

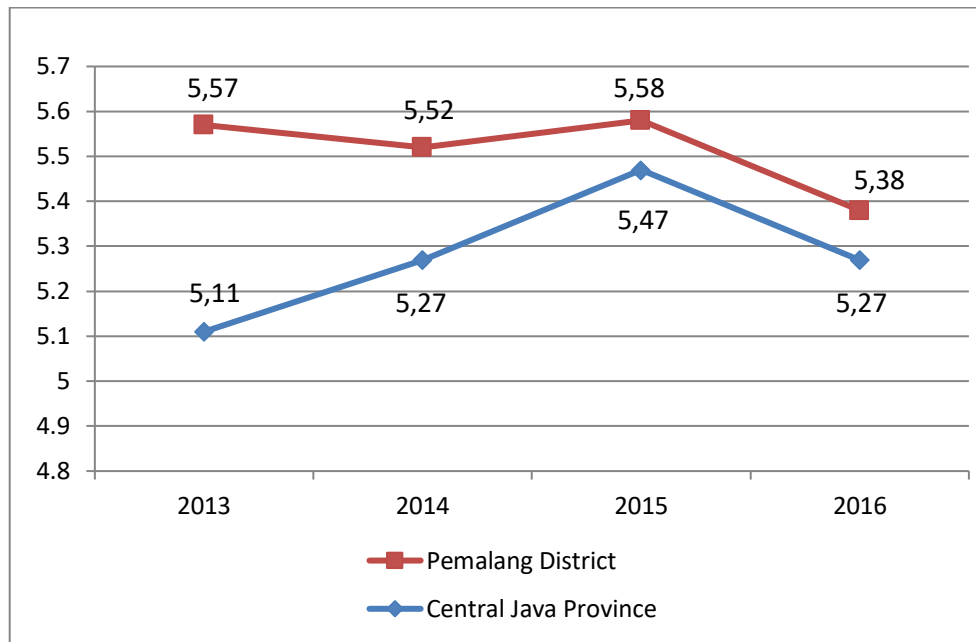
CHAPTER IV

RESEARCH RESULT AND DISCUSSION

A. General Description of Research Project

Pemalang District's GRDP at Constant Prices data shows a trend that tends to rise. Recorded in 2010, the Pemalang District's GRDP was 11.282.197 million Rupiah, which then experienced growth in 2011 to 11.847.200 million Rupiah. In 2012 and 2013 the same increase occurred in the previous year, to 12.477.234 and 13.172.084 million Rupiah. And from 2014 to 2016, Pemalang District's GRDP was also recorded to have increased from the previous year, respectively to 13.898.664 million rupiahs, 14.673.696 million Rupiah and 15.463.801 million Rupiah.

Pemalang District's GRDP data in 2016 showed that the highest growth reached by Electricity and Gas sector at 14,5%, followed consecutively by Mining and Excavation sector at 8,98%, and Financial Services and Insurance sector at 8,51%. Meanwhile the lowest reached by Mandatory Administration of Government, Defense and Social Security sector at 1,22%. However, the total GRDP growth was rather fluctuative from year to year. There was an increase in 2010-2013 total GRDP growth, but in 2014, it experienced a decline. In 2013, the total GRDP growth was 5,57%. While in 2014, the total GRDP growth was 5,52%. It increase again in 2015, became 5,58%, and had a decline again in 2016, became 5,38%.



Source : Badan Pusat Statistik

Figure 4.1
Comparison of Economic Growth in Pemalang District and Central Java Province Year 2013 – 2016 (Percent)

The rate of economic growth of Central Java Province from 2010 to 2016 also has a trend that tends to rise, although it had experienced a decline in 2013, rose again in 2014 and 2015, and decreased again in 2016. It can be seen from Figure 4.1, that during the last four years, namely 2013-2016, the economic growth of Pemalang Regency was still above the economic growth of Central Java Province. In 2016, the economic growth of Central Java Province was only 5,27%, the economic growth of Pemalang District was 5,38%.

In 2016, Pemalang District was ranked 11th in the order of the highest growth rate in Central Java Province, while the first, second, and third positions were occupied by Blora, Banyumas, and Tegal respectively. Pemalang District's GRDP growth rate in 2016 has a value of 5,38%.

In 2015, contribution of Agriculture, Forestry and Fisheries sector was 25,65% to total GRDP at constant prices, followed by Processing Industry sector at 20,55%, Wholesale and retail trade sector at 16,5%, Provision of Accommodation and Meals sector at 5,51%, and Educational Services sector at 5,16%.

In 2016, the economic structure of Pemalang District was still predominated by Agriculture, Forestry and Fisheries sector. This sector's contribution to GRDP was 24,9%, followed by Processing Industry sector around 20,6%, Wholesale and retail trade sector about 16,84%, Provision of Accommodation and Meals sector at 5,57% and Educational Services sector at 5,22%. The pattern structure was still the same compared to previous year.

Table 4.1
Role of Each Sector in the Growth Rate of GRDP at 2015 & 2016

No.	Sector	Amount of Role (%)	
		2015	2016
1.	Agriculture, Forestry and Fisheries	25,65	24,9
2.	Mining and Excavation	4,47	4,63
3.	Processing Industry	20,55	20,6
4.	Electricity and Gas	0,13	0,15
5.	Water Supply, Waste Management, and Recycling	0,09	0,086
6.	Construction	4,21	4,28
7.	Wholesale and retail trade	16,5	16,84
8.	Transportation and Warehousing	2,96	2,99
9.	Provision of Accommodation and Meals	5,51	5,57
10.	Information and Communication	2,48	2,48
11.	Financial Services and Insurance	2,91	2,99
12.	Real Estate	1,84	1,85
13.	Company Services	0,36	0,36
14.	Mandatory Administration of Government, Defense and Social Security	3,4	3,27
15.	Educational Services	5,16	5,22
16.	Health Services and Social Activities	0,98	1
17.	Other Services	2,82	2,78

Source : Data Processed

B. Result and Discussion

1. Location quotient (LQ) analysis.

Location Quotient (LQ) is used to identify internal potential that owned by a region which some basic sector and which sector is non basic sector. Basically, this technique shows a relative comparison between the ability of one sector among some regions researched by the ability of same sector in wider region.

If a sector has a LQ value of more than 1, then it shows that the sector is a prominent sector compared to other sectors of that region, and that sector is able to export some of added value it generates. On the other hand, If a sector has a LQ value of less than 1, then it shows that the sector is only able to meet the needs of the region itself and tend to import from other regions.

Based on the Table 4.2 which presents the results of LQ calculation, it is known there are sectors that have a value $LQ > 1$ are Agriculture, Forestry and Fisheries, Mining and Excavation, Electricity and Gas, Water Supply, Waste Management, and Recycling, Wholesale and retail trade, Provision of Accommodation and Meals, Financial Services and Insurance, Real Estate, Company Services, Mandatory Administration of Government, Defense and Social Security, Educational Services, Health Services and Social Activities, and also Other Services. These sectors are the base sector, which has an important role in the economy of Pematang District. It is indicated by the LQ coefficient with value of more than 1. This shows that these sectors are

sufficient to meet the needs in the Pemalang District and tend to be able to export to other regions.

The other 4 sectors, which are Processing Industry, Construction, Transportation and Warehousing, and also Information and Communication, which has LQ coefficient value less than 1, are considered as non base sectors, which means that these sectors have tendencies to be imported from other regions to meet it needs.

Table 4.2
Coefficient of *Location Quotient* (LQ) of Pemalang District at 2010-2016

Business Field	2010	2011	2012	2013	2014	2015	2016	LQ Average
Agriculture, Forestry and Fisheries	1,80211306	1,78026660	1,79738144	1,86584151	1,84432510	1,81771387	1,81663486	1,81775378
Mining and Excavation	2,14842190	2,30421473	2,30241067	2,27073638	2,25604766	2,21656313	2,02818327	2,21808253
Processing Industry	0,51189214	0,52404432	0,53140458	0,53545047	0,56961389	0,58315482	0,59120449	0,54953782
Electricity and Gas	1,14265303	1,15247949	1,11811034	1,08107978	1,14567725	1,21281214	1,32669773	1,16850139
Water Supply, Waste Management, and Recycling	1,05130825	1,09523520	1,13053127	1,18482657	1,22504632	1,23205802	1,23697735	1,16514043
Construction	0,41852402	0,41918798	0,41844675	0,42003646	0,42011585	0,41799891	0,42008248	0,41919892
Wholesale and retail trade	1,16664204	1,15007324	1,16136399	1,13924336	1,15020950	1,15277764	1,17297129	1,15618301
Transportation and Warehousing	0,96627546	0,96024072	0,97797898	0,94335112	0,90998790	0,89103296	0,90396027	0,93611820
Provision of Accommodation and Meals	1,84097668	1,82019382	1,82853187	1,80031461	1,77977871	1,77435251	1,77421544	1,80262338
Information and Communication	0,58890209	0,59587822	0,60068955	0,60757617	0,60862771	0,60505569	0,58936024	0,59944138
Financial Services and Insurance	1,06101558	1,07571082	1,06699787	1,06089424	1,07790213	1,08506573	1,07801048	1,07222812
Real Estate	1,01336675	1,01798994	1,02399698	1,01177454	1,00616756	1,00081758	0,99423309	1,00976378
Company Services	1,01080033	1,01483906	1,02856131	1,01235977	1,03284007	1,05021415	1,01324713	1,02326597
Mandatory Administration of Government, Defense and Social Security	1,24448031	1,26075634	1,26649367	1,25473536	1,24414066	1,23603968	1,22089462	1,24679152
Educational Services	1,54148853	1,47574507	1,42896906	1,40173611	1,40860402	1,41965388	1,40533593	1,44021894
Health Services and Social Activities	1,35193634	1,33446572	1,31642705	1,28948066	1,24962738	1,24918860	1,22611445	1,28817717
Other Services	1,92044540	1,92638472	1,92077454	1,84715735	1,84585634	1,84700032	1,76676462	1,86776904

Source : Data Processed

Result of calculation from that analysis shows there are thirteen (13) sectors which have LQ value more than 1, they are:

1. Agriculture, Forestry and Fisheries (LQ Average = 1,81775378)
2. Mining and Excavation (LQ Average = 2,21808253)
3. Electricity and Gas (LQ Average = 1,16850139)
4. Water Supply, Waste Management, and Recycling (LQ Average = 1,16514043)
5. Wholesale and Retail Trade (LQ Average = 1,15618301)
6. Provision of Accommodation and Meals (LQ Average = 1,80262338)
7. Financial Services and Insurance (LQ Average = 1,07222812)
8. Real Estate (LQ Average = 1,00976378)
9. Company Services (LQ Average = 1,02326597)
10. Mandatory Administration of Government, Defense and Social Security (LQ Average = 1,24679152)
11. Educational Services (LQ Average = 1,44021894)
12. Health Services and Social Activities (LQ Average = 1,28817717)
13. Other Services (LQ Average = 1,86776904)

These sectors need to be pursued both by the government and private sectors to be developed as a leading sector in regional economy of Pematang District.

While the other four (4) sectors are not prominent enough to be the leading sectors.

2. Shift share analysis.

Shift Share Analysis is one analytical tool that is useful to determine the performance or productivity of a regional economy compared to the national economy. This analytical tool is also used to analyze the economic growth of an area as a change or an increase in an economic growth indicator of a region within a certain period of time (Basuki and Gayatri, 2009). In this study, *Shift Share* is used to determine changes and economic shifts of Pemalang District through the provincial growth component, industrial mix components and competitive advantage components per economic sector in Pemalang District.

GRDP is an economic indicator that can show results in observing changes in economic structure in a region or region. Syarizal, 2008 in (Mariska, 2015) stated that an increase in GRDP in an area is an indication of an increase in economic activity can be translated into three components. These three components are an increase in GRDP caused by external factors (national / provincial policies) or often referred to as the effects of regional economic growth (Nij). The second influence is the influence of the sector and subsector growth structure, or the mix industry effect (Mij). Then the third effect is the influence of the competitive advantage of the studied area (Cij).

In Table 4.3 below, we can see the components of national growth (Nij), almost all sectors experienced an increase, although some sectors

experienced fluctuating movements. There are eleven (11) sectors that have a steady and continuous increase from 2010 until 2016, they are Mining and Excavation sector, Processing Industry sector, Electricity and Gas sector, Construction sector, Transportation and Warehousing sector, Information and Communication sector, Real Estate sector, Company Services sector, Educational Services sector, Health Services and Social Activities sector, and also Other Services sector. While the other six (6) sectors experienced fluctuative movements. Agriculture, Forestry and Fisheries sector experienced an increase until 2015, from 176.171,94 million Rupiah in 2011, became 205.664,97 million Rupiah in 2015, but eventually declined in 2016 became 203.086,44 million Rupiah. Water Supply, Waste Management, and Recycling sector also experienced the same thing as the Agriculture, Forestry and Fisheries sector. While for the Wholesale and retail trade sector, it experienced an increase in 2012, from 109.227,97 million Rupiah in 2011, became 113.209,41 million Rupiah in 2012, but then experienced a decline again in 2013, became 111.624,85 million Rupiah, and increase again until 2016 became 137.306,13 million Rupiah. The Provision of Accomodation and Meals sector & Financial Services and Insurance sector also experienced the same thing as the Wholesale and retail trade sector. It experienced an increase in 2012, then declined in 2013, and finally increased again until 2016.

The growth of industrial mix components (Mij) in Table 4.3 shows that there are no steady and continuous movement from all of the economy

sectors. All of the sectors experienced fluctuating movements through all the years from 2011-2016.

The component of competitive advantage (Cij) in Table 4.3 shows that the Agriculture, Forestry and Fisheries sector experienced fluctuating movements throughout the years. Its lowest value occurred in 2015, with the value of -5.321.002,99 million Rupiah. The Water Supply, Waste Management, and Recycling sector together with the Information and Communication sector experienced a similar thing. Both of their values experienced a decline in 2012, an increase again in 2013, then declined again until 2016. As for the Mining and Excavation sector, together with Financial Services and Insurance sector experienced the same thing. Both of their values declined in 2012, increased again in 2013 and 2014, then finally declined again in 2015 and 2016. While the other sectors experienced fluctuating movements too, but varies.

Regional growth component (Dij) in Table 4.3 shows that Water Supply, Waste Management, and Recycling sector experienced the same thing as the Wholesale and retail trade sector. Both of their values experienced a decrease in 2012, an increase again in 2013 and 2014, then declined again in 2015, and finally increased again in 2016. Other sectors experienced fluctuating movements, but varies. The total value of Dij in 2011 was 60.148.851,63 million Rupiah, then continuously increased until 2016, became 84.033.442,11 million Rupiah.

The results of the calculation using *Shift Share Analysis* on seventeen (17) economic sectors in Pematang District, from 2010 to 2016 can be seen in Table 4.3 below

Table 4.3Calculation results of Pematang District *Shift Share* 2010-2016 (Million Rupiah)

Sector	2010-2011				2011-2012			
	Nij	Mij	Cij	Dij	Nij	Mij	Cij	Dij
1	176.171,94	12.560.790,89	-5.134.375,618	7.602.587,215	184.705,7332	10.335.791,82	3.332.711,91	13.853.209,46
2	28.790,35239	-1.217.863,398	3.692.293,299	2.503.220,253	30.527,83655	2.996.209,228	-62.272,81262	2.964.464,251
3	113.521,388	11.001.275,81	4.702.787,994	15.817.585,2	123.804,1452	15.436.619,14	3.408.667,581	18.969.090,87
4	753,4703933	103.476,6579	8.820,504541	113.050,6328	810,136306	150.320,1505	-50.119,61905	101.010,6678
5	582,3741327	24.304,77262	43.666,04097	68.553,18772	597,3672973	-16.188,44009	35.230,19333	19.639,12054
6	26.425,43835	1.086.941,909	-61.703,08094	1.051.664,266	28.267,92076	3.322.233,829	-113.631,1234	3.236.870,627
7	109.227,9694	16.853.994,19	-3.780.642,354	13.182.579,81	113.209,4137	3.795.459,464	2.062.862,153	5.971.531,031
8	17.942,78585	1.576.002,803	-319.658,9645	1.274.286,625	19.638,99104	2.419.790,487	713.768,7234	3.153.198,201
9	34.527,82982	3.594.834,028	-965.990,7078	2.663.371,15	36.812,83318	3.622.390,13	313.875,5929	3.973.078,557
10	12.831,74236	1.929.498,017	235.816,3226	2.178.146,082	14.305,92328	2.593.329,392	229.700,3076	2.837.335,622
11	18.478,92635	1.423.850,226	399.915,7608	1.842.244,913	19.131,7339	1.259.709,16	-309.588,4329	969.252,4606
12	11.029,05477	1.254.480,761	38.760,55279	1.304.270,369	11.788,02306	1.186.831,179	131.312,8884	1.329.932,09
13	1.893,299154	331.308,6232	4.651,459123	337.853,3815	2.070,716522	272.190,225	55.034,3062	329.295,2477
14	24.463,37197	1.160.740,261	485.036,1798	1.670.239,813	24.889,21731	207.101,9819	201.099,4381	433.090,6373
15	27.348,62648	9.466.980,328	-2.768.151,83	6.726.177,125	31.372,76628	10.273.344,16	-2.204.084,209	8.100.632,714
16	5.741,45394	1.049.048,641	-186.329,4127	868.460,6824	6.297,449575	1.210.713,368	-178.964,9399	1.038.045,878
17	18.411,1665	915.770,9171	10.378,85004	944.560,9336	18.629,55415	224.834,5159	-111.063,0561	132.401,014

Table Extension

Sector	2012-2013				2013-2014			
	Nij	Mij	Cij	Dij	Nij	Mij	Cij	Dij
1	188.012,4655	7.742.814,536	16.035.097,8	23.965.924,8	190.406,0381	-3.637.951,747	-3.303.232,226	-6.750.777,935
2	30.683,20933	3.676.499,006	-601.405,3155	3.105.776,9	33.635,241	4.218.254,291	-283.002,6216	3.968.886,911
3	126.267,9306	13.348.611,24	3.137.297,979	16.612.177,15	148.130,4618	18.424.007,34	19.855.729,16	38.427.866,96
4	814,3779094	131.729,0999	-49.867,76857	82.675,7092	950,7714586	116.287,207	119.514,5155	236.752,4939
5	602,3015206	2.078,845036	62.196,15132	64.877,29788	666,4027189	42.943,78753	47.539,75987	91.149,95012
6	28.571,15159	2.712.021,767	481.368,0533	3.221.960,972	30.854,1042	2.531.393,664	153.658,3158	2.715.906,084
7	111.624,8478	10.196.424,05	-3.373.872,564	6.934.176,331	122.167,7241	10.989.816,05	2.908.120,871	14.020.104,64
8	19.879,40352	3.610.099,077	-1.326.502,932	2.303.475,549	21.673,67343	3.786.691,328	-1.488.061,259	2.320.303,742
9	36.358,84568	3.172.859,067	-826.616,4279	2.382.601,485	40.009,26814	5.733.004,332	-743.860,4231	5.029.153,177
10	14.999,40684	2.332.078,988	504.324,9223	2.851.403,318	17.563,22764	4.314.259,767	152.875,2548	4.484.698,25
11	18.968,8903	1.424.912,084	-52.377,88641	1.391.503,088	20.757,47631	16.01154,405	754.183,9596	2.376.095,841
12	12.040,66473	1.802.801,876	-192.963,2601	1.621.879,281	13.276,13964	1.796.600,837	-87.168,50647	1.722.708,47
13	2.193,449057	518.340,5283	-55.048,15168	465.485,8256	2.499,328845	375.370,109	115.710,708	493.580,1459
14	24.295,15934	1.234.666,796	-241.045,5934	1.017.916,362	25.113,17003	345.802,699	-294.689,1004	76.226,7686
15	32.355,90958	6.006.243,364	-1.023.677,734	5.014.921,54	36.784,51246	6.500.853,737	552.301,1779	7.089.939,427
16	6.342,749964	878.129,4411	-215,116.6556	669.355,5355	7.081,283867	1.520.475,413	-428.680,5602	1.098.876,136
17	18.784,89167	3.377.872,678	-1.370.218,306	2.026.439,263	21.069,09072	3.378.048,032	70.243,02049	3.469.360,143

Table Extension

Sector	2014-2015				2015-2016			
	Nij	Mij	Cij	Dij	Nij	Mij	Cij	Dij
1	205.664,9682	20.856.155,23	-5.321.002,993	15.740.817,21	203.086,4369	8.575.244,574	179.662,9928	8.957.994,004
2	35.865,5697	2.963.763,271	-1.130.009,902	1.869.618,939	37.719,3723	13.536.177,88	-7.150.172,892	64.23.724,358
3	164.802,1943	14.028.233,08	7.846.609,215	22.039.644,49	16.8017,1005	12.891.211,13	4.931.012,288	17.990.240,52
4	1.070,02856	46.598,7982	119.762,0183	167.430,845	1.182,363815	101.169,6314	222.824,6176	325.176,6128
5	706,9620074	20432,11678	8918,472285	30057,55108	700,570558	28164,09091	6850,448837	35715,1103
6	33.774,09313	3.676.866,04	-261.409,7608	3.449.230,372	34.928,41053	4.285.649,681	426.135,3045	4.746.713,396
7	132.268,6382	9.755.899,049	828.530,5199	1.0716.698,21	137.306,1256	14.466.289,43	5.110.326,524	19.713.922,08
8	23.719,82361	3.314.378,366	-925.363,2056	2.412.734,984	24.388,88373	2.248.295,39	755.598,0844	3.028.282,359
9	44.206,61295	5.444.373,739	-172.595,1754	5.315.985,177	45.434,97747	5.469.385,306	89.196,17065	5.604.016,454
10	19848,06647	3440874,438	-191784,0441	3268938,46	20227,76773	3165717,069	-1035074,363	2150870,475
11	23.336,61044	3.225.451,291	354.122,8754	3.602.910,776	24.437,66059	4.196.969,327	-275.976,2719	3.945.430,716
12	14.745,60404	2.032.679,613	-123.921,3989	1.923.503,818	15.112,50025	1.932.022,233	-169.402,9309	1.777.731,803
13	2.861,552522	441.713,6438	101.644,3974	546.219,5938	2.950,348986	591.315,8914	-211.560,4142	382.705,8263
14	27.269,28673	2.622.096,521	-287.129,2336	2.362.236,574	26.636,45977	1.169.752,803	-579.862,0779	616.527,1849
15	41.380,81926	5.673.281,85	725.294,6385	6.439.957,307	42.594,02531	6.125.522,038	-786.359,6494	5.381.756,414
16	7.832,231767	939.011,9166	10.730,79527	957.574,9436	8.158,572387	1.517.022,274	-296.395,4992	1.228.785,347
17	22.582,15325	1.302.594,903	71.400,14954	1.396.577,205	22.666,16668	3.682.228,03	-198.1044,739	1.723.849,458

Source : Data Processed

Annotation:

1. Agriculture, Forestry and Fisheries
2. Mining and Excavation
3. Processing Industry
4. Electricity and Gas
5. Water Supply, Waste Management, and Recycling
6. Construction
7. Wholesale and retail trade
8. Transportation and Warehousing
9. Provision of Accommodation and Meals
10. Information and Communication
11. Financial Services and Insurance
12. Real Estate
13. Company Services
14. Mandatory Administration of Government, Defense and Social Security
15. Educational Services
16. Health Services and Social Activities
17. Other Services

a. Agriculture, forestry and fisheries.

The Agriculture, Forestry and Fisheries Sector in Pemalang District based on the results of the *Shift Share* Analysis from 2011 until 2016 was influenced by several components. The influence of the growth component of Central Java Province (Nij) from this sector has value of 176.171,94 million Rupiah in 2011, then steadily increase until 2015, became 205.664,97 million Rupiah, until finally declined in 2016 became 203.086,44 million Rupiah towards the contribution of Central Java's GRDP.

Influence of industrial mix components (Mij) has a value of 12.506.790,89 million Rupiah in 2011, but unfortunately declined until 2014 became -363.7951,75 million Rupiah, then increase again in 2015 became 20.856.155,23 million Rupiah, until finally decrease again in 2016 became 8.575.244,57 million Rupiah. The influence of the competitive advantage component (Cij) has a negative value in 2011, amounted -5.134.375,62 million Rupiah, then increase in 2012 and 2013 became 16.035.097,8 million Rupiah, and experienced a decline again in 2014 and 2015 until its lowest point value of -5.321.002,99 million Rupiah, and bounced back to 179.662,99 million Rupiah in 2016. From the results of the *Shift Share* analysis, the value of the mix industry (Mij) component is positive, which indicates that the growth of the Agriculture, Forestry and Fisheries sector in Pemalang District grew faster than the same sector in Central Java Province. While the value of the component

of competitive advantage (Cij) in the last two years has a negative value, which indicates that the Agriculture, Forestry and Fisheries sector in Pemalang District has a low competitiveness compared to the same sector at the level of Central Java Province.

From the overall change in income (Dij) of the Agriculture, Forestry and Fisheries sector of Pemalang District from 2011 to 2016, this sector has a positive value with an average of 10.561.625,79 million Rupiah. This result indicates that the Agriculture, Forestry and Fisheries sector experienced a relatively faster revenue growth compared to the same sector at the level of Central Java Province.

b. Mining and excavation.

The Mining and Excavation sector in Pemalang District based on the results of the *Shift Share* Analysis from 2011 until 2016 was influenced by several components. The influence of the growth component of Central Java Province (Nij) from this sector has value of 28.790,35 million Rupiah in 2011, then steadily and continuously increase until 2016, with value of 37.719,37 million Rupiah towards the contribution of Central Java's GRDP.

From the results of the *Shift Share* analysis, the value of the mix industry (Mij) component is positive. The mix industry (Mij) value of 2011 was -1.217.863,39 million Rupiah, then increase until 2014, amounted 4.218.254,29 million Rupiah, then experienced a decline in 2015 became 2.963.763,27 million Rupiah, and finally bounced back in

2016 became 13.536.177,88 million Rupiah. The result of the analysis shows that the growth in the Mining and Excavation sector in Pemalang District is growing faster than the same sector at the Central Java Province level.

In terms of the influence of competitive advantage (Cij), Mining and Excavation sector has a positive value. The influence of competitive advantage (Cij) value of 2011 was 3.692.293,29 million rupiah, then declined in 2012 became -62.272,81 million Rupiah, increase again until 2014, amounted 19.855.729,16 million Rupiah, declined again in 2015 and 2016, with the amount of 4.931.012,29 million Rupiah. This result indicates that the Mining and Excavation sector in Pemalang District has a high competitiveness compared to the same sector at the level of Central Java Province.

From the overall change in income (Dij) of the Mining and Excavation sector of Pemalang District from 2011-2016, this sector has a positive value with an average of 3.472.615,27 million Rupiah. This result indicates that the Mining and Excavation sector experienced a relatively faster revenue growth compared to the same sector at the level of Central Java Province.

c. Processing industry.

The Processing Industry sector in Pemalang District based on the results of the *Shift Share* Analysis from 2011 until 2016 was influenced by several components. The influence of the growth component of

Central Java Province (Nij) from this sector has value of 113.521,39 million Rupiah in 2011, then steadily and continuously increase until 2016, with the amount of 168.017,1 million Rupiah towards the contribution of Central Java's GRDP.

From the results of the *Shift Share* analysis, the value of the mix industry (Mij) component is positive. The mix industry (Mij) value of 2011 was 11.001.275,81 million Rupiah, increase in 2012 became 15.436.619,14 million Rupiah, experienced a decline in 2013 became 13.348.611,24 million Rupiah, bounced back in 2014 became 18.424.007,34 million Rupiah, before finally experienced a decline again in 2015 and 2016 became 12.891.211,13 million Rupiah. The result of the analysis shows that the growth in the Processing Industry sector in Pemalang District is growing faster than the same sector at the Central Java Province level.

In terms of the influence of competitive advantage (Cij), Processing Industry sector has a positive value. The influence of competitive advantage (Cij) value of 2011 was 4.702.787,99 million Rupiah, experienced a decline until in 2012 and 2013 became 3.137.297,98 million Rupiah, increase in 2014 became 19.855.729,16 million Rupiah, before finally experienced a decline again until 2016 became 4.931.012,29 million Rupiah. This result indicates that the Processing Industry sector in Pemalang District has a high competitiveness compared to the same sector at the level of Central Java Province.

From the overall change in income (Dij) of the Processing Industry sector of Pemalang District from 2011-2016, this sector has a positive value with an average of 21.642.767,53 million Rupiah. This result indicates that the Processing Industry sector experienced a relatively faster revenue growth compared to the same sector at the level of Central Java Province.

d. Electricity and gas.

The Electricity and Gas sector in Pemalang District based on the results of the *Shift Share* Analysis from 2011 until 2016 was influenced by several components. The influence of the growth component of Central Java Province (Nij) from this sector has value of 753,47 million Rupiah in 2011, then steadily and continuously increase until 2016 became 1.182,36 million Rupiah towards the contribution of Central Java's GRDP.

From the results of the *Shift Share* analysis, the value of the mix industry (Mij) component is positive. The mix industry (Mij) value of 2011 was 103.476,66 million Rupiah, increase in 2012 became 150.320,15 million Rupiah, then experienced a decline until 2015 became 46.598,79 million Rupiah, before finally bounced back in 2016 became 101.169,63 million Rupiah. The result of the analysis shows that the growth in the Electricity and Gas sector in Pemalang District is growing faster than the same sector at the Central Java Province level.

In terms of the influence of competitive advantage (Cij), Electricity and Gas sector has a positive value. The influence of competitive advantage (Cij) value of 2011 was 8.820,5 million Rupiah, experienced a decline in 2012 became -50.119,62 million Rupiah, before finally increase again until 2016 became 222.824,62 million Rupiah. This result indicates that the Electricity and Gas sector in Pemalang District has a high competitiveness compared to the same sector at the level of Central Java Province.

From the overall change in income (Dij) of the Electricity and Gas sector of Pemalang District from 2011-2016, this sector has a positive value with an average of 171.016,16 million Rupiah. This result indicates that the Electricity and Gas sector experienced a relatively faster revenue growth compared to the same sector at the level of Central Java Province.

e. Water supply, waste management, and recycling.

The Water Supply, Waste Management, and Recycling sector in Pemalang District based on the results of the *Shift Share* Analysis from 2011 until 2016 was influenced by several components. The influence of the growth component of Central Java Province (Nij) from this sector has value of 582,37 million Rupiah in 2011, then steadily increase until 2015 became 706,03 million Rupiah, before finally experienced a decrease in 2016 became 700,57 million Rupiah towards the contribution of Central Java's GRDP.

From the results of the *Shift Share* analysis, the value of the mix industry (Mij) component is positive. The mix industry (Mij) value of 2011 was 24.304,77 million Rupiah, experienced a decline in 2012 became -16.188,44 million Rupiah, increase again in 2013 and 2014 became 42.943,79 million Rupiah, experienced a decline again in 2015 became 20.432,12 million Rupiah, before finally increase again in 2016 became 28.164,1 million Rupiah. The result of the analysis shows that the growth in the Water Supply, Waste Management, and Recycling sector in Pemalang District is growing faster than the same sector at the Central Java Province level.

In terms of the influence of competitive advantage (Cij), Water Supply, Waste Management, and Recycling sector has a positive value. The influence of competitive advantage (Cij) value of 2011 was 43.666,14 million Rupiah, experienced a decline in 2012 became 35.230,19 million Rupiah, increase again in 2013 became 62.196,15 million Rupiah, then finally experienced a decline from 2014-2016 became 6.850,45 million Rupiah. This result indicates that the Water Supply, Waste Management, and Recycling sector in Pemalang District has a high competitiveness compared to the same sector at the level of Central Java Province.

From the overall change in income (Dij) of the Electricity and Gas sector of Pemalang District from 2011-2016, this sector has a positive value with an average of 51.665,37 million Rupiah. This result indicates

that the Waste Management, and Recycling sector experienced a relatively faster revenue growth compared to the same sector at the level of Central Java Province.

f. Construction.

The Construction sector in Pemalang District based on the results of the *Shift Share* Analysis from 2011 until 2016 was influenced by several components. The influence of the growth component of Central Java Province (Nij) from this sector has value of 26.425,44 million Rupiah in 2011, then steadily and continuously increase until 2016 became 34.928,41 million Rupiah towards the contribution of Central Java's GRDP.

From the results of the *Shift Share* analysis, the value of the mix industry (Mij) component is positive. The mix industry (Mij) value of 2011 was 1.086.941,91 million Rupiah, increase in 2012 became 3.322.233,83 million Rupiah, experienced a decline in 2013 and 2014 became 2.531.393,66 million Rupiah, before finally bounced back in 2015 and 2016 became 4.285.649,68 million Rupiah. The result of the analysis shows that the growth in the Construction sector in Pemalang District is growing faster than the same sector at the Central Java Province level.

In terms of the influence of competitive advantage (Cij), Construction sector has a positive value. The influence of competitive advantage (Cij) value of 2011 was -61.703,1 million Rupiah, experienced

a decrease in 2012 became -113.631,12 million Rupiah, increase in 2013 became 481.368,05 million Rupiah, experienced a decline again in 2014 and 2015 became -261.409,76, before finally bounced back in 2016 became 426.135,3 million Rupiah. This result indicates that the Construction sector has a high competitiveness compared to the same sector at the level of Central Java Province.

From the overall change in income (Dij) of the Electricity and Gas sector of Pemalang District from 2011-2016, this sector has a positive value with an average of 3.070.390,95 million Rupiah. This result indicates that the Construction sector experienced a relatively faster revenue growth compared to the same sector at the level of Central Java Province.

g. Wholesale and retail trade.

The Wholesale and Retail Trade sector in Pemalang District based on the results of the *Shift Share* Analysis from 2011 until 2016 was influenced by several components. The influence of the growth component of Central Java Province (Nij) from this sector has value of 109.227,97 million Rupiah in 2011, then increase in 2012 became 113209,41 million Rupiah, experienced a decline in 2013 became 111.624,85 million Rupiah, before finally bounced back with steadily and continuously until 2016 became 137.306,13 million Rupiah towards the contribution of Central Java's GRDP.

From the results of the *Shift Share* analysis, the value of the mix industry (Mij) component is positive. The mix industry (Mij) value of 2011 was 16.853.994,2 million Rupiah, experienced a decline in 2012 became 3.795.459,46 million Rupiah, increase again in 2013 and 2014 became 10.989.816,05 million Rupiah, experienced a decline again in 2015 became 9.755.899,05 million Rupiah, before finally bounced back in 2016 became 14.466.289,43 million Rupiah. The result of the analysis shows that the growth in the Wholesale and Retail Trade sector in Pemalang District is growing faster than the same sector at the Central Java Province level.

In terms of the influence of competitive advantage (Cij), Wholesale and Retail Trade sector has a positive value. The influence of competitive advantage (Cij) value of 2011 was -3.780.642,35 million Rupiah, increase in 2012 became 2.062.862,15 million Rupiah, experienced a decline in 2013 became -3.373.872,56 million Rupiah, increase again in 2014 became 2.908.120,87 million Rupiah, experienced a decline again in 2015 became 828.530,52 million Rupiah, before finally bounced back in 2016 became 5.110.326,52 million Rupiah. This result indicates that the Wholesale and Retail Trade sector has a high competitiveness compared to the same sector at the level of Central Java Province.

From the overall change in income (Dij) of the Wholesale and Retail Trade sector of Pemalang District from 2011-2016, this sector has a positive value with an average of 11.756.502,02 million Rupiah. This

result indicates that the Wholesale and Retail Trade sector experienced a relatively faster revenue growth compared to the same sector at the level of Central Java Province.

h. Transportation and warehousing.

The Transportation and Warehousing sector in Pemalang District based on the results of the *Shift Share* Analysis from 2011 until 2016 was influenced by several components. The influence of the growth component of Central Java Province (Nij) from this sector has value of 17.942,79 million Rupiah in 2011, and then steadily and continuously increase until 2016 became 24.388,88 million Rupiah towards the contributin of Central Java's GRDP.

From the results of the *Shift Share* analysis, the value of the mix industry (Mij) component is positive. The mix industry (Mij) value of 2011 was 1.576.002,8 million Rupiah, steadily increase until 2014 became 3.786.691,33 million Rupiah, before finally experienced a decline in 2015 and 2016 became 2.248.295,39 million Rupiah. The result of the analysis shows that the growth in the Transportation and Warehousing sector in Pemalang District is growing faster than the same sector at the Central Java Province level.

In terms of the influence of competitive advantage (Cij), Transportation and Warehousing sector has a negative value. The influence of competitive advantage (Cij) value of 2011 was -319.658,96 million Rupiah, increase in 2012 became 713.768,72 million Rupiah,

experienced a decline in 2013 and 2014 became -1.488.061,26 million Rupiah, before finally bounced back in 2015 became -925.363,21 million Rupiah and in 2016 became 755.598,1 million Rupiah. This result indicates that the Transportation and Warehousing sector has a low competitiveness compared to the same sector at the level of Central Java Province.

From the overall change in income (Dij) of the Wholesale and Retail Trade sector of Pemalang District from 2011-2016, this sector has a positive value with an average of 2.415.380,24 million Rupiah. This result indicates that the Transportation and Warehousing sector experienced a relatively faster revenue growth compared to the same sector at the level of Central Java Province.

i. Provision of accommodation and meals.

The Provision of Accommodation and Meals sector in Pemalang District based on the results of the *Shift Share* Analysis from 2011 until 2016 was influenced by several components. The influence of the growth component of Central Java Province (Nij) from this sector has value of 34.527,83 million Rupiah in 2011, increase in 2012 became 36.812,83 million Rupiah, experienced a decline in 2013 became 36.358,85 million Rupiah, before finally bounced back in 2014 until 2016 became 45.434,98 million Rupiah towards the contribution of Central Java's GRDP.

From the results of the *Shift Share* analysis, the value of the mix industry (Mij) component is positive. The mix industry (Mij) value of 2011 was 3.594.834,03 million Rupiah in 2011, increase in 2012 became 3.622.390,13 million Rupiah, experienced a decline in 2013 became 3.172.859,07 million Rupiah, increase again in 2014 became 5.733.004,33 million Rupiah, experienced a decline again in 2015 became 5.444.373,74 million Rupiah, before finally bounced back in 2016 became 5.469.385,31 million Rupiah. The result of the analysis shows that the growth in the Provision of Accomodation and Meals sector in Pemalang District is growing faster than the same sector at the Central Java Province level.

In terms of the influence of competitive advantage (Cij), Provision of Accomodation and Meals sector has a negative value. The influence of competitive advantage (Cij) value of 2011 was -965.990,71 million Rupiah, increase in 2012 became 313.875,59 million Rupiah, experienced a decline in 2013 became -826.616,43 million Rupiah, before finally bounced back in 2014 became -743.860,42 million Rupiah, -172.595,18 million Rupiah in 2015, and 89.196,17 million Rupiah in 2016. This result indicates that the Transportation and Warehousing sector has a low competitiveness compared to the same sector at the level of Central Java Province.

From the overall change in income (Dij) of the Provision of Accomodation and Meals sector of Pemalang District from 2011-2016,

this sector has a positive value with an average of 4.161.367,67 million Rupiah. This result indicates that the Provision of Accomodation and Meals sector experienced a relatively faster revenue growth compared to the same sector at the level of Central Java Province.

j. Information and communication.

The Information and Communication sector in Pemalang District based on the results of the *Shift Share* Analysis from 2011 until 2016 was influenced by several components. The influence of the growth component of Central Java Province (Nij) from this sector has value of 12.831,74 million Rupiah in 2011, then steadily and continuously increase in 2012 until 2016 became 20.227,77 million Rupiah towards the contribution of Central Java's GRDP.

From the results of the *Shift Share* analysis, the value of the mix industry (Mij) component is positive. The mix industry (Mij) value of 2011 was 1.929.498,02 million Rupiah in 2011, increase in 2012 became 2.593.329,39 million Rupiah, experienced a decline in 2013 became 2.332.078,99 million Rupiah, increase again in 2014 became 4.314.259,77 million Rupiah, before finally experienced a decline again in 2015 and 2016 became 3.165.717,07 million Rupiah. The result of the analysis shows that the growth in the Information and Communication sector in Pemalang District is growing faster than the same sector at the Central Java Province level.

In terms of the influence of competitive advantage (Cij), Information and Communication sector has a negative value. The influence of competitive advantage (Cij) value of 2011 was 235.816,32 million Rupiah, experienced a decline in 2012 became 229.700,31 million Rupiah, increase in 2013 became 504.324,92 million Rupiah, before finally experienced a decline in 2014 until 2016 became - 1.035.074,36 million Rupiah. This result indicates that the Information and Communication sector has a low competitiveness compared to the same sector at the level of Central Java Province.

From the overall change in income (Dij) of the Information and Communication sector of Pemalang District from 2011-2016, this sector has a positive value with an average of 2.961.898,7 million Rupiah. This result indicates that the Information and Communication sector experienced a relatively faster revenue growth compared to the same sector at the level of Central Java Province.

k. Financial services and insurance.

The Financial Services and Insurance sector in Pemalang District based on the results of the *Shift Share* Analysis from 2011 until 2016 was influenced by several components. The influence of the growth component of Central Java Province (Nij) from this sector has value of 18.478,93 million Rupiah in 2011, increase in 2012 became 19.131,73 million Rupiah, experienced a decline in 2013 became 18.968,9 million Rupiah, before finally bounced back and increase steadily in 2014 until

2016 became 24.437,66 million Rupiah towards the contribution of Central Java's GRDP.

From the results of the *Shift Share* analysis, the value of the mix industry (Mij) component is positive. The mix industry (Mij) value of 2011 was 1.423.850,23 million Rupiah, experienced a decline in 2012 became 1.259.709,16 million Rupiah, before finally bounced back and increase steadily in 2013 until 2016 became 4.196.969,33 million Rupiah. The result of the analysis shows that the growth in the Financial Services and Insurance sector in Pemalang District is growing faster than the same sector at the Central Java Province level.

In terms of the influence of competitive advantage (Cij), Information and Communication sector has a positive value. The influence of competitive advantage (Cij) value of 2011 was 399.915,76 million Rupiah, experienced a decline in 2012 became -309.588,43 million Rupiah, increase in 2013 and 2014 became 754.183,96 million Rupiah, before finally experienced a decline again in 2015 became 354.122,88 million Rupiah and in 2016 became -275.976,27 million Rupiah. This result indicates that the Information and Communication sector has a high competitiveness compared to the same sector at the level of Central Java Province.

From the overall change in income (Dij) of the Financial Services and Insurance sector of Pemalang District from 2011-2016, this sector has a positive value with an average of 2.354.572,97 million Rupiah.

This result indicates that the Financial Services and Insurance sector experienced a relatively faster revenue growth compared to the same sector at the level of Central Java Province.

1. Real estate.

The Real Estate sector in Pemalang District based on the results of the *Shift Share* Analysis from 2011 until 2016 was influenced by several components. The influence of the growth component of Central Java Province (Nij) from this sector has value of 11.029,1 million Rupiah in 2011, then steadily and continuously increase in 2012 until 2016 became 15.112,5 million Rupiah towards the contribution of Central Java's GRDP.

From the results of the *Shift Share* analysis, the value of the mix industry (Mij) component is positive. The mix industry (Mij) value of 2011 was 1.254.480,76 million Rupiah, experienced a decline in 2012 became 1.186.831,18 million Rupiah, increase in 2013 became 1.802.801,88 million Rupiah, experienced a decline again in 2014 became 1.796.600,84 million Rupiah, increase again in 2015 became 2.032.679,61 million Rupiah, and finally experienced a decrease again in 2016 became 1.932.022,23 million Rupiah. The result of the analysis shows that the growth in the Real Estate sector in Pemalang District is growing faster than the same sector at the Central Java Province level.

In terms of the influence of competitive advantage (Cij), Real Estate sector has a negative value. The influence of competitive

advantage (Cij) value of 2011 was 38.760,55 million Rupiah, increase in 2012 became 131.312,88 million Rupiah, experienced a decline in 2013 became -192.963,26 million Rupiah, increase again in 2014 became -87.168,51 million Rupiah, before experienced a decline again in 2015 and 2016 became -169.402,93 million Rupiah. This result indicates that the Real Estate sector has a low competitiveness compared to the same sector at the level of Central Java Province.

From the overall change in income (Dij) of the Real Estate sector of Pemalang District from 2011-2016, this sector has a positive value with an average of 1.613.337,64 million Rupiah. This result indicates that the Real Estate sector experienced a relatively faster revenue growth compared to the same sector at the level of Central Java Province.

m. Company services.

The Company Services sector in Pemalang District based on the results of the *Shift Share* Analysis from 2011 until 2016 was influenced by several components. The influence of the growth component of Central Java Province (Nij) from this sector has value of 1.893,3 million Rupiah in 2011, then steadily and continuously increase in 2012 until 2016 became 2.950,35 million Rupiah towards the contribution of Central Java's GRDP.

From the results of the *Shift Share* analysis, the value of the mix industry (Mij) component is positive. The mix industry (Mij) value of 2011 was 331.308,62 million Rupiah, experienced a decline in 2012

became 272190,23 million Rupiah, increase in 2013 became 518.340,53 million Rupiah, experienced a decline again in 2014 became 375.370,11 million Rupiah, before finally bounced back and increase steadily in 2015 and 2016 became 591.315,89 million Rupiah. The result of the analysis shows that the growth in the Company Services sector in Pematang District is growing faster than the same sector at the Central Java Province level.

In terms of the influence of competitive advantage (Cij), Company Services sector has a positive value. The influence of competitive advantage (Cij) value of 2011 was 4651,46 million Rupiah, increase in 2012 became 55.034,31 million Rupiah, experienced a decline in 2013 became -55.048,15 million Rupiah, increase again in 2014 became 115.710,71 million Rupiah, before finally experienced a decline again in 2015 became 101.644,4 million Rupiah and in 2016 became -211.560,41 million Rupiah. This result indicates that the Company Services sector has a high competitiveness compared to the same sector at the level of Central Java Province.

From the overall change in income (Dij) of the Real Estate sector of Pematang District from 2011-2016, this sector has a positive value with an average of 425.856,67 million Rupiah. This result indicates that the Company Services sector experienced a relatively faster revenue growth compared to the same sector at the level of Central Java Province.

n. Mandatory administration of government, defense, and social security.

The Mandatory Administration of Government, Defense, and Social Security sector in Pemalang District based on the results of the *Shift Share* Analysis from 2011 until 2016 was influenced by several components. The influence of the growth component of Central Java Province (Nij) from this sector has value of 24.463,37 million Rupiah in 2011, increase in 2012 became 24.889,22 million Rupiah, experienced a decline in 2013 became 24.295,16 million Rupiah, increase again in 2014 and 2015 became 27.269,3 million Rupiah, before finally experienced a decline again in 2016 became 26.636,46 million Rupiah towards the contribution of Central Java's GRDP.

From the results of the *Shift Share* analysis, the value of the mix industry (Mij) component is positive. The mix industry (Mij) value of 2011 was 1.160.740,26 million Rupiah, experienced a decline in 2012 became 207.101,98 million Rupiah, increase in 2013 became 1.234.666,8 million Rupiah, experienced a decline again in 2014 became 345.802,7 million Rupiah, increase again in 2015 became 2.622.096,52 million Rupiah, before finally experienced a decline again in 2016 became 1.169.752,8 million Rupiah. The result of the analysis shows that the growth in the Mandatory Administration of Government, Defense, and Social Security sector in Pemalang District is growing faster than the same sector at the Central Java Province level.

In terms of the influence of competitive advantage (Cij), Mandatory Administration of Government, Defense, and Social Security sector has a negative value. The influence of competitive advantage (Cij) value of 2011 was 485.036,18 million Rupiah, experienced a steady decline in 2012 until 2014 became -294.689,1 million Rupiah, increase in 2015 became -287.129,23 million Rupiah, before finally experienced a decline again in 2016 became -579.862,1 million Rupiah. This result indicates that the Mandatory Administration of Government, Defense, and Social Security sector has a low competitiveness compared to the same sector at the level of Central Java Province.

From the overall change in income (Dij) of the Mandatory Administration of Government, Defense, and Social Security sector of Pemalang District from 2011-2016, this sector has a positive value with an average of 1.029.372,9 million Rupiah. This result indicates that the Mandatory Administration of Government, Defense, and Social Security sector experienced a relatively faster revenue growth compared to the same sector at the level of Central Java Province.

o. Educational services.

The Educational Services in Pemalang District based on the results of the *Shift Share* Analysis from 2011 until 2016 was influenced by several components. The influence of the growth component of Central Java Province (Nij) from this sector has value of 27.348,63 million Rupiah, then steadily and continuously increase in 2012 until 2016

became 42.594,03 million Rupiah towards the contribution of Central Java's GRDP.

From the results of the *Shift Share* analysis, the value of the mix industry (Mij) component is positive. The mix industry (Mij) value of 2011 was 9.466.980,33 million Rupiah, increase in 2012 became 10.273.344,16 million Rupiah, experienced a decline in 2013 became 6.006.243,36 million Rupiah, increase again in 2014 became 6.500.853,74 million Rupiah, experienced a decline again in 2015 became 5.673.281,85 million Rupiah, before finally bounced back and increase again in 2016 became 6.125.522,04 million Rupiah. The result of the analysis shows that the growth in the Educational Services sector in Pemalang District is growing faster than the same sector at the Central Java Province level.

In terms of the influence of competitive advantage (Cij), Educational Services sector has a negative value. The influence of competitive advantage (Cij) value of 2011 was -2.768.151,83 million Rupiah, insteadly increase in 2012 until 2015 became 725.294,64 million Rupiah, before finally experienced a decline in 2016 became -786.359,65 million Rupiah. This result indicates that the Educational Services sector has a low competitiveness compared to the same sector at the level of Central Java Province.

From the overall change in income (Dij) of the Educational Services sector of Pemalang District from 2011-2016, this sector has a

positive value with an average of 6.458.897,42 million Rupiah. This result indicates that the Educational Services sector experienced a relatively faster revenue growth compared to the same sector at the level of Central Java Province.

p. Health services and social activities.

The Health Services and Social Activities sector in Pemalang District based on the results of the *Shift Share* Analysis from 2011 until 2016 was influenced by several components. The influence of the growth component of Central Java Province (Nij) from this sector has value of 5.741,45 million Rupiah in 2011, then steadily and continuously increase in 2012 until 2016 became 8.158,57 million Rupiah towards the contribution of Central Java's GRDP.

From the results of the *Shift Share* analysis, the value of the mix industry (Mij) component is positive. The mix industry (Mij) value of 2011 was 1.049.048,64 million Rupiah, increase in 2012 became 1.210.713,37 million Rupiah, experienced a decline in 2013 became 878.129,44 million Rupiah, increase again in 2014 became 1.520.475,41 million Rupiah, experienced a decline again in 2015 became 939.011,92 million Rupiah, before finally bounced back and increase again in 2016 became 1.517.022,27 million Rupiah. The result of the analysis shows that the growth in the Health Services and Social Activities sector in Pemalang District is growing faster than the same sector at the Central Java Province level.

In terms of the influence of competitive advantage (Cij), Health Services and Social Activities sector has a negative value. The influence of competitive advantage (Cij) value of 2011 was -186.329,41 million Rupiah, increase in 2012 became -178.964,94 million Rupiah, experienced a decline in 2013 and 2014 became -428.680,56 million Rupiah, increase again in 2015 became 10.730,79 million Rupiah, before finally experienced a decline again in 2016 became -296.395,5 million Rupiah. This result indicates that the Health Services and Social Activities sector has a low competitiveness compared to the same sector at the level of Central Java Province.

From the overall change in income (Dij) of the Health Services and Social Activities sector of Pemalang District from 2011-2016, this sector has a positive value with an average of 976.849,75 million Rupiah. This result indicates that the Health Services and Social Activities sector experienced a relatively faster revenue growth compared to the same sector at the level of Central Java Province.

q. Other services.

The Other Services sector in Pemalang District based on the results of the *Shift Share* Analysis from 2011 until 2016 was influenced by several components. The influence of the growth component of Central Java Province (Nij) from this sector has value of 18.411,17 million Rupiah, then steadily and continuously increase in 2012 until

2016 became 22.666,17 million Rupiah towards the contribution of Central Java's GRDP.

From the results of the *Shift Share* analysis, the value of the mix industry (Mij) component is positive. The mix industry (Mij) value of 2011 was 915.770,92 million Rupiah, experienced a decline in 2012 became 224.834,52 million Rupiah, increase in 2013 and 2014 became 3.378.048,03 million Rupiah, experienced a decline again in 2015 became 1.302.594,9 million Rupiah, before finally bounced back and increase again in 2016 became 3.682.228,03 million Rupiah. The result of the analysis shows that the growth in the Other Services sector in Pemalang District is growing faster than the same sector at the Central Java Province level.

In terms of the influence of competitive advantage (Cij), Other Services sector has a negative value. The influence of competitive advantage (Cij) value of 2011 was 10.378,85 million Rupiah, experienced a decline in 2012 and 2013 became -1.370.218,31 million Rupiah, increase again in 2014 and 2015 became 71.400,15, before finally experienced a decline again in 2016 became -1.981.044,74 million Rupiah. This result indicates that the Other Services sector has a low competitiveness compared to the same sector at the level of Central Java Province

From the overall change in income (Dij) of the Other Services sector of Pemalang District from 2011-2016, this sector has a positive

value with an average of 1.615.531,34 million Rupiah. This result indicates that the Other Services sector experienced a relatively faster revenue growth compared to the same sector at the level of Central Java Province.

3. *Klassen* typology analysis.

Klassen Typology is used to find the description of the pattern and structure of economic growth of each sector. *Klassen Typology* basically divides the economic sector based on two main indicators, namely the sector economic growth and per capita income of the sector. Through this analysis, there are four characteristics of different economic growth patterns and structures, namely: high growth and high income, high income but low growth, high growth but low income, and also low growth and low income (Kuncoro and Aswandi, 2002: 27-45) and (Radianto, 2003: 479-499).

There are four classifications in the *Klassen Typology* analysis result, which are:

- a. *Rapid Developed Sector* is a sector that has economic growth rate and per capita income higher than the average.
- b. *Pressed Developed Sector* is a sector that has a higher per capita income, but its economic growth rate is lower than average.
- c. *Fast Developing Sector* is a sector that have high levels of growth, but rate per capita is lower than average.
- d. *Underdeveloped Sector* is a sector that have low levels of economic growth and a low level of per capita income.

Judging from the average growth rate and economic contribution of the Central Java Province and Pemalang District through the results of the *Klassen Typology* classification in Table 4.4 below.

Table 4.4
Pemalang District GRDP Sector Classification for 2010-2016

Proportion Growth	$\frac{Xi}{X} \geq 1$	$\frac{Xi}{X} < 1$
$\frac{\Delta Xi}{\Delta X} \geq 1$	<p>Rapid Developed Sectors :</p> <p>Agriculture, Forestry and Fisheries (1,82 & 1,09)</p> <p>Electricity and Gas (1,17 & 1,43)</p> <p>Wholesale and Retail Trade (1,15 & 1,04)</p> <p>Financial Services and Insurance (1,07 & 1,07)</p> <p>Company Services (1,03 & 1,02)</p>	<p>Fast Developing Sectors :</p> <p>Processing Industry (0,56 & 1,49)</p> <p>Construction (0,42 & 1,03)</p> <p>Information and Communication (0,60 & 1,01)</p>
$\frac{\Delta Xi}{\Delta X} < 1$	<p>Pressed Developed Sectors :</p> <p>Mining and Excavation (2,23 & 0,84)</p> <p>Provision of Accommodation and Meals (1,80 & 0,91)</p> <p>Real Estate (1,01 & 0,96)</p> <p>Mandatory Administration of Government, Defense and Social Security (1,25 & 0,90)</p> <p>Educational Services (1,42 & 0,86)</p> <p>Health Services and Social Activities (1,28 & 0,82)</p> <p>Other Services (1,86 & 0,75)</p>	<p>Underdeveloped Sectors :</p> <p>Transportation and Warehousing (0,93 & 0,85)</p>

Source : Data Processed

The results of the calculation using the *Klassen Typology* analysis in the Table 4.4 shows that the developed sectors are the Agriculture, Forestry and Fisheries with a contribution of 1,82 and the growth rate of 1,09, the Electricity and Gas sector with a proportion of 1,17 and growth of 1,43 percent, Wholesale and Retail Trade sector with a contribution of 1,15 and growth of 1,04 percent, Financial Services and Insurance sector with a contribution of 1,07 and growth rate of 1,07 percent, and Company Services sector with a contribution of 1,03 and growth rate of 1,02 percent, which explains that these sectors have a very large contribution to the formation of GRDP in Pematang District and will continue to be a growing sector in the future.

While for the fast developing sectors, there are Processing Industry with a contribution of 0,56 and growth rate of 1,49 percent, Construction sector with contribution of 0,42 and 1,03 percent of growth rate, and also Information and Communication sector with contribution of 0,6 and growth rate of 1,01 percent. This indicates that eventhough these sectors are not giving a significant contribution to the province's GRDP, but they are promising to be the leading sectors in the next days.

For the pressed developed sectors, there are Mining and Excavation sector with contribution of 2,23 and growth rate of 0,84 percent, Provision of Accomodations and Meals sector with contribution of 1,8 and growth rate of 0,91 percent, Real Estate sector with contribution of 1,01 and growth rate of 0,96 percent, Mandatory Administration of Government, Defense and Social

Security sector with contribution of 1,25 and growth rate of 0,9 percent, Educational Services sector with contribution 1,42 and growth rate of 0,86 percent, Health Services and Social Activities sector with contribution of 1,28 and growth rate 0,88 percent, and Other Services with contribution of 1,86 and growth rate of 0,75 percent. This things indicates that eventhough these sectors give a significant contribution to the province's GRDP, but it is not developing anymore. These sectors can be also called as developed but depressed sectors.

As for the underdeveloped sectors, there is only the Transportation and Warehousing sector with contribution of 0,93 and growth rate of 0,85 percent. This sector does not give a significant contribution to the province's GRDP and also not developing. This indicates that there are not enough efforts from the local government to explore and increase the potential of the sector, and that both the government and private sectors should take several policies and actions to make this sector can compete with the other sectors.

4. Growth ratio model (GRM).

Growth Ratio Model (GRM) Analysis is an alternative analysis tool that is used in determining the description of regional and city planning economic activities obtained from modifying the *Shift Share* model (Yusuf, 1999). This analysis model is derived from the initial equation of the main components in the *Shift Share* analysis, namely *Differential Shift* and *Proportionality Shift*. *Growth Ratio Model (GRM) Analysis* is used in the Pematang Regency area to analyze the description of potential economic activities that are emphasized

in the analysis of economic structure as a basic consideration in determining the potential of the economic area of Pemalang Regency.

GRM analysis is done by comparing the growth of a sector in a district/city with the same sector growth in the province. The GRM analysis is divided into 2, namely the analysis of the Studied Area Growth Ratio (district/city), which is Pemalang Regency and the Regional Reference Growth Ratio analysis (province), which is Central Java Province. In Table 4.5 below, the results of the calculation and analysis of the GRM of Pemalang Regency are presented to see a description of the activities or economic sectors of the region.

Table 4.5
Pemalang District GRM Calculation Results 2010-2016

Business Field	RGR		SGR	
	Real	Nominal	Real	Nominal
Agriculture, Forestry and Fisheries	0,502255	-	1,09362	+
Mining and Excavation	1,243322	+	0,836095	-
Processing Industry	1,031781	+	1,492847	+
Electricity and Gas	1,231488	+	1,431223	+
Water Supply, Waste Management, and Recycling	0,263024	-	3,078722	+
Construction	0,956208	-	1,033083	+
Wholesale and retail trade	0,921954	-	1,039436	+
Transportation and Warehousing	1,339332	+	0,846565	-
Provision of Accommodation and Meals	1,139216	+	0,909393	-
Information and Communication	1,781755	+	1,013816	+
Financial Services and Insurance	1,021137	+	1,070615	+
Real Estate	1,284015	+	0,964855	-
Company Services	1,75082	+	1,015621	+
Mandatory Administration of Government, Defense and Social Security	0,446116	-	0,903618	-
Educational Services	2,205187	+	0,857786	-
Health Services and Social Activities	1,732393	+	0,818204	-
Other Services	1,037512	+	0,748898	-

Source: Data Processed

Annotation: RGR = Reference Area Growth Ratio ; SGR = Studied Area Growth Ratio

The table 4.5 above shows that the economic sectors that have a positive RGR value (+) and a positive SGR (+) value are Processing Industry sector, Electricity and Gas sector, Information and Communication sector, Financial Services and Insurance sector, and also Company Services sector. This indicates that in the period of 2010-2016, the sectors that have positive (+) value of RGR and SGR are the leading sectors, both at the provincial and district levels, because they have prominent growth compared to other sectors.

The economic sectors that have a positive RGR value (+) and a negative SGR (-) value are Mining and Excavation sector, Transportation and Warehousing sector, Provision of Accommodation and Meals sector, Educational Services sector, Health Services and Social Activities sector, and also Other Services sector. This indicates that in the period of 2010-2016 these six sectors had prominent growth at the provincial level, but at the district level they were not yet prominent.

The economic sectors that have a negative RGR value (-) and a positive SGR (+) value are Agriculture, Forestry and Fisheries sector, Water Supply, Waste Management, and Recycling sector, Construction sector, and also Wholesale and retail trade sector. This indicates that in the period of 2010-2016 these sectors had prominent growth at the district level, but were not prominent at the provincial level.

The only economic sector that has both negative RGR (-) and SGR (-) value is the Mandatory Administration of Government, Defense and Social Security sector. This indicates that in the period of 2010-2016, this sector had low growth both from the district and provincial levels.

The *Growth Ratio Model* (GRM) Analysis result in the Pemalang District shows that there are five (5) sectors that have a dominant growth and these sectors show an increase in the structure of economic growth. Those five sectors are Processing Industry sector, Electricity and Gas sector, Information and Communication sector, Financial Services and Insurance sector, and also Company Services sector.

5. Overlay analysis.

Overlay Analysis is used to determine potential economic sectors or activities based on both growth and contribution criteria by combining the results of the *Growth Ratio Model* (GRM) and *Location Quotient* (LQ) analysis. Judging by the results of the GRM, whichever, if the value of SGR > 1 , ie positive (+), it means that the growth of the sector at the studied area level is higher than the growth of the same sector in the reference area. And if the SGR value < 1 , ie negative (-), it means that the sector at the studied area level is lower than the sector's growth in the reference area. Whereas from LQ analysis, if the LQ value > 1 , ie positive (+), it means that the sector has a large contribution. And if the LQ value < 1 , ie negative (-), it means that the sector has a small contribution.

The results of calculations through *Overlay* Analysis in seventeen (17) economic sectors in Pemalang District from 2010 to 2016 can be seen in Table 4.6 below

Table 4.6
Result of Pemalang District's *Overlay* Analysis 2010-2016

Business Field	GRM (SGR)		LQ	
	Real	Nominal	Real	Nominal
Agriculture, Forestry and Fisheries	1,093619761	+	1,820360565	+
Mining and Excavation	0,836095269	-	2,22969264	+
Processing Industry	1,492846774	+	0,555812097	-
Electricity and Gas	1,431222793	+	1,172809454	+
Water Supply, Waste Management, and Recycling	3,0787216	+	1,184112454	+
Construction	1,033083351	+	0,419311406	-
Wholesale and retail trade	1,039435766	+	1,154439836	+
Transportation and Warehousing	0,846565234	-	0,931091992	-
Provision of Accommodation and Meals	0,909392858	-	1,796231159	+
Information and Communication	1,013816057	+	0,60119793	-
Financial Services and Insurance	1,070615486	+	1,07409688	+
Real Estate	0,964855109	-	1,009163281	+
Company Services	1,015621326	+	1,025343582	+
Mandatory Administration of Government, Defense and Social Security	0,903617971	-	1,247176722	+
Educational Services	0,857785671	-	1,423340679	+
Health Services and Social Activities	0,818203928	-	1,277550641	+
Other Services	0,748898337	-	1,858989648	+

Source : Data Processed

Annotation : GRM = *Growth Ratio Model*
SGR = Value of Studied Area Growth Ratio
LQ = Coefficient of *Location Quotient*

From the results of the *Overlay* analysis calculation in 2010 - 2016 above, it can be seen that the economic sector of Pemalang Regency shows the growth and contribution that can be classified as follows:

- a. Positive growth (+) and positive contribution (+) are found in the Agriculture, Forestry and Fisheries sector, Electricity and Gas sector, Water Supply, Waste Management, and Recycling sector, Wholesale and retail trade sector, Financial Services and Insurance sector, and also Company Services sector. This result indicates that these six (6) sectors are the most dominant sectors, which can be seen from the values obtained that both side of growth and contribution are significantly large to the formation of GDP and development in Pematang District.
- b. Positive growth (+) and negative contribution (-) are found in the Processing Industry sector, Construction sector, and also Information and Communication sector. This result indicates that even though these economic sectors have dominant growth, their contribution is still relatively small.
- c. Negative growth (-) and positive contribution (+) are found in the Mining and Excavation sector, Provision of Accommodation and Meals sector, Real Estate sector, Mandatory Administration of Government, Defense and Social Security sector, Educational Services sector, Health Services and Social Activities sector, and also Other Services sector. This result indicates that these economic sectors don't have a dominant growth. However, they still have a significant contribution to the GRDP of Pematang District.

Negative growth (-) and negative contribution (-) is only found in the Transportation and Warehousing sector. This result indicates that this sector is not a potential sector, and also does not give a significant contribution to the Pematang District's GRDP and development.