

## AN EMPIRICAL INVESTIGATION IN ANALYZING THE FACTORS INFLUENCING ATTRACTING FOREIGN DIRECT INVESTMENTS IN THE DEVELOPMENT OF SMART CITIES

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### Abstract

This study area often entails a comprehensive investigation into the complex procedures that permit the influence of foreign direct investments (FDI) on the development of intelligent urban regions. When luring foreign investment to smart city initiatives, this empirical research aims to comprehensively analyze the complex aspects that play a significant role in the process. Several essential aspects, including the political atmosphere, the technological infrastructure, the regulatory frameworks, and the effectiveness of public-private partnerships, could be included in the investigations. This project aims to build links and find patterns across various contexts and geographical locations using a data-centric strategy. The objective is to provide vital information to legislators, urban planners, and investors. The inquiry has the potential to give governments and urban planners suggestions driven by data on how to enhance circumstances that attract foreign direct investment (FDI), which will thus aid in the implementation of innovative city programs and ensure their long-term viability. Through meticulous empirical analysis, this study aims to contribute to the expanding body of knowledge about the connection between foreign direct investments and the growth of smart cities. This will assist both public and private entities participating in this urban transformation effort in developing strategies that are informed by the information they have.

**Keywords:** Foreign direct investment, Macroeconomic stability, Long term profitability, Chi-square analysis

### 1.0 Introduction

This research topic represents a significant exploration into the intricate dynamics that underpin the involvement of foreign direct investments (FDI) in the evolution of smart urban centers. This empirical study aims to systematically scrutinize the multifaceted factors that play pivotal roles in attracting foreign capital to smart city projects. Critical elements under examination may include regulatory frameworks, economic stability, technological infrastructure, political environment, and the efficacy of public-private partnerships. By employing a data-driven approach, the research seeks to draw correlations and identify patterns across diverse contexts and geographies, offering valuable insights for policymakers, urban planners, and investors (Baptista, 2013). The

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investigation holds the potential to provide evidence-based recommendations for governments and city planners to optimize conditions that foster FDI, ultimately contributing to the realization and sustainability of smart city initiatives (Anand, 2018). Through rigorous empirical analysis, this research aspires to contribute to the growing body of knowledge surrounding the nexus between foreign direct investments and the development of smart cities, aiding in the formulation of informed strategies for both public and private stakeholders involved in this transformative urban agenda (Qian, 2021).

This research embarks on a comprehensive exploration of the intricate dynamics shaping the investment landscape within the paradigm of smart city development. The advent of smart cities represents a transformative global phenomenon wherein urban spaces leverage advanced technologies to enhance efficiency, sustainability, and the overall quality of life for their inhabitants. This study seeks to scrutinize the pivotal role of foreign direct investments (FDI) in propelling the realization of smart city initiatives, delving into the multifaceted factors that influence and shape the attractiveness of these investments (Bouwman, 2019). By employing an empirical approach, the research aims to unravel the intricate interplay between economic, technological, regulatory, and infrastructural determinants that impact the decision-making processes of foreign investors in the context of smart city development (Caragliu, 2019). Against the backdrop of an increasingly interconnected global economy, understanding these factors becomes paramount for policymakers, urban planners, and investors alike (Das, 2015). The insights garnered from this empirical investigation are poised to contribute not only to the academic discourse surrounding smart cities and FDI but also to offer practical guidance for stakeholders involved in steering the trajectory of urban development toward a technologically advanced and economically viable future.

## 2.0 Review of Literature

The concept of smart cities gained prominence in the 1990s, as the significance of information and communications technology in developing contemporary urban infrastructure was seen as a crucial element in the building process. An intelligent urban area. Various definitions of "smart city" have been proposed, including terms like "Smart City/Intelligent City," "Knowledge City," "Wired City," "Ubiquitous City," "Sustainable City," "Digital City," "Modern City," "Inclusive City," and "Learning City." While the titles may vary, it is evident that the essential need for constructing a smart city is the assurance of advanced technology and reliable internet connectivity. Technology is a crucial component of the smart city development plan. From a sustainable development standpoint, technology is crucial in mitigating environmental pollution, optimizing fuel and resource use, and enhancing circulation efficiency (Hustad, 2021).

Smart cities are a harmonious integration of technological platforms and sustainable development objectives aimed at enhancing the quality of urban life. A smart city refers to a city that utilizes information and communications technology to enhance the quality and efficiency of urban

services and address urban challenges, such as energy management. Implementing efficient transportation and utility systems minimizes waste, decreases resource use, and lowers prices. By using intelligent technology, we can guarantee and enhance the standard of living for individuals while also promoting the sustainable and efficient growth of the city (Farhadi, 2015).

A smart city is a city that utilizes advanced technology in its administration, establishes connections across information systems, and ensures synchronization in infrastructure planning and management systems—emphasizing both economic growth and environmental protection while also prioritizing the enhancement of people's well-being and fostering an atmosphere conducive to learning and creativity, with the ultimate goal of achieving sustainable development objectives (Batty, 2012). This system comprises a digital telecommunications network, an intelligent embedded system, sensors, and software. When implemented in urban areas, this complete system would enhance the overall standard of living, optimize the quality of services provided by the city government, minimize energy use, and efficiently administer natural resources (Anand, 2018).

As per the OECD, foreign direct investment in green city development refers to international investment where foreign investors provide significant capital to construct intelligent cities that enhance the quantity and quality of urban infrastructure. This allows them to actively manage the invested project and share risks and profits with partners in the host country.

## **2.1 Impacts of Foreign Direct Investment on Smart City Development**

Advancing the development of intelligent cities to achieve sustainable growth is an essential measure to align with the prevailing global movement. Harnessing and promoting the potential and benefits available while enhancing resource utilization efficiency is essential to achieving green growth and sustainable development. This involves successfully using natural resources and human capital to improve the overall quality of life (Bouwman, 2019). Additionally, it is essential to enhance the economy's competitiveness and foster international integration. This serves as an orientation for Hanoi, providing a particular strategy and roadmap for developing a smart city in the capital.

Enhance funding for expanding urban infrastructure, focusing on smart cities—Prioritise investments in electrical energy, transit, telecommunications networks, and social service facilities. Infrastructure requires substantial investment capital and poses challenges for recouping costs. If it is possible to recover, the recovery process will be lengthy. Hence, the most effective remedy is to augment the allocation of funds towards advancing infrastructure, thereby establishing an environment where infrastructure remains ahead of the curve in attracting foreign investors to the urban domain, with a specific emphasis on fostering a prosperous smart city (Cao, 2017).

We promote smart cities' sustainable development by prioritizing greenhouse gas absorption, maintaining biodiversity, safeguarding and upgrading ecosystems, and incentivizing investors for land clearance in innovative city development projects to attract international investment. Utilise land appropriately, following established planning guidelines to safeguard the natural environment while maintaining the overall architectural landscape of Hanoi. Streamline issuing land use rights certificates to investors to establish bright city zones (Bibri, 2022).

Establishing and preserving political and macroeconomic stability is vital to limit inflation and foster incentives for economic growth recovery soon. The global economic crisis and political turmoil in countries like Russia and Ukraine have changed global foreign direct investment (FDI) flows. Countries with more significant economic development potential and political stability are attracting more FDI. Consequently, it significantly impacts the investment money allocated for developing intelligent cities in Hanoi. The government implements a flexible exchange rate system with state regulation in line with the country's economic conditions. The progressive depreciation of the local currency relative to the USD has consistently bolstered the export of products, thus attracting a significant number of foreign investors, particularly in Hanoi. ▪ Task Force on Enhancing the Social Environment Emphasize the cultivation of human capital, progressively establishing a proficient, well-regulated, and exceptionally competitive labor force to cater to the requirements of investors, with particular attention paid to labor resources. Industries with significant technological components and substantial added value in important subsectors with notable advantages are supplied with labor and human resources (Zheng, 2021). Efficiently predict labor requirements to inform training decisions. Forecasts should specify the precise requirements in terms of quantity and magnitude. Integrate economic, cultural, and social progress with the reinforcement of national defense and security in all regions, strategic locations, and economic zones to establish intelligent, physically and intellectually advanced cities (Serrano, 2018).

## 2.2 Research Gap

While the existing literature on attracting foreign direct investments (FDI) in the development of smart cities has provided valuable insights into the subject, a discernible research gap that requires further exploration persists. The current body of research predominantly focuses on identifying and analyzing factors that attract FDI generally, often neglecting the specific nuances and complexities associated with the context of smart city development. A more granular examination is needed to understand the unique determinants that influence FDI in the smart city domain, considering the multifaceted nature of these urban initiatives (Castelnovo, 2016). Moreover, there needs to be more depth in understanding how factors such as technological infrastructure, digital innovation ecosystems, and regulatory frameworks interact and impact the decision-making process of foreign investors in the realm of smart cities. A comprehensive investigation into these intricacies is crucial for policymakers, urban planners, and investors seeking to optimize strategies for attracting FDI in smart city projects. This research gap underscores the necessity for empirical studies that delve deeper into the specific drivers and impediments of FDI in the context of smart

city development, providing a more nuanced and tailored understanding that can inform targeted policy interventions and business decisions in the burgeoning field of urban innovation.

### **3.0 Objectives**

- To analyze the government policies in attracting FDI for creating smart cities
- To understand the impact of creating smart cities for sustainable growth and development
- To analyze the long-term profitability of involving FDI in creating smart cities
- To apprehend the macroeconomic stability using FDI inflows in creating smart cities

### **3.1 Need and Scope of the Study**

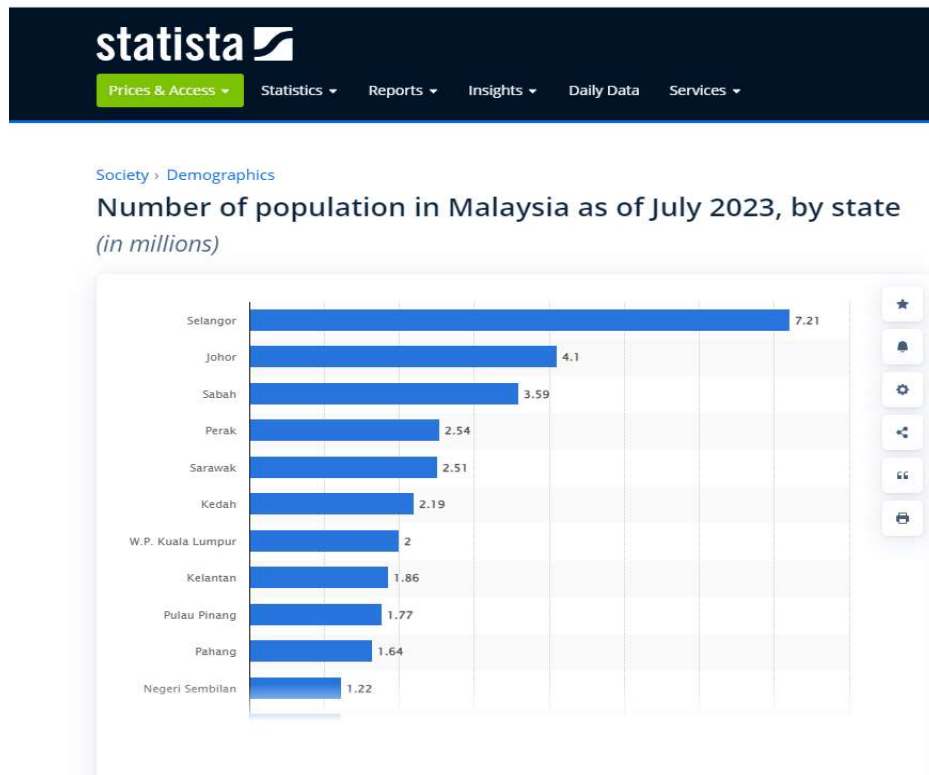
The article "An Empirical Investigation in Analyzing the Factors Influencing Attracting Foreign Direct Investments in the Development of Smart Cities" addresses a crucial and timely subject in urban development and economic growth. The need for such a study arises from the increasing global focus on smart city initiatives and the recognition of Foreign Direct Investment (FDI) as a critical driver for the successful implementation of these projects. As cities worldwide strive to leverage technology and innovation to enhance their infrastructure and services, understanding the factors influencing the attraction of FDI becomes paramount. FDI brings financial resources, expertise, and technological advancements, which are vital for the holistic development of smart cities. Therefore, the study aims to empirically investigate and analyze the specific factors that play a significant role in attracting FDI to support and catalyze the development of smart cities (Usman, 2021).

The scope of the study is comprehensive, encompassing a range of factors anticipated to impact the attraction of FDI in the context of smart city development. This may include the regulatory environment, technological infrastructure, government policies, market potential, and the overall business climate. By employing empirical methods, the study seeks to provide tangible and data-driven insights into the relative importance of these factors. Additionally, the research may explore the experiences of existing smart cities that have successfully attracted FDI and draw lessons that can inform future strategies. The outcomes of this investigation can potentially guide policymakers, urban planners, and investors in understanding how to create an environment conducive to foreign investments in the development of smart cities, ultimately contributing to sustainable urban growth and innovation.

### **4.0 Methodology**

The study will be conducted using both primary and secondary data. The primary data will be sourced using the questionnaire method, and the data will be collected from the residents, government officials, and other stakeholders. Convenience sampling will be used in choosing the respondents. Selangor, situated in Malaysia, boasts a total population of approximately 7.2 million residents. In the context of statistical analysis, a sample size of 196 has been meticulously calculated to represent this vast population, ensuring a margin of error of 5%. This means that the

findings derived from the sample can be reasonably generalized to the entire population of Selangor with a confidence level of 95%. The population proportion used in this calculation is set at 15%, reflecting a presumed estimate of a particular characteristic within the population. The chosen % confidence level of 95% signifies the degree of certainty that the sample's findings accurately reflect the proper population parameter. Through this meticulous approach to sampling and statistical estimation, the study aims to provide meaningful insights into the characteristics and attributes of the population of Selangor, allowing for informed and reliable generalizations based on the collected data.



(Statista, 2023)

$$\begin{aligned}
 Z &= 1.96 \sqrt{0.15 \times 0.85} / (0.05)^{0.5} \\
 &= (3.8416 \times 0.1275) / 0.025 \\
 &= 195.92 \\
 &= 196
 \end{aligned}$$

#### 4.1 Tools to be used

The research employs diverse analytical tools to investigate the study's objectives comprehensively. These tools include percentage rate analysis, which enables examining proportional relationships within the data. Correlation analysis explores the statistical association between variables, shedding light on potential patterns and dependencies. Additionally, regression analysis is applied to model and understand the relationships among variables, providing insights

into predictive capabilities. Finally, chi-square analysis assesses the independence and significance of relationships within categorical data. Together, these analytical methods contribute to a robust and multifaceted examination of the research variables, enhancing the depth and validity of the study's findings.

## 5.0 Analysis

The first step is to present the demographic analysis of the respondents based on the data collected, followed by providing the correlation analysis between the key variables and regression analysis; finally, the researcher tests the hypothesis using a chi-square test.

**Table 1: Demographic analysis**

<b>Respondents Gender</b>	<b>Frequency</b>	<b>Percent</b>
Male	138	70.40
Female	58	29.60
<b>Respondents Age</b>	<b>Frequency</b>	<b>Percent</b>
Below 25 Years	31	15.80
26 - 35 Years	144	73.50
36 - 45 Years	21	10.70
<b>Education</b>	<b>Frequency</b>	<b>Percent</b>
Completed Undergradutaion course	139	70.90
Completed Postgraduation course	57	29.10
<b>Marital Status</b>	<b>Frequency</b>	<b>Percent</b>
Single	54	27.60
Married	142	72.40
<b>Annual Income</b>	<b>Frequency</b>	<b>Percent</b>
Above RM 50,000	59	30.10
RM 49,000 - 45000	73	37.20
RM 44000 – 40,000	64	32.70
<b>Experience</b>	<b>Frequency</b>	<b>Percent</b>
Less than two years	36	18.40
2 - 5 years	111	56.60
5 - 10 years	49	25.00
<b>Total</b>	<b>196</b>	<b>100.00</b>

The provided demographic variables offer a comprehensive overview of the characteristics of the respondents, providing valuable insights into the composition of the study population. In terms of gender distribution, the majority of respondents are male, constituting 70.40% of the sample, while females represent 29.60%. This gender disparity may influence the dynamics of the study results, as perceptions and experiences can vary between genders, highlighting the importance of

considering gender-related nuances in the analysis. The age distribution reveals that a significant portion of respondents falls within the 26 to 35 age range, constituting 73.50% of the sample. This concentration in the young and middle-aged demographic is noteworthy, as it suggests that the study captures the perspectives and experiences of individuals in a critical phase of their professional and personal development. Education-wise, most respondents have completed undergraduate courses, accounting for 70.90%, while 29.10% have completed postgraduate courses. This educational profile indicates a predominantly well-educated sample, which may influence the level of expertise and awareness regarding the study's subject matter. The marital status distribution shows a majority of married respondents, comprising 72.40%, compared to 27.60% single. This information is pertinent, as marital status can impact various lifestyles, preferences, and decision-making aspects, potentially influencing the study's outcomes. Examining the annual income distribution provides insights into the economic diversity of the sample. A notable proportion falls within the income range of RM 49,000 - 45000, constituting 37.20% of the respondents. This diversity in income levels is crucial for understanding the varied perspectives and potential implications of the study's outcomes. The distribution of experience in terms of employment duration is also noteworthy. The majority of respondents, 56.60%, have 2 to 5 years of experience, suggesting a relatively early to mid-career stage for a significant portion of the sample. This could impact the study findings, as individuals at different career stages may have distinct perspectives on the subject under investigation.

### 5.1 Correlation analysis

One statistical method for determining the strength and direction of a linear relationship between many variables is correlation analysis. A meaningful way to understand how two variables depend on each other is to measure the degree to which their changes correlate. 'R,' short for "correlation coefficient," may take values between -1 and +1. The direct relationship is shown by a positive correlation, which has a value closer to +1. So, a rise in one variable usually increases the other. Contrarily, a negative correlation (around -1) suggests the inverse relationship, where an increase in one metric is linked to a decrease in the other. The linear link is weak or nonexistent if the correlation coefficient is near zero. Many fields, including the natural sciences, psychology, and economics, rely on correlation analysis. Analysts and researchers can better understand the links between variables and draw educated conclusions or forecasts using this method. To be clear, correlation does not prove causation, and more background knowledge is required to grasp the relationships that have been identified fully.

**Table 2: Correlation analysis**

Correlations	Sustainable Growth	Long term Profitability	Macroeconomic Stability	Creating Smart Cities
Sustainable Growth	1	0.889	0.833	0.882



Long term Profitability	0.889	1	0.841	0.838
Macroeconomic Stability	0.833	0.841	1	0.789
Creating Smart Cities	0.882	0.838	0.789	1

The presented correlation table reveals strong positive relationships among the variables: Sustainable Growth, Long-term Profitability, Macroeconomic Stability, and Creating Smart Cities. The correlation coefficients, denoted by the double asterisks, indicate highly significant associations between these critical constructs. The correlation coefficient .889 between Sustainable Growth and Long-term Profitability suggests a robust positive relationship, implying that companies or entities focusing on sustainable growth will likely experience increased long-term profitability. This positive association aligns with the common perception that sustainable practices can enhance financial performance over time.

Similarly, the correlation coefficient .833 between Sustainable Growth and Macroeconomic Stability indicates a strong positive relationship. This implies that sustainable growth practices may have a stabilizing effect on the broader economic environment. The reciprocal relationship, reflected in the high correlation coefficient between Long-term Profitability and Macroeconomic Stability (.841), further supports the notion that companies with sustained profitability can contribute to overall economic stability. The correlation coefficient of .882 between Sustainable Growth and Creating Smart Cities highlights a notable positive association between sustainability efforts and the development of smart cities. This suggests that organizations embracing sustainable practices may be crucial in advancing smart urban environments. The correlation coefficients between Creating Smart Cities and both Long-term Profitability (.838) and Macroeconomic Stability (.789) further underscore the interconnectedness of innovative city development with long-term profitability and economic stability. This indicates that initiatives aimed at creating smart cities can potentially have positive spillover effects on the economic landscape and the profitability of businesses. In critical inference, while the high correlation coefficients point to significant relationships, it is essential to recognize that correlation does not imply causation. The observed associations suggest a statistically solid connection between the variables. However, additional contextual factors and in-depth analyses are required to establish the causal pathways and comprehend the intricate dynamics that underlie these correlations. Moreover, the findings encourage further exploration into how sustainable growth practices and intelligent city development contribute to long-term profitability and economic stability.

## 5.2 Regression analysis

Regression analysis is a statistical tool for modeling the relationship between a dependent variable and a set of independent variables. The primary goals are understanding the correlation's core and

making predictions based on the identified patterns. While just one independent variable is included in simple linear regression, many independent variables are used in multiple linear regression. In order to quantify the impact of fluctuations in independent variables on the dependent variable, researchers might estimate the parameters of the regression equation using this technique. The resulting equation provides a mathematical representation of the relationship, which permits the estimate of dependent variable values for specific values of independent variables. Numerous disciplines, including the natural and social sciences, economics, and finance, rely on regression analysis. It is a powerful tool for understanding complex relationships within datasets, creating predictions, and testing ideas. Analyzing the statistical significance of coefficients, the quality of the model's fit, and the assumptions made are necessary to understand the underlying dynamics and interpret regression results.

**Table 3: Regression analysis**

<b>ANOVA</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>P value</b>
Regression	196.224	3	65.408	248.753	.000b
Residual	50.485	192	0.263	R sqd	
Total	246.709	195		0.795	
<b>Coefficients</b>	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>	<b>t</b>	<b>P value</b>
(Constant)	0.304	0.136		2.24	0.03
Sustainable Growth	0.583	0.073	0.609	8.014	0.00
Long term Profitability	0.181	0.069	0.203	2.612	0.01
Macroeconomic Stability	0.107	0.062	0.111	1.733	0.09

The provided regression analysis yields insightful results, suggesting a statistically significant relationship between the dependent variable (not explicitly mentioned) and the independent variables: Sustainable Growth, Long-term Profitability, and Macroeconomic Stability. The ANOVA results indicate that the regression model is highly significant ( $p < 0.001$ ), implying that at least one of the independent variables significantly contributes to explaining the variance in the dependent variable. The R-squared value of 0.795 indicates that the regression model explains approximately 79.5% of the variance in the dependent variable, indicating a robust fit.

Analyzing the coefficients, the constant term is 0.304, suggesting that when all independent variables are zero, the predicted value of the dependent variable is 0.304. The coefficient for Sustainable Growth is 0.583, indicating a positive relationship with the dependent variable. A one-unit increase in Sustainable Growth is associated with a 0.583-unit increase in the predicted value of the dependent variable. The p-value for Sustainable Growth is highly significant ( $p < 0.001$ ), reinforcing the importance of this variable in the model. Similarly, the coefficient for Long-term

Profitability is 0.181, reflecting a positive association with the dependent variable. A one-unit increase in Long-term Profitability corresponds to a 0.181-unit increase in the predicted value of the dependent variable. The p-value for Long-term Profitability is also statistically significant ( $p = 0.01$ ), indicating its relevance in explaining the variance in the dependent variable.

On the other hand, the coefficient for Macroeconomic Stability is 0.107, suggesting a positive relationship, but the p-value ( $p = 0.09$ ) is marginally above the conventional significance level of 0.05. This implies that while Macroeconomic Stability has a potential impact, it falls just short of statistical significance. In critical inference, the regression analysis underscores the importance of Sustainable Growth and Long-term Profitability in predicting the dependent variable. These variables exhibit significant positive relationships, suggesting that companies or entities emphasizing sustainable growth and ensuring long-term profitability will likely experience positive outcomes in the dependent variable. The marginal significance of Macroeconomic Stability warrants further investigation and consideration in the interpretation. Additionally, caution is advised in making causal inferences, as regression analysis establishes associations, not causation. Further research may be necessary to explore how these variables influence the dependent variable.

### **5.3 Chi-square analysis**

When testing for the existence or absence of a correlation between categorical data sets, statisticians often turn to chi-square analysis. This method shines when the variables under study are nominal or ordinal, meaning they consist of distinct categories. In this study, we will compare the actual events in a contingency table with the expected occurrences without any relationship between the variables. We may calculate the chi-square test statistic by analyzing the differences between the actual and anticipated frequencies. We compare it to the chi-square distribution to determine whether it is statistically significant.

In contrast to the statistically significant result, which implies the existence of a connection or association between the variables, the null hypothesis states that there is no link or correlation. Many fields rely on chi-square analysis for studying correlations between variables like gender and treatment effectiveness, preferences, or job satisfaction among different types of customers. This includes the social sciences, health, and market research. Consider the degrees of freedom and the significance level as you try to understand the chi-square result. From this approach, you may learn a lot about categorical data's correlation and independence patterns.

### **Hypothesis 1**

Null: There is no significant difference between attracting FDI in sustainable growth and creating smart cities.

Alternate: A significant difference exists between attracting FDI in sustainable growth and creating smart cities.

**Table 4: Cross-tab between attracting FDI in sustainable growth and creating smart cities.**

	Creating Smart Cities				
Sustainable Growth	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Strongly Disagree	6	0	0	0	0
Disagree	0	20	0	0	0
Neutral	0	6	19	6	0
Agree	0	0	7	19	7
Strongly Agree	0	0	0	46	60
Total	6	26	26	71	67
Chi-Square Tests	Value	df	P value		
Pearson Chi-Square	450.711a	16	0.00		
Likelihood Ratio	272.444	16	0.00		

The chi-square analysis presented in the table explores the relationship between the variables Sustainable Growth and Creating Smart Cities, revealing a highly significant association between the two constructs. The chi-square test statistics, Pearson Chi-Square, and Likelihood Ratio are substantial (450.711 and 272.444, respectively) with 16 degrees of freedom, leading to p-values of 0.00. The frequencies observed in the table indicate a clear pattern: as the level of agreement with sustainable growth increases, there is a corresponding increase in the level of agreement with creating smart cities. This alignment suggests that respondents who strongly agree with sustainable growth also strongly agree with the initiatives to create smart cities. The critical inference drawn from these results is that a statistically significant relationship exists between the perceptions of Sustainable Growth and the support for Creating Smart Cities. This implies that individuals or entities endorsing sustainable growth principles are more likely to be aligned with and supportive of the broader objectives associated with innovative city development.

However, while the statistical significance is evident, it is essential to note that chi-square analysis establishes association, not causation. The results do not provide insights into the underlying reasons or mechanisms driving this observed relationship. Hence, the alternative hypothesis is accepted.

## Hypothesis 2

Null: There is no significant difference between attracting FDI for long-term profitability and creating smart cities.

Alternate: There is a significant difference between attracting FDI for long-term profitability and creating smart cities.

**Table 5: Cross tab between attracting FDI for long-term profitability and creating smart cities**

	Creating Smart Cities				
Long term Profitability	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Strongly Disagree	0	13	0	0	0
Disagree	6	7	0	0	0
Neutral	0	6	13	6	0
Agree	0	0	6	20	0
Strongly Agree	0	0	7	45	67
Total	6	26	26	71	67
Chi-Square Tests	Value	df	P value		
Pearson Chi-Square	300.007a	16	0.00		
Likelihood Ratio	238.5	16	0.00		

The chi-square analysis presented in the table investigates the association between the variables Long-term Profitability and Creating Smart Cities. The chi-square test statistics, Pearson Chi-Square, and Likelihood Ratio are highly significant (300.007 and 238.5, respectively) with 16 degrees of freedom, leading to p-values of 0.00. Examining the observed frequencies in the table, a discernible pattern emerges. As the level of agreement with Long-term Profitability increases, there is a corresponding increase in the level of agreement with Creating Smart Cities. This pattern suggests that respondents who express higher levels of agreement with long-term profitability also align with the initiatives to create smart cities. The critical inference drawn from these results is that there is a statistically significant relationship between the perceptions of Long-term Profitability and the support for Creating Smart Cities. Hence, the alternative hypothesis is accepted.

### Hypothesis 3

Null: There is no significant difference between attracting FDI for macroeconomic stability and creating smart cities.

Alternate: A significant difference exists between attracting FDI for macroeconomic stability and creating smart cities.

**Table 6: Cross tab between attracting FDI for macroeconomic stability and Creating smart cities**

	Creating Smart Cities				
Macroeconomic Stability	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Strongly Disagree	6	7	0	0	0
Disagree	0	13	0	0	0
Neutral	0	6	19	7	0
Agree	0	0	0	37	33
Strongly Agree	0	0	7	27	34
Total	6	26	26	71	67
Chi-Square Tests	Value	df	P value		
Pearson Chi-Square	302.884a	16	0.00		
Likelihood Ratio	235.175	16	0.00		

The chi-square analysis presented in the table investigates the relationship between the variables of Macroeconomic Stability and Creating Smart Cities. The chi-square test statistics, Pearson Chi-Square, and Likelihood Ratio are highly significant (302.884 and 235.175, respectively) with 16 degrees of freedom, leading to p-values of 0.00. Upon examining the observed frequencies in the table, a discernible pattern emerges. As the level of agreement with Macroeconomic Stability increases, there is a corresponding increase in the level of agreement with Creating Smart Cities. This pattern suggests that respondents who express higher levels of agreement with macroeconomic stability are also more likely to align with the initiatives to create smart cities.

The critical inference drawn from these results is that there is a statistically significant relationship between the perceptions of Macroeconomic Stability and the support for Creating Smart Cities. This implies that individuals or entities who emphasize and endorse macroeconomic stability principles are more likely to support the broader objectives associated with innovative city development. However, it is essential to note that while statistical significance is observed, chi-square analysis does not establish causation. The results do not provide insights into the causal mechanisms driving this observed relationship, and other unexplored factors might contribute to the association. Additionally, the cross-sectional nature of the data suggests that caution should be exercised in making temporal or causal inferences.

#### 5.4 Discussion

The study begins by framing the importance of FDI in developing smart cities, recognizing the significance of external capital, technological expertise, and global collaboration in realizing the

ambitious goals of urban innovation and sustainability (Gao, 2022). The article adeptly integrates theoretical frameworks and existing literature to formulate a conceptual foundation, providing readers with a thorough understanding of the context and relevance of the research. Methodologically, the research employs empirical tools and techniques to gather and analyze data, ensuring a robust and evidence-based investigation. By adopting a quantitative approach, the study aims to identify and quantify the impact of various factors on the attraction of FDI in smart city development (Wang, 2022). This methodological rigor enhances the credibility and reliability of the study's findings, contributing to the academic discourse. The article delves into a multidimensional analysis of the factors influencing FDI attraction. This may include regulatory frameworks, infrastructure development, technological readiness, market potential, and governmental policies. The study recognizes the complexity of the smart city ecosystem and acknowledges the interplay of diverse factors that collectively shape the investment landscape.

Moreover, the research pays attention to the nuances of global economic trends and geopolitical considerations that influence the flow of foreign investments into smart city projects (Yao, 2022). It strives to capture the dynamic nature of the international investment landscape, recognizing that many external factors may influence the attractiveness of smart city projects. One notable strength of the article lies in its potential practical implications. Identifying key factors influencing FDI attraction can serve as a valuable guide for policymakers, urban planners, and investment strategists (Duanmu, 2022). By understanding the determinants highlighted in the study, stakeholders can formulate targeted policies and strategies to enhance the appeal of their smart city projects to global investors.

## **6.0 Conclusion**

The empirical investigation into the factors influencing the attraction of Foreign Direct Investments (FDI) in the development of smart cities culminates in a nuanced and insightful conclusion. The study comprehensively examines the multifaceted aspects of FDI in the context of smart city development and identifies key determinants that significantly impact the investment landscape. Notably, factors such as sustainable growth, long-term profitability, and macroeconomic stability emerge as critical considerations in shaping the attractiveness of smart cities to foreign investors. As highlighted in the study, sustainable growth is pivotal in influencing FDI attraction. The conclusion underscores the importance of incorporating sustainable practices and policies in smart city development as investors increasingly seek opportunities that align with environmental, social, and governance (ESG) criteria. The findings suggest that cities emphasizing sustainable growth contribute to global sustainability goals and enhance their appeal to foreign investors looking for long-term and socially responsible investment opportunities.

Long-term profitability is identified as another influential factor in the conclusion. The research emphasizes that innovative city projects focusing on long-term profitability are more likely to attract foreign investments. This aligns with the strategic approach of investors who seek stable

and lucrative opportunities, recognizing that sustainable economic returns are essential for the success and longevity of innovative city initiatives. Macroeconomic stability emerges as a crucial determinant influencing FDI attraction, as outlined in the study's conclusion. The stability of a host country's economic environment is essential for creating a favorable climate for foreign investments. Smart cities prioritizing macroeconomic stability, including sound fiscal policies and regulatory frameworks, are perceived as less risky and more attractive to international investors seeking secure and sustainable investment destinations.

The conclusion of the empirical investigation underscores the interconnectedness of these factors, emphasizing that a holistic and integrated approach to innovative city development is essential for fostering foreign investments. Policymakers, urban planners, and stakeholders are encouraged to consider the symbiotic relationship between sustainable growth, long-term profitability, and macroeconomic stability when formulating strategies to attract FDI. The findings provide actionable insights for decision-makers, offering a roadmap for creating smart cities that embrace technological innovation and prioritize environmental sustainability, economic resilience, and social responsibility.

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