Urbanization as a catalyst for structural transformation in developing countries: The mediating impact of foreign direct investment

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Abstract

This article analyzes the link between urbanization and the process of structural transformation (ST) in developing countries, taking into account the mediating role that FDI can play. We use secondary data from 2000 to 2023 to determine if FDI positively or negatively influences the ST process in these countries, thereby, altering urbanization patterns. By estimating the Generalized Method of Moments (GMM), the study explores the relationship between urbanization, the ST process, and the mediating role played by FDI. In addition, it takes into account control variables such as gross fixed capital formation (GFCF), gross domestic product per capita (GDPPC), and diversification of production structure (DPS) to analyze their effect on urbanization and, more specifically, on the ST process. The econometric results showed a negative correlation between FDI flows and urbanization, demonstrating that FDI could hinder the success of the ST process in developing countries. On the contrary, econometric results showed that the control variables, GFCF, GDPPC, and DPS, positively influence urbanization in developing countries, indicating that these variables are more conducive to a successful ST process than FDI. Based on the econometric results, policymakers in developing countries are called upon to strengthen urbanization in these countries, by encouraging local investment and the diversification and sophistication of production and export structures, rather than relying solely on FDI. Over the period studied, FDI has not contributed as expected to advancing the urbanization process, a crucial element in the ST process in developing countries.

1. Introduction

Successful urbanization and the attraction of foreign direct investment (FDI) are two phenomena that are currently transforming the economic landscape of the world's countries. As urban areas become centers of human activity, attracting workforces seeking the best socio-economic conditions and opportunities, FDI flows in en masse, creating jobs and promoting inclusive growth.

However, beyond their individual effects, there is a link between urbanization and FDI that can significantly contribute to success of the structural transformation (ST) process in developing economies. Indeed, urbanization can be seen as both a result of and a catalyst for attracting FDI, while FDI can both create urban dynamics and impact the international distribution of sectors of activity.

Moreover, understanding the complex interdependencies between these two phenomena and ST is essential to designing sound development strategies and policies and achieving sustainable, inclusive future growth. In this vein, this article explores the links that may exist between urbanization, FDI and the process of ST, focusing on the mediating role played by FDI, in the complex interdependencies between these phenomena.

In this context, urbanization is seen as a dynamic process, characterized by both population growth and the expansion of cities, generating profound socio-economic and environmental transformations. Thus, the expansion of urban areas and profound socio-economic transformations in the countries concerned, both territorially and economically, typically accompany urbanization (Jedwab, 2017).

As for ST, it can be defined as a redeployment of the distribution and composition of economic activities within a given country. This stipulates a shift from an initially agricultural economy to an industrial economy focused on technology-intensive services, as well as a movement of surplus labor from the primary sector to the more productive secondary and tertiary sectors (McMillan & Rodrik, 2011).

Furthermore, FDI represents a transfer of capital and investment from multinational firms to local firms in a different country. In fact, FDI can take several forms, namely: establishing partnerships with local players, investing in new infrastructure, or acquiring existing businesses (Huynh, 2021).

The interest of this research lies in the growing importance of these three phenomena in the socio-economic development of developing countries, and in the interaction of these phenomena in designing sound strategies and policies to foster future, sustainable and inclusive growth, reduce poverty, and improve living conditions.

The main objective of this article is to analyze the complex links that might exist between these three phenomena, explaining the mediating role that FDI can play in the success of the ST process. By exploring the extent to which FDI can impact the effect of urbanization on ST, this article aims to provide valuable insights for the various actors involved: politicians, investors, socio-economic development practitioners, and academics. Based on the above, various important questions emerge: How does urbanization impact TS in developing countries? To what extent can FDI influence this link? What are the challenges and opportunities arising from the interaction between these three phenomena?

These questions form the core of this article, which seeks to shed light on the path towards sustainable and inclusive economic development. By examining the interrelationships between urbanization, FDI, and ST, this study aims to identify the obstacles and opportunities facing developing countries in their quest for economic progress.

This article divides into three main sections to address these concerns: The first section explores the theoretical underpinnings of the relationship between urbanization and ST. The second section delves into an in-depth analysis of the empirical literature on the connections between urbanization, FDI, and ST. The third section presents an empirical assessment of the impact of urbanization on ST in developing economies, with a specific focus on the role of FDI in this context.

2. Structural Transformation through Urbanization

Accelerating the ST process is a fundamental priority for developing countries, if they are to achieve sustainable, inclusive development[1]. It is now essential to carry out industrialization[2] oriented ST in developing countries. With both a sectoral and cross-sectoral approach, developing countries could increase real incomes, create decent jobs, and establish a tax system conducive to social development, the business climate, and domestic and foreign investment, particularly FDI.

Historically, the links between ST and urbanization would create positive interactions and spillovers in the service of productivity and well-being[3]. Close links between economic and urban development are therefore entirely plausible (ECA, 2012). Indeed, productivity gains and the associated agglomeration effects[4] would stem from well-planned urbanization. They would therefore be essential to the success of the ST process in developing countries.

This is why ST for developing countries in general, and African countries in particular, is a fundamental priority if they are to serenely ensure their inclusive and sustainable development (ADB, 2013). The African Development Bank (ADB) has explained that ST is considered by the leaders of these countries as a necessary condition for translating the growth rates achieved into inclusive and sustainable economic development. Indeed, for them, it would be strategic to pursue ST based on industrialization. ADB also felt that a successful

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[1] Sustainable and inclusive development: This is achieved when all categories of the population participate in creating opportunities, making decisions and sharing benefits, whatever their age, social status, gender, origin...

[2] Industrialization: Is the sharp increase in factory and plant work, and the widespread introduction of mechanization.

[3] Wellness: Not just the absence of disease or infirmity (World Health Organization), but being well in body, mind and with others.

[4] Agglomeration effects: Firms group together to save costs in their day-to-day transactions (interactions, communications) and generate positive externalities.

ST in these countries would be one that improved their real incomes, stimulating their internal and external investments under the major constraint of sustainable development (SD). It placed particular emphasis on the role of an effective, incentive-based fiscal policy, on an active, targeted policy to attract FDI, and on the creation of decent jobs in dynamic sectors with high growth potential.

From a chronological perspective, there is a stronger correlation between ST and innovation than with urbanization. According to the ADB (2013) relationship between urbanization and ST, even if limited in developing countries given their essentially rural or desert context, it would have positive effects on the service of well-being and productivity in these countries. In fact, if well planned, urbanization would promote the success of the ST process, thanks in particular to the productivity gains associated with agglomeration effects. Thus, urban development would enable these developing countries to succeed in their ST, and thus significantly reduce their macroeconomic and structural imbalances. The absence of solid public policies in this direction, on the other hand, prevents these countries from achieving their development goals and catching up with other developed countries. Ignoring the urban spatial dimension of economic variables and their trends would create, in these countries, the risks of not effectively apprehending the mechanisms of ST, and thus letting the process of this ST drift towards more exclusion, more macroeconomic destabilization and more social and territorial inequalities (ADB, 2013).

In addition, the ADB has shown that urbanization is a long and indispensable process for developing countries, particularly Africa. Along with its Asian counterparts, Africa is considered the epicenter of global urbanization. Indeed, these countries are undergoing a more rapid transition to urbanization than their Asian counterparts. This makes Africa the world's fastest-growing continent in terms of urbanization. In the near future, African countries will be predominantly urban, with a high proportion of young people. This demographic transition will serve as a natural catalyst for the indispensable urbanization of these countries, which, along with innovation, for their ST to lead to greater economic development and further reduce their lag behind developed countries.

Despite all its problems, urbanization is an inevitable source of prosperity and well-being, as it is a powerful tool for many transformations in developing countries. Even if these countries face a number of challenges, their urban areas are likely to experience greater ST and economic development. Indeed, cities generally account for more than half of GDP (55%). Similarly, these urban areas record the best social indicators. As a result, the emergence of urbanization and its self-sustaining dynamics make this ST sector, alongside innovation, the cornerstone of most national and international programs concerning economic development. Let's cite Agenda 2063 and the New Urban Agenda (ADB, 2013).

Based on the various programs adopted in Africa, most notably Agenda 2063 produced by the African Union Comission (2015) several urbanization factors could encourage the ST process in developing countries. The first would be the integration of urbanization into national development plans, for a better orientation of ST at regional and national levels. Sound development planning would enable the deployment of the ST process. The second factor would be a system of urban centers that fosters the ST process by achieving strong, sustainable economic growth. Indeed, urban centers would ensure the production of high-value goods, as well as linking these countries and their territories to other world markets. It is evident in this system of urban centers that the secondary sector plays a crucial role in the success of any region's tourism.

This is why urban agglomerations, as the third factor of urbanization, would facilitate the industrialization process, by ensuring the rise of economies of scale, strengthening intersectoral interactions, and using production factors in the right way. Cities would then play an indisputable role in improving the values of human development indicators derived from ST. The proof, generally speaking, is in the values achieved for such indicators in cities, which are far superior to those achieved in rural areas, precisely in terms of the availability and quality of public services, which remain a catalyst for ST.

As a result, connecting urban areas and rural areas would be the most important lever for urbanization. Indeed, this connectivity would be an indefectible driver of productivity and improved living standards in rural areas in particular. It would also be instrumental in improving added value and incomes in the primary sector through the integration of technology and agro-processing, thereby encouraging the process of ST.

Similarly, innovation clusters, urban infrastructure, and the evolution of green technology, which are beginning to emerge in developing countries, are also among the indispensable factors for urbanization. They are the keys to the ST processes' success. These factors are important because they focus on human development, business competitiveness, the attractive and creative forces of local capabilities, the adoption of green technologies, and the emergence of urban regions as the cornerstones of regional integration (African Union Comission, 2015).

Despite the close links between ST and urbanization, we can see that the latter's factors could generate major returns for all three sectors of activity. It is therefore essential to manage urban development through other appropriate public actions, in order to guarantee the success of the ST process and ensure the well-being of urban and rural populations in these developing countries at their finest territorial and regional scales. This can only be achieved if the ST process in these countries is linked, alongside the channels of innovation and urbanization, to that of good governance and institutional quality.

Although the relationship between ST and urbanization appears to be closely linked in developing countries, a debate arises regarding the actual influence of urbanization on ST. On the one hand, studies by the

African Development Bank highlight the potential of urbanization to boost productivity through agglomeration effects, thus contributing to economic growth and inclusive development. On the other hand, some scholars point to the risks associated with rapid urbanization, particularly social and territorial inequalities that may arise in the absence of robust public policies (Oyelaran-Oyeyinka & Lal, 2016; Arndt, 2018).

Another debate centers on the very nature of urbanization and its role in economic development. We widely acknowledge the advantages of well-planned urbanization, but we still need to strike a balance between promoting urbanization and preserving rural ecosystems. The identified factors of urbanization, such as urban centers, agglomerations, and connectivity between urban and rural areas, must be addressed from a sustainability perspective to avoid environmental and social pitfalls (Abbas, Selvanathan, & Selvanathan, 2023).

Finally, governance and institutional quality are essential to the success of the ST process. Thus, urbanization can be seen as a catalyst for socio-economic development, if it is accompanied by good governance and better management of institutions to ensure a coherent transition to future, sustainable and inclusive development. Developing economies will benefit from designing strategies and policies that integrate the main channels (innovation, urbanization, and institutional quality), in order to reap the benefits of ST and reduce its negative influences. The debate focuses on the right way to achieve urbanization that genuinely encourages ST in developing countries, without creating new sources of disparity.

3. Review of Empirical Literature: FDI, Urbanization and ST

FDI serves as a reservoir of specific capital, both tangible and abstract, that host countries can utilize to foster economic development. By providing such capital (technical progress, procedural and managerial experience, innovation, etc.), FDI can play an indispensable role in boosting economic growth and achieving development in the host country. This concept has been well documented in the scientific works of Dunning (1993); Caves (1996); Markusen and Venables (2000) and Saini and Singhania (2018).

Urbanization is characterized by a decline in the population of the primary sector and a parallel increase in the population of the secondary and tertiary sectors, leading to a concentration of this population in cities (Clark, 1960). Indeed, the migration of this population to cities in search of better employment opportunities and healthier conditions is one of the main driving forces behind urbanization.

Historically, the productive and export structures of developing countries can undergo major transformations, when these structures are oriented towards the most productive sectors, instead of the primary sector. These transformations result in a surplus rural population, which then migrates to the cities, spurred on by growing opportunities in the secondary and tertiary sectors (Lewis, 1954). As a result, economic development not only alters a country's economic structure but also promotes urbanization by moving people people from rural to urban areas, creating a broader and more dynamic urban landscape in developing countries (Cao & Duan, 2015).

What compels people to leave the agricultural sector and seek employment in industrial or service sectors? According to the theories proposed by Lewis (1954) and Ranis and Fei (1963) the migration of rural populations to urban areas is primarily driven by the higher wages found in these sectors, especially in manufacturing. Significant income disparities between rural and urban areas in developing countries further fuel this migration (Udemba & Keleş, 2022).

Todaro (1969) building on these theories, argued that even in cities with high unemployment rates, the expected income in urban areas remains a significant draw compared to rural regions, encouraging rural-to-urban migration. Beyond income, other factors contribute to this trend. The allure of urban life, with access to superior healthcare, better educational opportunities, and enhanced infrastructure, also plays a role in motivating rural populations to relocate to urban centers, thereby increasing urbanization. In summary, these theories suggest that the primary drivers of urbanization in developing countries are the perceived benefits of urban living, job prospects in cities, and income differences between rural and urban areas.

How does FDI impact urbanization in developing countries? Prominent theories explaining FDI, such as those by Hymer (1976); Dunning (1993) and Caves (1996) use analytical frameworks to elucidate why multinational corporations engage in international production and what factors determine the location choices for FDI in host countries. However, these theories do not directly address the influence of FDI on urbanization, despite its relevance to developing countries, where FDI often brings a mix of capital, technology, production expertise, skilled labor, and marketing information.

Given this context, we expect FDI to play a role not only in fostering economic growth and development in developing countries but also to shape the process of urbanization. It can do so by (I) facilitating structural changes in the economy through the expansion of the most productive sectors (such as secondary and tertiary industries); (II) creating employment opportunities for surplus labor in these sectors; and (III) attracting people from rural areas to migrate to urban regions by offering competitive salaries and, consequently, higher income levels (Chen & Wu, 2017).

Firstly, FDI contributes to structural change and economic development in developing countries. As these countries often possess abundant human resources, particularly unskilled labor, the presence of FDI

tends to concentrate in labor-intensive sectors like manufacturing and services. As a result, FDI not only promotes economic development but also aids the ST of developing economies by supporting the growth of productive sectors (Chen & Wu, 2017).

Throughout the ST process, the reduction in the agricultural sector generates a considerable number of surplus workers in rural regions. Concurrently, the growth of productive sectors driven by FDI draws a significant number of migrants toward urban areas. Thus, FDI plays a crucial role in advancing ST by absorbing surplus rural labor and accelerating urbanization in developing countries (Wu & Zhao, 2019).

Moreover, FDI generates employment in developing countries, especially those with a considerable rural labor surplus. The impact of FDI on employment is twofold: directly, by providing jobs within multinational firms, and indirectly, through knowledge spillovers to other businesses, industrial linkages, and broader macroeconomic outcomes. These indirect outcomes may include increased employment within the broader economy to meet rising market demand, driven by the enhanced income generation facilitated by FDI Dunning (1993) and Wu and Zhao (2019).

Consequently, FDI quickly creates employment opportunities for many surplus rural workers, facilitating their migration to urban areas. FDI further boosts employment within the broader economy, thereby increasing the movement of rural workers into urban areas. This dynamic contributes to the acceleration of urbanization in developing countries, playing a pivotal role in the broader context of their ST.

Additionally, empirical studies have demonstrated that FDI stimulates higher wages in host countries. Multinational corporations not only offer substantial wages to their employees, but they also contribute positively to wage levels in local firms by participating in the established supply chains, especially in developing countries (OECD, 2008).

Moreover, FDI's contribution to economic growth often raises overall income levels in the urban areas of developing countries. FDI's wage and income increases attract surplus rural workers to the cities, seeking better job prospects and higher earnings. This trend boosts the urban population, reinforcing the urbanization process in these countries (Wu & Zhao, 2019).

However, in some cases, FDI may not impact urbanization if it is predominantly focused on the agricultural sector, retaining laborers in rural or remote areas, and exerting little influence on urbanization. In certain extreme scenarios, where FDI concentrates in booming resource industries, and draws populations from urban to rural or isolated regions, similar to the "Dutch disease" effect, FDI might even negatively influence urbanization (Sinha & Tirtosuharto, 2023).

Globally, FDI has predominantly targeted the secondary sector and, increasingly, the service sector in developing countries, contributing to urbanization through job creation, income growth, and broader economic development. Several empirical studies have identified the positive impact of FDI on urbanization in China, analyzing data from specific cities or regions. Researchers such as Yulong and Hamnett (2002); Yin and Jiang (2003); Walcott and Pannell (2006); Chubarov and Brooker (2013) and Kang and Qi (2013) have all pointed to the beneficial effects of FDI on urbanization.

In 2016, Wu and Chen examined the influence of FDI on urbanization in China, utilizing a dynamic panel system with a generalized method of moments and instrumental variable regression technique. They found that FDI can positively affect China's urbanization by stimulating economic growth and elevating overall income levels in urban areas. The significant impact of FDI on wages and income levels serves as an incentive for surplus rural workers to migrate to urban areas in search of better employment opportunities and higher wages.

Thus, FDI can positively influence the urbanization process in host countries if it is channeled into highly productive sectors, by drawing surplus labor from the agricultural sector, creating jobs with competitive wages, and contributing to the country's economic advancement. However, if FDI is primarily directed towards traditional or resource-based sectors, it may have an adverse effect on urbanization, potentially drawing urban labor toward rural or remote areas, a trend often referred to as the "Dutch disease."

4. Foreign Direct Investment and Urbanization: What Impact on the Structural Transformation Process?

4.1. Data Source

Table 1 shows the variables used in this study. To examine the impact of FDI on the ST process in developing countries (53 countries in a total of 99 countries)[5] via the urbanization channel (urban population growth as a proxy) between 2000 and 2023, a dynamic panel generalized method of moments (GMM) is specified and estimated in EVIEWS 12.

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[5] According to worlddata.info, the developing countries are: Afghanistan, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Republic of the Congo, Côte d'Ivoire, Djibouti, El Salvador, Eritrea, Ethiopia, Gambia, Ghana, Guatemala, Guinea, Guinea-Bissau, Haiti, Honduras, Kenya, North Korea, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Nigeria, Pakistan, Paraguay, Peru, Rwanda, Senegal, Sri Lanka, Sudan, Swaziland, Tanzania, Togo, Uganda, Venezuela, Vietnam, Zambia, Zimbabwe, Morocco, Algeria, Tunisia and Arab Republic of Egypt. It is important to note that this list is not exhaustive, and that other countries could also be considered as developing according to different criteria and perspectives. in addition, the choice of these countries is based on two criteria: the availability of data and the political stability of each country.

Table1. Variables used.

Variables	Descriptions	Source
UPG	Urban population growth	World development indicators (WDI) and UNCTAD
FDI	Foreign direct investment as a % of GDP	
GFCF	Gross fixed capital formation as a % of GDP	
LGDPPC	Logarithm of gross domestic product per capita in constant dollars	
DPS	Diversification of the production structure	

In fact, the GMM is a renowned statistical approach for estimating the parameters of econometric models. Its theoretical framework is based on several fundamental concepts.

First, we need to understand the concepts of moments and score functions. Moments, which are random variables, determine the characteristics of the underlying distribution. In the context of GMM, the aim is to equalize theoretical moments, derived from the model, with empirical moments, extracted from observed data. As for the score function, it emanates from the model's log-likelihood and plays a part in parameter estimation by minimizing the divergence between theoretical and empirical moments.

Second, GMM functions based on specific assumptions about the model and data sampling, which include the correct specification of the model and the random extraction of data from the underlying population. In addition, assumptions about the variance and covariance structure of the errors are often required.

The moment estimator is then mobilized to estimate the model parameters by equating the theoretical moments with the empirical moments. This estimator, which is frequently non-linear, may require numerical optimization methods for its resolution. In addition, GMM offers the guarantee of efficiency and consistency under certain preconditions. Efficiency implies that the estimator reaches the theoretical limit of asymptotic minimum variance, while consistency means that the estimator converges to the true value of the parameter as the sample size increases.

Finally, GMM can also be used to analyze assumptions about model parameters, using test statistics based on moment estimators and empirical moments. The latter are very useful for assessing the relevance of the estimated model and comparing various models with each other. In short, GMM provides a strong, elastic approach to parameter estimation and postulate testing in econometric models, based on an exact comparison between theoretical and empirical moments.

4.2. Econometric Model Specification

Here, we present two scenarios designed to overcome any shortcomings associated with missed variables, and also improve the credibility of the outputs. The first involves the integration of a set of complementary variables. The second relies on an empirical methodology based on panel data, combining time series and cross-sectional data. This approach enables us to draw robust conclusions based on cross-sectional data from different countries at different points in time. We begin by detailing the model specification, highlighting the endogenous and exogenous variables, which will enable us to analyze and measure the impact of FDI on the structural transformation process, via the urbanization channel, and then go on to describe the various estimation methods.

Our study's objectives dictate that the model for the estimation consists of two distinct categories of variables. We have a set of macroeconomic explanatory variables on one hand, and another variable that evaluates urbanization as a proxy for the ST process. If we formulate the following equation:

$$UPG_{it} = \pi_0 + \varphi_1 FDI_{it} + \varphi_2 GFCF_{it} + \varphi_3 LGDPPC_{it} + \varphi_4 DPS_{it} + \vartheta_{it}$$

With:

- UPG_{it}: Urban Population Growth in country i at time t as a dependent variable;
- Π_0: Constant;
- FDI_{it}: Foreign Direct Investment in country i at time t as a variable of interest;
- $GFCF_{it}$: Gross Fixed Capital Formation in country i at time t as a first control variable;
- $LGDPPC_{it}$: Logarithm of Gross Domestic Product Per Capita in country i at time t as a second control variable;
- DPS_{it}: Diversification of the Production Structure in country i at time t as a third control variable;
- ϑ_{it}: Error Term.

The following equation illustrates how the gap between desired urban population growth and actual urban population growth in the previous period partially determines current urban population growth for each country.

$$UPG_{it} - UPG_{it-1} = \lambda(UPG_{it} - UPG_{it-1})$$

Where λ represents the adjustment speed. Combining the two previous equations and isolating UPG_{it} we obtain:

$$UPG_{it} = \lambda\pi_0 + \lambda\varphi_1 FDI_{it} + \lambda\varphi_2 GFCF_{it} + \lambda\varphi_3 LGDPPC_{it} + \lambda\varphi_4 DPS_{it} + (1-\lambda)UPG_{it} + \lambda\vartheta_{it}$$

63

As a result, the model to be estimated is as follows:

$$\text{UPG}_{it} = \pi_0 + \pi_1 \text{FDI}_{it} + \pi_2 \text{GFCF}_{it} + \pi_3 \text{LGDPPC}_{it} + \pi_4 \text{DPS}_{it} + \vartheta_{it}$$

Note that the interest variable FDI and the first control variable GFCF are expressed as a percentage of GDP.

4.3. Results and Discussion

Table 2 shows the results obtained using the GMM in a system, as proposed by Blundell and Bond (1998). In addition, we performed two tests to confirm the validity of the empirical estimate. The first test is Sargan (1958) which indicates that our instruments are statistically valid. Next, the Arellano and Bond (1991) test was used to verify the autocorrelation of errors of order (2). With a p-value above the defined threshold, this test confirms the absence of a residual autocorrelation problem.

Table 2. GMM estimation results.

UPG t-1	0.906***
	(0.11)
FDI	−0.058**
	(0.26)
GFCF	0.044***
	(0.16)
LGDPPC	0.202***
	(0.27)
DPS	0.906**
	(0.11)
SARGAN test	17.43
	(0.366)
AR(2)	−1.16
	(0.245)

Note: Standard errors are shown in brackets.
***, ** significant at 1 and 5 respectively.

Contrary to several previous studies that found a positive effect of FDI on urbanization, including works by Yulong and Hamnett (2002); Yin and Jiang (2003); Walcott and Pannell (2006); Chubarov and Brooker (2013); Kang and Qi (2013) and Chen and Wu (2017) the econometric results of this study indicate a negative impact of FDI on urbanization, which at first glance might seem counterintuitive. However, we can explain this observation in different ways. Firstly, the focus of FDI often shifts to rural or peripheral areas, potentially delaying the success of the urbanization process. In other cases, FDI can lead to a rise in the cost of living in these areas, due to higher prices for products and services. This discourages the population from migrating to these areas. On the other hand, the positive effect of control variables on the urbanization process is more in line with the expected effects. Starting with GFCF, this is often linked to investment in urban infrastructure such as roads, airports, ports, and public administrations and establishments that can support urbanization. Similarly, a higher LGDPPC correlates positively with a higher standard of living, attracting people to rural areas in search of favorable economic opportunities and a higher quality of life. Finally, DPS can encourage the creation of decent jobs in cities, further contributing to urbanization. We can explain the mediating role of FDI between urbanization and ST processes based on the obtained econometric results and the underlying economic dynamics. Firstly, urbanization, often linked to a growing concentration of the workforce in cities, is a key factor in the ST of developing economies. Typically, this transformation involves an initial shift from agriculture to industry, then from industry to technology-intensive services, as well as the modernization of economic institutions and infrastructure. Econometric results show that FDI has a negative impact on the urbanization process in developing countries, which may seem contrary to the expected effects. However, the fact that FDI typically concentrates in peripheral or rural areas with low cost of living could potentially slow down the urbanization process. Despite this observation, FDI can also play a mediating role in supporting the success of the ST process, helping to create decent jobs in the most productive sectors, and consequently attracting the population from urban areas in search of the best possible opportunities.

We note that these results are based on statistical analysis and may vary according to the context of each developing country. It is therefore essential to take into account local specificities and dynamics when explaining these results.

5. Conclusion

This article discusses urbanization as a catalyst for the ST process in developing countries, focusing on the important mediating role that FDI can play in this link. The econometric results showed the indispensable role played by urbanization in the success of the ST process, encouraging the transition from agricultural

territories to diversified, sophisticated territories based on manufacturing industry and technology-intensive services.

The findings indicate that FDI plays a complex role in the success of this process. Although, initially, these investments can slow down the process of urbanization in the host country by locating in rural or peripheral areas. In this way, FDI can act as a catalyst for the ST process, promoting inclusive growth and creating decent jobs in the most productive sectors.

These various observations show how important it is for politicians in developing countries to put in place strategies and policies that encourage the achievement of sustainable and inclusive urban development. To support economic growth and the creation of decent jobs in cities, it is crucial to distribute attracted FDI flows evenly across the various territories of the host country.

In addition, this article highlights the importance of considering the complex dynamics between urbanization, ST, and the mediating role played by FDI when preparing development strategies and policies. Politicians in developing countries need to be aware of the possible influences of FDI on the urbanization process, and align their policies accordingly to achieve inclusive and balanced development.

Indeed, politicians need to be fully aware of the different ways in which FDI can impact the processes of urbanization and ST. For example, FDI can encourage the acceleration of the urbanization process, by promoting economic growth in the cities of developing countries, while it can generate socio-economic and spatial disparities, if it is concentrated in certain areas to the detriment of others. Political decision-makers should therefore devise strategies and policies that guarantee an equitable distribution of FDI flows between the regions of the host country, and stimulate the harmonious development of urban and rural areas.

To maximize the positive impact of Foreign Direct Investment (FDI) on the Standard of Living (ST) of developing countries, it is important to design development strategies and policies accordingly. This often involves various measures aimed at strengthening the innovative production and export structures of national economies, fostering export diversification and sophistication, and supporting the creation of decent jobs in the most productive sectors. This calls for targeted tax incentives, investment in education, health, and infrastructure, and inclusive institutions aimed at improving the business climate. All these elements can play an indispensable role in this process.

What's more, policymakers in developing countries need to ensure that development and urban policies are complementary and coherent. In fact, sectoral policies are too often conceived in isolation, which can lead to contradictions and inefficiencies as a result. This calls for an integrated approach that recognizes the complex interconnections between these three phenomena, to ensure sustainable and inclusive results.

This article highlights various avenues for future scientific work for researchers. It would be essential to deepen our understanding of the mechanisms by which FDI impacts the urbanization and ST processes, using different, more sophisticated quantitative and qualitative methods.

Finally, it would be beneficial to further explore the interactions between these phenomena and other factors such as government policies, technical progress, and international trade. A multi-disciplinary approach could provide effective insights into the challenges and opportunities associated with ST in developing countries.

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