneurs and Ability to Generate Innovations: Case of Kosovo. *International Journal of Sustainable Development and Planning,* 18(9), 2911-2921. https://doi.org/10.18280/ijsdp.180929

Saleem, F., Asif, M. & Lodhi, S. (2022). The Role of Institutions in Women's Entrepreneurial Performance. *Journal of Hunan University,* 49(3), 1-12. https://doi.org/10.55463/issn.1674-2974.49.3.26

Samadi, A.H. (2019). Institutions and entrepreneurship: unidirectional or bidirectional causality? *Journal of Global Entrepreneurship Research,* 9(3), 1-16. https://doi.org/10.1186/s40497-018-0129-z

Sedeh, A.A., Pezeshkan, A., & Rosa Caiazza, R. (2022). Innovative entrepreneurship in emerging and developing economies: the effects of entrepreneurial competencies and institutional voids. *The Journal of Technology Transfer,* 47(1),1198–1223. https://doi.org/10.1007/s10961-021-09874-1

Sendra-Pons, P., Comeig, I Alicia Mas-Tur, A. (2022). Institutional factors affecting entrepreneurship: A QCA analysis. *European research on management and business economics,* 28(3). https://doi.org/10.1016/j.iedeen.2021.100187

Shi, X. & Z. Xu (2018). 'Environmental regulation and firm exports: evidence from the eleventh Five-Year Plan in China', *Journal of Environmental Economics and Management,* 89(1),187–200.

Shu, C., Zhao, M., & Liu, J. (2021). Pursuing sustainable development through green entrepreneurship: An institutional perspective. *Business Strategy and the Environment,* 30(8), 4281-4296. https://doi.org/10.1002/bse.2869

Shyshkova, N., Ashcheulova, O., Blishchuk, K., Kozak, I., Anisimova, L., & Povoroznyk, M. (2022). Evaluation of the Business Model of Introducing High Technology into the Solidarity Economy. *Economic Affairs,* 67(05), 961-970. https://doi.org/0.46852/0424-2513.5.2022.31

Sorensen, A. (2017). New Institutionalism and Planning Theory from: *The Routledge Handbook of Planning Theory*. https://doi.org/10.4324/9781315696072.ch20

Sulastiningsih, Wikaningtyas, S.U., & Novitasari, D. (2023). Green Entrepreneurship Motivation Model. *Academic Journal of Interdisciplinary Studies,* 12(2), 262-272. https://doi.org/10.36941/ajis-2023-0047

Swain, R.B., & Yang-Wallentin, F. (2020). Achieving sustainable development goals: predicaments and strategies, *International Journal of Sustainable Development & World Ecology,* 27(2), 96-106. https://doi.org/10.1080/13504509.2019.1692316

Štilić, A., Mastilo, A., Vuković, K., & Mastilo, D. (2023). Innovative Solutions for Economic Growth: Exploring the Impact of Economic Freedoms on Foreign Direct Investment Attraction. *ECONOMICS - Innovative and Economics Research Journal*, 11(1), 29-44. https://doi.org/10.2478/eoik-2023-0013

Tae-Hee Jo. (2019). The Institutionalist Theory of the Business Enterprise: Past, Present, and Future. *Journal of Economic Issues, 53*(3), 597-611. https://doi.org/10.1080/00213624.2019.1634451

Thurik, A.R., Audretsch, D.B., Block, J.H., Burke, B., Carree, M.A., Dejardin, M., Rietveld, C.A., Sanders, M., Stephan, U., & Wiklund, J. (2023). The impact of entrepreneurship research on other academic fields. *Small Business Economics*, 61(4), 1-25. https://doi.org/10.1007/s11187-023-00781-3

Ugyel, L. (2018). Integrating formal and informal institutions: towards a healthy community in the Pacific. *Journal Development Policy Centre,* 69(1), 1-24. http://dx.doi.org/10.2139/ssrn.3216239

Urbano, D., Felix, C., & Aparicio, S. (2021). Informal institutions and leadership behavior in a developing country: A comparison between rural and urban areas. *Journal of Business Research,* 32(8), 544-556. https://sibresearch.org/uploads/3/4/0/9/34097180/riber_8-s1_08_s18-156_99-116.pdf

Vasilescu, M.D., Dimian, G.C., and Gradinarua G.I. (2023). Green entrepreneurship in challenging times: aquantitative approach for European countries. *Economic Research-Ekonomska Istraživanja,* 36(1), 1828–1847. https://doi.org/10.1080/1331677X.2022.2093767

Wang, X., Javaid, M.N., Bano, S., Younas, H., Jan, A., & Salameh, A.A. (2022). Interplay among institutional actors for sustainable economic development—Role of green policies, ecoprenuership, and green technological innovation. *Front. Environ. Sci.,* 10. https://doi.org/10.3389/fenvs.2022.956824

Webb, J.W., Khoury, T.A., & Hitt, M.A. (2020). The Influence of Formal and Informal Institutional Voids on Entrepreneurship. *Entrepreneurship Theory and Practice,* 44(3), 504-526. https://doi.org/10.1177/1042258719830310

Williams, C.C., & Bezeredi, A.S. (2018). An Institutional Theory of Informal Entrepreneurship: Some Lessons from Fyr Macedonia. *Journal of Developmental Entrepreneurship,* 23(03). https://doi.org/10.1142/S108494671850019X

Williamson, C.R. (2009). Informal institutions rule: institutional arrangements and economic performance. *Public Choice,* 139(1), 371-387. https://doi.org/10.1007/s11127-009-9399-x

Zetterberg, L., Eriksson, M., Ravry, C., Santosa, A., & Nawi, Ng. (2023). Neighbourhood social sustainable development and spatial scale: a qualitative case study in Sweden, *Local Environment,* 28(6), 793-810. https://doi.org/10.1080/13549839.2023.2179610

Zhang, Q., Z. Yu & D.Kong (2019). 'The real effect of legal institutions: environmental courts and firm environmental protection expenditure', *Journal of Environmental Economics and Management,* 98(1). https://doi.org/10.1016/j.jeem.2019.102254

Zhuang, J., & Sun, H., (2023). Impact of institutional environment on entrepreneurial intention: The moderating role of entrepreneurship education. *The International Journal of Management Education*, 21(3). https://doi.org/10.1016/j.ijme.2023.100863