

## IMPACT ANALYSIS OF UNDERDEVELOPED SECTORS IN BELITUNG DISTRICT

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### Abstract

*Economic growth in Belitung Regency has increased from 2018-2022, this is influenced by various indicators, one of which is the potential seen from the economic sectors in a region, which is included in competitive advantage rather than non-competitive advantage by being divided into leading sectors, potential sectors or underdeveloped sectors. The aim is to observe the shifting pattern of each economic sector in the Belitung district area by looking at the availability of facilities for the general public and determining the leading sector and also the underdeveloped sector. This research focuses on the underdeveloped sector to analyze the right development planning solution in an effort to overcome the impact on the community. The methods we used were Location Quotient or (LQ), Shift Share, Klasen Typology and Scalogram. The results of the research conducted there are leading and underdeveloped sectors in Belitung Regency. Comparative superior and comparative non superior sectors. Belitung Regency has a fairly diverse economic sector, but some sectors are still experiencing underdeveloped conditions. The factors causing the underdeveloped sector in Belitung include mining, which has great potential for tin mining, but has experienced a very significant decline in prices and others. This has a negative impact on the economic development of a country such as regional inequality and poverty.*

**KEYWORD:** *Development, Underdeveloped Sector, Impact*

### Introduction

Development in Bangka Belitung Province in 2022 has increased. In increasing this development, one of the indicators that can be seen is the value of economic growth. the level of economic growth can be a reference point in seeing the success of the development of an area under study. In economic growth in Belitung Regency from the last 5 years, namely 2018 to 2022, there has been a significant increase. However, based on the Central Statistics Agency (BPS). Economic growth, namely GRDP in Belitung Regency, ranks 4th from 2018- 2022 after Pangkal Pinang Regency, West Bangka Regency and Bangka Regency. However, when compared to the regencies on the island of Belitung, Belitung Regency is in the first position. This Belitung Regency has many High regional potential for the economy is closely related to the level of economic development if utilized optimally, many sectors can still be developed and improved.

Economic development has a wide range, it is influenced by various indicators, one of which is the potential of a region such as in economic sectors with calculations from the value of district-level GRDP and provincial-level GRDP, it is also expected that each sector is included in competitive advantage rather than non-competitive advantage by being divided into several sectors, including the leading sector, potential sectors and also underdeveloped sectors. When the regional leading sector is optimized, the empowerment of the potential that exists in a region continues to run as a determinant of the priority scale in regional development. But not only that, the underdeveloped sector is also very important to pay attention to as an effort to minimize economic problems such as poverty, unemployment inequality and even other economic problems (Valeriani & Wulandari, 2022). For this reason, this research aims to observe the pattern of change and also the shift of each sector in the economy in Belitung Regency, see the availability of facilities for the general public, and determine the leading sector and also the underdeveloped sector and then analyze the impact that occurs from the underdeveloped sector. This research focuses on underdeveloped sectors to be used as solutions and considerations for policy formulation and development planning. In an effort to overcome and minimize the impact that occurs in the backward sectors in the Belitung district so that these sectors can become potential that can be utilized by the Belitung district, although not now but later in the future.

Sector Theory of Growth is one of the theories in this research proposed by Clark-Fisher. Clark-Fisher stated that there was an increase in per capita income which was followed by a decrease in the ratio of resources used, such as in the agricultural sector which became the Primary Sector, the manufacturing industry sector which became the Secondary Sector, and the service sector. namely the Tertiary Sector. The increasing growth of the economic sector when changes occur is called Sector Shift. Then, Alfred Weber's Minimum Cost Location Theory from Alfred Webers is also a supporting theory in this research. where this theory states that location selection is based on the principle of cost minimization. Weber said the location of a business depends on labor and total transportation costs, the value of which must be a minimum by adding the two together. The maximum profit level is identical to the total cost of transportation and labor which has a minimum value.

The problem formulation in this research is the results of the calculation of LQ, Shift Share, Klasen Typology and Scalogram of the sectors in Belitung district; How has the underdeveloped sector evolved over the years; what are the impacts of underdeveloped sectors in Belitung district and what is the role of the government in overcoming the impacts of the underdeveloped sector in Belitung district. The analysis objectives of the observations and calculations carried out are, knowing the leading and underdeveloped sectors in Belitung Regency using the LQ, Shift Share, Klassen Typology and scalogram methods; able to know the impact caused by the existence of underdeveloped sectors and knowing the role played by the government in overcoming the problems of underdeveloped sectors in the Belitung district.

## Method

### Location Quotient (LQ)

LQ analysis is used as an analytical tool to determine the levels of economic sectors in the region by utilizing base and non-base sectors. This analytical tool calculates the output share comparison of certain sectors in one region which is then compared to other regions with wider coverage. The result of LQ analysis will produce the leading sector of each region. If the result of the calculation of  $LQ > 1$  then the sector is said to be basic and can export the results of its potential, if the amount of  $LQ = 1$  then it shows that the sector, has the same potential as similar or similar sectors in the region or region, which can be said to be enjoyed only by the region itself and if  $LQ < 1$  then the region cannot meet the needs of the region itself and the need to import to meet its needs.

Where:

$$LQ = \frac{S_i / N_i}{S / N} = \frac{S_i / S}{N_i / N}$$

$S_i$  = total production of commodity X in Belitung Regency

$S$  = total production of commodities in Bangka Belitung Province

$N_i$  = total production of commodity X in Belitung Regency.

$N$  = total production of commodity X in Bangka Belitung Province

### Shift Share Analysis

The Shift Share analysis tool is basically needed to find out any changes in the economic structure of the region which is then compared with the economic structure of a wider scope that can be provincial or even national or can be said to be the reference. Changes in the development performance of a region against the national can be seen from:

1. National economic growth
2. Shifting proportions
3. Differential Shift Share Formulation:

- Classic Shift Share Analysis

#### a. National Share

(Nij):  $N_{ij} = E_{ij} \times r_n$

Effect of national economic growth

#### b. Proportional Shift

(Mij):  $M_{ij} = E_{ij} (r_{in} - r)_{in}$

Influence of industry mix

c. **Differential Shift**(Cij):  $C_{ij} = E_{ij} (r_{ij} - r_{in})$ 

Effect of competitive advantage

d. **Change in GRDP (Dij):** $D_{ij} = N_{ij} + M_{ij} + C_{ij}$  or  $D_{ij} = E_{ij}^* - E_{ij} \text{ Real}$ 

impact of regional economic growth

- E-M Shift Share Analysis  $C_{ij} = (E_{ij} - E_{ij}') + (C_{ij}' + A_{ij})$ - Arcelus Shif Share Analysis  $C_{ij} = R_{ij} + R_{lij}$ 

Where:

$E_{ij}$  is employment in sector  $i$  of region  $j$ .  $E_{in}$  is national employment in sector  $i$ .  $R_{ij}$  is the growth rate of sector  $i$  in region  $j$ ,  $r_{in}$  is the growth rate of sector  $i$  at the national level.  $I$  of the national economy. And  $r_n$  is the national economic growth rate. An asterisk (\*) indicates data at the end of the analysis year.

**Klasen Typology**

This analytical tool is intended to determine the pattern and structure of economic growth of each region. The Klassen typology breaks down a region based on two indicators, namely the vertical axis for economic growth and the horizontal axis for the average per capita income.

**Scalogram Analysis**

Scalogram analysis is an analytical tool that aims to determine the growth center of an area based on the facilities and infrastructure it has, which can later be seen as a hierarchy of the center point of growth and service activities of an area or region. With the assumption that the high rating owned by a region illustrates that the region is the center point of economic growth.

**Result AND Discussion****Data Analysis Results**

In the analysis of calculations carried out using several calculation methods of LQ, SS, Klassen Typology and also Scalogram by looking at constant price GRDP in Belitung Regency to determine the leading sector and also how the impact caused by the results of the calculation of these analyses including:

**LQ (Location Quotient) Analysis**

The LQ analysis aims to see the existence of superior or basic and non- superior or non-basic sectors in the economic sectors in Belitung Regency. This LQ analysis is an answer to the question of whether these sectors have a comparative advantage or do not have a comparative advantage. Therefore, it is explained in the table below from 2018-2022 (B. P. S. K. Belitung, n.d.):

**Tabel 1. LQ Analysis Results**

No	Sektor	2018	2019	2020	2021	2022
1	Pertanian, Kehutanan, dan Perikanan	1.3964681	1.394675	1.385832	1.422077	1.392922
2	Pertambangan dan Penggalian	0.6889451	0.684194	0.66557	0.650761	0.634344
3	Industri Pengolahan	0.5516976	0.510358	0.541363	0.535179	0.548139
4	Pengadaan Listrik dan Gas	1.670994	1.5514	1.459786	1.42637	1.399285
5	Pengadaan Air, Pengelolaan Sampah, Limbah dan Daur Ulang	1.6945124	1.704402	1.753816	1.750667	1.740712
6	Konstruksi	1.4194268	1.436539	1.411117	1.414346	1.39929
7	Perdagangan Besar dan Eceran, Reparasi Mobil dan Motor	0.7911169	0.795199	0.757547	0.754777	0.767596
8	Transportasi dan Pergudangan	1.6206642	1.603632	1.522851	1.507515	1.677128
9	Penyediaan Akomodasi dan Makan Minum	1.458496	1.456815	1.341086	1.336494	1.365441
10	Informasi dan Komunikasi	1.5812778	1.614399	1.638432	1.620699	1.609659
11	Jasa Keuangan dan Asuransi	1.2751123	1.294835	1.281537	1.314954	1.304124
12	Real Estat	0.987833	1.002085	0.968768	0.949616	0.940963
13	Jasa Perusahaan	1.3042003	1.323857	1.223723	1.214319	1.321444
14	Administrasi Pemerintahan, Pertahanan dan Jaminan Sosial Wajib	1.1197216	1.13041	1.109857	1.10637	1.091756
15	Jasa Pendidikan	0.7698722	0.775542	0.756435	0.752846	0.741896
16	Jasa Kesehatan dan Kegiatan Sosial	1.5595747	1.547508	1.546422	1.526487	1.517041
17	Jasa Lainnya	1.0735371	1.06193	0.976319	0.977192	1.003866

*Bps, data processed*

For LQ value  $> 1$ , it is included in the comparative advantage which means that the output produced by the regional sectors is able to meet the needs of the region and can be exported outside the region marked in **green** in the table. Sectors that include comparative advantage are Agriculture, Forestry and Fisheries, Electricity and Gas Procurement, Water Procurement, Waste Management, Waste and Recycling, Transportation, Warehousing, Construction, Provision of Accommodation, Information and Communication, Financial and Insurance Services, Corporate Services, Government Administration, Defense and Compulsory Social Security, Health Services and Social Activities. As for the LQ value  $< 1$ , it does not include comparative advantage, this means that the output produced has not been able to meet the needs of the region, marked in **yellow**. Economic sectors that include non- comparative advantage are Mining, Quarrying, Manufacturing Industry, Wholesale and Retail Trade, Car and Motorcycle Repair and Educational Services.

However, there are 2 sectors, namely the real estate sector and the other services sector with the years 2018-2022 having or belonging to comparative advantage and also non-comparative advantage. In the real estate sector in 2019, it is included in the comparative advantage but in the years before and after, namely 2018, 2020, 2021 and 2022, it includes non-cooperative advantages, while for other service sectors in 2018, 2019 and 2022, it includes comparative advantages but in 2020 and 2021 it is classified as non-comparative advantages.

### Shift Share Analysis

The shift share aims at understanding the comparison in grouping of developing regions in the Belitung Regency area with an economic growth that occurred in the Bangka-Belitung province. In this shift share there are 3 approaches, namely:

#### 1). Classic Shift Share Analysis

The classic Shift Share aims to see the economic growth rate of the Belitung Regency and Bangka Belitung Province. There is a National Growth Component (Nij), Industry Mix (Mij), Competitive Advantage (Cij) and also the Total of GRDP (Dij) the results are obtained from the sum of Nij, Mij and Cij. Can be seen in the table below:

**Tabel 2.** Classic Shift Share Analysis Results

	Sektor Industri	Komponen	Komponen	Komponen	PDRB
		Pertumbuhan	Bauran	Keunggulan	
		Nasional	Industri	Kompetitif	
		(Nij)	(Mij)	(Cij)	(Dij)
1	Pertanian, Kehutanan, dan Perikanan	17293581,79	4391072,031	2898446,177	24583100
2	Pertambangan dan Penggalian	5846494,851	-6651018,623	-3348176,228	-4152700
3	Industri Pengolahan	8398074,91	-3760777,229	983602,3185	5620900
4	Pengadaan Listrik dan Gas	106523,8736	88694,14709	-174718,0207	20300
5	Pengadaan Air, Pengelolaan Sampah, Limbah dan Daur Ulang	19472,88361	15422,26322	10003,85316	44900
6	Konstruksi	8234457,676	-2192869,215	339211,5392	6370800
7	Perdagangan Besar dan Eceran, Reparasi Mobil dan Motor	7605793,402	2240474,958	-958370,36	8887900
8	Transportasi dan Pergudangan	4229088,069	707673,3374	2393138,594	7329900
9	Penyediaan Akomodasi dan Makan Minum	2273386,822	3952168,352	-1277455,174	4948100
10	Informasi dan Komunikasi	2266506,474	9483636,913	1207356,612	12957500
11	Jasa Keuangan dan Asuransi	1549524,974	-228517,4985	656292,5248	1977300
12	Real Estat	2171724,866	1696246,845	-721571,7107	3146400
13	Jasa Perusahaan	228959,1005	-176260,083	69800,98257	122500
14	Administrasi Pemerintahan, Pertahanan dan Jaminan Sosial Wajib	4111789,954	-520128,3026	-294361,6316	3297300
15	Jasa Pendidikan	1281662,974	177256,8143	-249419,7886	1209500
16	Jasa Kesehatan dan Kegiatan Sosial	1274353,945	2280839,847	-144493,7918	3410700
17	Jasa Lainnya	528207,7989	216994,4252	-270542,2241	474700
	PDRB	67419506,35	11720849,98	12829693,65	91970049,98

The results of the classic Shift share analysis that has been carried out obtained that the majority of existing sectors have a GRDP value (+) there is 1 sector that has a sign (-), namely the mining, quarrying sector. However, we focus on the competitive advantage component (Cij) which is worth (+), namely in the Agriculture, Forestry and Fisheries, Processing Industry, Water Procurement, Waste Management, Waste and Recycling, Construction, Transportation and Warehousing, Information and Communication, Financial and Insurance Services and Corporate Services with the calculation that is the *district sector in the initial year x (percentage of sectors in the district - percentage of sectors in the province)*. As for sectors that do not have a competitive advantage, namely sectors with a value of (-) are the Mining and Quarrying Sector, Electricity and Gas Procurement, Wholesale and Retail Trade, Car and Motorcycle Repair, Accommodation and Drinking Food Provision, Real Estate, Government Administration, Defense and Compulsory Social Security, Education Services, Health Services and Social Activities and Other Services. It can be concluded that in the 2018-2022 range in Belitung Regency, sectors that have a competitive advantage mean that the ability of sectors that have a level superior to non-competitive sectors is characterized by the order of economic sectors, namely 1,3,5,6,8,10,11 and 13.

#### 2). Esteben-Marquillas (E-M) Shift Share Analysis

In the E-M Shift Share Analysis is an analysis by showing the value of the competitive advantage of each sector. Belitung Regency in 2018-2022 sees the value of Cij (value of competitive advantage). The following data are:



**Tabel 3.** shift share analysis (E-M) Results

	Sektor/Industri	Yij	rij-rin	Eij'	Cij'	Eij-Eij'	Aij	Cij'+Aij	Cij
		1	2	3	4	5	6	7	8
1	Pertanian, Kehutanan, dan Perikanan	1613651	1,796203874	1155522,999	2075554,886	458128,0015	822891,2909	2898446,177	3356574,179
2	Pertambangan dan Penggalian	545532	-6,137451566	791836,7158	-4859859,492	-246304,716	1511683,264	-3348176,228	-3594480,943
3	Industri Pengolahan	783618	1,255206387	1420375,912	1782864,916	-636757,912	-799262,3979	983602,3185	346844,4066
4	Pengadaan Listrik dan Gas	9921	-17,6109284	5937,184688	-104559,3345	3983,815312	-70158,68623	-174718,0207	-170734,2054
5	Pengadaan Air, Pengelolaan Sampah, Limbah dan Daur Ulang	1817	5,505697944	1072,28487	5903,676605	744,7151298	4100,176559	10003,85316	10748,56829
6	Konstruksi	768351	0,428465036	541310,7488	231932,7297	227040,2512	97278,80948	329211,5392	556251,7903
7	Perdagangan Besar dan Eceran, Reparasi Mobil dan Motor	709691	-1,35040512	897074,7729	-1211414,366	-187383,773	253044,0063	-958370,36	-1145754,133
8	Transportasi dan Pergudangan	394613	6,064520413	243488,4436	1476640,636	151124,5564	916497,9573	2393138,594	2544263,15
9	Penyediaan Akomodasi dan Makan Minum	212128	-6,022095969	145442,98	-875871,5834	66685,02003	-401583,5903	-1277455,174	-1210770,154
10	Informasi dan Komunikasi	211486	5,708919798	133743,7336	763532,2483	77742,26644	443824,364	1207356,612	1285098,879
11	Jasa Keuangan dan Asuransi	144585	4,539146694	113390,0101	514693,8894	31194,98992	141598,6354	656292,5248	687487,5147
12	Real Estat	202642	-3,56082012	205137,9142	-730459,2121	-2495,91417	8887,501377	-721571,7107	-724067,6249
13	Jasa Perusahaan	21364	3,267224423	16380,91991	53520,14161	4983,080087	16280,84096	69800,98257	74784,06266
14	Administrasi Pemerintahan, Pertahanan dan Jaminan Sosial Wajib	383668	-0,767230083	342645,8774	-262888,225	41022,12259	-31473,40653	-294361,6316	-253339,509
15	Jasa Pendidikan	119591	-2,085606681	155338,7666	-323975,5693	-35747,7666	74555,78076	-249419,7886	-285167,5551
16	Jasa Kesehatan dan Kegiatan Sosial	118909	-1,215162786	76244,50402	-92649,48395	42664,49598	-51844,30781	-144493,7918	-101829,2958
17	Jasa Lainnya	49296	-5,488117171	45919,23326	-252010,1325	3376,76674	-18532,09153	-270542,2241	-267165,4573
	PDRB	6290863							

The shift share analysis (E-M) stated that the economic sectors included in the competitive advantage and specialization are Agriculture, forestry and fisheries, processing industry Water supply, waste management, waste and recycling, construction, transportation and warehousing, information and communication, financial services and insurance, corporate services.

### 3). Arcelus Shift Share Analysis

SS Arcelus analysis is a classic shift share conversion, which calculates the value of Cij which includes regional growth (Rij) and regional industry mix (Rijj). When the Arcelus shift share value is positive, it means that the economic sector has high economic potential. The sectors that have high economic potential are agriculture, forestry and fisheries, processing industry, water supply. Waste management, waste and recycling, Construction, Transportation and warehousing, information and communication, financial services and insurance, and corporate services. There are 8 sectors that have high performance and potential. In previous research, namely in the journal (Toifatun Najah, n.d.) related to testing using arcelus shift share analysis. Can be seen in the table below:

**Tabel 4.** Arcelus Shift Share Analysis Results

	Sektor/Industri	Rij	Rijj	Cij
		1	2	3
1	Pertanian, Kehutanan, dan Perikanan	3290907,463	-392461,286	2898446,177
2	Pertambangan dan Penggalian	1112567,296	-4460743,524	-3348176,228
3	Industri Pengolahan	1598123,959	-614521,6404	983602,3185
4	Pengadaan Listrik dan Gas	20233,05717	-194951,0779	-174718,0207
5	Pengadaan Air, Pengelolaan Sampah, Limbah dan Daur Ulang	3705,620893	6298,252271	10003,85316
6	Konstruksi	1566988,178	-1237776,639	329211,5392
7	Perdagangan Besar dan Eceran, Reparasi Mobil dan Motor	1447355,97	-2405726,33	-958370,36
8	Transportasi dan Pergudangan	804780,505	1588358,089	2393138,594
9	Penyediaan Akomodasi dan Makan Minum	432617,4732	-1710072,647	-1277455,174
10	Informasi dan Komunikasi	431308,1675	776048,4449	1207356,612
11	Jasa Keuangan dan Asuransi	294869,1232	361423,4016	656292,5248
12	Real Estat	413271,5625	-1134843,273	-721571,7107
13	Jasa Perusahaan	43570,10719	26230,87538	69800,98257
14	Administrasi Pemerintahan, Pertahanan dan Jaminan Sosial Wajib	782459,0847	-1076820,716	-294361,6316
15	Jasa Pendidikan	243895,9319	-493315,7205	-249419,7886
16	Jasa Kesehatan dan Kegiatan Sosial	242505,0494	-386998,8412	-144493,7918
17	Jasa Lainnya	100535,106	-371077,33	-270542,2241

### Klassen Typology Analysis

The Klassen Typology aims to illustrate the structure of economic growth in a region by knowing the LQ and Shift Share values where the calculation results are included in the leading sector, potential sector and underdeveloped sector.

Tabel 5. Klassen Typology Analysis Results

Index	LQ > 1	LQ < 1
SS (Cij +)	Sektor Unggulan: 1. Pertanian, Kehutanan dan Perikanan 5. Pengadaan Air, Pengelolaan sampah, Limbah dan Daur ulang 6. Konstruksi 8. Transportasi dan pergudangan 10. Informasi dan Komunikasi 11. Jasa Keuangan dan Asuransi 13. Jasa Perusahaan	Sektor Potensial: 3. Industri Pengolahan
SS (Cij -)	Sektor Potensial: 4. Pengadaan Listrik dan Gas 9. Penyediaan akomodasi dan makan minum 14. Administrasi Pemerintahan, Pertahanan dan jaminan sosial wajib 16. Jasa kesehatan dan kegiatan sosial 17. Jasa Lainnya	Sektor Terbelakang: 2. Pertambangan dan penggalian 7. Perdagangan besar dan eceran, reparasi mobil dan motor 12. Real Estat 15. Jasa Pendidikan

- The leading sectors in Belitung Regency are Agriculture, Forestry and Fisheries, Water Supply, Waste Management and Recycling, Construction, Transportation and Warehousing, Information and Communication, Financial Services and Insurance and Corporate Services. As can be seen in Numbers 1,5,6,8,10,11 and 13.

- Potential Sectors are sectors that allow it to become a leading sector, namely Manufacturing Industry, Procurement of electricity and gas, Provision of accommodation and eating, Government administration, defense and compulsory social security, health services and social activities and other services such as numbers 3, 4, 9, 14, 16 and 17.

- Underdeveloped Sectors are economic sectors that have slow growth and development, categorized as relatively underdeveloped sectors, namely Number 2,7,12,15.

### Scalogram Analysis

Scalogram analysis is seen from the presence of facilities. This Belitung Regency consists of 5 sub-districts. Each of these sub-districts can be found for the completeness of its facilities, so we can find out the ability of each region to provide services to the community such as the availability of facilities as the growth center of an area. The results of the scalogram analysis carried out in Belitung Regency with different levels of each sub-district, for example, the sub-district with the highest level of facilities consisting of education, places of worship, health and transportation will be categorized as a superior sub-district while on the contrary for the sub-district with the lowest level in the availability of facilities it will be declared as a backward sub-district. Belitung Regency is divided into Membalong, Tanjung Pandan, Badau, Sijuk, and Selat Nasik sub-districts. The results of the calculation later we use the latest year data, namely in 2020 (K. Agama Belitung Regency, 2020) by looking at the population of each sub-district, namely:

Tabel 6. Scalogram Analysis Results

JUMLAH PENDUDUK, FASILITAS EKONOMI DAN SOSIAL DI Masing-Masing Kecamatan di KABUPATEN BELITUNG TAHUN 2020																	
Kecamatan	jumlah penduduk	pendidikan							tempat ibadah	kesehatan		transportasi			jumlah fasilitas	jumlah unit	
		SD	TK	pesantren	SMP	SMU	SMK	SLB		puskesmas	Rumh sakit	bandara	terminal	pelabuhan			
Membalong	30,00	30	8	2	5	1	0	0	55	2	0	0	0	0	7	110	
Tanjung pandan	257,00	46	28	5	12	5	5	1	172	3	1	1	1	2	13	295	
Badau	32,00	22	11	0	3	0	1	0	34	1	0	0	0	0	6	78	
Sijuk	73,00	17	4	2	4	1	1	0	52	2	0	0	0	0	7	90	
Selat Nasik	47,00	7	1	0	2	0	1	0	9	1	0	0	0	0	6	27	
jumlah tipe		5	5	3	5	3	3	1	5	5	1	1	1	2			
jumlah unit		122	52	9	26	7	8	1	322	9	1	1	1	2			
HASIL ANALISIS SKALOGRAM KABUPATEN BELITUNG TAHUN 2020																	
Kecamatan	Jumlah penduduk	pendidikan							tempat ibadah	kesehatan		transportasi			Jumlah fasilitas	Jumlah unit	rangking
		SD	TK	pesantren	SMP	SMU	SMK	SLB		puskesmas	Rumh sakit	bandara	terminal	pelabuhan			
Tanjung pandan	257,00	46	28	5	12	5	5	1	172	3	1	1	1	2	13	295	1
Membalong	30,00	30	8	2	5	1	0	0	55	2	0	0	0	0	7	110	2
Sijuk	73,00	17	4	2	4	1	1	0	52	2	0	0	0	0	7	90	3
Badau	32,00	22	11	0	3	0	1	0	34	1	0	0	0	0	6	78	4
Selat Nasik	47,00	7	1	0	2	0	1	0	9	1	0	0	0	0	6	27	5
jumlah tipe		5	5	3	5	3	3	1	5	5	1	1	1	2			
jumlah unit		122	52	9	26	7	8	1	322	9	1	1	1	2			

From the observation results, it is stated that the sub-district that has the highest population is Tanjung Pandan by 257.00 thousand people while the lowest population is in Membalong by 30.00 thousand. This is influenced by the location of each sub-district, Tanjung Pandan sub-district is the city of Belitung Regency so that many people live there because it has the potential for higher survival. However, it is different from the Membalong sub-district which is located quite far from the city center so that access to fulfill its survival is relatively lower.

Based on the data from the scalogram analysis, there are levels of facilities, namely education, places of worship, health and transportation. At the education level, consisting of elementary schools, kindergartens, Islamic boarding schools, junior high schools, high schools and also special schools, each sub-district has a different number, this is the same as the number of places of worship with a total of 322 consisting of mosques, prayer room, break, temples, protestant churches, Catholic churches, monasteries and temples. For the health sector, it is grouped into 2 parts, namely health center and hospitals, such as in Membalong Sub-district consisting of 2 health center and no hospital, Tanjung Pandan Sub-district consists of 3 health center and 1 hospital, Badau Sub-district consists of 1 health center and no hospital, Sijuk Sub-district has 2 health center, no hospital and also Selat Nasik Sub-district has 1 health center and no hospital. The same applies to the level of health, places of worship and transportation.

Of the 5 sub-districts that have been analyzed and observed in the Belitung district, there are a total of 39 facilities and a total of 600 units. With the 1st rank order is the Tanjung Pandan sub-district with the number of facilities 13 and the number of units 295, the 2nd rank is the Membalong sub-district with the number of units. 7 facilities and 110 units, 3rd place is Sijuk subdistrict with 7 facilities and 90 units, 4th place is Badau subdistrict with 6 facilities and 78 units, and 5th place is Selat Nasik subdistrict with 6 facilities and 27 units.

So it can be concluded from the results of identifying the level of completeness in the 5 sub-districts contained in the Belitung Regency, the sub-district with the highest level of service to the community in the availability of facilities is the Tanjung Pandan sub-district, while for sub-districts that have a relatively low level of service to the community with the development of public facilities that are still less than optimal, namely the Selat Nasik sub-district.

#### A. *Year-on-Year Development of the Least Developed Sector*

##### 1). Mining and quarrying



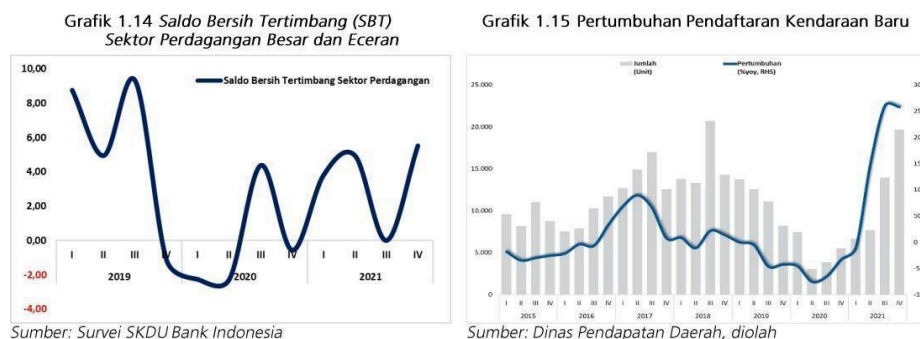
**Figure 1.** Former tin mine

Bangka Belitung Province, even Belitung Regency, is an area that has high potential for the mining and quarrying sector. Because the soil in this region has a lot of tin ore mineral content that has potential in the mining and quarrying sectors. Quartz sand, building sand, kaolin, mountain stone, clay and granite as a result of its excavation material. However, it should be noted that one of the commodities from the mining and quarrying sector that has more advantages in regency Belitung and the province of Bangka Belitung is tin. The tin mining activity itself has been going on for a very long time, especially by PT Tambang Timah, a subsidiary of Tbk, which has been operating since 1976. And even during the Dutch East Indies, tin mining was carried out. Since the beginning of tin mining carried out in Belitung and Bangka Belitung, millions of thousands of tons of tin have been extracted on this small island. Even in 2008, the revenue of PT Timah itself reached Rp. 9.053 Trillion, which increased from previous years. At this time, the gap between people who work at PT Timah and people who make a living as ASN farmers and so on was felt. However, the future as it is today makes. The land on the island has been reduced and the supply of tin production has decreased. The limited land owned on land makes miners turn to the

ocean with a floating tin mining system. Which received great rejection by the government and fishermen due to the resulting environmental impact.

For the time being, tin mining results have decreased and even the price of tin itself has decreased and even the tin itself has not been sold. Based on the results of BPS analysis data from Prov. Kep Bangka Belitung and central BPS in 2013-2017 the mining and quarrying sector is a basic sector that produces mining products, namely tin ore (1.56) the mining and quarrying sector is able to meet the needs of the region itself and outside the region. Which can be interpreted in that time bracket this sector is able to export. When viewed further, the mining and quarrying sector in this region has not had a long period. Based on the *release* issued by PT Timah Tbk related to the mining and quarrying sector at the investor summit, in 2018 tin mining alluvial reserves in Bangka Belitung province or regency Belitung can still last 10 years and in resources can last for 20 years. if in total this tin mining will last for 30 years to come. Therefore, before the reserves of these mining products are completely exhausted, it is necessary to make changes from superior products while maintaining a competitive advantage in the region.

## 2). Wholesale and Retail Trade, Repair of Cars and Motorcycles



**Figure 2. Wholesale and Retail Trade, Repair of Cars and Motorcycles**

It can be seen in the graph above that an economic activity in the trade sector where the goods sold do not change in type or form followed by the services provided that follow the process from the activity of buying and selling goods. Both in wholesale and retail trade activities are the final stages in the distribution process of the goods being traded. Which includes car and motorcycle repairs. Judging from the economic report of Prov. Bangka Belitung issued by BI states that wholesale and retail trade, car and motorcycle repairs began to experience growth during the new normal of the co-19 pandemic, thus encouraging an increase in community activity which made trade continue to grow. The growth itself is triggered by an increase in leading sectors such as plantations which encourage people's income to increase.

## 3). Real estate

Real estate is a business sector in the field of buying and selling land and buildings on it. Difficult economic conditions have made the property business in the province of Bangka Belitung and regency Belitung experienced a significant decline which recorded a decline of up to 70 percent (Artiana, 2016). In 2015, the end became the worst stagnant year in its decline precisely from September to December. Most people prefer to sell assets rather than buy assets. However, in mid-2016 the economic pace in the region increased, encouraging this sector to increase again. It should also be noted that the majority of people from Belitung Regency prefer to own their own homes rather than living in housing. The abundance of vacant land makes people choose to build their own homes. In addition, sales in the property sector are more dominant in subsidized housing. Based on the results of BPS data analysis from province Bangka Belitung and the central BPS in 2013-2017, the real estate sector is included in the superior base sector where the result of real estate is (1.02) and this sector is said to be able to meet the needs of the market in the region itself and markets from outside the region. Which can be interpreted that at that time frame this sector can meet the needs of the region and can export.

## 4). Education Services

Educational services have a big share in efforts to improve existing human resources. The success of the education service itself can be seen in the provision of good and quality services to its users. Educational services in Belitung Regency can be said to be inadequate from previous years until now (Sumarno,



2020). However, for now it has developed little by little. Where education for each individual aims for the advancement of development, efforts to meet the needs of education for every level of society continue to be carried out. as for one of the causes of poor quality in the education service sector, namely the lack of special education funds sourced from the APBD and APBN to support the development of educational infrastructure in the region. the education function budget is only provided around 20 percent and it is still said to be lacking when compared to the road infrastructure development budget that is currently being built by the local government. BPS also stated that the size of the Gross Participation Rate (APK) is 37.3 percent with the aim of finding work, 18 percent assuming that education at the high school / vocational level is sufficient. 17.3 percent wanted to get married, 16.5 percent did not have the money to continue their education, and the rest had other reasons.

### **B. Impact of Underdeveloped Sectors in Belitung Regency**

Based on the results of the analysis, regency Belitung has 4 underdeveloped sectors, namely real estate, education services, mining and quarrying, wholesale and retail trade, car and motorcycle repair. These 4 sectors can cause poverty and inequality in the district of Belitung. The mining sector, which used to be the livelihood of the community, has become an underdeveloped sector. The lack of human resource development to advance and develop the mining sector makes the mining sector unable to reach the leading sector. The lack of human resources in Belitung district occurs because education here is not yet superior. For example, there are still sub-districts in Belitung that do not have school facilities from the government, such as in Membalong sub-district where there is no vocational school and in Badau sub-district where there is no high school. Uneven school facilities in Belitung result in regional inequality, and the lack of education makes it difficult to compete in the world of work and lag behind human resources with other regions. Underdeveloped Mining in Belitung district also occurs due to the lack of downstream government in the mining sector in Belitung which makes the added value of exports a little, this has an impact on income that is not maximized so that it also causes the unemployment rate to increase and the people of Belitung who are forced to switch professions. Other problems are inadequate transportation, as is the case for rail transportation that does not yet exist in Belitung, making long-distance shipments of goods constrained. situations like this can result in changes in the inflation rate in Belitung quite high, because in shipping goods that enter Belitung must use ships / planes that cost quite a lot of money. Property in Belitung is also experiencing a slowdown due to slow growth. This slow economic growth is due to the tin mining sector in Belitung still not good, only about 10% of the number of properties that can be sold.

### **C. The Role of Government in the Emerging Impacts of Underdeveloped Sectors**

The government controls the inflation rate that affects economic growth, such as providing subsidized assistance to the community and supervising the provision of this assistance, besides that the government also cooperates with regional inflation control teams such as Bangka Belitung Province. Regarding the problem of poverty, the government has implemented several programs, one of which is in improving the education system where the education system is carried out such as; increasing school accreditation and organizing non-formal education, improving the quality of learning and guidance in each region (Tanjung et al., 2021) and increasing the equitable distribution of teachers in each region where improving education will have a direct effect on increasing human resources evenly by increasing the Human Development Index which has an impact on reducing poverty. Belitung Regency has an average number of poor people, namely 13.5 thousand people (Sugianto & Bokings, 2021). In addition, the government is improving investment and investment governance where the government is structuring infrastructure development and developing the productivity of small and medium industries that support the growth of industrial estate.

### **Conclusion**

In analyzing the underdeveloped sectors in the district of Belitung, we used the LQ, Shift Share, Klassen Typology and scalogram methods. The results of the analysis carried out can produce superior and underdeveloped sectors in the Belitung district. Belitung district has comparative superior sectors including Agriculture, Forestry and Fisheries, Water Procurement, Waste Management, Electricity and Gas Procurement, Construction, Waste and Recycling, Transportation and Warehousing, Provision of Accommodation and Drinking Food, Information and Communication, Financial and Insurance Services,

Company Services, Government Administration, Defense and Compulsory Social Security, Health Services and Social Activities. Then Belitung Regency has comparative non superior sectors including Mining and Quarrying, Processing Industry, Wholesale and Retail Trade, Car and Motorcycle Repair, and Educational Services.

The district of Belitung has a fairly diverse economic sector, but some sectors are still experiencing underdeveloped conditions. some underdeveloped sectors in Belitung have developments such as in mining in Belitung have great tin mining potential, but have experienced a very significant decline in prices. then real estate which is still a little demand for property here resulting in a decline. as well as wholesale & retail trade which can actually develop, especially trade related to tourism. but due to infrastructure constraints make this sector less developed and education services, education here is underdeveloped due to the lack of education budget from the state budget and inadequate infrastructure in some areas resulting in inequality. The impacts of the rear sector have resulted in several problems such as inequality, poverty, inflation, lack of human resources, transportation that is still limited in access and the fluctuating income of Belitung district. for this reason, the role of the government is needed, including controlling inflation and improving the quality of education, increasing infrastructure development to make it easier for investors to invest in Belitung district and governance of investors in infrastructure development and developing productivity to support the growth of industrial areas.

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