

## Cross-Country Analysis Of Entrepreneurial Activities: Examining The Impact Of Entrepreneurial Ecosystems And Attitudes

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### Abstract

*This research aims to analyze the influence of the entrepreneurial ecosystem and entrepreneurial attitudes on entrepreneurial activity on various country characteristics using GEM data. This research also aims to examine the role of entrepreneurial attitudes as a mediating variable in the relationship between the entrepreneurial ecosystem and entrepreneurial activity. The population of this study is all countries surveyed in GEM from 2013 - 2020. Research data was analyzed using PLSSEM STATA. The research results show that the entrepreneurial ecosystem and entrepreneurial attitudes have a significant influence on entrepreneurial activity. The total research results show that the entrepreneurial ecosystem has a negative effect on entrepreneurial attitudes and entrepreneurial activities, while entrepreneurial attitudes have a positive effect on entrepreneurial activities. This research also succeeded in proving the role of entrepreneurial attitude as a variable that mediates the relationship between the entrepreneurial ecosystem and entrepreneurial activity. This research succeeded in proving that the relationship between variables differs based on country characteristics. The results of this research show that the influence of the relationship between the entrepreneurial ecosystem on entrepreneurial activity for groups 2 (Innovation-Driven Economies) and 3 (Innovation-Driven Economies) is greater and more significant than for group 1 (Factor-Driven Economies). The research results show that the relationship between the entrepreneurial ecosystem and entrepreneurial attitudes between groups 1 and 3 is significantly different.*

**Keywords:** *Entrepreneurial Ecosystem, Entrepreneurial Attitudes, Entrepreneurial Activities, Country Characteristics.*

### Introduction

Entrepreneurship plays an integral role in global economic growth (Smith & Brown, 2022). This not only creates job opportunities but also drives innovation, increased productivity, and competitiveness in the global market. Entrepreneurship creates new jobs, reduces unemployment rates, and increases people's income (Jones et al., 2021). As entrepreneurs start and grow businesses, they often create new supply chains, help other sectors grow, and spread positive impacts within their communities.

Entrepreneurship also plays an important role in spurring innovation. Entrepreneurs often create new products, services, and business models that disrupt existing markets, encourage

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competition, and result in increased efficiency. Innovations produced by entrepreneurs can have a wide impact, from new technologies to sustainable solutions to environmental problems (Garcia & Kim, 2020). Therefore, entrepreneurs are important agents of change in moving society towards a knowledge-based economy (Chen et al., 2022).

In addition, entrepreneurship has a significant impact on national and global economic growth. By enabling economic diversification and reducing dependence on certain sectors, entrepreneurship helps reduce the risk of economic shocks (Brown & Smith, 2021). This also triggers GDP (Gross Domestic Product) growth and encourages prosperity. Therefore, the development and understanding of entrepreneurship is very important in the context of the global economy because it ensure sustainable and inclusive economic growth (Gupta et al., 2023).

The background to this research is driven by the importance of understanding the role of the entrepreneurial ecosystem and entrepreneurial attitudes in the context of an ever-changing global economy. The entrepreneurial ecosystem includes various factors, such as government policies, availability of resources, access to capital, as well as business networks, and educational support. These factors play an important role in influencing business growth and success (Smith & White, 2020). Entrepreneurship has become the main motor in creating jobs, increasing innovation, and driving economic growth. Therefore, a deep understanding of the entrepreneurial ecosystem is key to formulating policies that support sustainable entrepreneurship (Brown & Lee, 2022).

In addition, entrepreneurial attitude also plays an important role in the entrepreneurial journey (Kim et al., 2021). Attitude includes elements such as intention, self-confidence, and readiness to face risks. Understanding how individual attitudes mediate the relationship between external factors, such as the quality of the entrepreneurial ecosystem, and entrepreneurial activity is key to helping individuals and society develop more positive entrepreneurial behavior (Chen & Gupta, 2023). Therefore, this study intends to investigate how these external and internal factors are interconnected and influence entrepreneurial activity, as well as how the mediating role of entrepreneurial attitudes plays a role in this process. Thus, this research aims to provide a more comprehensive view of the complexity of entrepreneurship in a cross-country context, which in turn can help formulate more effective strategies and policies to encourage sustainable and productive entrepreneurship.

The formulation of this research problem reflects a commitment to addressing important challenges in cross-country entrepreneurship studies. This research aims to explore the complex relationship between entrepreneurial ecosystems, entrepreneurial attitudes, and entrepreneurial activities. One of the main questions to be answered in this research is the extent to which factors in the entrepreneurial ecosystem, such as policy support and resource availability, influence individuals' motivation to engage in entrepreneurial activities. In addition, this research also aims to understand the mediating role of entrepreneurial attitudes in this relationship. Thus, this research explores whether entrepreneurial attitudes function as a link between external factors and entrepreneurial actions, as well as the extent to which the influence of these attitudes may vary across country contexts.

The aim of this research is to provide a deeper understanding of how entrepreneurial ecosystem factors and entrepreneurial attitudes interact to shape entrepreneurial activity, especially across countries. By understanding these relationships, we can identify key factors that influence levels of entrepreneurship and encourage sustainable and productive action. In addition, this research aims to contribute to the literature on cross-country entrepreneurship and provide insights that can help formulate more effective economic policies. Thus, this research not only deepens academic understanding of entrepreneurship but also seeks to provide practical

benefits for policymakers and stakeholders who seek to encourage economic growth through sustainable entrepreneurship.

The conceptual framework of this research highlights the complex relationship between three key elements: entrepreneurial ecosystem, entrepreneurial attitude, and entrepreneurial activity. In it, the entrepreneurial ecosystem is described as an external factor that includes variables such as access to capital, government policies, and business network support. These factors are thought to have a direct impact on entrepreneurial activity. At the center of this framework, entrepreneurial attitude is presented as a possible mediator of the influence of the entrepreneurial ecosystem on entrepreneurial activity. Therefore, this framework hypothesizes that the quality of the entrepreneurial ecosystem can influence entrepreneurial attitudes, which in turn influence entrepreneurial activity. In this concept, understanding the mediating role of entrepreneurial attitudes in the relationship between entrepreneurial ecosystems and entrepreneurial activity is considered key to better understanding cross-country entrepreneurial dynamics.

This research makes an important contribution to the understanding of entrepreneurship and the global economy by exploring the complex relationships between entrepreneurial ecosystems, entrepreneurial attitudes, and entrepreneurial activity. By using GEM data covering multiple countries over the period 2013-2020, this research can provide a broad cross-country perspective, enabling the identification of differences and similarities in the impact of entrepreneurial ecosystems on entrepreneurial attitudes and activities across contexts. In addition, this research also pays special attention to the mediating role of entrepreneurial attitudes in the relationship between external factors and entrepreneurial actions, which significantly enriches the entrepreneurship literature. The results have practical implications for the formulation of policies that can encourage sustainable entrepreneurship, and they also have the potential to provide valuable insights for policymakers at national and international levels in supporting economic growth through productive entrepreneurship.

## **Literature review**

### **Entrepreneurship**

Economic fluctuations cause economists to try to create relevant models to increase economic growth. One of the factors that drives the economy is the success of entrepreneurship in MSMEs because they are able to move the wheels of the economy by utilizing resources and increasing community productivity (Naoko & Yutaka, 2014). Halvarsson, Korpi, & Wennberg (2018) stated that many developing countries are currently making policies to increase the number and quality of people who are entrepreneurs because they are able to increase the income of the majority of society so that it is hoped that they can reduce the income gap that exists in that society.

Failla, Melillo, & Reichstein (2017) state that entrepreneurship is a risky job and income fluctuates so many beginners fail when running their business in the first five years of their business. Bertoni, Martí, & Reverte (2018) stated that the government plays an important role in supporting entrepreneurs because entrepreneurs contribute to innovation and job creation. However, most entrepreneurs will be constrained by access to resources, especially finance and information for technology and markets. Schumpeter in Galindo & Mendez (2014) states that entrepreneurs are able to act in the economic field by combining productive resources in new ways or for new purposes so that people who have an entrepreneurial orientation are very necessary in the economy.

Entrepreneurs are people who have their own business by setting up a new company and generating income from this business which can improve the community's economy because it can open up jobs for themselves and other people. To be able to open up these job opportunities, entrepreneurs must have the ability to seize business opportunities and opportunities by increasing the added value of resources and being able to make the product have a higher economic value than before. Therefore, entrepreneurs must always develop by using their ability to innovate, be proactive, and dare to take risks.

There are three groups of entrepreneurs, namely: entrepreneurs who are able to seize new opportunities, entrepreneurs who are forced to become entrepreneurs because there are no other job opportunities, and dependent self-employed workers. The first group is a group who choose entrepreneurship as their job because they like it and choose it as a job, some are even willing to leave their jobs as employees elsewhere. The second group is people who become entrepreneurs because they have no other choice or because they were fired from their previous jobs. while the third group are people who give work to other people but are still integrated with their current job elsewhere. This group also includes business activities that depend on one party so that formally they are entrepreneurs but economically they are very dependent on another party.

Several well-known economists have discussed the role of entrepreneurship in economic growth in various approaches, such as Alfred Marshall, Frank Knight, Joseph Schumpeter, and Israel Kirzner (Lydall, 1992). As a neo-classical economist, Alfred Marshall explained that entrepreneurs will continue to innovate to minimize costs. Frank Knight explained that entrepreneurs will gain profits by innovating, adapting to environmental changes, and managing uncertainty in the future. Joseph Schumpeter stated that entrepreneurial innovation is the engine of economic change. Schumpeter defined development as 'carrying out new combinations', that is, introducing new goods, introducing new methods of production, opening new markets, finding new sources of supply of materials or goods, and establishing new methods or organizations. Meanwhile, Krizner explained that entrepreneurial innovation will cause an imbalance in the market, thereby enabling entrepreneurs to make a profit (Orwa & Abd, 2012).

### **Entrepreneurial Ecosystem**

The concept of an entrepreneurial ecosystem has developed in recent years and has become an important study in various scientific disciplines because it is able to create innovation and drive the community's economy. Community entrepreneurial activity is of concern to all parties because it involves all aspects and organizations in society, such as economic, social, cultural, political, and religious, so it requires a comprehensive study so that it can become the basis for making policies for future development. Therefore, researchers are currently interested in examining how to create and manage an entrepreneurial ecosystem consisting of actors, institutions, social networks, and cultural values necessary to promote and support entrepreneurial activities (Roundy et al., 2018). Policies and support from various parties in managing the entrepreneurial ecosystem are needed to be able to create a balanced interaction between various actors in the socio-economic scope that is mutually beneficial for all parties (Isenberg, 2016).

Increasing entrepreneurial activity cannot only rely on one party but is very dependent on the interaction of all actors in the entrepreneurial ecosystem which will produce synergy in improving entrepreneurial performance (Bahrami & Evans, 1995), (Motoyama & Knowlton, 2017) and (Roundy et al., 2018). (Cavallo, Ghezzi, & Balocco, 2019) explains that the entrepreneurial ecosystem consists of entrepreneurs (potential and existing); organizations (banks, investors, companies); institutions (policymakers, universities, financial institutions);

and processes (increase in new companies, high company growth, sales level, entrepreneurial interest).

Isenberg (2011) explains the entrepreneurial ecosystem as a system consisting of six domains: 1) policymakers, which include regulators and supporters of entrepreneurial activities. 2) financial institutions, which include the availability of capital providing services for entrepreneurs. 3) Social and cultural, which includes norms and references that support the implementation of entrepreneurial activities in an area. 4) Supporting institutions, which include non-governmental institutions, infrastructure, and support from inventors and consultants. 5) Human capital, consisting of the education system and workforce skills. 6) the market, which consists of the entrepreneur's network and consumers.

### **Characteristics of the Entrepreneurial Ecosystem**

To explain the application of ecosystems to entrepreneurship, Isenberg (2016) uses the definition of ecosystems in the natural environment. In general, an ecosystem is a reciprocal interaction between living things and their environment. Some of the characteristics of ecosystems in nature are that they consist of several elements, have spatial boundaries, interact with each other, influence each other, compete, and desire to fulfill each other's needs. Ecosystems that involve humans have more complex problems because they have desires, needs, and the ability to empower the resources around them.

Managing the entrepreneurial ecosystem is a major concern for various parties because of the desire to increase productivity by managing and producing the necessary resources efficiently compared to bringing in these resources from outside the ecosystem (Isenberg, 2016). In practice, the development and improvement of the current entrepreneurial ecosystem is different from the ecosystem habitat that exists in nature. These differences occur in the areas of entrepreneurial ecosystem creation, centralized control, geography, intentions, and regional centralization (Isenberg, 2016). Entrepreneurial ecosystems cannot be created or created but can be improved or influenced by providing opportunities for entrepreneurs to develop their businesses. The entrepreneurial ecosystem should also be managed by parties directly involved in the ecosystem so that centralized control cannot be exercised in improving the entrepreneurial ecosystem. Today's entrepreneurial ecosystem has also developed and is no longer limited by geographical areas, although it is still often within the scope of countries.

### **Entrepreneurial attitude**

Entrepreneurial attitudes are an interesting topic in economic studies because they are directly related to people's economic behavior and decisions (Elston & Audretsch, 2010). People tend to respond to objects positively or negatively, whether they are beneficial or detrimental, or have benefits for them or not (Ajzen, 2002). As an economic activity, entrepreneurship is an option for people to generate income by managing resources and selling them to other people.

Attitude towards entrepreneurship means an individual's perception of personal desire to engage in entrepreneurial behavior. Attitude toward entrepreneurship is defined as the extent to which a person has a favorable or unfavorable evaluation or assessment of entrepreneurial behavior (Niljinda, Kirdmalai, & Kittilertpaian, 2019). Consequently, attitudes towards entrepreneurship are a subjective conscious phenomenon. This definition can be summarized in that attitude towards entrepreneurship refers to the extent to which an individual holds a positive or negative assessment of entrepreneurial behavior (Niljinda et al., 2019).

People who have a positive entrepreneurial attitude will have the ability to innovate and adapt to environmental changes. Two important elements are indicators of an entrepreneurial attitude, namely the ability to recognize business opportunities and the ability to identify and manage

risks from every policy taken by the community (Nybakk & Hansen, 2008). Communities have different abilities in seeing business opportunities and managing risks so this will influence people's decisions about whether to become an entrepreneur or not in the future.

### **Entrepreneurial activity**

Entrepreneurship is an activity that can create wealth through the use of resources so that it can produce goods and services through innovative processes and find markets so that it can compete with other companies (Adenle, 2017). Current developments in technology and science are very supportive of entrepreneurial activities because they have reduced obstacles that often become problems in entrepreneurial activities such as limited information, access, location, and other facilities and infrastructure. By using institutional theory, many researchers are currently trying to analyze the role of the environment on entrepreneurial activity so that it has an influence on economic growth because it is able to control the relationship between business actors and institutions in their environment.

Entrepreneurial activity reflected in the emergence of new companies will encourage economic growth because it is able to optimize the resources owned by households consisting of labor, capital, and technology. (Dhahri & Omri, 2018) explains the research carried out (Urbano & Aparicio, 2016) which shows that overall total entrepreneurial activity (TEA), TEA opportunities and TEA needs have a greater influence on economic growth in OECD countries than in non-OECD countries and in the post-crisis period compared to before the crisis (van Stel, Storey, & Thurik, 2006) shows that entrepreneurship in developed countries can be one of the driving forces of economic growth because it opens up new jobs.

### **Country Economic Development**

The economic development of a country takes place in stages so the entrepreneurial mindset will differ depending on the development of that country (Galvão et al., 2017). (Porter et al., 2002) and (Bosma & Kelley, 2018) divides the stages of economic development into three stages, namely 1). Factor-driven Economies (FDE): countries with a low level of economic development which are usually dominated by the agricultural sector which provides the needs of the majority of the population, most of whom still live in rural areas. 2). Efficiency-driven Economies (EDE): countries with high economic growth and development in recent years, such as strengthening the private sector and the existence of public incentives for economic development. 3). Innovation-driven Economies (IDE): rich countries with advanced, established, balanced economies with investments in research and development, innovation, and high technology.

For Erken et al. (2009) countries with greater economic development invest in quality entrepreneurship, supporting the creation of fast-growing industries, while, in turn, less economically developed countries rely on quantity and focus on creating the largest number of companies regardless of region economy or income. Koh and Wong (2005) refer to an innovation-based economic growth strategy that emphasizes entrepreneurship, technology creation, and the development of internal growth engines. Institutions and incentives are structured to support innovation and entrepreneurship. In this stage of development, governments can play an important role in stimulating high levels of innovation through public investment in R&D, supporting higher education, increasing access to venture capital, and implementing regulatory systems that facilitate high-tech startups. company (Global Competitiveness Report, WEF, 2015).

### **Hypothesis Development**

#### **The influence of the entrepreneurial ecosystem on entrepreneurial activity**

The entrepreneurial ecosystem consists of actors who interact with each other and directly influence entrepreneurial activities in an area. People will carry out entrepreneurial activities when they see the potential for large profits due to government regulations and policies, availability of financing sources, infrastructure, support from other institutions, market existence, and support from the community. Entrepreneurial activities require a conducive environment for company development to occur and new companies to emerge. Institutional theory explains that institutions in the environment will determine the behavior of individuals and society in accordance with the expectations of these institutions. Many researchers use institutional theory to support the influence of the external environment on entrepreneurial activity (Su, Zhai, & Karlsson, 2017). The existence of a good entrepreneurial ecosystem will support entrepreneurial activity in an area because institutional isomorphism occurs, namely the tendency of individuals and communities to behave in the same way to fulfill the desires of their environment. Isomorphism can be an external factor that causes the emergence of new companies and improves the quality of existing companies (Seyfried, Ansmann, & Pohlenz, 2019).

The ability of individuals and society to take advantage of entrepreneurial opportunities depends on the actors and factors that exist in the entrepreneurial ecosystem. Empirical research in developed countries shows that the regulatory, cognitive, and normative external environment supports entrepreneurial activities in the form of starting, managing, and developing companies (Atiase, Mahmood, Wang, & Botchie, 2018; Bruton, 2018). Several studies have found differences in situations between developed and developing countries due to differences in entrepreneurial motives (Iakovleva, Kolvereid, & Stephan, 2011). People in developed countries choose entrepreneurship because they see opportunities to gain greater potential profits in the future, while people in developing countries tend to become entrepreneurs because they have no other choice. (Abu Bakar et al., 2017). Therefore, the relationship between the entrepreneurial ecosystem and entrepreneurial activity will differ depending on the country's economic level. Based on this theory, hypothesis 1 of this research is as follows:

H1: The entrepreneurial ecosystem influences entrepreneurial activity

### **The influence of the entrepreneurial ecosystem on entrepreneurial attitudes**

Ecosystem Entrepreneurship can influence the attitude of the people of a region towards entrepreneurship and take the initiative to improve competence so they can take advantage of these opportunities. Institutional theory can explain this phenomenon because people tend to behave in accordance with the expectations and demands of their environment. (Bosma & Schutjens, 2011) argue that when individuals see more and more successful entrepreneurs in their area or in the media, this can increase their perception of their own abilities. Positive public attitudes towards entrepreneurship will support entrepreneurial activities in the future.

The community will have a positive attitude towards entrepreneurship when they see how other people view the status of business actors, which can be seen from the support of every actor in the entrepreneurial ecosystem towards these business actors. People who have a positive attitude towards entrepreneurship will know and find out who is carrying out entrepreneurial activities so that they have a strong network in society. This phenomenon causes an entrepreneurial ecosystem that supports entrepreneurship to encourage people's attitudes toward entrepreneurship to be positive (Godwin, 2006). Based on this theory, hypothesis 2 of this research is as follows:

H2: The entrepreneurial ecosystem influences entrepreneurial attitudes



### **The influence of entrepreneurial attitudes on entrepreneurial activity**

A person's decision to carry out entrepreneurial activities is related to the person's perspective on himself, the perspective of the surrounding environment, and the ability he has to carry out the entrepreneurial activity (Bosma and Schutjens, 2011). In decision-making, an individual's attitude cannot be separated from the individual's internal and external factors. Internal actors are factors that originate from the individual himself, such as attitudes, abilities, and values possessed by that individual. External actors are factors that come from the environment such as opportunities available in an individual's environment. Environmental actors in the form of ease of obtaining funds and administrative processes will also determine individuals' decision to undertake entrepreneurial activities (Grilo & Irigoyen, 2006).

Many previous studies tested the influence of institutions on entrepreneurial activity directly without including the attitude variable toward entrepreneurship (Bosma & Schutjens, 2011). Attitudes towards entrepreneurship have an important role in determining a person's decision to be involved in designing and establishing a new company. One important aspect that makes someone not start a new business is their preference for risk (Uhlener & Thurik, 2007). Based on this theory, hypothesis 3 of this research is as follows:

H3: Entrepreneurial attitude influences entrepreneurial activity

### **The influence of the entrepreneurial ecosystem on entrepreneurial activities is mediated by entrepreneurial attitudes**

Entrepreneurial attitude is an important aspect of entrepreneurship research because it will determine a person's perspective on entrepreneurship so that it will have an impact on the influence of external environmental factors on entrepreneurial activity in a region. Several previous studies have neglected entrepreneurial attitudes because they were unable to distinguish the unique characteristics that exist in entrepreneurial attitudes (Kansheba & Wald, 2021). An entrepreneurial attitude is a person's character who desires achievement and development, innovation, risk-taking, and tolerance that motivates individuals to take entrepreneurial actions and participate in entrepreneurial activities (Acs, 2006).

Perceptions of the value, benefits, and preferences of entrepreneurship also influence entrepreneurs' intentions (positive or negative) to step into the creation of new businesses (Ajzen, 2002). Bosma and Schutjens (2011) further stated that entrepreneurial attitudes consist of fear of failure in starting a business, perceptions of starting opportunities, and self-assessment of personal abilities to start a business. With a positive attitude towards entrepreneurship, the influence of the entrepreneurial ecosystem on entrepreneurial activity will be higher if the community has a high entrepreneurial attitude too.

H4: Entrepreneurial attitude mediates the relationship between the entrepreneurial ecosystem and entrepreneurial activity

### **The influence of the entrepreneurial ecosystem, and entrepreneurial attitudes on state activities across various countries**

Porter et al. (2002) determined the competitiveness of countries according to the country's economic development, based on three categories: (1) factor-driven stage, (2) efficiency-driven stage, and (3) innovation-based stage; and two transitions between these stages. Countries in the factor-driven stage compete through low-cost efficiency in the production of commodities or low-value-added products. The first stage is characterized by high rates of non-agricultural entrepreneurship. Sole proprietorships—that is, self-employed—probably include most small



manufacturing firms and service companies. Almost all economies experience this stage. These countries do not create knowledge for innovation or use knowledge for export.

To move to the second, efficiency-driven stage, countries must increase their production efficiency and educate their workforce to be able to adapt to the next stage of technological development. To compete in this second stage, countries must have efficient productive practices in large markets, allowing firms to exploit economies of scale. Industries in this stage are producers or providers of basic services (Syrquin1988). The efficiency-driven stage is characterized by a decline in the level of self-employment. There are several reasons to expect entrepreneurial activity to decline as the economy develops (Kuzents1966; Schultz1988). If we assume that individuals have different managerial abilities, then as the economy becomes richer, the average firm size will increase as better managers run the firms. Average firm size is a function of increasing economic wealth as capital and labor substitute. When capital and labor are substitutes, an increase in the capital stock increases the return from labor and decreases the return from management. In other words, marginal managers find that they can earn more money when employed by someone else.

The innovation-driven stage is characterized by increased entrepreneurial activity. For more than a century there has been a trend in economic activity, exhibited in almost every advanced industrial country, away from small firms and toward larger organizations. It was therefore surprising when a series of studies identified this trend as not only stopping around the mid-1970s but actually beginning to reverse itself (Blau1987; Evans and Leighton1989). More recent studies have confirmed these results for most developed countries in the 1970s and 1980s (Acs, 2006). Empirical evidence clearly shows that the distribution of firm sizes in developed countries is starting to shift away from large firms and towards entrepreneurial activity.

There are three reasons why entrepreneurial activity increases in the late stages of economic activity. First, the innovation-driven stage is characterized by a decline in the share of manufacturing in the economy. Second, technological change during the postwar period has been biased towards industries where entrepreneurial activity is important (Jorgenson 2001). Improvements in information technology, such as telecommunications, can increase entrepreneurial returns. Express postal services, photocopying services, personal computers, internet, web services, and cell phone services make it cheaper and less time-consuming for geographies. Third, Aquilina et al. (2006) have come to the conclusion that high values of factor elasticity of substitution not only produce more capital per capita but at the same time make it easier for individuals to become entrepreneurs if the aggregate elasticity of substitution is also negative. In an economy characterized by higher values of the aggregate elasticity of substitution, we should expect a higher level of development, more entrepreneurs, and smaller firms.

H5: The influence of entrepreneurial ecosystem variables, entrepreneurial attitudes, and country activities is significantly different.

## **Research methods**

### **Research design**

This research uses quantitative secondary data to examine the influence of the entrepreneurial ecosystem on entrepreneurial activity which is mediated by entrepreneurial attitudes in various country characteristics. The data comes from a survey in GEM 2003 – 2020 which consists of 97 countries and 411 data.

## Sample

This research uses survey data derived from data displayed by GEM in 2013 - 2020. The population of this research is all countries included in GEM in 2013 - 2020. Data regarding the entrepreneurial ecosystem, entrepreneurial attitudes, and entrepreneurial activities in various country characteristics can be downloaded. Through <https://www.gemconsortium.org/>. The sampling technique for this research uses total sampling in order to obtain more complete data and to describe the population accurately. Table 1 explains the countries sampled in this study.

**Table 1. Development of Country Characteristics**

Phase	Year								Total
	2013	2014	2015	2016	2017	2018	2019	2020	
FDE	6	10	6	5	4	7	5	6	49
ED	14	30	31	32	26	11	13	7	164
IDEA	5	29	23	27	24	29	32	29	198
<b>Total</b>	<b>25</b>	<b>69</b>	<b>60</b>	<b>64</b>	<b>54</b>	<b>47</b>	<b>50</b>	<b>42</b>	<b>411</b>

Source: GEM 2013 - 2020

Information:

1 = Factor-driven Economies

2 = Efficiency-driven economies

3 = Innovation-driven economies

Based on table 4.1, the sample for this study consists of 96 countries whose data is available from 2013 - 2020. The total data is 411 because there are several countries whose data is not available in GEM. The data distribution respectively from 2013 – 2020 is 25, 69, 60, 64, 54, 47, 50, and 42 countries. These countries represent conditions at various levels of economic development, such as Factor-driven economies, Efficiency-driven economies, and Innovation-driven economies. Apart from that, these countries also represent various regions of the world. From 2013 to 2020 there were 49 countries included in the FDE category, 164 countries in the EDE category, and 198 countries in the IDE category.

## Measurement instrument

In this research, the dependent variable is entrepreneurial activity (Y), which is measured through three indicators, namely Total Early-Stage Entrepreneurial Activity (TEA), Social Entrepreneurial Activity (SEA), and Employee Entrepreneurial Activity (EEA). TEA covers the percentage of the population between 18–64 years who are involved in entrepreneurial initiatives, SEA measures the level of individual involvement in entrepreneurial activities with a social purpose, while EEA reflects the level of employee involvement in entrepreneurial activities, such as the development of new goods or services.

The independent variable in this research is the entrepreneurial ecosystem (X), which consists of nine factors that interact with each other to support entrepreneurship in a region. These factors include entrepreneurial financing, government policy, government entrepreneurship programs, entrepreneurship education, research and development transfer, commercial and legal infrastructure, entry regulations, physical infrastructure, and culture and social norms.

Next, the mediating variable is entrepreneurial attitude (Z), which includes four aspects, namely attitude towards opportunities, attitude towards personal abilities, attitude

towards risk, and attitude towards entrepreneurial desires. This variable describes an entrepreneur's response to information, events, opinions, and views related to the entrepreneurial environment.

Meanwhile, the control variables in this research are country characteristics, which are divided based on the country's economic development phase into factor-driven economies, efficiency-driven economies, and innovation-driven economies. This variable is used as a control to understand the impact of a country's economic development phase on the relationship between the entrepreneurial ecosystem and entrepreneurial activity.

Thus, this study uses three types of variables (dependent, independent, and mediating) as well as control variables to investigate the complex relationships between entrepreneurial ecosystems, entrepreneurial attitudes, country characteristics, and entrepreneurial activities in the context of a country's economic development.

### **Data Analysis Procedures**

This research will use PLS-SEM with STATA17, according to the method described by Hair et al. (2019). SEM allows researchers to investigate complex relationships between variables, both recursive and non-recursive, thereby providing a deeper understanding of the model under study. In this context, Partial Least Square (PLS) is a relevant method. PLS is useful when the sample size is large but the theoretical basis is not yet strong, or when the relationship between variables is very complex with a limited sample size, as explained by Hair, Hult, Ringle, and Sarstedt (2017). PLS involves evaluating the measurement model (outer model) for validity and reliability, as well as the structural model (inner model) to test causality.

Evaluation of the measurement model involves a convergent validity test, where a factor loading above 0.7 is desired to indicate that the indicator is effectively measuring the construct. Discriminant validity ensures that the instrument can differentiate between different constructs. Composite Reliability (CR) is used to measure the internal consistency of the construct, with values  $\geq 0.7$  accepted.

In the structural model, R-Square (R<sup>2</sup>) is used to measure the extent to which exogenous variables can predict endogenous variables and an R<sup>2</sup> value  $> 0.67$  is considered an indication of a strong model. Q<sup>2</sup> Predictive Relevance assesses the relevance of model predictions, with a Q<sup>2</sup> value  $> 0$  indicating a good prediction. Hypothesis testing using the Bootstrapping method is used to assess the significance of the influence between variables, and the number of bootstrap samples is around 200-1000.

By using PLS, this research can overcome situations where there is a mismatch between the sample size and the complexity of the variable relationships that are the focus of the research.

## **Results**

### **Data Description Analysis**

In this section, each variable will be described or described using STATA software. Meanwhile, the results of data processing in the form of descriptive statistics will display the characteristics of the sample used in this research, including the average value (mean), minimum value, and maximum for each variable as well as the standard deviation value. The description in this research includes entrepreneurial activities, entrepreneurial ecosystem, entrepreneurial attitudes, and country characteristics. Descriptive statistical results from research data can be seen in Table 2 below.

**Table 2. Descriptive Statistics**

Variables		Mean	Std. Dev.	Min	Max
ACT	overalls	7.563255	3.722622	1.34	22.34
	between		4.098218	1,962	22,168
	within		1.609207	.3859221	17.78776
ECO	overalls	4.128779	.9581468	2.158333	6.391667
	between		.7086412	2.433333	5.654667
	within		.7186178	1.784732	5.516279
ATT	overalls	39.29476	9.464489	15,775	68,925
	between		9.658596	17.60188	65,725
	within		4.814405	21.64976	62.2469
Stages	overalls	2.36253	.6860686	1	3
	between		.7088434	1	3
	within		.2286023	1.529197	3.16253

Source: Data processed with STATA, 2023

Based on descriptive statistics carried out using STATA software, it is known that the exogenous variable, namely entrepreneurial activity (Y), has a mean of 7.56, a maximum value of 22.34, and a minimum value of 1.34 with a standard deviation of 3.72. The entrepreneurial ecosystem has a mean of 4.13, a maximum value of 6.39, and a minimum value of 2.16 with a standard deviation of 0.96. The entrepreneurial attitude variable has a mean of 39.29, a maximum value of 68.93, and a minimum value of 15.78 with a standard deviation of 9.46.

### Outer Model

Outer Model uses Convergent Validity. Outer model test results to show the outer loading value using the PLSSEM SATA analysis tool. The loading factor values for the entrepreneurial ecosystem are all above 0.05, so it can be concluded that all indicators reflect the latent variables of the entrepreneurial ecosystem consisting of EF, GOV, UNI, IND, and CSN. The indicator for the latent variable entrepreneurial attitude is lower than 0.05, namely EF with a value of -0.420, so it is removed from the equation. There is also an indicator for the latent variable entrepreneurial activity that is lower than 0.05, namely EEA with a loading factor value of -0.301 so it is removed from the equation. The improved model measurements can be seen in Table 3.

**Table 3. Evaluation of the Revised Measurement Model**

	Reflective: Eco	Reflective: Att	Reflective: Act
E.F	0.943		
GOV	0.844		
UNI	0.843		
IND	0.924		
CSN	0.624		
P.O		0.708	
PC		0.901	
EI		0.882	
NER			0.858
NBOR			0.883
TEA			0.991
EBOR			0.577
Cronbach	0.952	0.788	0.859

DG	0.924	0.872	0.904
rho_A	0.349	0.852	0.930

Source: Data processed by Stata17, 2023

Based on data processing, it can be seen that the loading factors for all indicators are above 0.5, so it can be concluded that the manifest variables or observed variables represent the latent variables that will be measured.

Apart from looking at the value of the construct loading factor as a validity test, the measurement model also carries out a reliability test. Reliability tests are carried out to prove the accuracy, consistency, and precision of the instrument in measuring a construct. In PLS-SEM using PLS-SEM STATA to measure the reliability of a construct can be done in several ways, namely with AVE and Cronbach's Alpha. The results of the AVE index can be seen in Table 4.

**Table 4. AVE and Squared Interfactor Correlation values for measuring Composite Reliability**

	<b>Eco</b>	<b>Att</b>	<b>Act</b>
ECO	1,000	0.050	0.093
ATT	0.050	1,000	0.546
ACT	0.093	0.546	1,000
AVE	0.711	0.697	0.708

Source: Data processed by Stata, 2023

From Tables 12 and 13 it can be seen that the values of all variables in reliability testing using validity testing using AVE have a value of more than 0.5 and Cronbach's Alpha is greater than 0.7. Therefore, it can be concluded that the variables tested are valid and reliable so that it can be continued to test the structural model.

### **Inner Model**

The structural model was evaluated using R-square for dependent constructs, Stone-Geisser Q-square test for Q2 predictive relevance, and significance test of structural path parameter coefficients.

Evaluation of the structural model or inner model aims to predict the relationship between latent variables. The structural model is evaluated by looking at the percentage of variance explained, namely by looking at the R-squared value for the endogenous latent construct. The results of this research show that the R2 value of entrepreneurial activity is 0.30819. This value shows that the entrepreneurial ecosystem variable and entrepreneurial activity have an influence on the entrepreneurial activity variable by 30.82 percent. And the rest is influenced by other variables outside the variables in this research.

To find out whether a hypothesis is accepted or rejected can be done by paying attention to the significance values between constructs, t-statistics, and p-values. In this way, measurement estimates and standard errors are no longer calculated using statistical assumptions but are based on empirical observations. In the bootstrapping method in this research, the hypothesis is accepted if the values are smaller than 0.05, then Ha is accepted and Ho is rejected, and vice versa.

Table 14 shows the direct influence between variables. The first equation shows the direct influence of entrepreneurial ecosystem variables and entrepreneurial attitudes on

entrepreneurial activity. The second equation shows the influence of entrepreneurial ecosystem variables on entrepreneurial attitudes.

**Table 5. Statistical Test Results of Direct Effects**

Variables	Att	Act
Eco	-0.224 (0.008)	-0.148 (0.003)
Att		0.706 (0.000)
r2_a	0.048	0.564
p-values in parenthesis		

Table 6 shows how the indirect influence of entrepreneurial ecosystem variables on entrepreneurial activity is mediated by entrepreneurial attitudes.

**Table 6. Statistical Test Results of Indirect Effects**

Statistics	Act <- Att <- Eco
Indirect effects	-0.158
Standard error	0.042
Z statistics	-3,742
P-value	0,000
Conf. intervals (N)	(-0.241, -0.075)
Conf. interval (P)	(-0.246, -0.080)
Conf. interval (BC)	(-0.246, -0.080)
confidence level: 95%	
N) normal confidence interval	
(P) percentile confidence interval	
(BC) bias-corrected confidence interval	

Table 7 shows a multigroup analysis of the role of country characteristics on the relationship between variables. In this analysis, you will see how the influence differs between variables in different groups.

**Table 7 Multigroup Analysis**

Structural effects	Global	Group_1	Group_2	Group_3	AD_2vs1	AD_3vs1	S_2vs1	S_3vs1	P_2vs1	P_3vs1
Eco -> Att	-0.224	-0.165	0.431	0.302	0.596	0.466	1,262	6,507	0.208	0,000
Eco -> Act	-0.148	-0.252	0.078	0.057	0.329	0.309	1,854	3,982	0.064	0,000
Att -> Act	0.706	0.652	0.680	0.675	0.028	0.023	0.059	0.018	0.953	0.986

Source: SATA processed data, 2023

### Hypothesis testing

Based on Table 6, Table 6, and 7, the determination of whether a hypothesis is accepted or rejected is explained as follows.

Hypothesis 1 states that there is a significant influence of the entrepreneurial ecosystem on entrepreneurial activity. If the P value <0.05 the hypothesis is accepted. The research results show that hypothesis testing shows a p-value of 0.003 with a coefficient value of -0.148. Based

on the results of the calculations above, it can be concluded that hypothesis 1 is accepted and it is stated that there is a significant influence of the entrepreneurial ecosystem on entrepreneurial activities.

Hypothesis 2 states that there is a significant influence of the entrepreneurial ecosystem on entrepreneurial attitudes. If the P value is  $<0.05$  then the hypothesis is accepted. The results of hypothesis testing show a P value of 0.008 with a coefficient value of -0.224. Based on the results of the calculations above, it can be concluded that hypothesis 2 is accepted and it is stated that there is a significant influence of the entrepreneurial ecosystem on entrepreneurial activity.

Hypothesis 3 states that there is a significant influence of entrepreneurial attitude on entrepreneurial activity. If the P value is  $<0.05$  then the hypothesis is accepted. Hypothesis testing shows a P value of 0.000 with a coefficient value of 0.706. Based on the results of the calculations above, it can be concluded that hypothesis 3 is accepted and it is stated that there is a significant influence of entrepreneurial attitude on entrepreneurial activity.

Hypothesis 4 states that there is a significant influence of the entrepreneurial ecosystem on entrepreneurial activities mediated by entrepreneurial attitudes. If the P value is  $<0.05$  then the hypothesis is accepted. Hypothesis testing shows a P value of 0.000 with a coefficient value of -0.158. Based on the results of the calculations above, it can be concluded that hypothesis 4 is accepted and it is stated that there is a significant influence of the entrepreneurial ecosystem on entrepreneurial activity mediated by entrepreneurial attitudes.

This research also looks at the differences in influence between variables for each country's characteristics. The results of this research show that the influence of the relationship between the entrepreneurial ecosystem on entrepreneurial activity for groups 2 and 3 is greater and more significant than for group 1. The influence of the entrepreneurial ecosystem on entrepreneurial attitudes in Group 1 is -0.165, while in Group 2 it is 0.431 and in Group 3 is 0.302. The research results show that the relationship between the entrepreneurial ecosystem and entrepreneurial attitudes between groups 1 and 3 is significantly different because the p-value is  $<0.05$ .

The influence of the entrepreneurial ecosystem on entrepreneurial activity in Group 1 has a regression coefficient value of -0.252, while in Group 2 the regression coefficient value is 0.078 and in Group 3 the regression coefficient value is 0.057. The research results show that the relationship between the entrepreneurial ecosystem and entrepreneurial activity between groups 1 and 3 is significantly different because the p-value is  $<0.05$ . The research results also show that the influence of entrepreneurial attitudes on entrepreneurial activities does not differ significantly between groups.

## **Discussion**

### **The Influence of the Entrepreneurial Ecosystem on Entrepreneurial Activities**

The influence of the entrepreneurial ecosystem on entrepreneurial activity has a coefficient value of -0.102, meaning that if the value of other variables remains constant and the entrepreneurial ecosystem experiences an increase of 1 unit, entrepreneurial activity will decrease by 0.102 units. This negative coefficient value indicates that there is a negative relationship between the entrepreneurial ecosystem and entrepreneurial activity. This means that if the entrepreneurial ecosystem increases, entrepreneurial activity will decrease, and vice versa.



Based on the hypothesis test, the results showed that the Entrepreneurial Ecosystem has a negative and significant effect on entrepreneurial activity as indicated by a negative coefficient sign and has a p-value of  $0.007 < 0.05$ . The results of this research show that the entrepreneurial ecosystem has a negative and significant effect on entrepreneurial activity.

This research succeeded in proving the hypothesis proposed in this research which was built based on theory and previous research but in an inverse relationship. The entrepreneurial ecosystem will influence entrepreneurial activities based on certain regions (Content, Frenken, & Jordaan, 2019). (Acs, 2006) explains that country characteristics will play a role in determining the level of entrepreneurship. People in developed countries choose entrepreneurship because they see opportunities to gain greater potential profits in the future, while people in developing countries tend to become entrepreneurs because they have no other choice (Abu Bakar et al., 2017). Therefore, the relationship between the entrepreneurial ecosystem and entrepreneurial activity will differ depending on the country's economic level. Thus, countries that have an entrepreneurial ecosystem will not directly influence entrepreneurial activity.

The results of this research do not support previous research conducted by (Content et al., 2019) which states that the entrepreneurial ecosystem helps shape the impact of entrepreneurial activity on economic growth. Therefore, this research can be used as a consideration to determine the factors that influence entrepreneurial activity that have been carried out by previous researchers and can be used as a reference for conducting research on similar topics.

### **The Influence of the Entrepreneurial Ecosystem on Entrepreneurial Attitudes**

Based on the hypothesis test, the result was that the Entrepreneurial Ecosystem positive and significant effect on entrepreneurial attitude which is indicated by a coefficient value of -0.224 and a p-value of 0.008 which is smaller than 0.05. The coefficient value of -0.224 means that if there is an increase entrepreneurial Ecosystem of 1 unit, then it will decrease the entrepreneurial attitude of 0.224.

The results of this research support the hypothesis proposed in this research which is built on theory and previous research. This is because the existence of a good entrepreneurial ecosystem will improve the attitudes of a country's people regarding entrepreneurship (Kansheba & Wald, 2021). Countries that have a good entrepreneurial ecosystem have actors who interact with each other in developing entrepreneurship so that they can influence people's attitudes toward entrepreneurship. Therefore, people's attitudes towards entrepreneurship will really depend on how they see the entrepreneurial ecosystem around them.

The results of this research are in line with research conducted by (Kansheba & Wald, 2021) which succeeded in proving that the entrepreneurial ecosystem influences entrepreneurial attitudes. Improving the quality of the entrepreneurial ecosystem, which is characterized by the involvement of all actors in the entrepreneurial ecosystem such as individuals, organizations, institutions, markets, and culture, will improve entrepreneurial attitudes and morals so that it will increase entrepreneurial activities in a country. Therefore, this research can strengthen the results of research that has been carried out by previous researchers and can be a reference for conducting research on similar topics.

### **The Influence of Entrepreneurial Attitudes on Entrepreneurial Activities**

Based on the hypothesis test, the results showed that Entrepreneurial Attitude can have a positive and significant effect on Entrepreneurial Activity as indicated by a positive coefficient sign and a probability value of 0.000 which is smaller than 0.05. Then, a coefficient value of

0.706 means that if there is an increase in Entrepreneurial Attitude, it will increase Entrepreneurial Activity by 0.706 units. A country that wants to increase entrepreneurial activity must pay attention to and improve entrepreneurial attitudes,

These results illustrate that the hypothesis proposed in this research which was built based on theory and previous research, has been proven to be true. This is because having a good entrepreneurial attitude will increase entrepreneurial activity in a country. Attitudes towards entrepreneurship have an important role in determining a person's decision to be involved in designing and establishing a new company. One important aspect that makes someone not start a new business is their preference for risk (Uhlener & Thurik, 2007). Countries that have a good entrepreneurial attitude will encourage them to be directly involved in entrepreneurial activities. Therefore, entrepreneurial activity will greatly depend on society's attitudes about entrepreneurship.

The results of this research are in line with research conducted by (Draghici, Albulescu, & Tamasila, 2014) which states that entrepreneurial attitudes and perceptions greatly influence entrepreneurial activity in Europe based on an aggregate index, using Global Entrepreneurship Monitor (GEM) data. Therefore, this research can strengthen the results of research that has been carried out by previous researchers and can be a reference for conducting research on similar topics.

### **The Influence of the Entrepreneurial Ecosystem on Entrepreneurial Activities through Entrepreneurial Attitudes as a Mediating Variable**

Based on the hypothesis test, the results showed that entrepreneurial attitude mediates the relationship between the entrepreneurial ecosystem and entrepreneurial activity because the p-value of the indirect effect is 0.000 which is smaller than 0.05. Then, the coefficient value of -0.158 means that the influence of the entrepreneurial ecosystem on entrepreneurial activity through entrepreneurial attitudes is -0.158.

These results illustrate that the hypothesis proposed in this research which was built based on theory and previous research, has been proven to be true. The results of this research are in line with research conducted by (Kansheba & Wald, 2021) which succeeded in proving that the entrepreneurial ecosystem influences entrepreneurial attitudes with entrepreneurial attitude as a mediating variable.

### **The role of state characteristics in explaining the relationship between the entrepreneurial ecosystem and entrepreneurs' attitudes towards entrepreneurial activities.**

The results of this research also explain the influence of the ecosystem and entrepreneurial attitudes on entrepreneurial activities in various country characteristics. This study compared the FDE group (1) with the EDE group (2) and the FDE group (1) with IDE (3). The influence of the entrepreneurial ecosystem on entrepreneurial activity in Group 1 was -0.252, while in Group 2 it was 0.078 and in Group 3 it was 0.057. The research results show that the relationship between the entrepreneurial ecosystem and entrepreneurial activity between groups 1 and 3 is significantly different because the p-value is <0.05. The research results also show that the influence of entrepreneurial attitudes on entrepreneurial activities does not differ significantly between groups.

FDE, EDE, and IDE are the three stages of economic development experienced by a country. Each stage is characterized by varying levels of complexity and economic sophistication. The entrepreneurial ecosystem, entrepreneurial attitudes, and entrepreneurial activities at each stage are influenced by different factors. In FDE, the main drivers of economic

growth are natural resources and low-skilled labor. Entrepreneurial activities at this stage are usually focused on small-scale businesses, often in the informal sector. The entrepreneurial ecosystem is weak, with limited access to finance, technology, and markets. In EDE, the main drivers of economic growth are efficiency gains from better production processes, education, and infrastructure. Entrepreneurial activities at this stage are usually focused on small and medium enterprises with the aim of increasing efficiency and productivity. The entrepreneurial ecosystem at this stage is stronger than FDE, with better access to finance, technology, and markets.

In IDE, the main driver of economic growth is innovation and technological progress. Entrepreneurial activity at this stage is usually focused on high-tech start-ups that aim to disrupt existing markets or create new ones. The entrepreneurial ecosystem is highly developed, with strong access to finance, technology, and markets.

### **Conclusions and recommendations**

This research provides a deeper understanding of the relationship between entrepreneurial ecosystems, entrepreneurial attitudes, and entrepreneurial activities in various countries using data from the Global Entrepreneurship Monitor (GEM) from 2013 to 2020. This quantitative research uses PLS-SEM STATA to test the influence between variables. The results of this research succeeded in proving hypothesis 1 which states that the entrepreneurial ecosystem influences entrepreneurial activity but in the form of an inverse relationship. The influence of the entrepreneurial ecosystem on entrepreneurial activity is negative in the total data and in the FDE group data, while in the EDE and IDE groups, the influence between these variables is positive. Therefore, improving the entrepreneurial ecosystem has a positive and significant effect on entrepreneurial activity in the EDE and IDE groups. The results of this research succeeded in proving hypothesis 2 which states that the entrepreneurial ecosystem has a significant influence on entrepreneurial attitudes, but in the form of an inverse relationship in total data and the FDE group, while the influence between variables in the EDE and IDE groups has a positive influence. Therefore, improving the entrepreneurial ecosystem has a direct effect on entrepreneurial attitudes. The results of this research succeeded in proving hypothesis 3 which states that entrepreneurial attitudes have a positive and significant effect on entrepreneurial activity in total data and all country groups. This shows that the higher the entrepreneurial attitude, the greater the entrepreneurial activity. The results of this research succeeded in proving hypothesis 4 which states that entrepreneurial attitude mediates the influence of the entrepreneurial ecosystem on entrepreneurial activity. This research explains the influence of the ecosystem and entrepreneurial attitudes on entrepreneurial activity in various country characteristics. The research results show that the relationship between the entrepreneurial ecosystem and entrepreneurial attitudes and entrepreneurial activities between groups 1 and 3 is significantly different because the p-value is  $<0.05$ . Significant differences also occur between groups 1 and 2 specifically in the relationship between the entrepreneurial ecosystem and entrepreneurial activity. The research results show that the influence of entrepreneurial attitudes on entrepreneurial activities does not differ significantly between groups.

Based on the results of data collection and processing, the suggestions from this research are as follows: 1) The results of this research state that entrepreneurial attitudes have a positive and significant effect on entrepreneurial activity. Therefore, to increase community entrepreneurial activity, the government and related institutions need to pay attention to entrepreneurial attitudes in order to encourage entrepreneurial activity. 2) The government needs to make policies that will improve the entrepreneurial ecosystem and entrepreneurial attitudes by paying attention to the characteristics of the country concerned, which will be able to encourage entrepreneurial activity. 3) For future researchers, it is hoped that they will be able

to pay attention to other factors that influence entrepreneurial attitudes because they have a very important role in increasing entrepreneurial activity. Other researchers can also pay attention to other variables that can cause differences in the influence between the entrepreneurial ecosystem and entrepreneurial attitudes toward entrepreneurial activities.

The contribution of this research to the existing literature is the development of a deeper understanding of the complexity of factors influencing entrepreneurship in various country contexts. The results of this research integrate the concepts of entrepreneurial ecosystem, entrepreneurial attitude, and entrepreneurial activity, allowing us to view entrepreneurship as a process influenced by internal and external factors. It provides a strong foundation for further research in this area and provides valuable insights to stakeholders such as governments, educational institutions, and businesses in the formulation of policies and practices that can support productive entrepreneurship.

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