The Model of Economic Growth and Implications for Economic Growth Danang

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Abstract

There are many models of different economic growth proposed based on the characteristics of natural, economic and social situation of each country. Even the economic growth model is considered suitable for a country, but no means it will suit a local territory of that country. The paper studies the different growth models from which to seek implications for appropriate growth model for Danang, a local administrative level in Vietnam. The theories on growth model based on resources internal and external seen as important resources for economic growth. With this approach, the article points out the limitations for the economic growth of Danang over time, and proposes the solutions to build a economic growth model suitable for Da Nang in future in order to achieve development goals of Danang, the city of living worth and environment.

Key Words: Economic growth model, Danang, provincial competition, internal resource, external resource.
1. Overview of Economic Growth and Economic Growth Model

Economic growth is one of the core problems of the theory of economic development. Economic growth includes two sides of quantity and quality. Economic growth is an economic category, reflecting the scale of the increasing or decreasing of the economy from this year to earlier year, or compared this period to the previous period. Economic growth can be expressed by the growth scale and the growth rate. Growth scale reflects an increase or decrease more or less, but the growth rate is used to compare the relative significance and reflects the fast or slow the rise of the economy between the years or periods. To measure the economic growth it is often used two main indicators: the increase or decrease the scale of the economy (in GDP), or economic growth (in GDP).

According to Quach Duc Phap, economic growth model is a way of organizing the mobilization and utilization of resources to ensure economic growth over the years, with a reasonable rate. "Way" said here is diversified, including inputs (mainly as sourcing, production, processing or service); outputs (introvert or extrovert mainly); development of the regions and the types of businesses, corporations; coordination between the State and the market in each sector, etc. Whatever the way chosen, the model applied depends on the conditions, characteristics and specific situation in each country in relation to the present world and is determined by the subjective will of the leadership of each country (1).

Economic growth model with extensive-scale characteristic is essentially increased production volume due to the growth of capital, labor and natural resources. Also, the simplest path to expand production, create jobs, raise incomes, etc. But it also exists drawbacks: the stagnation of the economy, low labor productivity, the slowly-shifted economic structure, etc.

Whereas the intensive economic growth model is based on science and modern technology, improvement of the efficiency and growth quality, such as improving the efficiency of capital use, increase productivity, raising the contribution of total factor productivity (TFP), directing economic activities of the areas with highly into added value, reducing production costs, actively production and goods exported with high technological density, based on fully exploit the advantages of the country, synchronize process of exploitation and processing of products. Intensive growth not only improves the quality and efficiency of the economy, but also protects the ecological environment, enhances social welfare, etc. (2)

Today, economic growth is tied to the quality of growth. The economic growth model is a tool to establish the relationship and describe the evolution of economic growth, the dominant factor in the growth process, the measure of growth in both quantity and quality in the process of growth (1).

1.1 Harrod - Domar

The simple economic growth model is Harrod - Domar. Two economists as Roy Harrod Domar Evsay in the UK and US, based on the Keynes’s ideas, have jointly launched the model explains the relationship between growth and unemployment in the developed countries. This model is also widely used in developing countries to consider the relationship between growth and capital needs. This model is considered the output of any economic unit, whether a company, an industry or the entire economy depends on the total capital invested in it.

1.2 Model Solow - Swan

Solow-Swan model is exogenous growth model, an economic model for long-term economic growth is based on the neoclassical economics. This model is given to explain the long-term economic growth by studying the process of capital accumulation, labor or population growth, and increasing in productivity, commonly called technological progress. Its essence is neoclassical production total function, usually in the form of Cobb-Douglas function, which allows model "associated with micro-economics" (4). The model was developed independently by Robert Solow and Trevor Swan in 1956(5), replacing post-Harrod-Domar - Keynesian model.

1.3 The Model of Economic Growth with Technological Advances

Technological advances have had great significance in the theory of economic growth. Thanks to the technological advances that the economies of many countries have developed rapidly. Theoretically, if there is no technological progress, due to diminishing marginal productivity will make it difficult to maintain per capita indicators not only by reducing the accumulation.

1.4 The Endogenous Growth Models

In the growth models described above, the labor factor or broaderly human factors and technological advances are considered exogenous. However, many economists argue that these elements can in fact be endogenous. The endogenous growth models may be mentioned include:


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b. Research and Development Model.

c. Mankiw-Romer-Weil Model.

d. AK Model.

e. Learning-or-doing model.

Although the endogenous growth models have highlighted the role of savings for economic growth, but the conclusions of this model has much in contrast to the Solow model. Especially, this model shows no tendency to poor countries (lack of capital) can catch up with rich countries in per capita income levels, despite the same savings rate. The cause stems from the disparity is not only physical capital, but more important is the human capital. Because growth speed is endogenous, the model shows a path out of poverty: a country invests more in human resources than would have higher growth.

2. Building a Model of Economic Growth at Provincial Level

2.1 The Relationship between Locality and Centrality

Considering the economy of a country as a complete system, the economy in each city, or the province is regarded as a module. The local economy depends on the control of the central economy as investment capital, interest rates, market, economic legal documents, resources, natural resources of the country, etc, and on the other hand the local economy depends heavily on the characteristics of local natural social conditions, geographic location, etc. Therefore local economy has relative independence.

2.2 The Relationship between Industries, Elements in the Local Social - Economic Structure

Structure of Vietnam's economy follows three major sectors: agriculture - forestry - fisheries, industry - construction, and services. Management mechanism of Vietnam based on both sector and territory, so analyst must consider industries and elements are parts of the system within the country, and as the whole body with special features.

2.3 Interactive Relationship between Local Economic Modules with Super System: Local Socio- Economic System

- Factors affecting the growth of the economy are very broad, including economic and non-economic factors such as socio-cultural characteristics, socio-eco political institutions, human races, and religions.

- In relation to mechanisms and policies, in addition to comply with the policies of the central government, localities have issued guiding documents to implement central policies at locality, to promote local economic development, especially policies such as investment attraction, talent recruitment, land clearance, etc.
- Apart from social elements, the local traditions, traditional villages, human personality, education and training also influence on the development of the local economy.

### 2.4 The Economic Model and Data System in the Local Socio-Economic Analysis

To be able to have the quantitative analysis and reliable forecasts, the prerequisite is to establish models that reflect the elements and the basic relationship involving the objects for analysis and forecast. Simultaneously, there must be the data system about the objects as materials for quantitative analysis. Currently there are many theoretical models for economic forecasts with advantages and disadvantages for each. Therefore, using this model must be based on the conditions and characteristics of the object, thereby selecting the most appropriate model to meet the requirements and objectives of the research.

The information is an important in management and control, so the application of the model to forecast would not achieve results if information is missing. From theoretical models, it should "assemble" the information, the original data to analyzes and quantify relationships in the model (economic variables). Information for building predictive models of socio-economic development is a of socio-economic database system, including data on socio-economic infrastructure, resource allocations, local socio-economic development goals, relationships with the central economy (6).

In overall up to now, local data system is inadequate. According to preliminary assessments, data systems are essentially the following drawbacks:

- Provincial and central data system do not match, asynchronous and inconsistent.
- The industries data implemented in separate, so that the data of the industry and the provinces do not match, because the provinces don’t collect the statistics for all industries, while industries don’t interested in local data.
- Because of inconsistencies between local and central statistics, it led to inconsistencies and overlap between horizontal and vertical management system.

Therefore, there should be the appropriate method of handling data sources to format and estimate theoretical models. For local level forecast, the patterns often used are simple growth model (Harrod-Domar, Solow-Swan), the local SNA tables, quantitative patterns in areas and sectors, etc.

### 3. Situation for Business Environment and Economic Growth of Danang

#### 3.1 Macroeconomic Environment

The growth rate of per capita GDP of Da Nang during past 5 years reached 11.35%/year compared with the national average was 7.27%/year. In 2009, the GDP structure shifting in a positive direction, the proportion of services accounted for 51.51%, industry and construction

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accounted for 44.58% and agriculture, forestry and fisheries accounted for 3.91%. Service production value at constant prices in 1994 reached VND 8,601.25 billion; the industrial production value reached VND 11,179.48 billion; production value of agriculture, forestry and fishery products reached VND 556.24 billion. Export turnover in the Da Nang reached US$ 476.43 million. Total retail sales of goods and services reached VND21.909 billion. Per capita income at current prices in 2009 was VND 27,696 million/person, higher than the national average, around VND 19±13 million/person.

The scale and speed of investment growth for social development accelerated, creating resources for economic development. In 2009, the total social development investment was VND 15,287.62 billion, up 24.64% on average/year for 5 years. On attracting foreign investment, in 2009, Da Nang attracted many foreign investors from 24 countries, with 169 projects and total registered capital of nearly US $ 2.6 billion (ranked 15th in the country in terms of attracting FDI volume).

The scale and development of enterprises in Da Nang are generally inferior to other major cities such as Hanoi and Ho Chi Minh City. This can be seen quite clearly in the ranking of JSC Assessment Report Vietnam (Vietnam Report).

According VNR 500 ranking, among the 500 largest enterprises in Vietnam in 2015, Hanoi had 118 enterprises, which occupied leading positions as Petro Vietnam, Vietnam Petroleum Corporation ranked No 3. The Electricity Corporation ranked No. 4, Viettel Telecom Group ranked No. 5. This figure in other major cities respectively in Ho Chi Minh City 144 enterprises, Danang 9 enterprises. Particularly, Vietnam National Petroleum Corporation occupied leading positions of 500 largest Vietnamese enterprises for 7 consecutive years since 2008 to 2014.

Of the 500 largest private enterprises in Vietnam in 2015, Hanoi accounting for 102 enterprises, of which ranged from No. 2 to No. 5, respectively JSC Corporation Doji jewelry, FPT Joint Stock Company, Vingroup, JSC Hoa Phat Group, etc. This number of other major cities in turn Ho Chi Minh City is 156 enterprises, Danang is 10 enterprises. Gemstone Jewelry Joint Stock Company Doji is among 500 ranked leading private enterprises in Vietnam for 3 consecutive years since 2012-2014.

According to FAST500 ranking, among 500 enterprises most outstanding growth in 2015, Hanoi had 115 enterprises, of which there are now ranked highly as ANSV telecommunications equipment occupies No. 2, FLC Joint Stock Company occupies No.4, etc. This number of other major cities in turn Ho Chi Minh City with 122 enterprises, Danang with 15 enterprises.

Of the 500 the most outstanding growth small and medium enterprises in 2015, Hanoi had majority with 93 companies, of which there are now ranked highly as White Ming Joint Stock
Company occupies No. 7, Machine import export Sao Vietnam Company ranked No.11. This number of other major cities in turn Ho Chi Minh City with 46 enterprises, Danang with 12 enterprises.

According V1000 ranking, among 1000 enterprises paid enterprise income tax in Vietnam (according to the tax code of the enterprise) in 2015, Hanoi had 208 enterprises, including large taxpayer such as Military Telecommunications Corporation, the Mobifone telecommunications corporation, Vietnam oil and gas corporation, Vietnam Commerce and Industry joint stock commercial Bank.

Among 1000 enterprises with highest payment of enterprise income tax in Vietnam (according to the consolidated financial statements of the enterprise) in 2015, Hanoi had 212 enterprises, including large taxpayer such as Petro Vietnam, Oil and gas exploration the Corporation – a single member state limited liability company, Viettel Mobile Corporation, Mobifone telecommunications corporation7.

3.2 The Administrative Procedures and Operating Capacity of Danang City Government

For transparency, the PCI Danang survey results in 2009 said 55.22% of enterprises need to have "relationships" to get the documents of the city; 34.75% of companies agree the importance of business associations in counseling and criticism of provincial policy. Transparency norms of planning documents of Danang reached at 3.40 points while in Hanoi, Ho Chi Minh City and Binh Duong reached at 2.91; 2.79 and 3.34 respectively. Transparency norms in legal documents such as decisions and decrees of Danang reached at 4.05 points, behind Binh Dung with 4.21 points.

In the survey indicators on access to information related to the business activities of enterprises for Danang replied by 51.78% of enterprises, only information about changes of tax provisions was relatively accessible. For other indicators, only 20% enterprises replied that was relatively accessible, such as access to information provincial budget 13.04%; city socio-economic development plan 17.78%; building plans for new infrastructure: 20.1%; the investment projects of the central government 14.22%; land planning maps 16.6%; the preferential policies of the city 17%. For other remaining indicators, 35% enterprises replied that relatively accessible such as laws, ordinances and resolutions of the Central Authority; the guiding documents of ministries; the guiding forms of city. Thus, for the development planning related plans, the city's policies are still difficult to access for enterprises in the Danang.

However, PCI survey in 2015 showed that Danang has occupied a leading position in terms of transparency.

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7 VNR500 – Ranking 500 largest enterprises in Vietnam following Fortune 500 Model.
For **business registration procedures**, in 2009, Da Nang has improved business registration procedures such as reducing the number of days to 7 days, Hanoi, Ho Chi Minh City and Binh Duong are still about 14, 15 days; while Decree No. 88/2006/ND-CP of the Government dated 29/8/2006 stipulated that Provincial Business Registration Department confers business registration certificate for enterprises within 10 working days. In addition, enterprises in Da Nang just wait about 15 days to get the certificate of land use rights compare to 30 days in Hanoi, 60 days in Ho Chi Minh City and 72 day in Binh Duong. Therefore, the percentage of enterprises wait more than 1 month or 3 months to complete all the procedures are much lower compared to other provinces.

For **business support services**, according to the survey PCI 2009, Danang has 67.14% of enterprises used business information search services, 65.24% of enterprises used legal consultancy services, 55.99% of businesses used the partner finding service, 45.45% of enterprises used trade promotion services, 52.51% of companies using services related to technology. Thus the proportion of enterprises in Danang have access to business support services are relatively high, however those of enterprises will now reuse these services in Da Nang higher than Binh Duong, but lower than in Hanoi and Ho Chi Minh city.

Enterprises in Danang generally satisfied for access to local authorities, but not for notarizing papers due to too long period for waiting. For building permission, enterprises need to have three basic documents: an application for a building permission, certificate of ownership and design drawings. However, the application for a building permission to go through many steps involved in land - planning and depending on project size and nature of industries. According to interviews from Danang Business Association, in average it takes 3-6 months to have permission for the larg construction projects related to land planning. For some projects relating to the land clearance with valuation difficuty, the highest time is about 1 year. Thanks to the one door structure in Danang, people and enterprises do not stuck in the "procedure cycle" as Ho Chi Minh City. Document collecting department committed to solve procedures faster. Furthermore, the guidance of the Danang People's Committee helped reduce the problems in the application process. That is why so few people used the private services due to cheaper public services and solving problems effectively by local authorities.

(*)

- The **occupancy rate of industrial parks**: Occupancy percentage in the total area of the industrial zone in Danang reached 69.68%. However, the percentage of enterprises highly assess the quality of industrial parks, roads and quality of telecommunications services in Danang counted to 51.58%, while only 27.21% in Hanoi, 39.54% in Ho Chi Minh city and 79.17% in Binh Duong. Road quality is highly accessed by Danang enterprises with 80.82%,

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while this ratio was 24.19% in Hanoi; 17.11% in Ho Chi Minh City, 70.06% in Binh Duong. Telecommunications services quality is highly accessed by Danang enterprises with 84.68%, the higher than in Hanoi, Ho Chi Minh City, Binh Duong with 61.42%, 69.37% and 75.14% respectively.

- **Communications and telematics network**: Da Nang has a network of communications and telematics quite complete. Da Nang International Airport has 815 hectares wide, 3km from the Da Nang center, and aircraft parking system has 73,450 m² and 43,840 m². Currently Danang international airport is place for the 20 flights domestic and international with more than 1,500 passengers per day, 10 regular direct flights to Da Nang and 11 charter direct routes to Danang. North-south railway long 42km under the city administrative boundary. Danang Port is 12km² wide with deep access channels 10-17m, 450m long breakwater, the area of 125,350 m² freight yards, a total area of 22,764 m² warehouse; port capability of receiving ships of up to 35,000 DWT general cargo, container ships and passenger ships up to 2,000 TEUs, and to 75,000 GRT with a total cargo handling capacity of about 3.5 to 4.0 million tons/year.

### 3.3 Access Capability to Resources

For **access capability to land**, PCI survey in 2009 showed that 67.69% enterprises in Da Nang have certificates of land use rights, much higher than in Hanoi, and the Ho Chi Minh City with 46.82% and 50.54% respectively, but still far from Binh Duong with the proportion of 82.11%. In addition, the proportion of land area have certificates of official land use rights in Danang occupies 27.27%, a modest rate compared to other provinces such as Hanoi, Ho Chi Minh and Binh Duong with 64.29%, 60.89% and 87.97% respectively.

Regarding **access to the labor market**, the labor force of Da Nang has always accounted for about 50% of the city's population with the percentage of workers with college degrees or higher accounted for about 18% of workforce in average. In 2009, the worker and high school labor force represent 8.19% and 5.61%, suddenly decrease compared to 2008 is 22.21% and 9.23% respectively. The unemployment rate in 2009 accounted for 5.05%.

Regarding **access to financial markets**, up to 31/12/2009, Da Nang has 35 joint-stock commercial banks, 8 state-owned commercial bank branches and 192 transaction offices covering all the districts to meet capital requirements for enterprises in the city. According to the report on loan interest support impact assessment for enterprises in Danang in 2009 of the Danang Research Institute for Social - Economic Development, 74.86% of enterprises said banking system in the city to meet the needs of capital for productive activities, 11.7% of enterprises rated very good. Survey results also indicated enterprises easy to access to capital and faster disbursement from joint stock commercial banks. However, according to the survey of VNCl in 2009 for the collateral and loan procedures, 90.42% enterprises in Danang were
unable to borrow without collateral property; 48.73% said loan procedures at banks in the city is very troublesome; and 34.44% agreed to "bribe" for officials and bank credit to get a loan.

**Table 1: Synthesis PCI Survey from 2007 to 2015 Showed Danang Da Nang Always Occupy a High Ranking in the Ranking of PCI**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total marks</th>
<th>Ranking</th>
<th>Executive Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>68.34</td>
<td>1</td>
<td>Very good</td>
</tr>
<tr>
<td>2014</td>
<td>66.87</td>
<td>1</td>
<td>Very good</td>
</tr>
<tr>
<td>2013</td>
<td>66.45</td>
<td>1</td>
<td>Very good</td>
</tr>
<tr>
<td>2012</td>
<td>61.71</td>
<td>12</td>
<td>Good</td>
</tr>
<tr>
<td>2011</td>
<td>66.98</td>
<td>5</td>
<td>Good</td>
</tr>
<tr>
<td>2010</td>
<td>69.77</td>
<td>1</td>
<td>Very good</td>
</tr>
<tr>
<td>2009</td>
<td>75.96</td>
<td>1</td>
<td>Very good</td>
</tr>
<tr>
<td>2008</td>
<td>72.18</td>
<td>1</td>
<td>Very good</td>
</tr>
<tr>
<td>2007</td>
<td>72.96</td>
<td>2</td>
<td>Very good</td>
</tr>
</tbody>
</table>

(Source: VCCI, 2015)

Results showed that in 2015 ranked as the 3rd consecutive year Da Nang stayed at the top with a score of 68.34, recorded the leading 6th year since the PCI is published. Other outstanding following provinces are Dong Thap (66.39 points) and Quang Ninh (65.75 points), the provinces leading with many reform initiatives in administrative reforms such as lean machines, publicity and transparency in the evaluation and selection of staff. The next two localities in the group with very good operating quality of the PCI 2015 respectively Vinh Phuc (62.56 points) and Lao Cai (62.32 points). This year, the majority of indicators measuring the time cost and implementation efficiency of administrative procedures were improved. The rate of enterprises said they "do not have to go back several times to get the seal and signature" rose from 67% last year to 70%, rated "officials work effectively" increased from 71% last year to 76%. Aims to build a "smart city", Da Nang has developed e-government model, promoted rapid development of online services, modernize public administration to survey activities of state agencies. E-government model has received positive signals of the business community. A PCI survey in 2015 showed that related indicators of information technology applications of Danang increase in highest in 3 years: website openness or electronic portal score of the city reached 35.5 points, up 3 points compared with 2013; on average, 39% of enterprises highly assess the application of information technology in the one-door sections, up 15% compared to 2013; in particular, the rate of access of enterprise to information portal of the city this year soared to 87%, higher than the 55% in 2013. Danang became the place with highest websites access rates around the
country. (9) The success of this model has been transferred to 17 provinces and cities across the country. (10).

3.4 Regarding Access to Infrastructure

PCI survey in 2015 showed that the private enterprises had the best assessment of the infrastructure in Binh Duong, Da Nang, Dong Nai, Vinh Phuc and Ho Chi Minh City.

Let’s take industrial parks, high-tech zones in Da Nang for instance. In Da Nang city has 6 industrial zones, including: Da Nang, Hoa Khanh, Lien Chieu, expanded Hoa Khanh, Hoa Cam and Da Nang fisheries service, with the scale of 1,141.82 ha and 4 industrial infrastructure trading companies: Danang industrial park infrastructure and development company, Massda Land Co. Ltd., Saigon - Danang industrial zone Investment JSC, Hoa Cam industrial zone JSC. In addition, the city is also focused on implementing information technological park and Hoa Khuong industrial park project.

Danang Industrial Zone was established on 23/02/1993 with an initial area of 303.275 hectares, is the first industrial park in Da Nang early completion infrastructure construction, landscape embellishment, and filling trees in 100% of the area. Danang Industrial Zone is considered the most successful and typical zone of Da Nang in the construction and development of the economic model of industrial parks.

Hoa Khanh Industrial Zone was established with an area of 423.5 hectares. So far, Hoa Khanh industrial zone is transferred to the Da Nang Industrial Park Infrastructure and Development Company as an investor, with the remaining area is adjusted 395.75 hectares. It’s quite relatively uniform invested in infrastructure in Hoa Khanh Industrial Park, completing stormwater drainage transportation system, and leveling, lighting, water supplying throughout the industrial park; collection systems, sewage connections completed over 80%.

Lien Chieu Industrial Zone with planning area is 289.35 hectares. It’s quite relatively uniform invested in infrastructure in Lien Chieu industrial zone, which built 95% complete transport systems for drainage, leveling, and electric lighting.

Da Nang fisheries service industrial park had planning area 43.34 hectares in first stage, and 33.96 hectares in second stage. It’s quite relatively uniform invested in infrastructure in the Da Nang fisheries service industrial zone are relatively complete investment, with 90% of the roads were carpet; complete transport systems, drainage, leveling, lighting, water supply in the entire industrial park.

Hoa Cam Industrial Zone with planning area (Phase 1) is 136.73 hectares and have built complete 90% of the transport system, rainwater drainage, leveling, lighting, water supply in

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9 The Provincial Competitiveness Index Report (PCI) 2015.
the whole park industry; 70% wastewater collection system goes through enterprises in Hoa Cam Industrial Park.

Hoa Khanh Industrial Zone covers an area of 212.12 hectares. Construction has completed 90% of the transport system, drainage, leveling, lighting, water supply in the entire industrial park (11).

Currently there are 347 projects invested in industrial parks, creating jobs for 63,047 unskilled workers, including 272 domestic investment projects with a total investment of over VND 11,496 billion and 75 projects foreign projects with a total investment of USD 689.4 million; production value of industrial zones reached VND 13,352 billion, accounting for 35.7% of industrial production value of the whole city; exports turnover of goods of industrial zones reached US$ 342.57 million accounted for 59.4% of the value of goods exports throughout the city; state budget contribution in 2011 was VND 428.03 billion.

Industrial park development led to positive results as upgrade infrastructure system in and outside the industry park, the social works system. According to statistics by the end of 2011, total industrial land area for lease of six industrial parks in operation in Danang is 684.21 hectares; leased industrial land is 586.87 hectares, the occupancy rate reached 85.77%, including Da Nang Industrial Park has 100% occupancy.

However, there are still many difficulties and challenges for the industrial zone in Danang:

- Da Nang has yet to find a typical model in the development of industrial parks. The change of industrial infrastructure investors has caused many difficulties in the work of state management. Therefore, the question for the Industrial Zones in Danang is to find a model of development of industrial parks from the inner side of the industrial park as the investment capital, infrastructure construction for joint venture, cooperation between industrial zones in Danang as well as the industrial areas in the central coastal region.

- The “hot” issue at the industrial parks in Danang is shortcomings in the land clearance, compensation, clearance and arranging resettlement areas within the planning of the industrial parks as well as the social works serve the labor force in the industrial zones. This has slowed the progress of construction of the project, increased costs of investments, significant impact on the enterprise investment decisions.

- The quality of infrastructure within and outside the industry did not meet the high requirements of both domestic and foreign investors; lack of skilled workers and good managers; non-complete for support services after the investment; available land with full infrastructure is low. In addition, environmental issues surrounding the industrial park is also concerned, especially in the construction of sewage treatment plants concentrated in the

industrial zones in Danang such as Da Nang fisheries service industrial park, Hoa Khanh industrial zone.

- Investment attraction in industrial zones has also focused quantity, not for the percentage of occupancy. There is not selection for quality of the projects, therefore the majority of the projects are small and low high-quality technology. Technology transfer activities are slow. Although in recent years, Danang directed to develop supporting industries as a top priority in order to call for abroad investment, especially FDI from multinational corporations to invest in industrial areas of Danang. However, promoting development of supporting industries remains a difficult problem for the city until now.

3.5. Economic Growth of Danang

It’s can make preliminary remarks for economic growth of Danang as follows:

3.5.1 High Growth and Sustainability for Total Gross Domestic Product

Danang has a stable and continuous economic growth associated with the progress of social life, development infrastructure, and urban embellishment. The average GDP growth rate of Danang in the period 2006-2010 was 11%, in 2013 reached 8.1%, and 9.8% in 2015. The main industrial products of Danang are fisheries, textiles, footwear, mechanical, building materials, and handicraft goods. High-tech industry, especially the IT industry now become became one of the key economic sectors (12).

3.5.2 Thriving Commercial Activities

Export turnover of Danang continued to increase in recent years. The exports of the city were present in more than 90 countries and territories around the world. Trade relations between Danang and countries located along the East-West Economic Corridor is also being developed.

3.5.3 Maintain High Growth Rates for Economy, Shift in the Right Direction for Economic Structure, and Develop the Social Resources and Sectors (13)

- The gross regional domestic product in Danang (GRDP, constant price 2010) is estimated to increase by 9.7%/year, higher than the national average, estimated at VND 45,885 billion in 2015, equivalent to 1.6 times in 2010; GRDP per capita is significantly improved each year, estimated at 62.65 million until 2015, equivalent to $ 2,908, nearly 2 times in 2010; economic structure continues to shift in the right direction, the proportion of services 62.6% estimated in GRDP, and construction - industry 35.3% and 2.1% for agriculture until 2015.

- The structure of economic sectors shifted positively, estimated in 2015, the proportion of private businesses increased from 60.1% to approximate 63.7% economic foreign

13 The draft "Report on plan for socio-economic development, defense and security for 5 years from 2016 to 2020" the People's Committee of Da Nang City, 9/2015.
investment increased from 11% to 12.8%, while the state economy fell 28.3% from 2010 to 23.5%. The reorganization and renewal of state enterprises has been strengthened, the majority of enterprises after equitisation operate efficiently, contribute positively to the economic development of the city.

- Breakthrough in the development of services, especially commerce and tourism services, the service production value is estimated to increase by 12.1%/year, 1.8 times years compare to 2010 until 2015, contribute to promoting growth and economic restructuring of the city. Commercial infrastructure rapidly develops according to plan with creating a system of markets, trade centers, supermarkets, business specialized streets. According to statistics, Danang currently has five commercial centers, 41 specialized supermarkets, 69 markets (2 big sized markets per 1,000 business households, 3 markets per 500 households). Danang has 54 commerce banks, 01 social policy bank, 01 finance company, 01 financial leasing company. Thriving for the foreign exchange services, financial consulting, investment brokerage, bid guarantees, payment guarantees, letters of credit (L/C) opening, the securities dealer, and electronic banking services such as home banking, phone banking, internet banking, etc.

- There is concentration to tourism, gradually affirmed as a key economic sector; invest in tourism infrastructure; increase tourism products quality, quantity and diversity of forms as a Ba Na - Suoi Mo tourist complex, Son Tra Peninsula, Ngu Hanh Son, Asia Park, Helio Center and fireworks events, international marathon, the sea - river forms of tourism, etc. There are 75 tourism projects have been implemented with 8.7 billion US dollars, many international brands bearing projects (coastal projects: Pullman, Intercontinental, Silver Shores, Fusion Maia, Hyatt Regency, Vinpearl Luxury, Vinacapital, etc; the project in the city center: Novotel, Mercure, Brilliant, etc) has put into operation, create a new look for visitors attraction and retention. Total tourist arrivals to the city in the period 2011 - 2015 was estimated at 16.4 million, up 20.1%/year, of which, 4 millions international visitors, an increase of 25.5%/year; income from tourism is estimated at nearly 40,000 billion, up 30.6% / year.

- Information and communications technology service develop with increasingly large scale, particularly in information technology revenue is estimated to increase by 24.1% / year, of which software export value was estimated to increase 26%/year, the main markets are the United States, Japan and the Eurozone countries. Currently, the city has 583 outlets with 93 post offices; 112 postal service points, average service radius reached 1.64 km, serving a population of 7,919 people reached/point. Fixed telephone density in 2015 was estimated at 15.5/100 people; mobile teledensity was estimated at 189/100 people; internet subscription rate is estimated at 26 subscribers/100 inhabitants; 100% villages and telecommunications infrastructure, many households used fixed telephone, mobile. Transport services quality
increases, revenue is estimated to increase by 22.6%/year. Da Nang International Airport is investing in upgrading, picked up 5 million passengers/year (2014). Financial services, banking, insurance develop in diversity; capital mobilisation increased by 14.2%/year; outstanding credit rose 10.1%/year. Educational and training healthy services quite developed, with the participation of many domestic and foreign enterprises, and gradually expanding the scope and scale of operations and diversification of products and services.

- Industrial production growing steadily and gradually developing in depth with the production value is estimated to increase by 10%/year. The industry internal structure positively transform, reduce the proportion of energy consumption industries, environmental pollution, low added value, such as food processing, textile - apparel - shoes, processing timber and forest products, etc. There is increasing proportion of modern, high-tech industries, high added value, such as manufacturing components, electrical appliances, electronics, information technology, engineering, etc. Processing industry continues to hold the leading role, supporting industry initially developed, accounting for over 25% of total production value. Some industrial projects of large scale, such as rubber, automobile assembly, electrical, electronic, milk, beer invested newly, expanded production such as radial tire manufacturing plant (Rubber Joint stock company), the project to expand the production of beer (VBL Danang company), Da Nang Milk plant (JSC Vietnam Dairy products), Vietnam automobile TCIE Ltd Company, etc, contributing to the formation of new products, create high added value, improve the industrial growth in the past time.

- Agriculture shifted towards restructuring, in-depth development and enhance the added value; initially formed specialized zone in rice cultivation; floriculture, safety vegetable, freshwater aquaculture with the high-yield, quality and economic efficiency; production value is estimated to increase by 4.5%/year.

- Marine economy is focused on development, in association with defense, maritime sovereignty. Technical infrastructure serving the maritime economy, such as ports, fishing ports, roads, coastal tourist areas was invested more efficiently, of which, seaport infrastructure, modern and large-scale container port in region. Cargo volumes through Danang port is estimated to increase by 14.5%/year, estimated at 6.5 million tonnes by the end of 2015.

- Foreign affair activities and foreign economic relations, domestic and international cooperation links has expanding more and more effectively. Have jointly organized many seminars and conferences to enhance cooperation, linking areas of transport, maritime economy, tourism, education, health, etc. Establishing coordination unit and fund for research and development of the central coastal provinces. Activities for friendship, exchange, people foreign affair have been strengthened, contributing to attracting investment resources,
improve the position of the city in domestic and worldwide. The mobilization of domestic and foreign capital to invest in social economic development is done quite well. Total development investment is estimated at VND 159,170 billion, up 9.4% / year.

- Managing and operating budgets are tight implementation, flexibility, efficiency. The revenues structure transferred positively, the revenues from the economic operation growing. The total state budget revenue in the period 2011 – 2015 is estimated at VND 58,233 billion, up 0.7%/year, of which domestic revenue (excluding land use fee) is estimated at VND 32,855 billion, up 11.2% year; total budget balance collection is estimated at VND 80,240 billion. Danang has restructured expenditure, ensuring to spend proper purposes, saving, for the cause of socio-economic development, national defense and security. Total local budget expenditure is estimated at VND 69,558 billion, down by 4.8%/year (14).

3.5.4 Limitations for the Quality of Growth and Shaping of Growth Model of Danang (15):

- Economic growth is quite good but in small-scale, low competitiveness, not consistant with the potential and advantages of Danang. Investment in production development is slower than infrastructure development, and no breakthroughs. It is not formed the modern service sector ranked as the regional and international level. Industrial production is in small-scale, no breakthrough, no major projects with a high technological density, highly added value; the proportion of raw and processed products is still large; key industries and supporting industries have not developed. Large-scale enterprises and key products have not created yet. Agricultural development with highly-yield technology is slow, without much innovation. Fishery economy face with difficulties. The number of coastal fishing vessels accounted for a large proportion, exploiting structure is not sustainable. Not to promote the role of the seaport city, transport terminals, transit, goods exchange of Central Vietnam, Highlands. Roles become the driving force to make very pervasive in Central Vietnam, Highlands remains limited.

- The implementation of the socio-economic development plan 2011-2015 has the limitations and weaknesses; almost targets are not met. Economic recovery and growth are slow, the quality of growth is not high; some sectors are not really sustainable development; no key industry, products, and enterprises in large scale; export market of the business is limited; role for driving and linking between the regions are weak and less pervasive; limitation on investment resources. Urban infrastructure is rapidly developing, but not synchronized. The quality of education and training, human resources has been uneven; culture development is not on par with the potentials and advantages of the city. The situation

14 The draft “Political Report of the Party Committee of the City of the session XX of the Delegate Congress XXI, the term 2015 – 2020”, Danang Party Committee

15 The draft “Report on plan for socio-economic development, defense and security for 5 years from 2016 to 2020” the People's Committee of Da Nang City, 9/2015
of social order and security, traffic safety emerged complicately. Some of building local
government capacity moved slowly.

- Implementing key projects invested by the central government under Resolution No. 33-
NQ/TW of the Politburo (IX), Conclusion 75-KL/TW and the decision of the Prime Minister
is slow, for example, Da Nang-Quang Ngai highways projects; Danang international air
station upgrading and expanding project; Lien Chieu seaport project and Da Nang - Quang
Ngai 2 way railway project; Danang university village projects; high-tech park project;
petroleum depots, arsenal and railway station relocation project out of the city, etc.

- The urban management is still inadequate. Reducing investment fund for social
development has impacted to the city's economic growth. The foreign direct investment
capital in Danang increase, but the implementation has been slow. There has not attracted
many high-tech and technology investment projects yet. Land use fee revenues were lower
compared with the previous period, revenues structure shift sustainably but not really solid.

4. Solutions to Enhance Economic Growth Danang

4.1 Construction and Improvement of Policies to Enhance the Competitiveness of the
City

- Review, amend and supplements policies to improve and strengthen the bussiness and
investment climate more liberal, transparent, facilitating for enterprises to develop equal and
fair competition; implementing transparency of the local government ’s guidelines, policies.

- To accelerate the reform of administrative procedures.

- Improving the quality of the evaluation of the legal documents of the People's Council,
People's Committee in Danang.

- Enhance the role of business associations in the city.

4.2 Improving the Quality of Planning and Urban Management

- Continue to research and innovate processes and methods of planning.

- Review and adjust the overall planning of socio-economic development, sector
development planing towards enhancing quality and efficiency.

- Review and supplement planings, plans, land use planing in the direction of efficient use
of land in socio-economic development.

- Regularly monitor and supervise the implementation of the overall planning of socio-
economic development, planning for developing sectors, areas, planning, land use planning,
and urban planning.

- To enhance the openness and transparency for all kinds of planning.

- Continue to implement and manage the effective implementation of the overall planning
of socio-economic development, architectural space and urban environment up to 2020;
- Implementation of the general planning of Da Nang up to 2030, with a vision to 2050 associated with the planning, development plans for the region and the directions concerned.

- Focusing on urban design, spatial organization of urban modernity, harmony with nature, creating diversified highlights of landscape; ensuring the standards of modern urban on transport land, residential land, and density of trees.

4.3 To Renew Mechanisms and Policies on Mobilization, Allocation and Use of Public Investment and Promote Domestic and Foreign Investment Attraction

- Mobilizing reasonably resources for a development investment associated with improving the efficiency of investment.

- Maintaining and gradually reducing the proportion of public investment with the possibility of budget in social investment capital total going with strengthening and expanding the scope of socialization.

- Fundamentally renewing distribution mechanisms and management of capital, overcoming spreading, dispersing and wasting investment, improving the efficiency of state investment.

- Complete and synchronize the provisions of investment decentralization and management, to ensure both consistent with general provisions and meet the development needs of the city.

- Enhance the responsibility of managing agencies, investors and other units involved in the process of basic construction investment, strengthen the competence and capability of the monitoring system for public investment, information publicity and transparency about the investment, encourage and facilitate community supervision for public investment projects

- To strengthen the close cooperation and unity among the agencies involved in the reception and evaluation of investment projects, to ensure good implementation of the "one stop one door mechanism" to promptly solve difficulties and obstacles to investment procedures, business registration, and capital access.

- Review, analyze and make a list of projects likely shift to other forms of investment such as BOT, BT, BOO, PPP, O & M, etc in order to reduce the investment pressures of budget.

- Implement uniform and consistent mechanisms to attract investment, combined with domestic investment with FDI, ODA and other assistant funds.

- Focus on mobilizing FDI for high-tech projects.

- Enhance capacity to control transfer pricing activities for FDI projects.

4.4 Restructuring Revenues and Strengthen Budget Management

- Focus on supporting enterprises in production and business development in order to create a sustainable source of revenue
- Review land and housing resource to take appropriate measures to exploit revenues in reality.
- Concentrating funds for key projects of the city, the loan payments due; ensuring regular expenditures.
- Improving the efficiently-implemented mechanisms and staffing autonomy and administrative expense for the state agencies and responsibility and accountability mechanisms for performing the tasks, organizational structure, staffing and financing of the public administrative units.
- Boost inspections, tax examination combined with inspecting and checking implementation of the pricing legislation.

4.5 Restructuring Enterprises, Improve the Quality of Private Businesses
- Continue to implement effectively plans for reorganization and renewal of State-owned enterprises managed by Danang in 2011-2015.
- Effectively implement national programs on the development, and improve the quality of private businesses.
- Maintain meetings and dialogues between city leaders and enterprises to timely catch and assist enterprises to overcome the difficulties and problems in the course of operation.
- Develop enterprises in the advantage sectors, in line with socio-economic development planning, sector development planning and economic restructuring of the city such as enterprise development in the field of tourism, trade, logistics, finance, banking, high-quality education and training, deep-specialized health, high-tech enterprises, information technology, supporting industry; developing agricultural enterprise with high-tech applications such as safe vegetable production, floriculture and ornamental plants, etc.
- Development of enterprises in both quantity and quality, focusing on development of quality; facilitating enterprises to actively participate in the value chain (production and distribution) of goods and services in the Danang economy and the country as a whole, creating jobs and improving the income of employees. Number of established enterprises increased on average 10%/year. From now to 2020, Danang have to increase the percentage of medium-sized enterprises, large enterprises, enterprises with the taxpayers over VND 500 billion/year; resolve 31,000 jobs annually. Total investment of the enterprises sector accounted for 65-70% of total development investment capital in Danang. Enterprise sector contributes about 75-85% of total budget revenues.\(^{(16)}\)

\(^{(16)}\) Decision No. 2156 / QD-UBND dated April 15, 2015 of the People's Committee of Da Nang City on approving the "Project for Economic Restructuring Danang up to 2020".
4.6 Continue to Promote the Moving of the Economic Structure towards Industry – Service Sectors, Promote Socialization, Cooperation, Joint Venture, and Association

- Continue to implement effectively and review, adjust service development project of Da Nang until 2015, with a vision to 2020, diversification of forms and quality improvement of services; focus on developing branches, services with competitive advantages such as transportation, banking, postal, telecommunications, tourism, etc.

- Promote the implementation of policies on health socialization, encourage investment in the health facilities according to the public private partnership form.

- Concentrate on directing the implementation of the restructuring of industrial production, priority for sectors and products with highly-added value, applying advanced technologies, clean technology, energy savings and efficiency, environmental protection, information technology products, supporting industry, processing industry for agriculture, forestry and fisheries.

- To enhance cooperation, joint ventures, associations with provinces and other cities on the basis of promoting the particular strengths to grow in the tourism, seafood processing, construction and effettively exploit of the seaport system; training and usage of human resources; links, support in the areas of investment, implementation of investment projects in planning nationwide and in region.

4.7 Improve the Quality of Human Resources to Facilitate Economic Restructuring, Growth Model Transformation

+ Implement fully and consistently Danang workforce development planning in the 2011-2020 period.

+ Continue implementation of Danang education and training development planning until 2020, Danang vocational training in 2011-2020 period, the national target programs on employment and vocational training in 2012-2015 period.

+ To develop high quality human resources and trained employee.

+ To increase investment in infrastructure, expanding the scale of training for key training institutions, key industries with the high quality standards achievement in accordance with international, regional and national standards.

+ To implement high-level vocational training plans according to international standards, create highly qualified labour to meet labour need of domestic and foreign enterprises.

+ To build policies to support for training high quality human resources for the units operating in the high-tech zone.

+ To build Danang University as the key institutions, speed up the establishment and operation of a number of key universities such as International University, Pacific - American University, UK – Vietnam University to focus on training high-quality human at all levels.
4.8. Develop Science and Technology Associated with Promoting Economic Restructuring and Transformation of Growth Model

- Create appropriate mechanisms, policies to promote the leverage role of science and technology in the process of economic restructuring associated with the transformation of growth model; attach the objectives and tasks of science and technology with the goals and tasks of socio-economic development.

- Powerfully and synchronously innovate organization, management mechanism, operational mechanism of science and technology, focusing on mechanism innovation of planning, budgeting, investing, and financing. Promote the implementation of mechanisms of State order for scientific and technological tasks.

- Prioritize the allocation of resources for the development of science and technology; focus on research and development of technology for foundation, production, high-tech.

- Encourage and support enterprises to invest in research and development, scientific and technological activities, especially in large-scale enterprises, units operating in high-tech parks, increasing transfer and master new technologies.

5. Conclusion

Danang is the image of the impressive growth of recent years including in infrastructure, economy, environment, and particularly administrative reform in Da Nang always considered a nationwide leading in building capacity of provincial competition. However, the selection of the economic growth model for Da Nang to continue to be the flagship of Central Vietnam and the whole country is a problem of current concern of municipal leaders, businesses, investors and the people in the locality.

The paper analyzes some limitations on growth model of the city over time and indicates Danang are still confused while selecting the model of economic growth in line with resources, geographical, economic, social features available in local: 1) Economic growth speed is high but small-scale, low competitiveness; 2) investment for production development increased more slowly than infrastructure and no breakthrough; 3) no more large projects with high technological density, with greater added value; 4) no major products, leading business to create the effect of supporting industries; 5) has not formed the modern service sector, regional level and internationally; 6) marine economy is not sustainable, not to promote available role of seaport city as a terminal for transport, transit, goods exchange of the Central Vietnam and Highlands and the East-West Economic Corridor; 7) not yet to become the center of financial investment of Central Vietnam – Highlands to create regional linkages and many other areas, that Danang can not exploit its full potentials.

The article also proposes measures to promote growth model of Danang matching available resources of the city and attract more resources from locals in the country and
foreign investors. Hopefully these suggestions will help shape growth model of Danang in the future.

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