

The Effect of Pangkal Balam Port Development on Employment and Tourism in Bangka Belitung Island Province

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Abstract. Ocean transportation plays a vital part for archipelagic nations. The Indonesian economy relies heavily on sea transportation because of the country's 17,000 islands and vast ocean. Given the indispensable significance of transportation for the economy, ocean transportation should be grown appropriately and accurately to help financial development. Due to recent shifts in the global economy, sea transportation is one of the most challenging aspects of transportation development. On Bangka Island in the Bangka Belitung Province is where you'll find Pangkal Balam Harbor. Hinterland ports can possibly deliver mining, farming, and agro-industry items. The Bangka Belitung provincial government's four-port development plan includes Pangkal Balam Port. In order to accelerate the region's development and economic expansion, the Provincial Government of the Bangka Belitung Islands will construct four loading and unloading ports for passengers on Bangka Island. Additionally, this development will impact employment growth and the tourism industry. The research method used is OLS regression with a research period from 2011 to 2022. The results show that Pangkal Balam Port Development has a significant and positive effect on employment and tourism in the Bangka Belitung Island province.

Keywords: development; pangkal balam port; employment; tourism

1 Introduction

Sea transportation has a strategic role in supporting national development in all fields, including to unite Indonesia which is full of diversity, both religious, ethnic, cultural, racial and linguistic diversity. In addition, sea transportation is also an important infrastructure in order to move the wheels of the Indonesian economy, especially in the 3T (frontier, outermost and underdeveloped) areas. An adequate connectivity infrastructure is required to connect the thousands of islands scattered throughout Indonesia, where people of various ethnicities, religions, races, and languages live. In addition to being a hub for inter-island connectivity, sea transportation is also a link and a vein that propels Indonesia's national economic growth throughout the country. [1]

Ocean transportation plays a vital part for archipelagic nations. The Indonesian economy relies heavily on sea transportation because of the country's 17,000 islands and vast ocean. Given the indispensable significance of transportation for the economy, ocean transportation should be grown appropriately and accurately to help financial development. Due to recent shifts in the global economy, sea transportation is one of the most challenging aspects of transportation

development. As a result, regional and international perspectives must be taken into consideration when planning for the growth of sea transportation. [2]

As required by Law No. 1, sea transportation makes a significant contribution to the national and regional economies. Law No. 17 of 2008 has evolved into a crucial supporter of national unity and integrity and a highly strategic issue for national insight. It is also worth noting that the value of the costs incurred is the lowest when compared to the costs of land and air transportation, so the contribution of sea transportation is becoming increasingly important. Additionally, sea transportation offers greater adaptability than other modes of transportation. Due to their location and natural conditions, ships can traverse terrain that two-wheeled vehicles or airships cannot. The Indonesian government benefits from sea transportation facilities, particularly in regions with ports. As a sea transportation node, the port becomes a facility for connecting other regions to conduct trading. [3]

The equivalent is valid for what was finished in the region of the islands of Bangka Belitung. Ocean transportation is an essential transportation for the Bangka Belitung Islands as an archipelagic region to interface with different territories. There are eight ports in the Bangka Belitung Islands, with five ports for passengers and goods and three special ports for goods. On Bangka Island are six of the eight ports, while on Belitung Island are two of them. Private and PELNI businesses operate water transportation in the Province of the Bangka Belitung Islands. The delivery line from the Area of the Bangka Belitung Islands serves the objections of Jakarta, Palembang, Tanjung Pinang, Surabaya, and Pontianak. The following are a number of active ports serving the Bangka Belitung Province's supply and demand chains. [4]

On Bangka Island in the Bangka Belitung Province is where you'll find Pangkal Balam Harbor. Hinterland ports can possibly deliver mining, farming, and agro-industry items. Tin, kaolin, quartz sand, granite, rubber, palm oil, and pepper are the primary commodities. There are a number of amenities at Pangkal Balam Port, including a parking lot, a passenger terminal, a 787-meter-long pier, and stacking facilities. The import-export of goods, inter-island trade, and passenger transportation to and from Tanjung Pandan and Jakarta by jetfoil or fast boat from Pangkal Balam Port. [5]

Pangkal Balam Port is included in the 4 (four) port development plan by the Bangka Belitung provincial government. The Provincial Government of the Bangka Belitung Islands will develop four loading and unloading ports and passengers on Bangka Island to accelerate the development and economic growth of the area. The four ports that will be developed for facilities and infrastructure on Bangka Island are Muntok and Tanjung Ular Ports in West Bangka Regency, Belinyu Port in Bangka Regency and Pangkalbalam Port in Pangkalpinang City. The scope of the development is reclamation and port development, deepening of port lanes, normalization of shipping and river flows as well as mining, ease of service and availability of investment information in the transportation sector and so on. The dredging of this port channel is very necessary to overcome sedimentation caused by mining which has an impact on the flood disaster [6]

With the development of the Pangkal Balam port, it can improve the economy of Bangka Belitung, especially in the export of commodities and natural products from Babylon. The cost of reclamation of the 100-hectare area has been carried out by a third party in collaboration with BUMD to become a container port and the provincial government is also ready to build other facilities besides port development that can be carried out by the Ministry of Transportation. In addition, the development of the Pangkal Balam Port is a regional initiative that is supported by land that is in accordance with the Pangkalpinang City Regional Spatial Plan (RTRW) which is intended for the port [7]

2 Literature Review

Sea Transportation

Any mode of transportation that makes use of ships to move people, goods, or animals from one port to another and is managed by a sea transportation company is referred to as "sea transportation." [8]

The activity or process of transporting people and goods over a short or long distance by sea using ship transportation facilities is known as "sea transportation." Port facilities serve as distribution service points and serve as the hub for sea transportation activities.[9]

A port is a location that is made up of land and/or water and has specific boundaries. It serves as a location for government and business activities, as well as a location for intra- and intermodal transportation, as well as a location for ships to dock, carry passengers, and/or load and unload goods. It is made up of terminals and ship berths that are equipped with facilities for shipping safety and security.[10]

The marine terminal facilities found in a port include a dock where ships can be moored for the purpose of loading and unloading goods, cranes for the purpose of loading and unloading goods, marine warehouses (transito) and storage places where ships unload, and warehouses where goods can be stored for a longer period of time while waiting for delivery to their destination or shipment. A port is an area of water that is protected from the waves. [11]

Employment

The acceptance of workers to perform tasks (jobs) or the provision of job opportunities so that they can accommodate process seekers is known as employment. In general, a company's labor absorption indicates how much labor is required to produce a product. The capacity to absorb work contrasts from one district to each other [12]

One of the goals of financial improvement is to create new jobs, especially in Indonesia, where the number of people working is growing faster than the number of jobs available. This growing financial improvement will increase labor absorption, which will have an effect on the supply of work in a region. The demand factor, which is influenced by the dynamics of monetary growth, and the deliver factor, which is determined by the organization's population structure, both have an impact on the state of the workforce.) [13]

Tourism

Burkart defines tourism as the temporary and brief movement of individuals to locations other than their usual residence and place of employment, as well as the activities they engage in while there. A person can travel in a variety of ways for a variety of reasons. [14]

According to Spillane, a trip is considered a tourist trip if it meets three requirements, namely: - It must be temporary. - Must be voluntary, not under coercion. - Do not work in the nature of earning money or wages [15]

The broad definition of tourism is a brief trip from one location to another, whether solo or in a group, with the purpose of achieving harmony or balance with the environment in terms of science, social, cultural, and natural factors. [15]

3 Research Methods

Inferential statistics and regression analysis were utilized in this study as methods of data analysis. According to the level of explanation of this research, associative research is the research method. Research that aims to ascertain the relationship between two or more variables

is known as associative research. As indicated by the kind of information and investigation utilizing quantitative information types [16]

The examination configuration utilized in this study was to dissect time series information utilizing illustrative exploration examination or speculation research through clarifications. An analytical tool for testing the hypothesis to explain the causal relationship between variables is known as explicatory research. In order to describe a generalization or explain the relationship between two variables, the explanatory format uses inferential statistics for hypothesis testing (for hypothesis testing) [17]

4 Analysis and Discussion

Hypothesis Test Results

a. The Effect of Pangkal Balam Port Development On Employment In Bangka Belitung Island Province

Table 1. Estimation Regression Model 1 Results

Variable Dependen : Ln PangkalBalam Port				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	21.69192	3.337554	6.499347	0.0000
Ln_Employment	0.936946	0.377837	2.479763	0.0172
R-Squared		0.727712		
Adjusted R-squared		0.706943		

Source: Data processed Eviews 10

The calculation results obtained by a simple linear regression table, statistically significant results show that the probability value of Pangkalbalam port development is smaller than (0,0172 0,05), allowing one to draw the conclusion that the Pangkalbalam port development variable has a significant and positive effect on employment based on the findings of Table 1. In economics, "significant" means that the hypothesis of the Pangkalbalam port's development can be convincingly and meaningfully proven to affect employment. Despite the fact that a positive understanding indicates that employment rises in tandem with port development at Pangkalbalam.

The value of R-Squared = 0,727712 indicates the magnitude of the influence that the development of the Pangkalbalam port has on employment. This indicates that the magnitude of the influence that the development of the Pangkalbalam port has on employment is 72,77 percent, while the remaining 27,23% is influenced by other factors that are not included in the model that was studied.

b. The Effect of Pangkal Balam Port Development On Tourism In Bangka Belitung Island Province

Table 3. Estimation Regression Model 2 Results

Variable Dependen : Ln PangkalBalam Port				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	58.29782	20.26832	2.876302	0.0063
Ln_Tourism	5.725908	2.294562	2.495426	0.0166
R-Squared	0.629121			
Adjusted R-squared	0.608386			

Source: Data processed Eviews 10

It is possible to draw the conclusion that the variable of Pangkalbalam port development has a significant and positive effect on tourism based on the results from Table 1. Based on the results of calculations obtained by a simple linear regression table, statistically significant results show that the probability value of Pangkalbalam port development is smaller than (0,0166 0,05). In economics, "significant" means that the hypothesis of the development of the Pangkalbalam port has been convincingly and meaningfully demonstrated to have an effect on tourism. Nevertheless, there is a consensus that the expansion of the Pangkalbalam port is accompanied by an increase in tourism.

The value of R-Squared = 0,629121 demonstrates the magnitude of the impact that the development of the Pangkalbalam port has on employment. This indicates that the development of the Pangkalbalam port has a 62,91 percent impact on tourism, while the remaining 37,09 percent is influenced by other factors that are not included in the model that was examined.

5 Conclusion

The results of the study show that the development of the Pangkal Balam Port in Pangkalpinang provides a very meaningful and positive contribution to the increase in the tourism sector and the employment sector with the large number of tourist visits both domestic and foreign as well as the creation of employment opportunities that are able to absorb a significant workforce in the province of the Bangka Belitung Islands.

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References

- [1] S. Sunarto, "Evaluasi Kemanfaatan Kegiatan Pembangunan Sektor Transportasi Laut di Kawasan Barat Indonesia," *J. Penelit. Transp. Laut*, vol. 17, no. 2, 2020.
- [2] P. C. Susanto, Y. Pahala, and T. M. Setyowati, "Konektivitas Pelayaran Perintis Sebagai Bagian Sistem Distribusi Logistik Dalam Mendukung Keberhasilan Tol Laut," *J. Transp. Logistik, dan Aviasi*, vol. 1, no. 1, 2021.
- [3] L. D. Adenanthera, I. Mafruhah, and I. Susilowati, "Peran Transportasi Laut Pada Poros

- Maritim Dalam Pengurangan Disparitas Antar Wilayah Di Indonesia,” *Menu. Ekon. Lokal Bukan Spt. Cendawan di Musim Hujan*, no. 1, 2018.
- [4] J. Noer, K. Effendy, Ngadisah, and S. Lukman, “Analisis Implementasi Kebijakan Pengembangan Kawasan Industri Terpadu Pelabuhan Tukak Sadai Di Kabupaten Bangka Selatan, Provinsi Kepulauan Bangka Belitung,” *PAPATUNG J. Ilmu Adm. Publik, Pemerintah. dan Polit.*, vol. 2, no. 3, 2020.
- [5] A. Khusyairi and E. S. Hisyam, “Analisis kinerja pelayanan operasional peti kemas di pelabuhan pangkalbalam kota pangkalpinang,” *J. Fropil*, vol. 4, no. 2, 2016.
- [6] N. F. Dwitama, A. Fadillah, and S. Manullang, “Desain Model Fasilitas Dermaga Penumpang: Sebuah Konsep Berbasis Standar Pelayanan Minimum,” *J. Penelit. Transp. Laut*, vol. 21, no. 1, 2019.
- [7] E. Buchari, M. Agustien, E. Kadarsah, H. Fitriani, O. Firdaus, and W. Jonris, “Kajian Pengembangan Pelabuhan Pangkal Balam Berdasarkan Demand Pull dan Supply Push,” *J. Rekayasa Sipil dan Lingkung.*, vol. 4, no. 2, 2021.
- [8] D. Faturachman, “Analisis Transportasi Penyeberangan Laut Antar Negara Asean (Indonesia , Malaysia , Thailand) Studi Kasus : Penyeberangan Antar Negara Dipulau Sumatera (Belawan – Penang – Phuket),” *J. Sains dan Teknol.*, vol. 7, no. 1, 2017.
- [9] A. E. Handoko, A. Setyawati, and Y. Pahala, “Pertumbuhan Perusahaan Transportasi Laut di Indonesia,” *J. Manaj. Transp. Logistik*, vol. 7, no. 1, 2020.
- [10] H. Soewedo, “Pengertian Pelabuhan,” *Экономика Региона*, 2015.
- [11] S. Fajar, “Analisis Faktor Yang Mempengaruhi Pembangunan Pelabuhan,” 2020.
- [12] M. P. Todaro and S. C. Smith, “Economic Development, Twelfth edn.,” *Pearson Addison Wesley, Bost.*, 2014.
- [13] K. Amadeo, “Inflation Targeting Definition and How It Works,” *the balance*, 2020. .
- [14] M. Gren and E. H. Huijbens, “Tourism theory and the earth,” *Ann. Tour. Res.*, vol. 39, no. 1, 2012.
- [15] D. P. Stergiou and D. Airey, “Understandings of tourism theory,” *Tour. Rev.*, vol. 73, no. 2, 2018.
- [16] P. D. Sugiyono, *metode penelitian kuantitatif, kualitatif, dan R&D*. 2016.
- [17] Bungin Burhan, *Metodologi Penelitian Kualitatif: Aktualisasi Metodologi Ke Arah Ragam Varian Kontemporer*. 2019.