The effect of economic structural transfer on urban development in Binh Duong province

by Nguyen Thi Hoai Phuong (Thu Dau Mot University)

ABSTRACT

Binh Duong, a dynamic province in the Southern Key Economic Region in Vietnam, has a fast growing economy and strong economic restructuring towards industrialization and modernization, have affected many aspects of economy, culture, society and environment. This study analyzes the influence of economic restructuring on urban development in Binh Duong province by utilizing the time series data throughout 2000-2020, combined with methods collecting and processing documents; compare, analyze, synthesize; sociological investigation. The research results show that economic restructuring contributes to promoting economic and social development in general and expanding the urban network of Binh Duong province in particular, but it has some limitations in the process of development. Therefore, Binh Duong wants to successfully integrate into the world economy and develop urban areas towards sustainability (by 2030), it must have specific, scientific and objective analysis and evaluation on the success and limitations of the economic restructuring process and its impact on the urban system in recent times. The research results also have a scientific basis for proposing appropriate and effective solutions and policies to successfully implement the goals and orientations of economic restructuring and urban development that Binh Duong has been approved.

Keywords: effect, transfer, economic structure, urban, Binh Duong province
1. Introduction
The economic restructuring in urbans is an inevitable rule in the socio-economic development of each country, territory or locality. It is an opportunity for developing countries to take advantage of resources, ensure rapid growth, improve quality of life, and at the same time, it is also the driving force to promote the urbanization process towards sustainability.

Binh Duong is not an exception to that general development, from a mainly agricultural economic province with a low level of development, it has become the third largest economic scale in Vietnam in 2020 (after Ho Chi Minh city and Ha Noi city), in which the proportion of industry accounts for about 63% of GRDP (Binh Duong Statistical Office, 2020). Binh Duong has become a key province in terms of state budget revenue and foreign investment attraction since 2003, this capital is extremely important to contribute to economic restructuring.

Binh Duong province also has a high concentration of industrial zones and a high rate of industrial growth. The process of economic restructuring has markedly changed the urban network of its, the urban level has been raised, Thu Dau Mot town (class III city) has been upgraded to Thu Dau Mot city; Di An and Thuan An towns to Di An and Thuan An cities. The period 1997-2020, the number of urbans increased from 5 to 9 (including 3 cities, 2 towns and 4 towns), the urban space expands, urban infrastructure is increasingly synchronous and modern, the income of the population in general and the urban population in particular is increasing, occupational structure changed towards increasing the proportion of non-agricultural workers. However, the process of economic restructuring in Binh Duong province has many limitations as the driving force of economic restructuring is mainly foreign investment, which contains many risks and dependencies; The economic restructuring take place strongly in large cities, the remaining small towns have little change, qualified workers only meet a small part of development needs and requirements.

2. Literature review and research methods
The economic restructuring is interested in research by foreign scientists in many different aspects such as Chenery and Syrquin (1975) studies the characteristics of economic development in each period, restructuring the economic sector. Kuznets (1971) studies the relationship between economic development stages associated with economic restructuring according to three groups of agriculture, industry and services. Research on economic restructuring and economic growth in developed countries, typical authors as Gylfason and Zoega (2004), Yilmaz (2005), Fonfria et al. (2005), Huber et al. (2005), Polevychok and Mechyslava (2008), Micheal Spence et al. (2009).
Chenery, Syrquin (1975) and Cousins. Ah, Nagpoul (1979) analyzes quite fully the impacts of the political system, urban administration, economic, cultural, educational, religious factors... on urban development. Urban-related issues have also become a concern of many international organizations such as UNESCO, UNDP, WB,...


Researchers such as Trương Quang Thao (2003), Phạm Ngọc Con (2012), Trịnh Dựy Luan (2005) provide the concepts of urban, urban economy, urban society, urban function and urban management. Nguyễn Duy Quy (1998), Đam Trung Phượng (2005), World Bank (2011) study the current status of urban development in Vietnam and development orientations in the context of urbanization in the region and in the world.

In Bình Dương, related to economic restructuring, there are 3 works: Nguyễn Văn Hiếp (2007) "Socio-economic changes of Bình Dương province from 1945 to 2005", Võ Thị Cam Văn (2008) "Agricultural economic restructuring in Bình Dương province from 1997 to 2007", and Nguyễn Thị Ngọc Anh (2008) "Transformation of the agricultural-rural economic structure of Bình Dương province in the period of industrialization and modernization". These studies refer to the internal economic restructuring of the agricultural sector. Up to now, there have been no scientific studies on the effects of economic restructuring on urban development in Bình Dương, in both theory and in practice.

Research methods: (1) collecting and processing documents, (2) compare, analyze, synthesize, (3) sociological investigation is inherited from the author's own study "Urbanization and its effects on restructuring land use in Bình Dương province".

3. Results and discussion

3.1. The current situation of economic restructuring in Bình Dương province

3.1.1. Size and growth rate of GRDP

In the early stage of re-establishing the province in 1997, Bình Dương's economy was mainly agricultural, small in scale and backward. Since 2005, Bình Dương's economy has transformed, becoming one of the top provinces with high growth rate and investment attraction. The scale of GRDP accounts for more than 42% and export
turnover accounts for 40% of the whole country, contributing more than 60% of the national budget and accounting for 52% of the total GDP of the four key economic regions. In the period 2000 - 2020, the scale of GRDP increased by about 64.2 times (increased from VND 6,067 billion to vnd 389,500 billion), in which the proportion of the industrial sector dominated, contributing the most with 66.8% of GRDP (Binh Duong Statistical Office, 2000; 2020); Binh Duong province's GRDP in 2020 ranks third in the country (after Ho Chi Minh city and Hanoi city). The economic results achieved are due to the province's flexibly applying the renovation line, the Party and State's policies and guidelines, exploiting and effectively using the comparative advantages into the economic development strategy.

**TABLE 1.** GRDP and GRDP growth rate of Binh Duong, 2000-2020

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GRDP current prices</td>
<td>6,067</td>
<td>15,916</td>
<td>108,766</td>
<td>196,840</td>
<td>389,500</td>
</tr>
<tr>
<td>(billion vnd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growth (%)</td>
<td>13.9</td>
<td>15.4</td>
<td>14.5</td>
<td>13.1</td>
<td>6.8</td>
</tr>
</tbody>
</table>

The growth rate of GRDP tends to decrease from 2016 (10.56%) and change in the period 2017 - 2019 (about 9%) and decrease sharply in 2020 (6.8%), this is the the lowest increase since 2016 to now due to the impact of the Covid-19 pandemic. In the period 2005 - 2015, it is considered a "golden" period because of its high growth rate due to many investment projects of large corporations and effective operation. From 2016 onwards, it gradually decreased because enterprises went into stable production, the localization rate of high-tech industrial products was still quite low, so the added value was not high, leading to a low GRDP growth rate downtrend.

**GRDP per capita**

With a low starting point, GRDP per capita at current prices in 2000 will reach 8 million vnd, and in 2020 will reach 150.1 million vnd, higher than the average income of the southern key economic region (121.6 million vnd) and the whole country (64.7 million vnd); GRDP per capita of Binh Duong in 2020 will reach 150.1 million vnd/year (at current prices), 18.7 times higher than in 2000 (8 million vnd/year); ranking second in the country (after Ba Ria - Vung Tau province), 1.65 times higher than the national average (table 2).

**TABLE 2.** GRDP per capita/year of Binh Duong, Southern Key Economic Region and Vietnam

<table>
<thead>
<tr>
<th>Year</th>
<th>2000 (million vnd)</th>
<th>2020 (million vnd)</th>
<th>2020/2000 (times)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam</td>
<td>5.7</td>
<td>64.7</td>
<td>11.3</td>
</tr>
<tr>
<td>Southern key Economic Region</td>
<td>13.1</td>
<td>121.6</td>
<td>9.3</td>
</tr>
<tr>
<td>Binh Duong</td>
<td>8</td>
<td>150.1</td>
<td>18.7</td>
</tr>
</tbody>
</table>
3.1.2. Restructuring the economic sector

The economic structure of Binh Duong province changed positively in the direction of industrialization and modernization. The proportion of economic sectors has changed in the direction of increasing the proportion of industry and services, and decreasing the proportion of the agricultural sector. In which, industry always accounts for the highest proportion in the economic structure with 65.97% (in 2020), in the period 2000 – 2020 increased by 7.87%; services down 2.5%; the proportion of the agricultural sector decreased sharply (13.47%) and was in the top 10 provinces with the lowest proportion of the agricultural sector in the economic structure. However, the statistics of the service industry are not accurate because before 2010, no product tax except for product subsidies was included, so from 2010 onwards, the proportion of the service industry still increased but slowly increased, only increasing 3.05% in the period 2010 - 2020.

In the period 2005 - 2020, the proportion of industry tends to be saturated, fluctuates around 65%, labor-intensive industries still account for a high proportion in the structure of the economic sector, the localization rate in industry is still high. The development trend is to increase industries with high technology content.

**TABLE 3.** Economic structure of Binh Duong at current prices, 2000 - 2020 (unit: %)

<table>
<thead>
<tr>
<th>Year</th>
<th>Agriculture</th>
<th>Industry</th>
<th>Service</th>
<th>Taxes less subsidies on products</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>16.70</td>
<td>58.10</td>
<td>25.20</td>
<td>-</td>
</tr>
<tr>
<td>2005</td>
<td>8.40</td>
<td>63.50</td>
<td>28.10</td>
<td>-</td>
</tr>
<tr>
<td>2010</td>
<td>5.26</td>
<td>63.94</td>
<td>19.64</td>
<td>11.15</td>
</tr>
<tr>
<td>2015</td>
<td>3.26</td>
<td>66.65</td>
<td>21.54</td>
<td>8.55</td>
</tr>
<tr>
<td>2020</td>
<td>3.23</td>
<td>65.97</td>
<td>22.69</td>
<td>8.11</td>
</tr>
</tbody>
</table>

In the economic structure, industry plays a key role in the GRDP structure of Binh Duong. Thanks to the policy of dynamic economic development, focusing on industry such as: "industry is a central stage, playing an important role in the socio-economic development of Binh Duong and of the Southern Economic Zone" (1997); "industrial development - urbanization associated with agricultural and rural development" (2001). By 2020, Binh Duong has 29 industrial parks and 9 industrial clusters, it also prioritizes attracting foreign investment, becoming the third province with high foreign investment in Vietnam (after Ho Chi Minh city and Hanoi city). This capital has become one of the important resources contributing to promote industrialization of Binh Duong.

The proportion of the agricultural sector is low, plays a minor role in the economic restructuring and is decreasing due to the impact of the process of industrialization and urbanization leading to narrowing of agricultural land, unstable market, and investment projects. Investment in agriculture is low, production scale is small, so the contribution to GRDP is low.
3.1.3. Restructuring of economic components

In the process of globalization of the world economy, Binh Duong has actively integrated in the direction of multilateralization, diversification, and multi-sector economic development, which has contributed to speeding up the integration progress, promoting the economic components has many positive changes.

Foreign direct investment (FDI) is an important factor contributing to the transformation of economic structure and labor structure in Binh Duong province. FDI attraction ranks third in the country (after Ho Chi Minh City and Hanoi), the proportion of FDI ranked second after the non-state economic component in 2000, the proportion of FDI has always led head from 2005 onwards. However, from 2015 to now, the proportion has tended to decrease due to fluctuations on the world economic situation and due to an increase in investment capital in non-state economic components.

![Investment capital structure by economic components of Binh Duong at current prices, 2000 - 2020 (unit: %)](image)

*Figure 1.* Investment capital structure by economic components of Binh Duong at current prices, 2000 - 2020 (unit: %)

It can be seen that the structural transformation according to economic components of Binh Duong brings about a general effect for economic development. However, in terms of sustainability, this is not a reasonable shift because the shift relies on external resources such as FDI capital, which contains many risks, depends on and does not encourage the development of domestic economic sectors. At the same time, in recent times, Binh Duong has policies that give priority to FDI enterprises over domestic private enterprises, which causes many difficulties and affects the development of domestic private enterprises.

3.1.4. Economic restructuring on space

Economic production value of Binh Duong in the 2000s, mainly concentrated in Di An and Thuan An town. In the process of economic development, there is a division into 3 sub-regions: the southern region, the central region and the northern region. However, the economic production value of Binh Duong is mainly concentrated in the South and Central regions with the main economic sector being industrial production.
* The southern area

The scope includes Thuan An city and Di An city. The economic production value of this area accounts for 65% of Binh Duong's economic value (in 2020) by the contribution of industrial parks, industrial clusters and service activities. The economic structure of the sub-region has changed dramatically, with industry accounting for a high proportion of the economic structure from 2005 to 2020. The proportion of industry in Thuan An has remained unchanged, increasing by 1.82% (from 77.31% increased to 79.14%) and Di An decreased by 19.39% (from 64.24% to 44.87%). In contrast, the service in Thuan An decreased by 1.17% (from 21.95% to 20.78%) and Di An increased quite high by 20.5% (from 34.62% to 55.12%). With favorable conditions in terms of geographical location, infrastructure and source of migrant workers, the sub-region has attracted a large amount of investment capital for industrial production, of which FDI accounts for over 90%. The sub-region has 9 concentrated industrial zones with large scale and high production value such as VSIP I, Song Than 2, Song Than 3, Tan Dong Hiep A, Tan Dong Hiep B, ... and 4 industrial clusters. The service sector has not developed stably, the proportion of the agricultural sector accounts for a very low proportion in the economic structure and is decreasing. This economic restructuring is also due to the impact of the policy that identifies the sub-region as the focal point for industrial development. Currently, it is following the policy of promoting the development of the service industry.

* Central area

The scope includes Thu Dau Mot city, Tan Uyen town and Ben Cat town. Previously, Ben Cat town and Tan Uyen town were administrative units of Ben Cat district and Tan Uyen district. Due to the population boom in the south and the imbalance in socio-economic development indicators in the localities, the province actively restructured economic regions towards the north. In the 1990s, the north was oriented to develop agricultural economy, but in the early years of the 21st century, industrial zones were gradually formed (My Phuoc I industrial park, Nam Tan Uyen industrial park, ...), industry began to spread, contribute to economic restructuring. The economic production value of this area accounts for about 35% of the Binh Duong's economic value (by 2020).

Thu Dau Mot is an administrative and general economic city of Binh Duong, the development process is associated with economic development and territorial expansion on the basis of planning to divide and arrange functional areas when urbanizing. The market is expanding, the service sector accounts for the highest proportion in the economic structure with 62.78% and agriculture accounts for a very low proportion of 0.03% (2020). Ben Cat town and Tan Uyen town both have a share of industry over 70%, the proportion of agriculture in Ben Cat accounted for 0.03% and Tan Uyen accounted for 8.86% (2020), these two cities still is in the trend of economic restructuring towards industrialization.
3.2. Impact of economic restructuring on urban development in Binh Duong

3.2.1. Developing urban network

In 1997, when it was just re-established, Binh Duong province consisted of one town (Thu Dau Mot) and 3 districts (Thuan An, Ben Cat, Tan Uyen). In 1999, Thuan An district was divided into 2 districts: Thuan An and Di An; Ben Cat district is divided into 2 districts: Ben Cat and Dau Tieng; Tan Uyen district is divided into 2 districts: Tan Uyen and Phu Giao. In 1999, Thuan An district was divided into 2 districts, Thuan An and Di An, both districts play the role of key industry of the province. By 2020, Binh Duong has 3 cities, 2 towns and 4 townlets. Thu Dau Mot is located in the central geographical position of Binh Duong, functions as a provincial center of economy, finance, culture, education, training, health, tourism, science and technology, a traffic hub, for domestic and international exchanges, plays a role in promoting the socio-economic development of an inter-provincial region.

**TABLE 4.** Population, urban population, urban population ratio and number of cities, 2000 – 2020

<table>
<thead>
<tr>
<th>Year</th>
<th>Population (people)</th>
<th>Urban population (people)</th>
<th>Urban population ratio (%)</th>
<th>Total urban cities</th>
<th>Towns</th>
<th>Townlets</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>779,420</td>
<td>235,866</td>
<td>30.26</td>
<td>9</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2005</td>
<td>1,109,318</td>
<td>361,725</td>
<td>32.61</td>
<td>9</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2010</td>
<td>1,618,125</td>
<td>535,923</td>
<td>33.12</td>
<td>9</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2015</td>
<td>2,069,247</td>
<td>1,587,526</td>
<td>76.72</td>
<td>9</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2020</td>
<td>2,580,555</td>
<td>2,178,173</td>
<td>84.41</td>
<td>9</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Urban population continuously increased from 235,866 to 2,178,173 people in the period 2000-2020, the proportion of urban population will increase respectively from 30.26 to 84.41%. In the period 2000 - 2020, the urban population growth rate is 9.23 times, higher than Binh Duong's population growth rate of 3.31 times. The rate of urban population increased dramatically in the period 2010 - 2015 due to the change of administrative units from townlet to town, from commune to ward, mainly in 2 areas of Di An and Thuan An, at the same time, because of the rapid increase in immigration by the attraction of industrial development.

3.2.2. Expanding, upgrading and transforming urban functions

* Expansion and upgrading urban

The strong industrial development with 29 industrial zones, 9 industrial clusters and many craft villages has attracted laborers to work, settle down and develop services, creating areas with high population concentration with the main economic sector is non-agricultural. With social characteristics similar to urban areas, it has an influence on neighboring villages and communes, the precursor of future urban areas, capable of expanding its area. The development of industrial parks and industrial clusters not only
creates a strong attraction for workers looking for jobs and settling down, but also attracts investment capital for infrastructure construction, creating urban areas next to the industrial parks, which is the foundation for the formation of an industrial city. Some industrial zones have been adjusted in planning to form industrial zones - urban areas such as VSIP, My Phuoc, and Tan Dong Hiep.

Industrial zones and industrial clusters have created a large number of jobs and associated services have increased the proportion of the non-agricultural population. The concentration of them near important traffic routes such as highway 1K, highway 13, and My Phuoc-Tan Van superhighway has formed residential areas with a large concentration of laborers in the area, especially laborers of industrial sector, making the urbanization process taking place quite strongly in these areas, which is a prerequisite for the expansion of urban areas in terms of area. In 2000, Binh Duong's urban land area was 240.43 km², accounting for 8.9% of the natural land area. By 2020, the urban land area will increase to 560.76 km², accounting for 20.8% of the natural land area. The urban land area will increase to 320.33 km², the average growth rate of this period is 5.1% in the period 2000 - 2020. Thu Dau Mot city has increased by 3,209 hectares, due to the merger of some communes of Tan Uyen town and Ben Cat town (the common feature is that it is close to industrial zones, mainly non-agricultural production activities).

In the period 2000 - 2020, the number of urban centers in Binh Duong province did not change, but the urban level had a big change. Thu Dau Mot upgraded from grade IV to grade III (2007), grade II (2014), grade I (2017). Thuan An and Di An are grade IV cities (in 2011), upgraded to grade III (in 2017) and upgraded to city at the beginning in 2020. Tan Uyen and Ben Cat are grade III cities (in 2018). The industrial development has contributed nearly 70% GRDP, created thousands of non-agricultural jobs in urban areas, increased capital spending for urban development, and appeared many new industries, the diversified urban economic structure, is the driving force for urban development to meet the standards of higher urban levels.

* Transforming urban functions

The strong development of the industry, especially the great contribution from FDI enterprises, has promoted the socio-economic linkages between cities as well as with cities outside more closely, contributing to the elevation of Binh Duong's urban areas, especially Thu Dau Mot city, Thuan An city and Di An city. Thu Dau Mot is the largest city and the political, economic, cultural, social and educational center of Binh Duong. Thuan An and Di An are the two second largest cities in the province, established at the end of 2013, these two cities have the process of urbanization and early industrialization, the location adjacent to Ho Chi Minh City should be urban satellites of Ho Chi Minh city, which are industrial cities, actively contribute to GRDP growth and promote Binh Duong's socio-economic development. Ben Cat and Tan
Uyen urban areas were separated from Ben Cat and Tan Uyen districts at the end of 2013, with the main function of industrial development, connecting industrial parks and urban areas in Binh Duong. The remaining urban centers have administrative functions (including 4 townlets: Lai Uyen, Dau Tieng, Phuoc Vinh, Tan Thanh, respectively in the districts: Bau Bang, Dau Tieng, Phu Giao, Bac Tan Uyen) with satellite cities, low density.

3.2.3. Promoting economic and social development of urban

* Urban economics

Urban economics are extremely important, playing a key role in promoting the entire economy of Binh Duong, in which economic growth is a decisive factor for the development of urban areas. The economy of urban areas in Binh Duong has a relatively high growth rate, during in the period 2000 - 2020, average of over 10% per year, the last three years are higher than prescribed criteria for urban classification (class I city has a low level of 7%, a high level of 9% or more; a grade III city has a low level of 6%, and a grade III city has a low level of 6%, a high as 6.5% or more). Thus, all the urban areas in Binh Duong, the economic growth in the last three years has met the standard of classification of existing urban areas.

At the end of 2013, Ben Cat and Tan Uyen district were separated into new administrative units and the proportion of industrial production value in the two old districts (Ben Cat and Tan Uyen district) concentrated mainly in Ben Cat town and Tan Uyen town. In 2016, the proportion of industrial production value of cities as Thu Dau Mot, Thuan An, Di An, Ben Cat and Tan Uyen accounted for 99.66% of Binh Duong.

<table>
<thead>
<tr>
<th>TABLE 5. Average economic growth of cities (unit: %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cities</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Thu Dau Mot</td>
</tr>
<tr>
<td>Thuan An</td>
</tr>
<tr>
<td>Di An</td>
</tr>
<tr>
<td>Ben Cat</td>
</tr>
<tr>
<td>Tan Uyen</td>
</tr>
</tbody>
</table>

Many new industries appeared in the process of economic restructuring, especially the service industry in urban areas, many new industries appeared, making the economic activities of the urban area vibrant and bustling. The scale and structure of total retail sales of goods and services are mainly concentrated in Thu Dau Mot city, which functions as an administrative, commercial and service center, so the proportion of retail sales of goods and service revenue the highest level in Binh Duong and an increasing trend in the period 2005 - 2020. Di An city, although it is a large urban area, both its size and proportion are lower than that of other urban areas.
The number of business establishments in the trade sector, the market system, and the service sector has grown quite strongly in the cities of Thu Dau Mot, Thuan An and Di An. In these three urban areas, many commercial centers and large supermarket systems have been built and put into operation such as: Aeon Mall, Lotte Mart, Becamex, Big C, Coop Mart, Metro, a system of supermarkets mini market, ... gradually improve the quality of commercial and service business forms.

* Urban society

**Labor quality and non-agricultural employment rate**

Labor working in economic sectors in urban areas tends to increase in number and proportion, the number increases from 381,283 to 1,387,744 people (increase 3.6 times) in the period 2005-2020, the average annual growth rate is 9%. The proportion of employees working in urban areas increased from 60.74% to 84.51% of the total labor of Binh Duong. The rate of non-agricultural workers reached a high level and increased from 88.7% to 98% in the period 2005-2020. Labor quality also increased, the proportion of trained workers increased from 8.37% to 20.72% for the period 2005-2020 in order to meet the development needs of the industry. These trained workers have a significant part of workers working in industrial zones who are trained by enterprises.

**TABLE 7. Characteristics of workers working in urban areas**

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working workers (people)</td>
<td>381,283</td>
<td>710,439</td>
<td>1,060,401</td>
<td>1,387,744</td>
</tr>
<tr>
<td>% of employees in Binh Duong</td>
<td>60.74</td>
<td>69.21</td>
<td>79.19</td>
<td>84.51</td>
</tr>
<tr>
<td>% of employees non-agricultural</td>
<td>88.7</td>
<td>91.5</td>
<td>94.9</td>
<td>98.0</td>
</tr>
<tr>
<td>% trained workers</td>
<td>8.37</td>
<td>11.76</td>
<td>17.40</td>
<td>20.72</td>
</tr>
</tbody>
</table>

With a large number of jobs created from industrial zones, industrial clusters and service industries, the urban unemployment rate decreased significantly from 4.31% to 2.88% in the period 2000-2020. The number of additional jobs in urban areas each year has an average of over 67,000 new jobs, most of which serve the needs of industrial parks and industrial clusters.
The author conducted a survey in 2017, surveying in 2 wards of Thu Dau Mot city (Phu Tan and Phu My wards) with 70 households. The survey results showed that up to 48 households changed their occupations, moving from the agricultural to non-agricultural economic sector, of which 31 households switched from agriculture to services and 17 households switched from agriculture to industry. This means that the proportion of non-agricultural workers has increased in the urban labor structure. The main reason for this career change is the development of industrialization and urbanization with the export new industries such as rented accommodation, retail trade.

- Urban living standards

![Graph showing average monthly income per capita, 2002 – 2020](image)

**Figure 2. Average monthly income per capita, 2002 – 2020**

Many jobs are created by the activities of industrial parks, industrial zones and service activities, leading to an increase in the average monthly income per capita of urban residents from 623 thousand VND to 11,580 thousand VND (up 18.6 times) in the period 2002-2020, nearly 2.1 times, higher than the per capita income of urban areas country and urban areas of the Southeast Vietnam (about 6,000 thousand VND).

By 2020, the urban areas in Binh Duong will no longer have poor households according to the national poverty standard in the period of 2016 - 2020, the level applicable to near-poor households and poor households in urban areas is 900,000 - 1.3 million vnd/person/month (cities) and 700,000 - 900,000 VND/person/month (rural). According to Binh Duong's multidimensional poverty and near-poor criteria in the period 2016-2020 about income: 1.2 - 1.6 million VND/person/month in rural areas and 1.4 - 1.8 million VND /person/month in urban areas. According to Binh Duong’s multidimensional poverty rate, the urban areas of Thu Dau Mot, Thuan An, and Di An are all below 1%; urban areas of Ben Cat and Tan Uyen less than 2% (Party Committee of Binh Duong Province, XII).
- Promoting urban infrastructure development

The most developed production and business activities, especially in industrial parks, industrial clusters and other types of services, have increased the budget of Binh Duong, created capital for investment in urban embellishment, and changed rapidly changing the urban face its. In the period 2005 - 2020, capital construction investment is increasing, accounting for 26.4% (2005); 29.2% (2010); 53.5% (2020) of Binh Duong's total construction investment capital. Three cities Thu Dau Mot, Thuan An and Di An have accounted for 62% of the total investment capital of Binh Duong for the repair, upgrading and new construction of social infrastructure.

Prominent urban transportation is invested, infrastructure is built in a synchronous direction, upgraded and expanded many important roads connecting urban centers and industrial zones in Binh Duong and the Southern Key Economic Region. Typically, the construction of a new 30km long My Phuoc - Tan Van expressway, put into operation in 2013, is a strategic transport circuit of the province, throughout new industrial zones with seaports (Thi Vai, Cai Mep), container ports (Dong Nai, Binh Duong, District 9) and Long Thanh new international airport, contributing to a 25% reduction in transportation time and 30% of transportation costs. This route is very important for the southern urban part of Binh Duong province, connecting Thanh Pho Moi Binh Duong, Di An, Thuan An, Thu Dau Mot, Ben Cat with the industrial clusters of Binh Duong and cities in the Southern Key Economic Region. It plays an important role in accelerating the socio-economic development of Binh Duong towards industrialization and urbanization. National Highway 13 (passing through Thu Dau Mot city and Thuan An city) has been upgraded and expanded to 6 lanes, helping to connect traffic to Ho Chi Minh city, Binh Phuoc province and the Central Highlands provinces.

Housing: economic restructuring has an indirect impact on improving the quality of urban housing through an increase in urban area to form new urban areas, increase housing area and raise incomes for the population to increase permanent housing. The average housing area in urban area of Binh Duong is 26.8 m²/person in 2018, higher than average urban area of Vietnam (26.3 m²/person) and higher than the urban area of Southeast region (23.5 m²/person). Many new urban areas (in Thu Dau Mot, Di An, Thuan An) were formed and expanded such as Hiep Thanh 3, Phu Thinh, Tokyu Garden City, Dong Binh Duong, Ecohome, Phu Hong Thinh, National University urban area, The Oasis, VSIP 1, etc. Housing quality has improved markedly and no temporary houses exist in urban areas. In the housing construction planning, there has been a focus on the general landscape of the urban area with the formation of new urban areas that they have built a common design (detached house, villa) that is modern and close to nature.

The education, healthcare and service systems are increasingly modern, meeting the growing demands in urban areas. Many hospitals and schools have been upgraded, expanded or built to international standards such as the 1,500-bed hospital, Eastern
International University, Viet Duc University, Thu Dau Mot University; big commercial centers as Aeon Mall, Lotte, Big C (Thuan An); Metro, Kyoto (Thu Dau Mot); Vincom Plaza (Di An),... not only meets the shopping and entertainment needs of resident in Binh Duong province but also for resident in neighboring areas such as Cu Chi district, Thu Duc district (Ho Chi Minh city) and Binh Phuoc province.

* Changing urban space

Economic restructuring along with the development of industrial parks and industrial clusters changes the general planning urban areas of Binh Duong, thereby affecting the change of urban space of the entire Binh Duong province, which is gradually divided into three areas: Southern urban area; Central urban area and Northern urban area.

**Southern urban areas:** including Thuan An city with service-industrial functions; Di An city has the function of service - industry - traffic hub in the whole region. These are two urban areas with high socio-economic development and rapid urbanization. Thuan An city is located on important traffic routes such as National Highway 13, My Phuoc - Tan Van superhighway, Provincial Road (741; 743), Ring Road 4. Di An city has important traffic routes such as: National Highway (1A; 1K), Highway 52, My Phuoc - Tan Van superhighway and North - South railway line, important train stations are Di An and Song Than, the task of transshipment of goods in the Southeast region and central provinces. These two cities are very favorable in terms of geographical location and other socio-economic conditions, which are the poles of development and promote the socio-economic development for the southern and the central area of Binh Duong province.

**Central urban areas:** There are three cities, the main city is Thu Dau Mot, this is the core urban area of the province, has implemented the construction of a new urban area, Binh Duong new city - the new administrative center of Binh Duong. Ben Cat town and Tan Uyen town both have service-industrial functions. These urban areas are connected to Ho Chi Minh city-Binh Duong-Dong Nai province through National Highway 13. My Phuoc-Tan Van superhighway connects Thanh Pho Moi Binh Duong center with Bien Hoa city (Dong Nai province), Ba Ria-Vung Tau province and Ho Chi Minh city, transporting export goods from industrial parks in Binh Duong to ports in Saigon and Dong Nai. Thu Dau Mot city plays the role of a nuclear city, the administrative, economic, political, social and cultural center of Binh Duong province, located in the system of urban areas in the Ho Chi Minh City metropolitan area.

**Northern urban areas:** this is the satellite urban area, including of Lai Uyen town (in Bau Bang district), Dau Tieng town (in Dau Tieng district), Phuoc Vinh town (in Phu Giao district) and Tan Thanh town (in Bac Tan Uyen district). The urban areas in the region are not closely linked with important national highways, but are located on the intersections between provincial roads, connecting the ring roads. Cities have little economic function, the main economic function is agricultural production, mainly administrative function.
In summary, economic restructuring has had both positive and negative impacts on urban development in Binh Duong province. On the positive side: (1) the development of the urban network and the increase in the rate of immigration makes the urban labor force abundant; (2) the emergence of many new industries makes the urban economic structure diversified, which is the driving force for the urban development to reach a higher urban upgrading; (3) changing urban function; (4) promoting urban socio-economic development; and (5) urban space division in order to improve the quality of life in harmony with urban economic development. However, besides that, there are still some limitations: (1) The economic restructuring in the remaining small cities has not changed much; (2) skilled workers in urban areas are limited; (3) The economy in urban areas contains many risks due to high dependence on FDI capital.

4. Conclusion

The process of economic restructuring of Binh Duong has exploited and promoted its advantages and achieved an increasingly progressive economic restructuring in line with the general development trend of the world and Vietnam. Binh Duong has many strengths for economic restructuring such as geographical location, infrastructure, capital and regional connectivity. In which, geographical location has become a comparative advantage along with the development of infrastructure, contributing to the attractiveness to attract FDI, affirming the dominant role in creating economic growth and make this factor become the driving force to promote economic restructuring of Binh Duong province.

Binh Duong's economic structure is actively transforming economic components. As for the territory, it is gradually reasonable based on the effective exploitation of the strengths of each territory. Industry has become the "driver" industry leading the economic restructuring to success. The process of economic restructuring has had positive impacts on urban development: forming population concentration areas to expand urban areas, creating conditions for urban upgrading, promoting urban socio-economic development, creating favorable conditions for urban development. conditions for upgrading and modernizing urban infrastructure, changing the planning towards a smart city.

However, the economic restructuring of Binh Duong province still has some limitations: The production results of the industrial zones as well as the FDI sector are not commensurate with the potential; Services make up a small share of the GRDP. In addition, the impact of economic restructuring on urban development is still inadequate such as dense population density in southern urban areas, making it difficult for management and conversion of urban areas; and qualified workers only meet a small part of development needs and requirements. Therefore, leaders of all fields need to closely coordinate and come up with fundamental solutions for the economic structure to shift in the right direction and the cities towards sustainable and smart development.
References


