



## **HOW HOMETOWN IDENTITY INFLUENCES DRIVER'S PULLS AND PUSHES TOWARDS ECO-INNOVATION**

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### **Abstract**

*Despite the development in eco-innovation research in recent years, it continues to be obvious what drives small to medium-sized businesses in the unorganized sector to innovate sustainably. The study examines how the push of job requirements and the pull of employment resources influence drivers' push and pull factors to start a hometown business. Whenever a company is deeply ingrained in the area, the hometown identity impact is stronger. It becomes less noticeable when a company is located in an area with a wide range of local dialects. In the Chinese industrial sector, it looks into how hometown identity affects eco-innovation. The information collected is from Chinese migrants. The major conclusions are that job demands can raise entrepreneurship intention to start hometown businesses. Through the use of employment convictions, entrepreneurship resources could occasionally have a favorable*

*impact on migrant workers' intentions to start hometown businesses. Additionally, the association between job demands, as well as employment intention is positively moderated by generations while the connection between employment resources, employment convictions, and eco-innovation is negatively moderated. The study highlights the generational disparities in understanding the hometown employment desire of drivers and also highlights the significance by simultaneously analyzing push and pull factors. The result shows that environmental and organizational factors are multiple types of eco-innovation drivers. Enterprises are compelled to implement green innovation approaches by the surrounding environment and system to satisfy similarity needs, improve organizational credibility, as well as enhance their environmental performance.*

*Keywords: Eco-Innovation; Push and Pull Factors; Hometown Identity; Informal Sectors; Economy*

## **INTRODUCTION**

Innovation and environmental protection have been crucial components and both must be well integrated into businesses' coordination and management operations, keeping in mind that the company is attempting to establish alternative solutions that mitigate environmental consequences resulting from its actions. Green product development is a way to combine sustainability and creativity and it could be a major contributor to higher company growth rates and societal improvement [1]. Environmental management has historically been viewed by businesses as a method at odds with goals of company expansion, competition, including profitability. Innovation is strongly related to economic progress, yet it also contributes to environmental harm. Companies need to consider social and environmental issues while creating new goods to flourish strategically as well as economically given the rise in environmental customer perception and societal and governmental pressure on businesses to lessen their impact on the environment [2]. Such a setting gives rise to the idea of eco-innovation. It is commonly known that eco-innovation has positive effects on society, the economy, and the environment [3]. For sustainable growth, developing nations are now concentrating on how to encourage eco-innovations in both large and small businesses. Innovation that meets the requirements of the present without jeopardizing the potential of subsequent generations to satisfy their needs" was the original definition of eco-innovation. Despite having the potential to spur eco-innovation, official policies and laws frequently tend to ignore the "dualistic" economic structure and social significance of "hidden" innovations in the

informal sector. In Sub-Saharan Africa (SSA), the such sector accounts for 50% to 60% of jobs and 90% of small and medium-sized businesses (SMEs) [4].

The informal sector has been growing a significant advantage, an immediate influence on the community, and a better opportunity to incorporate social and environmental advantages into the valuation of their products due to their flexibility as well as capacity in serving various local marketplaces in comparison to large organizations. However, the trend toward financial, cultural, and environmental justice could only become sustainable with the participation of the saturation point of firms in the informal economy. Whereas large firms' entire structure segments of the economic system and the number of their actions are key players in sustainability policies. Because of a shortage of information, a limitation of interest to researchers, and, most significantly, the complexities of the nature, the characteristics, as well as the ecosystem in which these businesses operate, drivers of eco-innovation amongst SMEs in the informal sector are yet unclear [5]. Researchers categorize the informal sectors according to their (1) diverse types of entrepreneurs (e.g., institutions, social, circular, and necessity entrepreneurs); (2) unique features of SMEs (Sole proprietorship); and (3) unusual environmental context [6]. Every one of the circular economy's tenets or pillars is not yet practical or understood in the context of the informal sector. SMEs frequently operate following principles of circular economics without being familiar with its principles or developing eco-products before even determining whether there is a market need or opportunity. Intriguingly, the potential to utilize the nearby resources might be more important to informal entrepreneurs than that to the surroundings. The goals, surroundings, organization, and activities could not be independently studied because the management solution of SMEs is interconnected.

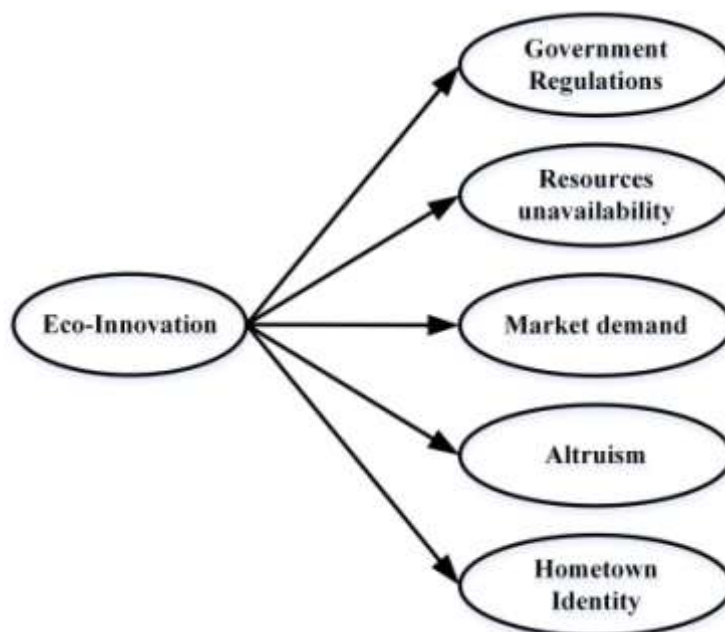
The entrepreneur plays a significant role in several of these business owner enterprises; the smaller the business, the less formalized the corporate structure is and the greater decision-making is centralized at the entrepreneur levels. As a result, the entrepreneur is essential to the success or success of innovativeness or efforts of the firms, as well as the leadership style, beliefs, and perception of the surroundings all influence the corporate purpose and decision-making [7]. Without a doubt, businesses and entrepreneurs throughout this industry do not always or necessarily fit inside the boundaries provided by Western literature regarding motivations or approaches to eco-innovate, given the complexity of the informal sector as well as the unique surroundings. Thus, by comprehending the forces driving eco-innovation in the unorganized sector, it should be possible to avoid the oversimplification of data that frequently occurs in writing about emerging economies. The concept of hometown identity is founded on the premise that an entrepreneur's business is connected to the neighborhood in which they perform beyond accordance with rules and regulations. An entrepreneur's local identity is the

product of three factors: 1) understanding of their societal problems, 2) engagement in environmental problems, and 3) consequent social movement constraints.

Previous studies have shown in the research that hometown identification is connected to psychological biases that affect the judgment of politicians [8] and entrepreneurs' favoritism and acquisition behaviour. However, neither the idea of an entrepreneur's hometown identity was already adapted to the environment of eco-innovation in the informal sector nor have psychological mechanisms been discovered to explain whether an entrepreneur's hometown identity influences enterprises' strategic decisions and results [9]. In light of the aforementioned, mainstream research has been giving drivers of eco-innovation more attention in recent years. Recognizing the eco-motivators, innovation meantime, may help policymakers create economic tools which might promote its growth and adoption in the manufacturing sector of the economy. A thorough analysis of the factors influencing eco-innovation at the global, national, industrial, sectorial, and business levels has been conducted by several academics [10]. The main conceptual frameworks for a number of these researches are resource-based views, evolutionary economies, environmental economics, including innovation economics. Recent research has demonstrated that "market-pull", as well as "technology-push" dynamics, work together to foster eco-innovation. The double emissions problem, however, has led to the identification of the policy (regulatory) push/pull impact as being essential to its adoption and implementation by businesses [11].

As a result of (1) the upper echelons hypothesis and (2) the impacts of place identification on decision-making, researchers predict that entrepreneurs' hometown identities have a positive impact on eco-innovation. Initially, according to the upper echelons theory, an entrepreneur's psychological bias or preferences would significantly affect the strategic decision-making process and the result of the company. Researchers contend those customers' hometown identities, a psychological bias brought on by place identification; have a substantial impact on business strategies. People will develop an emotional tie with the local environment because it is where they have been born as well as nurtured, and as a result, they would act with kindness and consideration for it [12]. As a result, businesses with business owners are much more inclined to care about regional environmental issues and to reduce pollution through actively developing eco-friendly products and improving the ecological efficiency of the production processes. Second, as shown in Figure 1, individuals are more likely to support the causes of their hometown neighborhood due to place identity. People who have strong emotional ties to their hometowns may consider economic issues and the concerns of the local community while making decisions [13]. As a result, hometown identity might stimulate pro-social motivation in people, causing them to concentrate on helping others out of concern for the

welfare of the hometown group [25]. Researchers contend that local business owners are more inclined to act with a prosaic mindset and care about the welfare of others in their neighborhoods. Local CEOs are therefore more likely to protect the environment by using green innovation techniques, which will benefit people, even as they pursue financial rewards.



**Figure 1: Eco-Innovation driver's framework**

Recent studies have identified four categories of factors that influence eco-innovation: "market-pull," "technology-push," "firm-specific actors," as well as "policy" determinants. Potential savings, share price, financial effectiveness, market demand for sustainable products, and consumer advantages are among the elements that fall under the category of "market pull" [14]. Concerning the "technology push," among the factors have been the company's managerial and technological abilities (e.g., participation in R&D, employee training, in-house software attainment, etc.); partnership with research organizations; connecting to outside knowledge; organizational innovation; as well as management techniques. The variables for the policy (regulatory) driver comprise current rules, anticipated future restrictions, accessibility to current subsidies, and financial incentives. Even though there is a fair amount of empirical data on the factors that generate Eco-innovation, certain other important questions remain mostly unanswered. Through the use of employment convictions, entrepreneurship resources could occasionally have a favorable impact on migrant workers' intentions to start businesses when they return home. Additionally, the association between job demands, job burnout, as well as employment intention is positively moderated by generations while the connection between

employment resources, employment convictions, and entrepreneurship is negatively moderated. The study emphasizes the importance of simultaneously evaluating push and pull factors as well as the age differences in understanding Chinese migrant workers' entrepreneurship desire for hometown business. The outcome demonstrates the existence of two distinct categories of eco-innovation drivers: environmental and organizational factors. The environment as well as the system around businesses forces them to adopt green innovation strategies to meet similar demands, boost company credibility, and enhance environmental sustainability. The outcome demonstrates that there are two distinct categories of eco-innovation drivers: environmental and organizational factors. The environment and systems around businesses force them to adopt green innovation strategies to meet similar demands, boost company credibility, and improve environmental performance.

The study explores how work requirements and employment resources affect drivers' motivation to start a hometown business. The study also examines generational differences in drivers' hometown employment desires and push and pull factors.

## RELATED WORKS

When deciding whether to eco-innovate, companies are affected by both internal (resources and capabilities) and external (e.g., regulatory) aspects. Nevertheless, compared to the examination of the external causes, the internal components have gotten far less consideration. By examining the role of assets, competencies, and dynamic capabilities (RCCs) as predictors (drivers and barriers) of various eco-innovation (EI) kinds, the research seeks to close such limitations in knowledge. These EI kinds each make a unique contribution to the society's and economy's transformation to a sustainable society. The statistical studies demonstrate that distinct RCCs are more or less significant for various types of EIs, and also that RCCs are fairly relevant as drivers of EIs. Particularly, the factors that affect systematic and extreme EIs diverge significantly from those that affect gradual improvements. The findings indicate that such EIs are driven by external RCCs, participation in environmental supply chains, an EI-friendly corporate structure, technology push and pull from the market, as well as internal financing assets, while barriers to such EIs include cooperation, organizational learning, an ISO (International Organization for Standardization) environmental credentialing, and technological path dependency. The findings could serve as a roadmap for businesses looking to innovate through specific EI kinds that match accessible and focused RCCs to gain a competitive as well as sustainable benefit. They might be helpful to decision-makers that want by promoting particular EI kinds. The research, however, lacks sufficient data, and they must additionally concentrate on the factors within various manufacturing and non-manufacturing sectors [14][15].

In the study, researchers examine what motivates various eco-innovations in European SMEs. Actual studies for the various capacities of supplies, demands, as well as the regulated environment within promoting the adoption of various kinds of eco-innovation are discovered using a dataset of 27 European countries. A tri-variate probity model is estimated as part of the empirical approach. The findings demonstrate that business owners who place a premium on working with research institutions, organizations, and universities as well as the growth in consumer demand for eco-friendly goods are more engaged in all forms of eco-innovation. For ecological organizational and process innovations as opposed to ecologically innovative products, supply-side features tend to be a more significant driver. The findings also demonstrate that cost-savings are only significantly important for eco-process innovations, whereas market share only significantly influences eco-product and eco-organizational innovations. Finally, prioritizing current regulations has a substantial influence on the development of eco-products and eco-organizations, whereas predicted requirements, accessibility to subsidies, and financial incentives have little or no influence on the choice of a corporation to engage in eco-innovation in Europe. Furthermore, the feature collected at hand lacks exact statistics on spending on innovation. Researchers suggest further investigation because the factors influencing both the decision to eco-innovate as well as the intensity of eco-innovation may vary[16].

The Canadian wine industry is a tiny but rapidly expanding non-metropolitan economic sector. Wineries have been under pressure to adapt and create more environmentally friendly techniques and manufacturing processes because they are reliant on the region's environmental assets and climate circumstances, as well as shifting consumer tastes. Understanding the environment of the capacities and materials wineries rely on to create eco-innovations has therefore become more and more crucial. The study, which is based on an interview with 151 wine companies in Canada, examines the primary forces behind eco-innovation as well as compares them to those that drive conventional development. The experimental analysis's findings indicate that both kinds of innovation are related to internal causes. Such partially reflects the peculiarities of the wine industry in Canada which is made up of tiny businesses that often operate through internal research through trial and error. Eco-innovation in this sector, however, is different from traditional development in that it is less directly linked to outside sources of knowledge, which are typically more technical and environmental. The study has two drawbacks. The first is that traditional innovation as well as eco-innovation does not share the same general drivers within a given industry, aside from the variations, which exist between specific types of innovation. Second, industry players appear to not understand Eco-innovation which lacks a clear definition in the study[17].

Although there is a growing body of research on the influences, which drive eco-innovation, fewer investigations on it in developing nations. Consequently, to close this gap, the reason for the study is to analyze the impact of various eco-innovation drivers (technological push, market pull, and regulatory push-pull) on multiple opposite eco-innovation kinds: resource efficiency as well as self-sustaining sensitivity, while distinguishing between various kinds of innovation (product and process) as well as varying levels of novelty (incremental and radical). Multivariate probity methods are used to build the empirical study, which takes into account a sample of Chilean businesses from 2009 to 2016. Whenever an emerging nation is considered, the results suggest a substitution of innovation management drivers; collaboration through partners, partnerships, as well as networking, together within the non-R&D embedded, were among the most common technological push tactics in this study. Additionally, market factors will drive eco-innovations, whilst public support is only marginally significant. Several restrictions apply to the findings. Because researchers conduct a biennial survey and are unable to recognize companies over time throughout the survey, researchers were, on the one hand, unable to perform a finished panel data analysis. This final restriction prevents us from obtaining the "individuals" they require for panel data. Since some organizations could participate in the survey for multiple years, the lack of firm identification might add bias to the longitudinal study. Researchers have made an effort to fix it by adding age squares as well as time assumptions[18].

As a consequence of global warming, modern societies have become more aware of environmental challenges, and renewable energy production has become an essential part of resource-efficient production in today's globe. The risks of climate change to people's well-being are rising. To reduce environmental impact, it is now vital to investigate environmentally sustainable energy and manufacturing production methods. It is intended that such a study will provide a conceptual framework for Pakistani green technology businesses. According to data gathered from the executives of several environmental technology firms, Pakistan does have a huge potential for technologies relating to sustainable manufacturing. The public and commercial sectors, unfortunately, do not give this area adequate attention. The study's findings demonstrate that Pakistan's green power industry has a sizable market with room for expansion, which would help draw more businesses into this sector and promote the development of a healthy and sustainable environment throughout the nation. The scope of this study is currently restricted to manufacturing firms in Pakistan; however, it could eventually be expanded to other industries[19].

An international initiative to adopt environmental sustainability gave rise to eco-innovation. As a means of attaining environmental sustainability, states as well as businesses



devised and put into practice strategies and policies for eco-innovation. Action plans have helped to promote eco-innovation in industrialized nations, particularly in OECD members including European nations. Eco-innovation policies have recently become more prevalent in developing nations. As a result, the paper examines eco-innovation regulations in Asian nations. Utilizing categories of policy instruments, policies about eco-innovation in 17 Asian nations were examined. The categorization of development stages was interpreted as well as contrasted with national tactics for eco-innovation. Eco-innovation was sparked by a global movement to promote environmental sustainability. Governments and companies developed and put into effect plans and approaches for eco-innovation as an approach to achieving environmental sustainability. New initiatives had aided in promoting eco-innovation for emerging countries, especially in OECD members that include European nations. Policies promoting eco-innovation are now more common in developing countries. As a result, the article looks at the laws governing eco-innovation in Asian countries. There are, however, several restrictions on the gathering and analysis of data. There aren't many publicly accessible statistics on eco-innovation strategies in the Asian nations chosen. To assess eco-innovation strategies in the chosen Asian nations, researchers mostly relied on data that has been provided in English. Researchers were unable to undertake in-depth evaluations of eco-innovation policies due to a lack of data. Case studies will help us learn about eco-innovation strategies in the least developed and developing nations[20].

The motivations behind eco-innovation and their impacts on business performance are clarified through the study. Researchers concentrate on eco-innovation, which adds value for customers and businesses, promotes environmental sustainability, but also lessens negative effects on the environment. The paper examines the relationship between the drivers, eco-innovation behaviour, and business success using data gathered from 442 Chinese companies. The findings show that several elements, including technological prowess, environmental organizational prowess, a market-based tool, and competitive pressures, including customer green demand, play a role in the growth of eco-innovation. The strongest incentive for businesses to implement eco-innovation comes from competitive pressure, by following the market-based tool, technology solutions, customer green demand, as well as ecological organization capabilities. A control and command instrument does not effectively encourage eco-innovation, whereas a market-based instrument does. Regarding the adoption of eco-innovation, researchers demonstrate how such behaviour could greatly improve a firm's sustainability impact, which in turn has a favorable indirect effect on the economic effects of the company. The "Porter hypothesis" is supported by these findings, which have several ramifications for decision-makers in government and business. To assess the mistakes of the

first stage of firm variations as well as the second stage of company variances, the paper recommends further research using HLM[21].

Several kinds of eco-innovations are in use today. When every innovation type has unique characteristics, drivers, and contributions to company performance, implementing eco-innovation programs without a comprehensive viewpoint is ineffective. The resource-based view theory is employed in the study to examine the linkages between the three forms of eco-innovation (process, product, and organizational) and how they differ in terms of how they affect organizational effectiveness. The analysis of 120 samples from the Taiwan Environmental Management Association utilizing multiple regression techniques reveals that eco-organizational innovation does have the greatest impact on financial success. Additionally, the benefits of eco-organizational innovation are somewhat mediated by eco-process when eco-product innovations and the impacts of eco-process innovations on firm profitability are partially mediated by eco-product innovations. Eco-organizational and eco-process, including eco-product innovations, have a direct and indirect impact on business success. The results imply that managers should comprehend the dependence as well as co-evolutionary links between various kinds of eco-innovation towards developing efficient eco-innovation strategies. Overall, the study broadens the conversation about innovation to include eco- or environmental innovation. The analysis and implications of such a study's findings should take into account a number of its drawbacks. The actual impact of eco-innovation on efficiency could be assessed more efficiently by gathering a variety of viewpoints (for example, objective data) to possibly eliminate such biases. Business performance was previously measured by several subjective metrics. Second, characteristics such as innovative traits may modify the association between eco-innovation and firm profitability[22].

## **METHODOLOGY**

### **The Study**

The individuals' preferences in eco-innovation, push and pull forces, employment conviction, and control variables including accomplishment drive and risk inclination, along with their population information, were used to generate a hypothesis for the experiment. By rearranging the sequence of the items and putting unnecessary factors among the independent and mediation variables, the study attempted to eliminate typical method bias. Each individual has been asked to state if they intended to go back home and start a new business three days following completing the first section of the survey. 200 replies were received, with several respondents of 94.10%. The study kept 250 usable surveys with a rate of 82.29% after

eliminating blank responses and unpaired surveys. The individuals had an average age of 33.48, and a mean work duration of 11.53 years, and 63.2% of them were male.

### The hypotheses

Hypothesis 1- The association between an individual's hometown and a company's commitment to Eco-innovation is weakened by employment intention.

Hypothesis 2- Job Demand pushes at work are positively correlated with plans to start a hometown business towards Eco-innovation.

Hypothesis 3- Employment resources pulls have a favorable correlation with hometown employment intention towards Eco-innovation

Hypothesis 4- The strong correlation between employment resources and hometown inclination is mediated by employment conviction towards Eco-innovation.

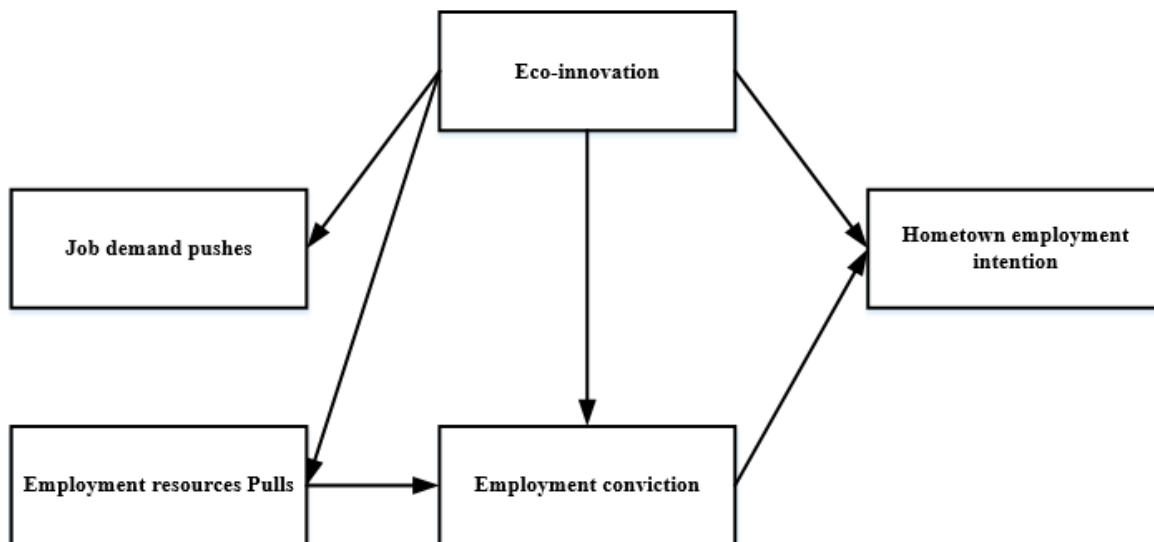


Figure 2: Model of Hypotheses

### Data collection

Chinese companies that were publicly traded from 2002 to 2016 make up the study's dataset. China's provinces are incredibly diverse. There are significant regional distinctions in languages, customs, history, as well as culture, which offer enough variety for a CEO to have a diverse hometown background. As a result, Chinese businesses offer a solid sample against which we can test our theories. The study employed the following sample techniques. According to the "List of Listed Companies' Environmental Verification Industry Classification" and the "China Securities Regulatory Commission Industry Classification Guidelines," we first selected the industries with the highest levels of pollution since businesses in these sectors have a

greater effect on the environment and are more aware of environmental concerns. Second, based on the readily available data, the study chose the publicly traded Chinese companies in the aforementioned highly polluting industries from 2002 to 2016 as the initial sample. Finally, because their governance structures and regulatory standards differ from those of companies that issue B-shares and/or H-shares, this paper excludes them [23]. The following three sources provided the information that was utilized to create the sample. First, using information from executive resumes provided by the China Stock Market Accounting Research Database, which is manual, collected data on CEO characteristics (CSMAR database). After then, we acquired financial information from the CSMAR database and companies' annual reports. Finally, the study combined the three sets of information mentioned above and removed the missing information. In total, 6831 firm-year records for 590 enterprises were included in the sample. The actual addresses of the businesses were verified, and the CEOs or MDs of every one of the 1000 businesses were selected as the points of contact to boost response rates. The sampling database was purged of all the businesses with no identifiable addresses or that were insolvent, and it was then replaced with businesses that have been similarly situated and operating in the same sector. To keep the sample group at 1000 firms, the exercise was conducted. The steps taken have contacts, follow-up visits, etc. By employing a face-to-face method, field officers administered the survey. A maximum of 574 completed surveys were recovered from the manufacturing industry after the survey administration. However, following final data preprocessing, the number dropped to 521 companies.

## **Analysis Measures**

### *a. Dependent variables of Eco-Innovation*

The study used the resource-conservation as well as ecologically responsible applications which companies submitted for to quantify the firms' green innovation, per the findings of [24]. As examples of green innovation, the study looked at patents with the following parameters: "green," "pure," "environmental," "cycling," "ecology," "low emissions," "savings," "energy conservation," "environmental," "environmental preservation," "air degradation," and "reducing emissions".

### *b. Independent Variables for Hometown Identity*

Hometown is equivalent to 1 if a company's headquarters are in the same city as its hometown and 0 else. It is discovered that the majority of such a data could only be actively examined at the province level while only a small portion is particular to the city level when looking for hometown data. To contrast the CEO's hometown to the region in which the company is based, only the region data is used in the regression analysis. The region and city

are combined to assess hometown identification in the robustness test. If hometown data at the city level could be located, then it is compared to the location of the company's headquarters. Otherwise, primary data at the provincial level was utilized for assessment.

*c. Job demands push Factors*

To evaluate job demand pushes, the reliable Job Content Questionnaire is employed. Data on several areas of job demand pushes, such as mental stress, physical challenges, and underemployment, is gathered using this survey. "My work demands actively working" and "My job includes a lot of repetitious work" is a couple of examples. The measure's Cronbach's alpha is 0.91.

*d. Employment Resource pulls Factors*

The study provided the employment resource pull scale. The three types of employment assets that are measured are financial, intellectual, and societal. Examples include "I have job experience complementing the field of the business endeavor" or "When building a business venture, I would prepare the finances required for investment." The measurement's Cronbach's alpha is 0.76.

*e. Employment conviction*

To assess the employment commitment of migrant workers, a five-item scale is utilized. "I think I am competent enough to begin my business" is an example item. For this measurement, Cronbach's alpha is 0.85.

*f. Employment intention*

To assess the employment intent of remote migrant workers, the study modified a five-item scale. It also altered each term's wording to emphasize the employment context of the migrant workers' return. Examples include "I had thought about moving back to my hometown and starting my own business." The measure's Cronbach's alpha is 0.87.

*g. Control Variables*

Participant factors like gender, age, marital status, household yearly income, and individual monthly income are selected, which can have an impact on important correlations in the model. Male and married respondents are individually coded as "1" when genders, as well as marriage, were dummy-coded. Self-reported age was given in years. Since these factors could influence employment ambition, the participants' risk propensity and achievement motivation are also taken into account. Risk propensities were assessed using the three-item scale, while achievement motives were assessed utilizing a four-item scale. These two methods have Cronbach's alpha values of 0.80 and 0.81, correspondingly. The study used firm- and CEO-level variables in the analysis to account for a variety of variables that could influence how firms innovate in the green sector.

- Company age is prolonged exposure to the isomorphic procedures associated with green technologies may be the case for older companies. By counting the years because of a firm's founding, firm age might therefore be adjusted for.
- Larger companies might have greater resources to invest in green innovation, but they may also be more inactive. For such an assessment, the natural logarithm of the total assets after every year was used.
- Exports of previous research have demonstrated a favorable relationship between export and green innovation. Using a dummy variable, Export = 1 if a firm conducts export business and 0 otherwise, export actions could be simulated.
- Due to their considerable assets, state-owned (SOE) businesses can foster green innovation. They might, however, spend less on green innovation as a result of the political connections shielding them from governmental pressure. Here, a fictitious variable was added that had values of 1 for state-owned businesses and 0 for all other businesses.
- Corporate performance occurs when businesses with strong financial results could manage to adopt more environmentally friendly innovations. To assess business performance, the ROA (return on assets) metric is assessed.

### Model Evaluation

The study estimated the following Eq.1 model using normal least squares to test Hypothesis 1:

$$EI = \alpha_0 + \alpha_1 ht + \alpha_2 A \times Y + region + company + \beta \quad (1)$$

Here, EI is the dependent variable, which depicts how well the firm I performed in terms of green innovation within year t. Hometown (*ht*) is 1 if a stated firm's hometown and location of registration are the same and 0 otherwise. A is a collection of control variables, which includes controls at the firm and person levels. Industry, time, and regional fixed effects are represented, respectively, by company, year (*Y*), and region.

The models 2- 4 following Hypotheses 2-3 are employed as follows in Eqs. 2, 3, and 4:

$$EI = \alpha_0 + \alpha_1 ht + \alpha_2 ht \times jd + \alpha_3 jd + \alpha_4 A + Y + region + company + \beta \quad (2)$$

$$EI = \alpha_0 + \alpha_1 ht + \alpha_2 ht \times er + \alpha_3 er + \alpha_4 A + Y + region + company + \beta \quad (3)$$

$$EI = \alpha_0 + \alpha_1 ht + \alpha_2 ht \times jd + \alpha_3 jd + \alpha_4 ht + er + \alpha_5 er + \alpha_3 A + Y + region + company + \beta \quad (4)$$

Here, *jd* stands for the job demand pushes ratio, *er* for entrepreneur resource pulls, and the remaining variables are the same as those in the Eq.1 concept.

## RESULT AND DISCUSSIONS

### Evaluation using CFA

Confirmatory factor analysis (CFA) techniques are utilized to check the measuring model's fitting as well as the individuality of the major components preceding the tests of the hypotheses. Initially, the study conducted a single-factor analysis using Harman's one-factor test, which incorporates every variable measure. The findings showed that the majority of the correlation in the measures was unable to be accounted for by either a single component or a generic factor when the overall variation was 66.86%, the first factor's eigenvalue was 12.31%, and 22.39% of the variation were accounted by it. The next step was to evaluate the proposed five-factor structure to other models using a series of CFAs. The specifics of the CFA findings are shown in Table 1. With  $A^2 = 242.11$ ,  $df = 114$ ,  $\frac{A^2}{df} = 2.7$ ,  $CFI = 0.80$ ,  $TLI = 0.79$ ,  $RMSEA = 0.09$ , the analysis indicates that the five-factor hypothesis offered the greatest fit to the data. The five factors indicated here are Eco-Innovation Job demand pushes, employment resources pulls, employment conviction, and employment intention.

Table 1: Outcome of Confirmatory Factor Analysis

Method	$A^2$	Degree of freedom ( $df$ )	$A^2/df$	Root Mean Square Error of Approximation (RMSEA)	Comparative Fit Index (CFI)	Tucker–Lewis index (TLI)
1 factor method	724.10	142	4.12	0.11	0.62	0.40
2 factor method	312.27	138	3.10	0.09	0.73	0.61
3 factor method	263.62	132	2.80	0.08	0.74	0.64
4 factor method	287.77	120	2.82	0.07	0.74	0.64
5 factor method	242.11	114	2.7	0.07	0.80	0.79

### Descriptive statistics

Table 2 shows the averaging, SD, and Pearson correlations for every relevant parameter. Table 2 gives a positive correlation among the variables employment resources with

work demands as well as the intention to start a business in one's hometown. In addition, there was a strong association between eco-innovation and measures of job needs, as well as between eco-innovation and employment intention. Additionally, there is a significant relationship between entrepreneur conviction and both employment intention as well as resources.

Tables 2: Average, SD, and Correlations

Parameters	A	SD	1	2	3	4	5
Company age	0.0005	0.0006					
Company Size	0.035	0.034	1				
Export	0.100	0.101	0.01	1			
Gender	1.35	0.40	0.27	-0.01	1		
Age	0.006	0.005	0.15	-0.06	0.06	1	
overall income	10.10	75.10	0.01	-0.01	0.07	0.03	1
Job demands (Push factor)	2.23	0.89	-0.03	-0.06	0.02	0.06	0.01
Employment Resources (pull factor)	2.4	0.67	0.10	-0.03	0.10	0.04	0.15
SOE	-0.14	-0.142	-0.02	-0.01	-0.05	-0.00	0.14
ROA	-0.007	-0.012	6.41	0.82	2.65	0.14	0.20

### Hypotheses Testing

The testing of Hypotheses 1 and 3 involved hierarchical linear regression. The study specifically modeled hometown employment intention on employment conviction and employment resources for eco-innovation to evaluate Hypotheses 1 and 3, respectively. Table 3, showed a significant correlation between employment conviction as well as employment intention, along with employment resources and employment intention. These relationships were all in favor of eco-innovation. The findings back up Hypotheses 1 and 3.

Table 3: Regression analysis outcomes

Parameters	Hometown employment intention towards eco-innovation		
	A1	A2	A3
Company age	-0.078	-0.079	-0.075
Company Size	-0.223	-0.251	-0.120
Export	0.591	0.566	0.452



Gender	0.01	0.04	0.02
Age	0.06	0.06	0.04
overall income	-0.00	0.01	0.01
Job demands (Push factor)	-	0.27	-
Employment Resources (pull factor)	-	-	0.35
SOE	0.419	0.466	0.492
ROA	0.140	0.125	0.100

Table 3...

Environmental innovation and employment conviction are suggested to serve as mediators in Hypotheses 2 and 4, respectively, between the connection between employment needs and employment intention and the relationship between employment resources and employment intention. The findings showed that such informal impact of employment demands on employment intention through eco-innovation is significant at the 99% level of confidence, and the mediating variable of employment resources on employment intention across employment conviction also is substantial at the 99% level of confidence. The findings back up Hypotheses 2 and 4. To evaluate the hypotheses, we lastly used moderated path analysis, bootstrapping 1000 samples to generate bias-corrected CI. Intergenerational distinctions, according to Table 4's results, constructively moderated the association between eco-innovation and employment intention but did not adequate the connection between job demands with eco-innovation, indicating, that the moderation impact primarily operated in the second phase.

Table 4: Moderated average estimation outcomes

Moderators	Job demand (Push factor)-employment conviction-employment intention				
	Initial level	Second level	Direct impacts	Indirect impact	Overall Impact
New gen	0.24	-0.22	0.37	-0.04	0.30
Old gen	0.24	0.58	0.24	0.15	0.42
Distinction	0.01	0.80	-0.03	0.19	0.12

Additionally, the younger generation had a stronger than the older generation indirect relationship between job demands and employment inclination. Such indirect effects differed significantly among generations. These findings are consistent with Hypothesis 2, which holds that intergenerational distinctions substantially normalize the indirect impact of job demands on

employment intention via eco-innovation, with the impact becoming greater for the younger generation of migrant workers compared to the older generation. The relationship between employment resources as well as employment conviction and the relationship between employment conviction and employment intention are both given in Table 5 which moderates negatively among them.

Table 5: Moderated average estimation outcomes

Moderators	Employment resource(Pull factor)-employment conviction-employment intention				
	Initial level	Second level	Direct impacts	Indirect impact	Overall Impact
New gen	0.77	0.62	-0.03	0.54	0.68
Old gen	0.68	0.32	0.24	0.20	0.38
Distinction	-0.29	-0.39	0.24	-0.42	-0.16

Additionally, Table 5's findings show that the older generation is more likely to be affected indirectly by employment resources on employment intention through employment conviction, as well as the distinction in the indirect consequence was significant at the 99% confidence interval. These findings are consistent with Hypothesis 3 which contends that intergenerational distinctions negatively moderate the relationship between employment resources and employment intention and suggests that the older population of migrant workers exhibits a stronger employment conviction than the younger generations.

## CONCLUSION

It remains clear what motivates small to medium-sized enterprises in the unorganized sector to innovate sustainably, despite recent advances in eco-innovation research. The study looks at how elements push and pull people to create local businesses, such as work requirements and employment resources. The impact of a company's hometown identity is greater when it has a strong local presence. When a business is situated in a region with a diverse variety of regional dialects, it is less obvious. It investigates how hometown identity affects eco-innovation in the Chinese industrial sector. Chinese immigrants provided the information that was gathered. The main takeaways are that job demands can increase entrepreneurs' desire to launch local enterprises. The entrepreneurship tools could occasionally have a positive effect on migrant workers' intent to launch local enterprises through the usage of employment convictions. Additionally, whereas the relationship between employment resources,

employment convictions, and eco-innovation is adversely regulated by generations, the relationship between employment needs and employment intention is favorably mediated. The study emphasizes the generational differences in identifying drivers' employment aspirations in their hometowns and emphasizes the significance of examining both push and pull elements at once. The outcome demonstrates that there are two distinct categories of eco-innovation drivers: environmental and organizational factors. The environment and systems around businesses force them to implement eco-innovation approaches toward meeting similar needs, boosting organizational credibility, and improving environmental performance.

This research focuses solely on the Influences of hometown identity on drivers' pulls and pushes toward eco-innovation. So, in the future, research can focus on how hometown identity affects the board of directors, middle managers, and other members of the company.

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