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**Sectoral Economic Potentials
of Bandung Metropolitan Area**

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SECTORAL ECONOMIC POTENTIALS OF BANDUNG METROPOLITAN AREA

Adhitya Wardhana

Abstract

The result of an “overlay analysis approach” suggests that Bandung municipality (Kota Bandung) need to re-emphasize the role of service sectors such electricity, gas, water supply, financial sector, and others service sector as engine of economic development. Those sectors are found to be the most promising in term of its future potential as the driver of economic growth of the region. The potential economic sector of Bandung regency (Kabupaten Bandung) on the other hand are still dominated by its traditionally-dominant sector such as agriculture and manufacturing.

Introduction

Bandung Metropolitan Area (Wilayah Metropolitan Bandung—WMB) is one of the leading area and Center of National Activities (Pusat Kegiatan Nasional—PKN). It has an important role as an engine of development in West-java province.

In term of regional structure, WMB's can be seen as a system of city constellation, where the city of Bandung functions as the core and other surrounding area become the periphery or satellites. Up to now, the development of the WMB tend to focus on expansion without careful consideration on its actual function. The mismatch between the the expected function with the actual or potential function can be an indicator the quality government intervention as the city planner. Synergy between government and economic players is needed for a better and more organized planning.

This paper use an overlay analysis to examine the potentials of all economic sectors to become a leading sector that can generate investment for the economic growth of WMB. We calculated location quotient and shift-share with growth ratio model. The calculation of location quotient and shift-share is used to determine the growth criteria and contribution criteria. Growth ratio model is a model that use a growth assessment from large scale activities or small scale activities. In growth ratio model, two ratios are used, growth ratio on subject area (GRS) and growth ratio on reference area (GRR). Then, those ratios will be overlay with location quotient analysis headed for the image of economic potential from one area. This paper is aimed to analyze the potentials of economic sectors to evaluate the sectoral economic growth for future consideration

in the development planning of Bandung metropolitan area

The Analysis uses district of Bandung metropolitan area, however city of Cimahi cannot be analyze since there is a limitation in data, hence this analysis will include District at Bandung municipality level, Bandung regency level, and Sumedang regency level from 2001-2003.

Growth Ratio Model (GRM)

This model is used to explain about economic activities, especially economic structure in one area that focus on the criteria of growth, either from externally (province) or internally (subject area)¹. Growth ratio model is divided into two different ratios, which are:

1. Growth ratio on reference area.
2. Growth ratio on subject area.

Growth Ratio on Reference Area (GRR)

The idea of this ratio is to make a comparison between economic sectors in the province area context (reference area) with the total GDRP province. GRR is a modification of Proportional Shift².

Proportional Shift measures marginal/changes on particular economic sectors growth on reference area as a part of total economic sectors on reference area.

$$P_{ij} = \left[\frac{\Delta E_{iR}}{E_{iR(t)}} - \frac{\Delta E_R}{E_{R(t)}} \right] E_{ij(t)}$$

Growth Ratio on Reference Area is obtained from the equation below:

¹ Yusuf, Maulana Ir., MT., Growth Ratio Model (GRM) as One Alternative Tools Regional Planning Analysis, FEUI

² Ibid

$$P_{ij} = \left[\frac{\Delta E_{iR}}{E_{iR(t)}} - \frac{\Delta E_R}{E_{R(t)}} \right] E_{ij(t)}$$

$$\frac{P_{ij}}{E_{ij(t)}} = \left[\frac{\Delta E_{iR} E_{R(t)}}{E_{iR(t)} E_{R(t)}} - \frac{\Delta E_R E_{iR(t)}}{E_{iR(t)} E_{R(t)}} \right]$$

$$\frac{P_{ij}}{E_{ij(t)}} = \left[\frac{\Delta E_{iR} E_{R(t)}}{E_{iR(t)} E_{R(t)}} - 1 \right] \frac{\Delta E_R}{E_{R(t)}}$$

$$\frac{E_{R(t)} P_{ij}}{\Delta E_R E_{ij(t)}} + 1 = \frac{\Delta E_{iR} E_{R(t)}}{E_{iR(t)} \Delta E_R} = \frac{\Delta E_{iR} / E_{iR(t)}}{\Delta E_R / E_{R(t)}}$$

$$RPR = \frac{\Delta E_{iR} / E_{iR(t)}}{\Delta E_R / E_{R(t)}}$$

Details:

$$\Delta E_{iR} = E_{iR(t+n)} - E_{iR(t)}$$

$$\Delta E_R = E_{R(t+n)} - E_{R(t)}$$

ΔE_{ij} = change in income on activity i at subject area with time period t and t+n.

ΔE_{iR} = change in income on activity i at reference area.

ΔE_R = change in GDRP at reference area.

E_{ij} = income on activity i at subject area

E_{iR} = income on activity i at reference area.

E_R = GDRP at reference area.

n = sum of years between two periods.

Criteria of GRR are acquired from:

If GRR is larger than one, in that case GRR is considered as positive value (+). If GRR is smaller than one, in that case GRR is considered as negative value (-). While GRR is positive, it explains to us that the growth on particular activities on provincial level is higher than the total growth of GDRP on that province. When GRR is negative, it explains to us that the growth on particular activities on

provincial level is lower than the total growth of GDRP on that province³.

$$\frac{E_{iR(t)}D_{ij}}{\Delta E_{iR}E_{ij(t)}} + 1 = \frac{\Delta E_{ij}E_{iR(t)}}{\Delta E_{iR}E_{ij(t)}} = \frac{\Delta E_{ij}/E_{ij(t)}}{\Delta E_{iR}/E_{iR(t)}}$$

Growth Ratio on Subject Area (GRS)

The idea of this ratio is to make a growth comparison between a specific economic sector on the subject area with the total GDRP on provincial level. GRS is a modification of Differential Shift.

Differential Shift measures marginal/changes on a specific economic sector growth on subject area as a part of activities on reference area.

$$D_{ij} = \left[\frac{\Delta E_{ij}}{E_{ij(t)}} - \frac{\Delta E_R}{E_{R(t)}} \right] E_{ij(t)}$$

Details:

ΔE_{ij} = change in income on activity i at subject area with time period t and t+n.

ΔE_{iR} = change in income on activity i at reference area.

ΔE_R = change in GDRP at reference area.

E_{ij} = income on activity i at subject area

E_{iR} = income on activity i at reference area.

E_R = GDRP at reference area.

n = sum of years between two periods.

Growth Ratio on Subject Area is obtained from the equation below:

$$D_{ij} = \left[\frac{\Delta E_{ij}}{E_{ij(t)}} - \frac{\Delta E_R}{E_{R(t)}} \right] E_{ij(t)}$$

$$D_{ij} = \Delta E_{ij} - \frac{\Delta E_{iR}E_{ij(t)}}{E_{iR(t)}}$$

$$D_{ij} = \left[\frac{\Delta E_{ij}E_{iR(t)}}{\Delta E_{iR}E_{ij(t)}} - 1 \right] \frac{\Delta E_{iR}E_{ij(t)}}{E_{iR(t)}}$$

$$RPS = \frac{\Delta E_{ij}/E_{ij(t)}}{\Delta E_{iR}/E_{iR(t)}}$$

Details:

ΔE_{ij} = change in income on activity i at subject area with time period t and t+n.

ΔE_{iR} = change in income on activity i at reference area.

ΔE_R = change in GDRP at reference area.

E_{ij} = income on activity i at subject area

E_{iR} = income on activity i at reference area.

E_R = GDRP at reference area.

n = sum of years between two periods.

Criteria of GRS are acquired from:

If GRS is larger than one, in that case GRS is considered as positive value (+). If GRS is smaller than one, in that case GRS is considered as negative value (-). While GRS is positive, it explains to us that the growth on a specific activity on subject area (city or municipal level) is higher than the growth at provincial level. When GRS is negative, it explains to us that the growth on a specific activity on subject area is lower than the growth at provincial level.

Final analysis from growth method is a combination from GRR and GRS, which is:

1. First classification, GRR and GRS have a positive value is called as dominant growth. It has a meaning that the specific activity is raising not only at subject area level (at city or

³ Ibid

- municipal level) but on bigger area as well, in this case at provincial level.
2. Second classification, GRR has positive value and GRS has negative value. In this case, the specific activity that has been examined is rising at provincial level although at subject area this activity is not conspicuous.
 3. Third classification, GRR has negative value and GRS has positive value. In this case, the specific activity that has been examined is rising at subject area although at provincial level this activity is not conspicuous. Therefore, this activity is expected can enhance the growth at provincial growth.
 4. Fourth classification, both GRR and GRS have a negative value is called as low growth. It has a meaning that the specific activity is not raising not only at subject area level (at city or municipal level) but on bigger area as well, in this case at provincial level.
1. First, to make an estimation about total amount/export capacity either in goods/ services or workers that happened within the community easier compare if we do that through direct survey.
 2. Second, is to observe how a specific sector can be self-sufficient in production process and providing the workers.
 3. Third, is to observe general local economic stability, where stability always associated with the economic base diversity, which has a meaning that output/workers are not concentrated in one sector/industry only.

Location Quotient Analysis

Location Quotient (LQ) analysis is a statistic method that used output characteristic/value added or job opportunities to analyze and to determined the economic base diversity from local community. The sectors those are included in community economic base is a sector which has a characteristic that related with income and job opportunities. LQ is gave us a framework about the importance of people's economic stability and flexibility to adjust with a new condition through industrial/sector examination which is located at community neighborhood⁴.

The advantages from LQ analysis are:

⁴ Kuncoro, Mudrajad, Analisis Spasial dan Regional, UPP AMP YKPN, Yogyakarta, 2002.

LQ analysis on industrial sector is using to make a comparison between industrial share as a percentage of total workers on local area (subject area) compare with industrial share as a percentage of total workers on national/ bigger area (reference area, in this case is provincial level). The comparison that we make is on the same industrial sector. Once industrial share on local area is bigger than national area, we can conclude that the positive value from output/workers will determine the amount of export. In terms of mathematical, that statement will be:

$$LQ_i = \frac{v_i/v_t}{V_i/V_t}$$

Where:

LQ_i is a location quotient value on sector i at the specific area

v_i is total output/workers at industry i at the specific area

v_t is total output/workers at the specific area

V_i is total output/workers at industry i at reference area

V_t is total output/workers at reference area

The value that obtained from LQ has several meanings that followed with the rules below:

1. If LQ is bigger than 1 therefore sector i on that area is more specialized compare with the same sector on the reference area. In other words, that sector is capable to export their products/workers (base sector).
2. If LQ is less than 1 therefore sector i on that area is less specialized compare with the same sector on the reference area. In other words, that

sector does not have any capability to export their products/workers (non-base sector).

3. If LQ_i is 1 then the sector i on that area have same specialization level with the same sector at reference area. In other words, that sector is self-sufficient.

The result from location quotient analysis (LQ) can be seen at appendix. The calculation of location quotient (LQ) is designed for the calculation on overlay analysis by combining the value that we obtained from growth ratio model with the LQ result itself that followed on overlay criterions, which has been determined before.

Overlay Analysis

Overlay analysis is a descriptive analysis, which is, described potential economic activities based on growth criteria that obtained from growth ratio model, and contribution criteria from location quotient analysis.

There are four possibilities from overlay analysis, which are:

1. If the value of growth and contribution are both positive, it has a meaning that there is a sector which is very dominant in terms of growth and contribution.
2. Growth has positive value and contribution has negative value, which is mean that there is a sector which has dominant growth but insignificant contribution. The sector contribution can be enhanced thus it can be a potential sector.
3. Growth has negative value and contribution has positive value, which is mean that there is a sector which has significant contribution but insignifi-

cant growth. This is happen since there is growth stagnancy in this sector.

4. If the value of growth and contribution are both negative, it has a meaning that these sector is not potential sector either based on growth or contribution criteria.

Considering on growth ratio model analysis and location quotient, we can describe economic structure on subject area, and as a result, we can inveterate potential economic sectors from every city and municipal level.

Growth Ratio Model Analysis (GRM) at Bandung Municipality, Bandung Regency, and Sumedang Regency

Stand on the descriptive of economic activities on metropolitan area which is included Bandung municipality, Bandung regency, and Sumedang regency which is focusing on growth criteria either in provincial scale or regional scale. In growth ratio model, the ratios are divided into two. First is growth ratio on reference area (GRR), second is growth ratio on subject/regional area (GRS). In this paper, the reference area is city or municipal level and the subject area is district. Both ratios can be seen on the table in enclosure section.

Based on The Growth Ratio estimation, agricultural, mining and quarrying sectors have low growth criteria. The meaning from low growth criteria is either in district or municipality area, agriculture sector and mining and quarrying sector

have an insignificant growth or in other words we can say that these sectors are not within the priority to be developed in economic growth do not have any contribution in economic development at Bandung municipality. Even though there are some districts such as district Bandung Wetan, Batununggal, Bojongloa, Bandung Kidul, Coblong, Margacinta dan Cibiru which have potential criteria but do not have any impact to enhance growth at Bandung municipality. Furthermore for mining and quarrying sector, Bandung municipality does not have any resources.

After that for high growth criteria at Bandung municipality are in the manufacturing sector, electricity, gas, and water supply sector, financial sector, and transportation and communication sector. Generally, districts at Bandung municipality area are high growth criteria, obtained from manufacturing sector, electricity, gas, and water supply sector, financial sector, and transportation and communication sector, which are already gave a significant contribution to Bandung municipality. Even though these sectors are already gave a significant contribution, the government at Bandung municipality level should keep maintaining the evaluation to avoid the declining in growth, because in some district a good evaluation can give a positive and significant influences, where the sectors are turn into dominant growth criteria, like transportation and communication sector at Cicendo district and financial sector at district at bandung Wetan, Lengkong, Astana Anyar, Andir, and Babakan Ciparay.

Potential criteria are for construction sector, trade, hotel, and restaurant sector, and services sector. These sectors are expected to take a bigger role in order to give a contribution for growth at Bandung municipality.

Growth ratio model at Bandung regency is more diversity compare to Bandung municipality. This diversity happened on high growth and dominant growth criteria which are on the construction sector, trade, hotel, and restaurant sector, transportation and communication sector, financial sector, as well as services

sector. From this result we can conclude that there is a conducive whether for economic activities at Bandung regency and most of these activities have significant influences in economic growth. Sector which got high growth criteria is manufacturing sector, and for potential criteria is agriculture sector. Low growth is not really dominated at Bandung regency, which is mean that the investment that have been invested long time ago have significant contribution for economic growth in Bandung regency.

Table 1
Bandung Municipality Growth Ratio Model Conclusion Year 2001-2003

No	District Area	Agriculture	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water Supply	Construction	Trade, Hotel and Restaurant	Transportation and Communication	Financial	Services
1	Cicendo	PR	PR	PM	PM	P	P	DP	PM	P
2	Sumur Bandung	PR	PR	PM	PM	P	P	PM	PM	P
3	Bandung Wetan	P	PR	PM	PM	P	P	PM	DP	P
4	Ujungberung	P	PR	PM	PM	P	P	PM	PM	P
5	Rancasari	PR	PR	PM	PM	P	P	PM	PM	P
6	Regol	PR	PR	PM	PM	P	P	PM	PM	P
7	Lengkong	PR	PR	PM	PM	P	P	PM	DP	P
8	Sukajadi	PR	PR	PM	PM	P	PR	PM	PM	P
9	Astana Anyar	PR	PR	PM	PM	P	P	PM	DP	P
10	Andir	PR	PR	PM	PM	P	P	PM	DP	P
11	Babakan Ciparay	PR	PR	PM	PM	P	P	PM	DP	P
12	Batununggal	P	PR	PM	PM	P	P	PM	PM	P
13	Cidadap	PR	PR	PM	PM	P	P	PM	PM	P
14	Bojongloa Kidul	P	PR	PM	PM	P	P	PM	PM	P
15	Arcamanik	PR	PR	PM	PM	P	P	PM	PM	P
16	Kiaracondong	PR	PR	PM	PM	P	P	PM	PM	P
17	Bandung Kidul	P	PR	PM	PM	P	P	PM	PM	P
18	Sukasari	PR	PR	PM	PM	P	P	PM	PM	P
19	Cibeunying Kaler	PR	PR	PM	PM	P	P	PM	PM	P
20	Cicadas	PR	PR	PM	PM	P	P	PM	PM	P
21	Bandung Kulon	PR	PR	PM	PM	P	P	PM	PM	P
22	Cibeunying Kidul	PR	PR	PM	PM	P	P	PM	PM	P
23	Cobleng	P	PR	PM	PM	P	P	PM	PM	P
24	Margacinta	P	PR	PM	PM	P	P	PM	PM	P
25	Cibiru	P	PR	PM	PM	PR	P	PM	PM	PR
26	Bojongloa Kaler	PR	PR	PM	PM	P	P	PM	PM	P

Details :

- DP Dominant Growth
- PM High Growth
- P Potential
- PR Low Growth

Table 2
Bandung Regency Growth Ratio Model Conclusion 2001-2003

No	District Area	Agriculture	Mining And Quarrying	Manufacturing	Electricity, Gas, and Water Supply	Construction	Trade, Hotel and Restaurant	Transportation and Communication	Financial	Services
1	Padalarang	PR	PM	P	P	DP	DP	PM	DP	DP
2	Batujajar	PR	DP	P	PR	PM	DP	DP	DP	DP
3	Cipatat	PR	DP	PR	P	PM	PM	DP	DP	PM
4	Ngamprah	PR	PM	P	PR	DP	DP	DP	DP	DP
5	Cileunyi	P	PM	P	PR	PM	PM	DP	PM	DP
6	Cimenyang	PR	PM	P	P	PM	DP	DP	DP	DP
7	Cilengkrang	P	PM	PR	PR	PM	DP	PM	DP	PM
8	Bojongsoang	P	PM	PR	PR	DP	PM	DP	DP	DP
9	Margahayu	PR	DP	P	PR	PM	DP	PM	DP	DP
10	Margaasih	P	DP	PR	PR	PM	DP	PM	DP	PM
11	Katapang	P	PM	PR	PR	DP	DP	DP	DP	PM
12	Dayeuhkolot	PR	PM	P	PR	DP	PM	PM	PM	DP
13	Banjaran	P	PM	P	PR	PM	DP	DP	PM	DP
14	Pameungpeuk	PR	PM	P	PR	PM	DP	PM	PM	PM
15	Pangalengan	P	DP	P	PR	DP	DP	DP	DP	DP
16	Arjasari	P	DP	P	PR	DP	PM	PM	PM	DP
17	Cimaung	PR	PM	P	PR	PM	PM	DP	DP	PM
18	Ciliilin	P	PM	P	P	DP	DP	DP	DP	DP
19	Sindangkerta	P	PM	PR	P	PM	DP	PM	DP	DP
20	Cipongkor	P	PM	P	PR	PM	PM	DP	PM	DP
21	Gununghalu	P	PM	P	PR	DP	PM	P	DP	PM
22	Rongga	P	PM	P	PR	PM	PM	PM	PM	PM
23	Cikalongwetan	PR	PM	P	PR	DP	DP	DP	PM	DP
24	Cipeundeuy	P	PM	P	P	PM	DP	DP	DP	PM
25	Cicalengka	P	PM	P	P	DP	DP	PM	PM	PM
26	Nagreg	P	PM	PR	PR	DP	PM	PM	PM	DP
27	Cikancung	P	PM	PR	PR	PM	PM	PM	PM	PM
28	Rancaekek	P	PM	P	P	DP	PM	DP	DP	DP
29	Ciparay	P	PM	P	P	DP	DP	DP	DP	DP
30	Pacet	P	PM	P	PR	PM	DP	DP	DP	DP
31	Kertasari	P	PM	PR	PR	PM	PM	PM	PM	PM
32	Baleendah	P	PM	PR	PM	PM	DP	DP	DP	DP
33	Majalaya	PR	PM	P	P	DP	DP	DP	DP	DP
34	Solokanjeruk	PR	PM	P	PR	PM	PM	DP	PM	DP
35	Paseh	P	PM	P	P	DP	DP	DP	DP	DP
36	Ibun	PR	PM	P	P	PM	PM	PM	DP	PM
37	Soreang	P	PM	P	PR	PM	DP	DP	DP	DP
38	Pasirjambu	PR	PM	PR	PR	DP	DP	PM	DP	DP
39	Ciwidey	P	PM	P	P	PM	PM	DP	DP	DP
40	Rancabali	P	PM	PR	PR	PM	DP	PM	PM	PM
41	Lembang	P	PM	P	PR	PM	DP	DP	PM	DP
42	Cisarua	PR	PM	P	PR	PM	PM	DP	PM	PM
43	Parongpong	PR	PM	PR	PR	PM	PM	PM	PM	PM

Details:

- DP Dominant Growth
- PM High Growth
- P Potential
- PR Low Growth

This time, the regency that will be analyzed is Sumedang regency. Based on growth ratio calculation there is none dominant growth criteria at Sumedang regency. This is has a meaning that economic activities at this regency cannot give any contribution yet. Growth is not high enough in agriculture sector, mining and quarrying sector, and trade, hotel and restaurant sector neither in district level nor in regency level.

Most of Sumedang economic growth is driven by manufacturing sector, electricity, gas, and water supply sector, transportation and communication sector,

and financial sector, furthermore for potential criteria there are construction sector and services sector. Sumedang regency is dominated by sectors which have criteria as high growth sector, which is mean the government from Sumedang regency need to enhance these sectors especially on district level. Since Sumedang regency is dominated by potential sector criteria, it is a must for government at Sumedang regency to establish a better policies to develop these sectors, thus in the future these sectors can be a leading sectors at Sumedang regency.

Table 3
Sumedang Regency Growth Ratio Model Conclusion 2001-2003

No	District Area	Agri-culture	Mining and Quarrying	Manu-facturing	Electricity, Gas, and Water Supply	Cons-truction	Trade, Hotel and Restaurant	Transportation and Communication	Finan-cial	Services
1	Cadasngampar	PR	PR	PM	PM	P	PR	PM	PM	P
2	Tomo	PR	PR	PM	PM	P	PR	PM	PM	P
3	Ujung Jaya	PR	PR	PM	PM	P	PR	PM	PM	PR
4	Conggeang	PR	PR	PM	PM	P	PR	PM	PM	PR
5	Paseh	PR	PR	PM	PM	P	PR	PM	PM	PR
6	Cimalaka	PR	PR	PM	PM	P	PR	PM	PM	P
7	Tanjungkerta	PR	PR	PM	PM	P	PR	PM	PM	PR
8	Buah Dua	PR	PR	PM	PM	P	PR	PM	PM	P
9	Cibugel	PR	PR	PM	PM	P	PR	PM	PM	P
10	Cikeruh	PR	PR	PM	PM	PR	PR	PM	PM	P
11	Cimanggung	PR	PR	PM	PM	PR	P	PM	PM	P
12	Tanjungsari	PR	PR	PM	PM	P	PR	PM	PM	P
13	Rancajalong	PR	PR	PM	PM	P	PR	PM	PM	P
14	Sumedang Selatan	PR	PR	PM	PM	P	PR	PM	PM	P
15	Sumedang Utara	PR	PR	PM	PM	P	PR	PM	PM	P
16	Situraja	PR	PR	PM	PM	P	PR	PM	PM	P
17	Darmaraja	PR	PR	PM	PM	P	PR	PM	PM	PR
18	Wado	PR	PR	PM	PM	P	PR	PM	PM	PR

Details :

- DP Dominant Growth
- PM High Growth
- P Potential
- PR Low Growth

Overlay Analysis at Bandung Municipality, Bandung Regency and Sumedang Regency

This analysis is focused to examine the relationship between growth criteria and contribution. The results that we obtained from overlay analysis have four possibilities, which have been mentioned on the previous part. Overlay analysis can be used to examine the potencies and growth influences from all economic sectors, which can be a leading sector that can generate investment for local government. The result that we obtained can be a blue print for Bandung metropolitan area planning. Without considering the economic sectors growth at regency area which are close from Bandung municipality, the planning won't present the best result. The planning on one area should also consider and examine the economic activities which are near or connected with Bandung municipality, and at the end its expected can present the best result and strike to the point.

On this paper, the overlay analysis will be conducted based on economic sectors at Bandung municipality, Bandung regency, and Sumedang regency. The result that we earned from overlay analysis for Bandung municipality will be:

1. In general agricultural sector, mining and quarrying sector, electricity, gas, and water supply sector, manufacturing sector, and transportation and communication sector are included into not potential and declining sectors. Especially for mining and quarrying sector, Bandung municipality does not have any resources.
2. Mostly manufacturing sector, electricity, gas, and water supply sector, transportation and communication sector are not potential sectors. At many districts area there are still

dominant growth and potential at agriculture sector and transportation and communication sector.

3. In many districts area where, the growth criteria is dominant and potential are at construction sector, trade, hotel and restaurant sector, and services sector. These mean that these sectors have significant contribution and enhanced the economic growth in Bandung municipality.
4. Government at Bandung municipality should give more attention for any sectors which are not potential and have declining criteria, by put them as precedence by investment expansion or just fulfill their investment needs which are not really dominat.

Overlay analysis for economic sectors at Bandung regency are:

1. From overlay calculation result is showed that there are some sectors which have criteria as not potential sector, such as mining and quarrying sector, electricity, gas, and water supply sector, and construction sector. At electricity, gas, and water supply sector, mining and quarrying sector, and construction sector are easy to make it better since at one district in bandung regency area these sectors have a criteria as potential sector and have a dominant growth. While mining and quarrying sector still need a huge attention since it is dominated by not potential criteria.
2. Subsequently the sectors beside mining and quarrying sector, electricity, gas, and water supply sector, as well as construction sector, have positive value or in average they have potential and dominant growth.

3. Essentially, based on overlay analysis, Bandung regency have several advantages which are better than compare to Bandung municipality, thus it is expected that the sectors at Bandung regency can exist and getting bigger.

The last overlay analysis is for Sumedang regency, where form the calculation, it will be like:

1. In general, the economic sectors at Sumedang regency are included into not potential and declining criteria. Barely electricity, gas, and water

supply sector at Sumedang regency with financial sector, and service sector at some district which have a better condition from others.

2. Government at Sumedang regency have to solve the migration problem, because every year number of people from Sumedang are moving to Bandung regency or Bandung municipality for a better life or job. This can be used as a signal that there is something wrong with the development program at Sumedang regency.

Table 4
Bandung Municipality Overlay Analysis Conclusion 2001-2003

No	District Area	Agriculture	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water Supply	Construction	Trade, Hotel and Restaurant	Transportation and Communication	Financial	Services
1	Cicendo	TP	TP	M	TP	PD	PD	SD	TP	PD
2	Sumur Bandung	TP	TP	TP	TP	SD	SD	TP	M	SD
3	Bandung Wetan	PD	TP	TP	M	SD	PD	TP	PD	SD
4	Ujungberung	SD	TP	M	TP	PD	PD	TP	TP	PD
5	Rancasari	M	TP	M	TP	PD	PD	TP	TP	PD
6	Regol	TP	TP	TP	M	SD	SD	TP	M	PD
7	Lengkong	TP	TP	TP	M	SD	SD	M	SD	PD
8	Sukajadi	TP	TP	TP	TP	SD	M	M	M	SD
9	Astana Anyar	TP	TP	TP	M	SD	SD	TP	SD	SD
10	Andir	M	TP	TP	M	PD	SD	TP	PD	PD
11	Babakan Ciparay	TP	TP	M	TP	PD	SD	TP	PD	PD
12	Batununggal	PD	TP	M	M	PD	PD	TP	TP	SD
13	Cidadap	TP	TP	TP	M	SD	SD	M	M	PD
14	Bojongloa Kidul	SD	TP	TP	TP	SD	SD	M	M	PD
15	Arcamanik	M	TP	M	M	PD	PD	M	TP	SD
16	Kiaracondong	TP	TP	TP	M	PD	SD	TP	M	PD
17	Bandung Kidul	SD	TP	TP	M	SD	PD	M	M	PD
18	Sukasari	M	TP	TP	M	SD	PD	M	M	SD
19	Cibeunying Kaler	TP	TP	TP	M	SD	SD	M	M	SD
20	Cicadas	M	TP	M	M	SD	PD	TP	M	PD
21	Bandung Kulon	TP	TP	M	TP	PD	PD	M	TP	SD
22	Cibeunying Kidul	TP	TP	TP	M	SD	SD	TP	TP	SD
23	Coblong	SD	TP	TP	M	SD	SD	M	M	SD
24	Margacinta	SD	TP	TP	M	SD	SD	M	M	SD
25	Cibiru	SD	TP	TP	M	M	PD	TP	TP	M
26	Bojongloa Kaler	TP	TP	TP	M	SD	SD	TP	M	SD

Details:

- SD Genuinely Dominant
 PD Genuinely Potential
 M Declining
 TP Not Potential

Table 5
Bandung Regency Overlay Analysis Conclusion 2001-2003

No	District Area	Agri- culture	Mining And Quarrying	Manu- facturing	Electricity, Gas, and Water Supply	Cons- truction	Trade, Hotel and Restaurant	Transportation and Communication	Finan- cial	Services
1	Padalarang	TP	TP	PD	SD	SD	PD	TP	PD	PD
2	Batujajar	SD	SD	PD	TP	TP	PD	SD	SD	SD
3	Cipatat	TP	SD	TP	SD	TP	TP	PD	SD	TP
4	Ngamprah	PD	TP	PD	TP	SD	PD	PD	PD	PD
5	Cileunyi	SD	TP	PD	TP	TP	TP	PD	TP	PD
6	Cimendan	TP	TP	PD	SD	TP	SD	SD	SD	SD
7	Cilengkrang	SD	TP	TP	TP	TP	SD	TP	SD	TP
8	Bojongsoang	PD	TP	TP	TP	PD	TP	SD	SD	SD
9	Margahayu	TP	SD	PD	TP	TP	SD	TP	SD	SD
10	Margaasih	SD	SD	TP	TP	TP	SD	TP	SD	TP
11	Katapang	PD	TP	TP	TP	PD	PD	SD	PD	TP
12	Dayeuhkolot	TP	TP	SD	TP	PD	TP	TP	TP	PD
13	Banjaran	SD	TP	SD	TP	TP	PD	PD	TP	PD
14	Pameungpeuk	TP	TP	SD	TP	TP	SD	TP	TP	TP
15	Pangalengan	SD	PD	PD	TP	SD	PD	SD	PD	SD
16	Arjasari	SD	SD	SD	TP	SD	TP	TP	TP	PD
17	Cimaung	TP	TP	PD	TP	TP	TP	PD	SD	TP
18	Cililin	PD	TP	SD	PD	SD	PD	PD	PD	PD
19	Sindangkerta	SD	TP	TP	PD	TP	SD	TP	PD	PD
20	Cipongkor	SD	TP	PD	TP	TP	TP	PD	TP	SD
21	Gununghalu	SD	TP	PD	TP	PD	TP	TP	PD	SD
22	Rongga	SD	TP	PD	TP	TP	TP	TP	TP	TP
23	Cikalongwetan	TP	TP	PD	TP	PD	SD	SD	TP	SD
24	Cipeundeuy	PD	TP	PD	PD	TP	SD	SD	PD	TP
25	Cicalengka	SD	TP	PD	PD	SD	PD	TP	TP	PD
26	Nagreg	PD	TP	TP	TP	SD	TP	TP	TP	PD
27	Cikancung	SD	TP	TP	TP	TP	M	TP	TP	TP
28	Rancaekek	PD	TP	SD	SD	PD	TP	SD	PD	PD
29	Ciparay	PD	TP	SD	PD	PD	PD	PD	PD	PD
30	Pacet	PD	TP	PD	TP	TP	SD	PD	PD	PD
31	Kertasari	SD	TP	M	TP	TP	M	TP	TP	M
32	Baleendah	PD	TP	TP	PD	TP	SD	PD	SD	PD
33	Majalaya	PD	TP	SD	PD	PD	PD	PD	PD	PD
34	Solokanjeruk	TP	TP	SD	M	TP	TP	PD	TP	PD
35	Paseh	PD	TP	SD	PD	PD	SD	SD	PD	PD
36	ibun	TP	TP	SD	PD	TP	TP	TP	SD	TP
37	Soreang	PD	TP	PD	TP	TP	SD	PD	PD	PD
38	Pasirjambu	TP	TP	TP	TP	TP	TP	TP	SD	SD
39	Ciwidey	PD	TP	SD	PD	TP	TP	PD	PD	PD
40	Rancabali	PD	TP	TP	TP	TP	SD	TP	TP	TP
41	Lembang	PD	TP	PD	TP	TP	SD	PD	TP	PD
42	Cisarua	M	TP	SD	TP	TP	PD	SD	TP	TP
43	Parongpong	M	TP	TP	TP	TP	M	TP	M	TP

Details :

- SD Genuinely Dominant
- PD Genuinely Potential
- M Declining
- TP Not Potential

Table 6
Sumedang Regency Overlay Analysis Conclusion 2001-2003

No	District Area	Agri- culture	Mining And Quarrying	Manu- facturing	Electricity, Gas, and Water Supply	Cons- truction	Trade, Hotel And Restaurant	Transportation and Communication	Finan- cial	Services
1	Cadasngampar	M	TP	TP	PD	TP	TP	TP	TP	M
2	Tomo	M	TP	TP	PD	TP	TP	TP	TP	M
3	Ujung Jaya	M	TP	TP	PD	TP	TP	TP	TP	TP
4	Conggeang	M	TP	TP	PD	TP	TP	TP	TP	TP
5	Paseh	M	TP	TP	TP	TP	TP	TP	TP	M
6	Cimalaka	M	TP	TP	TP	TP	TP	TP	PD	SD
7	Tanjungkerta	M	TP	TP	SD	TP	TP	TP	M	M
8	Buah Dua	M	TP	TP	PD	TP	TP	TP	PD	M
9	Cibugel	M	TP	TP	TP	M	TP	TP	TP	M
10	Cikeruh	M	TP	M	PD	TP	TP	PD	PD	M
11	Cimanggung	M	TP	M	PD	TP	TP	TP	PD	PD
12	Tanjungsari	M	TP	TP	SD	TP	TP	TP	SD	M
13	Rancakalong	TP	TP	TP	SD	TP	TP	TP	TP	TP
14	Sumedang Selatan	TP	TP	TP	PD	TP	TP	TP	PD	SD
15	Sumedang Utara	TP	TP	TP	PD	PD	TP	TP	TP	TP
16	Situraja	TP	TP	TP	PD	TP	TP	TP	PD	TP
17	Darmaraja	TP	TP	TP	PD	TP	TP	TP	TP	TP
18	Wado	TP	TP	TP	SD	TP	TP	TP	TP	TP

Details:

- SD Genuinely Dominant
- PD Genuinely Potential
- M Declining
- TP Not Potential

Conclusion

The result that we obtained from overlay analysis can be a blue print city planning and resident planning at Bandung metropolitan area. There are some conclusions that we earned from this examination:

1. First, based on overlay analysis, Bandung municipality needs to put more attention which are declining in growth, such as electricity, gas, and water supply sector, financial sector, others service sector. This is could be happened because there is not enough awareness from local government in terms of intensive evaluating and controlling.
2. Bandung regency has bigger contribution compare to Bandung municipality and Sumedang regency,

thus the local government have to create a new policy to reduce migration that frequently happen in Bandung regency, because without migration Bandung regency can continue to exist.

3. On the other side, Sumedang regency still needs more effort to enhance the growth in their economic sectors. This is happen because based on the overlay analysis, Sumedang regency is dominated by the criteria of low growth and not potential.
4. Finally based on overlay analysis, Bandung municipality as a satellite city can be source of policies and decisions in Bandung city planning, and it could be expected that there will be expansion and escalation in investment.

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APPENDIX

**TABLE GRS AND LQ
BANDUNG MUNICIPALITY**

	CICENDO	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-3,413427562	0,034583572	-	-	-
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,951044335	1,938245448	-	+	+
4	Electricity, Gas and Water Supply	0,955631793	0,338576781	-	-	-
5	Consturction	1,024233292	0,215524383	+	-	+
6	Trade, Hotel and Restaurant	1,042264665	0,432627805	+	-	+
7	Transportation and Communication	2,148244048	1,425276112	+	+	++
8	Financial	1,120261496	0,387740531	-	-	-
9	Services	0,920493338	0,296702067	+	-	+

	SUMUR BANDUNG	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-3,895759717	0,111733108	-	-	-
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,970693881	0,175001752	-	-	-
4	Electricity, Gas and Water Supply	1,070924238	0,917044587	-	-	-
5	Consturction	1,019194022	1,028226128	+	+	++
6	Trade, Hotel and Restaurant	1,014130214	1,399441621	+	+	++
7	Transportation and Communication	0,867221413	0,672412445	-	-	-
8	Financial	1,010348047	1,531734298	-	+	+
9	Services	0,95938844	2,462475785	+	+	++

	BANDUNG WETAN	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	6,591446326	0,184969763	+	-	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	1,037593961	0,174050976	-	-	-
4	Electricity, Gas and Water Supply	0,999710029	1,291700715	-	+	+
5	Consturction	1,127169922	1,191002972	+	+	++
6	Trade, Hotel and Restaurant	0,992712273	0,988929908	+	-	+
7	Transportation and Communication	0,850514585	0,579575349	-	-	-
8	Financial	1,338007333	0,960595973	+	-	+
9	Services	0,917432029	4,05795636	+	+	++

	UJUNG BERUNG	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	21,03293137	1,816545527	+	+	++
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	1,002527913	2,271355446	-	+	+
4	Electricity, Gas and Water Supply	1,007284151	0,470281482	-	-	-
5	Consturction	0,950076722	0,281742288	+	-	+
6	Trade, Hotel and Restaurant	0,971439915	0,378850296	+	-	+
7	Transportation and Communication	0,690131423	0,27870737	-	-	-
8	Financial	0,998594792	0,533261529	-	-	-
9	Services	0,965558443	0,423192336	+	-	+

	RANCASARI	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-	-	-	+	+
2	Mining and Quarrying	0	0	-	-	-
3	Manufacturing	1,011210445	1,979253219	-	+	+
4	Electricity, Gas and Water Supply	1,014739651	0,649738874	-	-	-
5	Consturction	1,053532347	0,381561208	+	-	+
6	Trade, Hotel and Restaurant	1,047778842	0,666637545	+	-	+
7	Transportation and Communication	0,701368977	0,38963492	-	-	-
8	Financial	0,96516381	0,393472172	-	-	-
9	Services	1,636202137	0,3058364	+	-	+

	REGOL	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-3,726158742	0,311506459	-	-	-
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,987904954	0,769860907	-	-	-
4	Electricity, Gas and Water Supply	1,009680866	1,012272653	-	+	+
5	Consturction	1,093159351	1,084123764	+	+	++
6	Trade, Hotel and Restaurant	1,115972355	1,457059482	+	+	++
7	Transportation and Communication	0,818537548	0,744754486	-	-	-
8	Financial	0,892048094	1,085763812	-	+	+
9	Services	1,152919986	0,529039372	+	-	+

	LENGKONG	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-4,310771921	0,153468974	-	-	-
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	1,00074204	0,382957724	-	-	-
4	Electricity, Gas and Water Supply	1,004349754	1,330454509	-	+	+
5	Consturction	1,027845719	1,376154107	+	+	++
6	Trade, Hotel and Restaurant	1,064472634	1,46572849	+	+	++
7	Transportation and Communication	0,839830573	1,039512409	-	+	+
8	Financial	1,25451675	1,824128108	+	+	++
9	Services	0,941880953	0,681813699	+	-	+

	SUKAJADI	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-4,648636757	0,591479146	-	-	-
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,935183893	0,755978108	-	-	-
4	Electricity, Gas and Water Supply	1,066657509	0,843048157	-	-	-
5	Consturction	1,085443396	1,198429004	+	+	++
6	Trade, Hotel and Restaurant	0,31813663	1,00273566	-	+	+
7	Transportation and Communication	0,897759011	1,252027285	-	+	+
8	Financial	0,988662434	1,488024826	-	+	+
9	Services	0,961411115	1,107244495	+	+	++

	ASTANA ANYAR	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-5,171859942	0,203254006	-	-	-
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,991569091	0,421651998	-	-	-
4	Electricity, Gas and Water Supply	1,010786988	1,402382841	-	+	+
5	Consturction	0,92528264	1,051390529	+	+	++
6	Trade, Hotel and Restaurant	1,088752451	1,662188826	+	+	++
7	Transportation and Communication	0,740516866	0,566554889	-	-	-
8	Financial	1,352528033	1,23467288	+	+	++
9	Services	1,068709052	1,040089654	+	+	++

	ANDIR	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-5,076903974	1,231627722	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,976618473	0,535362586	-	-	-
4	Electricity, Gas and Water Supply	1,039761179	1,015620956	-	+	+
5	Consturction	1,091636228	0,71957098	+	-	+
6	Trade, Hotel and Restaurant	1,068264372	1,64170109	+	+	++
7	Transportation and Communication	0,975701288	0,94726483	-	-	-
8	Financial	1,194018971	0,842841734	+	-	+
9	Services	0,90630373	0,822080017	+	-	+

	BABAKAN CIPARAY	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-1,057256324	0,191289956	-	-	-
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	1,10061413	1,110614016	-	+	+
4	Electricity, Gas and Water Supply	1,001957815	0,682784633	-	-	-
5	Consturction	0,976254061	0,573778458	+	-	+
6	Trade, Hotel and Restaurant	1,092256274	1,35523391	+	+	++
7	Transportation and Communication	0,655202548	0,586912242	-	-	-
8	Financial	1,162132372	0,754023287	+	-	+
9	Services	1,081898042	0,508481832	+	-	+

	BATUNUNGGAL	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	21,53881419	0,351549597	+	-	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	1,115915848	1,254324095	-	+	+
4	Electricity, Gas and Water Supply	0,979177076	1,057672096	-	+	+
5	Consturction	1,079238845	0,776989518	+	-	+
6	Trade, Hotel and Restaurant	1,111682663	0,817250452	+	-	+
7	Transportation and Communication	0,858747789	0,824392272	-	-	-
8	Financial	0,972899699	0,829695921	-	-	-
9	Services	0,985671533	1,186833387	+	+	++

	CIDADAP	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-4,023599846	0,644819612	-	-	-
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	1,015730995	0,073425142	-	-	-
4	Electricity, Gas and Water Supply	0,962978208	1,454904786	-	+	+
5	Consturction	0,965441341	2,712765501	+	+	++
6	Trade, Hotel and Restaurant	1,029780063	1,444175694	+	+	++
7	Transportation and Communication	0,886656324	1,478966888	-	+	+
8	Financial	0,875275127	1,448660349	-	+	+
9	Services	1,053521345	0,757659105	+	-	+

	BOJONGLOA KIDUL	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	8,813358049	1,112928078	+	+	++
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	1,039371449	0,649307501	-	-	-
4	Electricity, Gas and Water Supply	1,004256963	0,959630512	-	-	-
5	Consturction	0,976513973	1,082916138	+	+	++
6	Trade, Hotel and Restaurant	0,985122916	1,303460312	+	+	++
7	Transportation and Communication	0,612456	1,213952054	-	+	+
8	Financial	0,908576389	1,20969596	-	+	+
9	Services	1,270190739	0,771672383	+	-	+

	ARCAMANIK	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-38,20357916	2,956204215	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,933808118	1,083922523	-	+	+
4	Electricity, Gas and Water Supply	0,994793377	1,331359338	-	+	+
5	Consturction	0,995378913	0,977321261	+	-	+
6	Trade, Hotel and Restaurant	0,894398721	0,851109589	+	-	+
7	Transportation and Communication	0,744665748	1,112694361	-	+	+
8	Financial	0,551413494	0,848309084	-	-	-
9	Services	0,980634441	1,029552665	+	+	++

	KIARACONDONG	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-3,547579737	0,431725767	-	-	-
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	1,072634132	0,939570085	-	-	-
4	Electricity, Gas and Water Supply	0,978515479	1,220716793	-	+	+
5	Consturction	1,05915876	0,796086791	+	-	+
6	Trade, Hotel and Restaurant	0,988765394	1,094260411	+	+	++
7	Transportation and Communication	0,845805469	0,829645005	-	-	-
8	Financial	0,979854209	1,248264609	-	+	+
9	Services	0,994941573	0,995523357	+	-	+

	BANDUNG KIDUL	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	8,813358049	1,203948755	+	+	++
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	1,039371449	0,70241103	-	-	-
4	Electricity, Gas and Water Supply	1,004256963	1,038113768	-	+	+
5	Consturction	0,976513973	1,171482292	+	+	++
6	Trade, Hotel and Restaurant	0,940820582	0,47057135	+	-	+
7	Transportation and Communication	0,727450395	3,201191485	-	+	+
8	Financial	0,908576389	1,308630786	-	+	+
9	Services	1,270190739	0,834783508	+	-	+

	SUKASARI	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-5,840372104	2,678421452	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	1,002919011	0,156919475	-	-	-
4	Electricity, Gas and Water Supply	0,958169543	1,260169119	-	+	+
5	Consturction	0,968705189	2,247841088	+	+	++
6	Trade, Hotel and Restaurant	1,001880476	0,938666298	+	-	+
7	Transportation and Communication	0,876211552	2,184772401	-	+	+
8	Financial	0,778074442	1,814093767	-	+	+
9	Services	0,995340971	1,237721299	+	+	++

	CIBEUNYING KALER	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-2,564650404	0,425373136	-	-	-
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,997482323	0,370524826	-	-	-
4	Electricity, Gas and Water Supply	0,975197241	1,416148491	-	+	+
5	Consturction	0,927365933	1,082696377	+	+	++
6	Trade, Hotel and Restaurant	0,949716107	1,101037054	+	+	++
7	Transportation and Communication	0,904047781	1,718426275	-	+	+
8	Financial	0,997799477	1,402608121	-	+	+
9	Services	0,838573933	1,519732016	+	+	++

	CICADAS	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-3,180468566	2,219384523	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,942067464	1,241295102	-	+	+
4	Electricity, Gas and Water Supply	0,982729386	1,515054278	-	+	+
5	Consturction	0,940708802	1,557072062	+	+	++
6	Trade, Hotel and Restaurant	0,984389867	0,600160894	+	-	+
7	Transportation and Communication	0,739744987	0,955763785	-	-	-
8	Financial	0,784763904	1,183791602	-	+	+
9	Services	1,061025576	0,907988127	+	-	+

	BANDUNG KULON	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-4,088325787	0,910353796	-	-	-
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	1,023609473	1,149074152	-	+	+
4	Electricity, Gas and Water Supply	0,99010606	0,981583209	-	-	-
5	Consturction	0,978044134	0,854333236	+	-	+
6	Trade, Hotel and Restaurant	1,039170412	0,947063876	+	-	+
7	Transportation and Communication	0,682934143	0,92820693	-	-	+
8	Financial	0,991835891	0,739455467	-	-	-
9	Services	0,999632313	1,029507702	+	+	++

	CIBEUNYING KIDUL	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-3,651034574	0,306689149	-	-	-
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	1,011176675	0,773744956	-	-	-
4	Electricity, Gas and Water Supply	0,95647195	1,343170401	-	+	+
5	Consturction	0,960468278	1,084324468	+	+	++
6	Trade, Hotel and Restaurant	0,963741229	1,158444452	+	+	++
7	Transportation and Communication	0,702660421	0,86893282	-	-	-
8	Financial	0,895755521	0,883974927	-	-	-
9	Services	0,913282392	1,363940236	+	+	++

	COBLONG	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	3,093662451	1,34130511	+	+	++
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,998669405	0,173997225	-	-	-
4	Electricity, Gas and Water Supply	0,990762817	1,702473134	-	+	+
5	Consturction	1,001859518	1,593389871	+	+	++
6	Trade, Hotel and Restaurant	1,010416682	1,111339219	+	+	++
7	Transportation and Communication	0,896307844	1,584962826	-	+	+
8	Financial	0,908251258	1,980970137	-	+	+
9	Services	0,902440363	1,489327506	+	+	++

	MARGACINTA	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	3,563184596	2,721380911	+	+	++
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	1,012092768	0,422541195	-	-	-
4	Electricity, Gas and Water Supply	1,008231325	1,647062215	-	+	+
5	Consturction	1,001126614	1,292300486	+	+	++
6	Trade, Hotel and Restaurant	0,983001361	1,188307232	+	+	++
7	Transportation and Communication	0,800743308	1,333844663	-	+	+
8	Financial	0,82052865	1,137251324	-	+	+
9	Services	1,145144311	1,43959451	+	+	++

	CIBIRU	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	4,890250814	5,319184239	+	+	++
2	Mining and Quarrying	0	0	-	-	-
3	Manufacturing	0,966942567	0,595130738	-	-	-
4	Electricity, Gas and Water Supply	1,005605901	1,282395506	-	+	+
5	Consturction	0,869007393	4,61237276	-	+	+
6	Trade, Hotel and Restaurant	0,918974207	0,800212276	+	-	+
7	Transportation and Communication	0,717591915	0,820917058	-	-	-
8	Financial	0,820377638	0,844021132	-	-	-
9	Services	1,00503118	1,067017499	-	+	+

	BOJONGLOA KALER	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-3,733436396	0,347347811	-	-	-
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,990560873	0,444205546	-	-	-
4	Electricity, Gas and Water Supply	0,99906876	2,044229706	-	+	+
5	Consturction	1,107932952	1,396074879	+	+	++
6	Trade, Hotel and Restaurant	1,117279158	1,502572636	+	+	++
7	Transportation and Communication	0,675892156	0,633531596	-	-	-
8	Financial	0,968483844	1,039252376	-	+	+
9	Services	1,250708333	1,175850412	+	+	++

**TABLE GRS AND LQ
BANDUNG REGENCY**

	Padalarang	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-14,1588247	0,00053142	-	-	-
2	Mining and Quarrying	-7,79581705	0,005019739	-	-	-
3	Manufacturing	191,425307	0,053672944	+	-	+
4	Electricity, Gas and Water Supply	303186,8362	13,63042466	+	+	++
5	Construction	229695,8681	7,270548869	+	+	++
6	Trade, Hotel and Restaurant	51,59998969	0,017314795	+	-	+
7	Transportation and Communication	-6,53005126	0,001191047	-	-	-
8	Financial	605,6888035	0,060761836	+	-	+
9	Services	1302,296085	0,259582156	+	-	+

	Batu Jajar	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	918,5110368	1,300904422	+	+	++
2	Mining and Quarrying	112,2956576	3,407262693	+	+	++
3	Manufacturing	148,6007079	0,292989087	+	-	+
4	Electricity, Gas and Water Supply	-11,1268839	0,000810284	-	-	-
5	Construction	-4,32089146	0,003178639	-	-	-
6	Trade, Hotel and Restaurant	29,35438874	0,07490091	+	-	+
7	Transportation and Communication	3184,610209	1,078629247	+	+	++
8	Financial	60848,2227	15,33935572	+	+	++
9	Services	8123,445863	2,873390938	+	+	++

	Cipatat	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-10,3480236	0,568566145	-	-	-
2	Mining and Quarrying	442,7551613	25,59893952	+	+	++
3	Manufacturing	-10,2618231	0,032468322	-	-	-
4	Electricity, Gas and Water Supply	278,3934437	9,60557616	+	+	++
5	Construction	-7,51779737	0,002331048	-	-	-
6	Trade, Hotel and Restaurant	-3,85618539	0,659040527	-	-	-
7	Transportation and Communication	1,584026764	0,470644389	+	-	+
8	Financial	29,94833661	1,490826944	+	+	++
9	Services	-5,29461638	0,100903077	-	-	-

	Ngamprah	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	2,703688019	0,076980039	+	-	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	4,459666211	0,08320904	+	-	+
4	Electricity, Gas and Water Supply	-	-	-	-	-
5	Construction	291942,9653	25,94157645	+	+	++
6	Trade, Hotel and Restaurant	1831,892127	0,669620409	+	-	+
7	Transportation and Communication	123,6454185	0,22716691	+	-	+
8	Financial	221,2713758	0,343647587	+	-	+
9	Services	213,8063448	0,298115925	+	-	+

	Cileunyi	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	9706,021279	6,27547303	+	+	++
2	Mining and Quarrying	-9,38369009	-	-	-	-
3	Manufacturing	310,068537	0,573650802	+	-	+
4	Electricity, Gas and Water Supply	-11,2253382	-	-	-	-
5	Construction	-7,18253705	0,000430565	-	-	-
6	Trade, Hotel and Restaurant	-6,12380001	0,057951879	-	-	-
7	Transportation and Communication	11,25826619	0,080591091	+	-	+
8	Financial	-8,13233029	0,004483737	-	-	-
9	Services	3,154050258	0,184337027	+	-	+

	Cimencyan	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-2,68089583	0,389381731	-	-	-
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	1,372195129	0,410302131	+	-	+
4	Electricity, Gas and Water Supply	141,8251363	1,123145335	+	+	++
5	Construction	-	-	-	-	-
6	Trade, Hotel and Restaurant	20,67290643	2,930313223	+	+	++
7	Transportation and Communication	99,27169858	1,662274929	+	+	++
8	Financial	15,41961478	2,972430674	+	+	++
9	Services	2,096494969	1,253617798	+	+	++

	Cilengkrang	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	14579,20022	5,651482276	+	+	++
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	-6,55529645	0,070095533	-	-	-
4	Electricity, Gas and Water Supply	-11,2250309	0,000174486	-	-	-
5	Construction	-7,52498012	-	-	-	-
6	Trade, Hotel and Restaurant	300,1268619	1,991183514	+	+	++
7	Transportation and Communication	-2,46010544	0,130677572	-	-	-
8	Financial	55,10744979	1,52975015	+	+	++
9	Services	-6,15386492	0,044559114	-	-	-

	Bojong Soang	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	9,938324356	0,123276111	+	-	+
2	Mining and Quarrying	-9,38369009	-	-	-	-
3	Manufacturing	-9,67898266	0,051086662	-	-	-
4	Electricity, Gas and Water Supply	-	-	-	-	-
5	Construction	46,35261129	0,170797206	+	-	+
6	Trade, Hotel and Restaurant	-8,30766669	0,030269984	-	-	-
7	Transportation and Communication	807,5666989	1,885651262	+	+	++
8	Financial	98,77032998	2,934850999	+	+	++
9	Services	291,6699033	9,767581373	+	+	++

	Margahayu	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-9,61243145	0,018839301	-	-	-
2	Mining and Quarrying	1856,004019	4,579476182	+	+	++
3	Manufacturing	9,123275326	0,272843573	+	-	+
4	Electricity, Gas and Water Supply	-11,2253382	-	-	-	-
5	Construction	-	-	-	-	-
6	Trade, Hotel and Restaurant	1114,998393	4,530162324	+	+	++
7	Transportation and Communication	-8,41948301	0,002654686	-	-	-
8	Financial	101,2565475	1,891996514	+	+	++
9	Services	55,07492299	1,296837882	+	+	++

	Margaasih	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	120,3349493	1,184490306	+	+	++
2	Mining and Quarrying	1380,384728	1,481440613	+	+	++
3	Manufacturing	-8,53321523	0,755625996	-	-	-
4	Electricity, Gas and Water Supply	-11,2214265	0,003368295	-	-	-
5	Construction	-7,52498012	-	-	-	-
6	Trade, Hotel and Restaurant	8,219141443	2,729991714	+	+	++
7	Transportation and Communication	-8,24761083	0,3115336	-	-	-
8	Financial	9,127411306	1,306971703	+	+	++
9	Services	-4,61965381	0,399796569	-	-	-

	Katapang	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	1934,238083	0,267156825	+	-	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	-0,09019423	0,141000423	-	-	-
4	Electricity, Gas and Water Supply	-	-	-	-	-
5	Construction	59902,66412	0,784285732	+	-	+
6	Trade, Hotel and Restaurant	93,33758531	0,199998208	+	-	+
7	Transportation and Communication	32368,56067	15,74981976	+	+	++
8	Financial	16,59853473	0,027193707	+	-	+
9	Services	-3,37546464	0,023213379	-	-	-

	Dayeuh Kolot	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-14,68654135	0,000732906	-	-	-
2	Mining and Quarrying	-9,38369009	-	-	-	-
3	Manufacturing	56,92761245	1,825311929	+	+	++
4	Electricity, Gas and Water Supply	-	-	-	-	-
5	Construction	234,0760492	0,509958469	+	-	+
6	Trade, Hotel and Restaurant	0,030274119	0,366141051	-	-	-
7	Transportation and Communication	-8,52605173	0,001633938	-	-	-
8	Financial	-8,33152043	0,001820788	-	-	-
9	Services	8,447716018	0,441442601	+	-	+

	Banjaran	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	5281,542446	1,585113741	+	+	++
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	297,8319558	1,403010278	+	+	++
4	Electricity, Gas and Water Supply	-	-	-	-	-
5	Construction	-	-	-	-	-
6	Trade, Hotel and Restaurant	48,93484677	0,497922096	+	-	+
7	Transportation and Communication	90,57773508	0,532195673	+	-	+
8	Financial	-	-	-	-	-
9	Services	42,52242419	0,447098036	+	-	+

	Pameungpeuk	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-14,7223908	0,011757428	-	-	-
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	9,898218384	1,315211758	+	+	++
4	Electricity, Gas and Water Supply	-	-	-	-	-
5	Construction	-	-	-	-	-
6	Trade, Hotel and Restaurant	48,89662928	2,314269517	+	+	++
7	Transportation and Communication	-8,196979066	0,083254069	-	-	-
8	Financial	-	-	-	-	-
9	Services	-5,90307398	0,092520815	-	-	-

	Pangalengan	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	971,7867837	1,830921385	+	+	++
2	Mining and Quarrying	275,9552757	0,225198357	+	-	+
3	Manufacturing	212,2911508	0,771392051	+	-	+
4	Electricity, Gas and Water Supply	-	-	-	-	-
5	Construction	6230,090445	1,437718276	+	+	++
6	Trade, Hotel and Restaurant	211,0673136	0,83508616	+	-	+
7	Transportation and Communication	973,6367635	1,971756491	+	+	++
8	Financial	97,87354936	0,760021402	+	-	+
9	Services	217,5522151	1,572636562	+	+	++

	Arjasari	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	98,43396718	1,138191801	+	+	++
2	Mining and Quarrying	2211,18872	1,97505645	+	+	++
3	Manufacturing	89,84032086	1,185145681	+	+	++
4	Electricity, Gas and Water Supply	-11,2253382	-	-	-	-
5	Construction	48046,60085	6,560021131	+	+	++
6	Trade, Hotel and Restaurant	-3,14967772	0,248220588	-	-	-
7	Transportation and Communication	-3,95939634	0,213455764	-	-	-
8	Financial	-8,13274656	0,043567998	-	-	-
9	Services	1,060473727	0,270782339	+	-	+

	Cimaung	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-13,6713178	0,106523915	-	-	-
2	Mining and Quarrying	-	0,000873435	-	-	-
3	Manufacturing	23,31620695	0,220738561	+	-	+
4	Electricity, Gas and Water Supply	-11,1977125	0,000442298	-	-	-
5	Construction	-7,19144402	0,008028842	-	-	-
6	Trade, Hotel and Restaurant	-7,85203333	0,077280969	-	-	-
7	Transportation and Communication	9,974135687	0,527349336	+	-	+
8	Financial	8046,947077	33,4947443	+	+	++
9	Services	-5,62839845	0,050003914	-	-	-

	Cililin	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	56,08745162	0,048301905	+	-	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	115663,6633	1,84253021	+	+	++
4	Electricity, Gas and Water Supply	6119,859827	0,453720416	+	-	+
5	Construction	12036,76336	1,386096826	+	+	++
6	Trade, Hotel and Restaurant	8,424499828	0,027455483	+	-	+
7	Transportation and Communication	852,87876	0,232095125	+	-	+
8	Financial	12,65056152	0,004579871	+	-	+
9	Services	152,3291849	0,046770836	+	-	+

	Sindangkerta	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	98,93688568	4,641368364	+	+	++
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	-8,592391265	0,03280481	-	-	-
4	Electricity, Gas and Water Supply	2,193622089	0,197691748	+	-	+
5	Construction	-6,70789527	0,213481374	-	-	-
6	Trade, Hotel and Restaurant	1,433965673	1,781108676	+	+	++
7	Transportation and Communication	-4,52610092	0,433912412	-	-	-
8	Financial	1,674214561	0,796905372	+	-	+
9	Services	4,515556559	0,754737451	+	-	+

	Cipongkor	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	3195,455315	5,692303719	+	+	++
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	303,6952713	0,369143771	+	-	+
4	Electricity, Gas and Water Supply	-	-	-	-	-
5	Construction	-	-	-	-	-
6	Trade, Hotel and Restaurant	-0,29032296	0,321597053	-	-	-
7	Transportation and Communication	35,68598375	0,584982355	+	-	+
8	Financial	-	-	-	-	-
9	Services	898,1104256	1,262438174	+	+	++

	Gunung Halu	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	32,38388705	1,560226181	+	+	++
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	2,072756057	0,025815773	+	-	+
4	Electricity, Gas and Water Supply	-11,2105829	0,129078951	-	-	-
5	Construction	1,379972843	0,039552674	+	-	+
6	Trade, Hotel and Restaurant	0,444681289	0,8727061	-	-	-
7	Transportation and Communication	0,532724378	0,188448341	-	-	-
8	Financial	3,574574491	0,612513208	+	-	+
9	Services	687,4449089	8,205462207	+	+	++

	Rongga	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	6,527269302	7,749834054	+	+	++
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	3,400399973	0,046635969	+	-	+
4	Electricity, Gas and Water Supply	-	-	-	-	-
5	Construction	-7,43188626	0,003037001	-	-	-
6	Trade, Hotel and Restaurant	-7,83895816	0,66705493	-	-	-
7	Transportation and Communication	-8,33478445	0,210421316	-	-	-
8	Financial	-	-	-	-	-
9	Services	-6,214177662	0,170726639	-	-	-

	Cikalong Wetan	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-2,26813536	0,337946804	-	-	-
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	3,231819369	0,165315792	+	-	+
4	Electricity, Gas and Water Supply	-	-	-	-	-
5	Construction	103,0612532	0,045222959	+	-	+
6	Trade, Hotel and Restaurant	435,3828619	4,619845624	+	+	++
7	Transportation and Communication	84,65293885	1,74123338	+	+	++
8	Financial	-3,84666823	0,100692212	-	-	-
9	Services	9,779265129	1,266265251	+	+	++

	Cipeundeuy	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	8,102677347	0,644689949	+	-	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	3,231819369	0,154478902	+	-	+
4	Electricity, Gas and Water Supply	5,457351621	0,285983266	+	-	+
5	Construction	0,919617202	0,00417208	-	-	-
6	Trade, Hotel and Restaurant	1098,896593	3,348066237	+	+	++
7	Transportation and Communication	6074,408576	5,694392999	+	+	++
8	Financial	24,55441554	0,296534936	+	-	+
9	Services	0,553101053	0,363115547	-	-	-

	Cicalengka	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	2,257946582	1,279178661	+	+	++
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	2,157572399	0,695961863	+	-	+
4	Electricity, Gas and Water Supply	1,523776213	0,69667965	+	-	+
5	Construction	10,07585464	8,293894865	+	+	++
6	Trade, Hotel and Restaurant	59,40127955	0,809822342	+	-	+
7	Transportation and Communication	-8,19228766	0,07182711	-	-	-
8	Financial	0,248732965	0,453128856	-	-	-
9	Services	1,22690137	0,674307739	+	-	+

	Nagreg	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	128,606007	0,573794493	+	-	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	-10,4353153	0,000235166	-	-	-
4	Electricity, Gas and Water Supply	-11,2253382	-	-	-	-
5	Construction	91997,14054	29,89063142	+	+	++
6	Trade, Hotel and Restaurant	-8,56443107	0,005775485	-	-	-
7	Transportation and Communication	-7,39396848	0,03021012	-	-	-
8	Financial	-8,21994207	0,002338582	-	-	-
9	Services	2,513193762	0,050835423	+	-	+

	Cikancung	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	96,77919118	3,335161531	+	+	++
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	-8,92771164	0,849230717	-	-	-
4	Electricity, Gas and Water Supply	-11,2117692	0,006749726	-	-	-
5	Construction	-7,34880780	0,010490273	-	-	-
6	Trade, Hotel and Restaurant	-3,24014122	1,105330862	-	+	+
7	Transportation and Communication	-7,85046791	0,586305827	-	-	-
8	Financial	-8,28585928	0,070503494	-	-	-
9	Services	-5,972671138	0,239856192	-	-	-

	Rancaekek	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	143,7080361	0,136670363	+	-	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	1511,547658	1,633420739	+	+	++
4	Electricity, Gas and Water Supply	904,2123572	1,07876786	+	+	++
5	Construction	380,1531378	0,071937658	+	-	+
6	Trade, Hotel and Restaurant	-7,49133337	0,025129593	-	-	-
7	Transportation and Communication	1251,972237	1,796043019	+	+	++
8	Financial	12,19062257	0,362150244	+	-	+
9	Services	7,624945585	0,198790719	+	-	+

	Ciparay	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	1,059293709	0,009736024	+	-	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	588827,2873	1,848363061	+	+	++
4	Electricity, Gas and Water Supply	1193,092081	0,022192811	+	-	+
5	Construction	227,7809533	0,002249156	+	-	+
6	Trade, Hotel and Restaurant	1,66402113	0,015097711	+	-	+
7	Transportation and Communication	157,2683709	0,022019717	+	-	+
8	Financial	947,9418357	0,146640955	+	-	+
9	Services	230,3724169	0,039956066	+	-	+

	Pacet	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	5,266226952	0,256874893	+	-	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	2649,093602	0,504369556	+	-	+
4	Electricity, Gas and Water Supply	-	-	-	-	-
5	Construction	-	-	-	-	-
6	Trade, Hotel and Restaurant	1285,468899	4,587178499	+	+	++
7	Transportation and Communication	243,8863395	0,552146085	+	-	+
8	Financial	58,51855817	0,330134653	+	-	+
9	Services	5,236354802	0,103804492	+	-	+

	Kertasari	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	6,275122542	4,716896076	+	+	++
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	-10,4450272	5,58576E-05	-	+	+
4	Electricity, Gas and Water Supply	-11,2253382	-	-	-	-
5	Construction	-7,52498012	-	-	-	-
6	Trade, Hotel and Restaurant	-6,25414919	1,231621556	-	+	+
7	Transportation and Communication	-8,54716510	0,049445815	-	-	-
8	Financial	-8,16622178	0,16530722	-	-	-
9	Services	-3,46261299	3,664363371	-	+	+

	Baleendah	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	208,8019126	0,479203394	+	-	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	-0,03230951	0,763952291	-	-	-
4	Electricity, Gas and Water Supply	110,4947582	0,258539096	+	-	+
5	Construction	-7,32573597	0,000924091	-	-	-
6	Trade, Hotel and Restaurant	85,78582739	2,636323844	+	+	++
7	Transportation and Communication	37,22672322	0,912713803	+	-	+
8	Financial	50,04691022	1,67091278	+	+	++
9	Services	29,46475831	0,980001152	+	-	+

	Majalaya	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	114,9182676	0,017213718	+	-	+
2	Mining and Quarrying	0	0	-	-	-
3	Manufacturing	2930,628787	1,775042241	+	+	++
4	Electricity, Gas and Water Supply	248546,5795	0,506388057	+	-	+
5	Construction	10747,87399	0,109177574	+	-	+
6	Trade, Hotel and Restaurant	217,385487	0,114822767	+	-	+
7	Transportation and Communication	132,9344036	0,115444224	+	-	+
8	Financial	108,5669387	0,073896225	+	-	+
9	Services	28819,09614	0,91118388	+	-	+

	Solokanjeruk	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-13,8992303	0,018179661	-	-	-
2	Mining and Quarrying	0	0	-	-	-
3	Manufacturing	1,253643786	1,486511411	+	+	++
4	Electricity, Gas and Water Supply	-11,2241094	9,72309E-06	-	+	+
5	Construction	-1,99683791	0,01244435	-	-	-
6	Trade, Hotel and Restaurant	-0,41536625	0,213262059	-	-	-
7	Transportation and Communication	33,70724019	0,759863225	+	-	+
8	Financial	-7,61925026	0,024361308	-	-	-
9	Services	2043,712432	2,463644756	+	-	+

	Paseh	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	90,61115232	0,081732222	+	-	+
2	Mining and Quarrying	0	0	-	-	-
3	Manufacturing	1219,332402	1,052325782	+	+	++
4	Electricity, Gas and Water Supply	1420,365917	0,170179246	+	-	+
5	Construction	2,335582007	0,003877276	+	-	+
6	Trade, Hotel and Restaurant	15540,12563	2,153691921	+	+	++
7	Transportation and Communication	78170,30874	2,544142854	+	+	++
8	Financial	86,60775235	0,220355862	+	-	+
9	Services	369,120122	0,06913658	+	-	+

	Ibun	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-11,9243591	0,134471163	-	-	-
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	20,42290906	1,402468352	+	+	++
4	Electricity, Gas and Water Supply	5,405331546	0,084182267	+	-	+
5	Construction	-4,00899645	0,032411292	-	-	-
6	Trade, Hotel and Restaurant	-8,58512240	0,013998761	-	-	-
7	Transportation and Communication	-4,79222012	0,124462168	-	-	-
8	Financial	16959,0005	8,145417439	+	+	++
9	Services	-4,56265588	0,066112988	-	-	-

	Soreang	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	9,316893557	0,081004611	+	-	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	1060,662545	0,391655349	+	-	+
4	Electricity, Gas and Water Supply	-	-	-	-	-
5	Construction	-	-	-	-	-
6	Trade, Hotel and Restaurant	12945,48181	5,056539494	+	+	++
7	Transportation and Communication	222,2751351	0,120722204	+	-	+
8	Financial	294,2682919	0,705078961	+	-	+
9	Services	275,7893915	0,342457303	+	-	+

	Pasirjambu	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-11,4054225	0,140855284	-	-	-
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	-4,64481387	0,02713047	-	-	-
4	Electricity, Gas and Water Supply	-11,2253382	-	-	-	-
5	Construction	-7,52498012	-	-	-	-
6	Trade, Hotel and Restaurant	-7,47643629	0,016350838	-	-	-
7	Transportation and Communication	-1,24627124	0,042083629	-	-	-
8	Financial	268,9163005	1,512040149	+	+	++
9	Services	2298,287932	11,67291687	+	+	++

	Ciwidey	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	217,1566192	0,565033195	+	-	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	30274,45792	1,887100792	+	+	++
4	Electricity, Gas and Water Supply	122,0795555	0,047181852	+	-	+
5	Construction	-	-	-	-	-
6	Trade, Hotel and Restaurant	-7,89535522	0,015519299	-	-	-
7	Transportation and Communication	4,453378668	0,039508594	+	-	+
8	Financial	44,90414763	0,10201159	+	-	+
9	Services	7,313704567	0,042434545	+	-	+

	Rancabali	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	4,8272604	0,573821418	+	-	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	-10,4242137	0,000851791	-	-	-
4	Electricity, Gas and Water Supply	-11,2144327	0,00222186	-	-	-
5	Construction	-7,52498012	-	-	-	-
6	Trade, Hotel and Restaurant	167,9861692	5,983403214	+	+	++
7	Transportation and Communication	-8,29464815	0,076909489	-	-	-
8	Financial	-1,13397828	0,22300228	-	-	-
9	Services	-5,15820028	0,524268474	-	-	-

	Lembang	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	395,1382901	0,031605138	+	-	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	4773,402177	0,027395626	+	-	+
4	Electricity, Gas and Water Supply	-	-	-	-	-
5	Construction	-	-	-	-	-
6	Trade, Hotel and Restaurant	4769757,618	6,569869049	+	+	++
7	Transportation and Communication	519,8797219	0,041306435	+	-	+
8	Financial	-	-	-	-	-
9	Services	2104,391889	0,116700498	+	-	+

	Cisarua	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	0,861215817	1,81890783	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	106,4398924	1,284828563	+	+	++
4	Electricity, Gas and Water Supply	-11,2253382	-	-	-	-
5	Construction	-7,52498012	-	-	-	-
6	Trade, Hotel and Restaurant	-3,92240155	0,545583026	+	-	+
7	Transportation and Communication	197,1049614	1,328043137	+	+	++
8	Financial	-8,3567755	-	-	-	-
9	Services	-4,48183334	0,226235081	-	-	-

	Parongpong	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-14,7591994	2,035523912	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	-10,4450310	0,003082652	-	-	-
4	Electricity, Gas and Water Supply	-11,2239945	0,221891539	-	-	-
5	Construction	-7,52491584	0,019675727	-	-	-
6	Trade, Hotel and Restaurant	-8,70316101	1,423977631	-	+	+
7	Transportation and Communication	-8,56876981	0,200646465	-	-	-
8	Financial	-8,27973213	20,12133607	-	+	+
9	Services	-6,28966297	0,457081521	-	-	-

**TABLE GRS AND LQ
SUMEDANG REGENCY**

	CADASNGAMPAR	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-22,53578546	122,9157035	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,296305548	0,135246337	-	-	-
4	Electricity, Gas and Water Supply	1,071113437	0,816515594	+	-	+
5	Construction	0,210703923	0,594367393	-	-	-
6	Trade, Hotel and Restaurant	0,509494851	0,788368281	-	-	-
7	Transportation and Communication	0,522768895	0,294350699	-	-	-
8	Financial	0,913107485	0,740401912	-	-	-
9	Services	0,813040296	1,129553162	-	+	+

	TOMO	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-22,53578546	122,9157035	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,296305548	0,135246337	-	-	-
4	Electricity, Gas and Water Supply	1,071113437	0,816515594	+	-	+
5	Construction	0,210703923	0,594367393	-	-	-
6	Trade, Hotel and Restaurant	0,509494851	0,788368281	-	-	-
7	Transportation and Communication	0,522768895	0,294350699	-	-	-
8	Financial	0,913107485	0,740401912	-	-	-
9	Services	0,813040296	1,129553162	-	+	+

	UJUNGJAYA	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-16,17679839	151,4412361	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,254874132	0,121414875	-	-	-
4	Electricity, Gas and Water Supply	1,113501605	0,89276697	+	-	+
5	Construction	0,210703923	0,610457334	-	-	-
6	Trade, Hotel and Restaurant	0,390502152	0,514436499	-	-	-
7	Transportation and Communication	0,534297475	0,306913501	-	-	-
8	Financial	0,819619325	0,695694054	-	-	-
9	Services	0,646534759	0,976857176	-	-	-

	CONGGEANG	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-19,31884791	130,3641626	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,28580817	0,202747997	-	-	-
4	Electricity, Gas and Water Supply	1,029443264	0,820514435	+	-	+
5	Construction	0,210703923	0,548956408	-	-	-
6	Trade, Hotel and Restaurant	0,532226177	0,622906994	-	-	-
7	Transportation and Communication	0,453189186	0,509391682	-	-	-
8	Financial	0,735632881	0,841630316	-	-	-
9	Services	0,612151481	0,912826329	-	-	-

	PASEH	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-	85,62254005	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	-	0,239230626	-	-	-
4	Electricity, Gas and Water Supply	-	0,802037612	-	-	-
5	Construction	0,210703923	0,770254824	-	-	-
6	Trade, Hotel and Restaurant	-	0,946613621	-	-	-
7	Transportation and Communication	-	0,553053268	-	-	-
8	Financial	-	0,697975481	-	-	-
9	Services	-	1,36336382	-	+	+

	CIMALAKA	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-24,18564985	75,71610752	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,395470142	0,182117032	-	-	-
4	Electricity, Gas and Water Supply	0,858872362	0,938747401	-	-	-
5	Construction	0,210703923	0,334587015	-	-	-
6	Trade, Hotel and Restaurant	0,472106475	0,954951961	-	-	-
7	Transportation and Communication	0,647322051	0,812264071	-	-	-
8	Financial	1,193550443	0,988173847	+	-	-
9	Services	1,106772877	1,561127886	+	+	++

	TANJUNGPURBA	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-18,47384193	117,0544517	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,332862424	0,076042416	-	-	-
4	Electricity, Gas and Water Supply	1,087528946	1,109447595	+	+	++
5	Construction	0,210703923	0,431735067	-	-	-
6	Trade, Hotel and Restaurant	0,571150652	0,677077438	-	-	-
7	Transportation and Communication	0,64299166	0,544100643	-	-	-
8	Financial	0,820703294	1,027012778	-	+	+
9	Services	0,660390733	1,483284672	-	+	+

	BUAHDUA	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-18,06026781	157,8241757	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,49435376	0,03878252	-	-	-
4	Electricity, Gas and Water Supply	1,31066645	0,744712217	+	-	+
5	Construction	0,210703923	0,352755507	-	-	-
6	Trade, Hotel and Restaurant	0,359311134	0,507790569	-	-	-
7	Transportation and Communication	0,675292635	0,334380993	-	-	-
8	Financial	1,062914421	0,873429617	+	-	+
9	Services	0,85440426	1,085133727	-	+	+

	CIBUGEL	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-17,38292889	155,7490576	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,392763728	0,02186599	-	-	-
4	Electricity, Gas and Water Supply	0,269620735	0,577598272	-	-	-
5	Construction	0,210703923	1,108338372	-	+	+
6	Trade, Hotel and Restaurant	0,276356757	0,446153155	-	-	-
7	Transportation and Communication	0,492246327	0,404231864	-	-	-
8	Financial	0,764698605	0,715542669	-	-	-
9	Services	0,916198922	1,09066223	-	+	+

	CIKERUH	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-19,36608164	17,15055114	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,582413574	1,574883305	-	+	+
4	Electricity, Gas and Water Supply	1,652058313	0,581711463	+	-	+
5	Construction	-2,656982613	0,142440893	-	-	-
6	Trade, Hotel and Restaurant	0,496092913	0,679582686	-	-	-
7	Transportation and Communication	1,033794979	0,162950818	+	-	+
8	Financial	1,281756261	0,706216304	+	-	+
9	Services	0,777421999	1,236392893	-	+	+

	CIMANGGUNG	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-21,26425802	18,98441809	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,451819091	2,268335486	-	+	+
4	Electricity, Gas and Water Supply	1,692485679	0,694472402	+	-	+
5	Construction	-2,271669955	0,170728152	-	-	-
6	Trade, Hotel and Restaurant	0,896402902	0,281939304	-	-	-
7	Transportation and Communication	0,870469828	0,100910559	-	-	-
8	Financial	1,350002339	0,395119788	+	-	+
9	Services	1,00423101	0,399915401	+	-	+

	TANJUNGSARI	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-15,94665402	81,53436777	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,586265981	0,315814872	-	-	-
4	Electricity, Gas and Water Supply	1,204276526	1,549599512	+	+	++
5	Construction	0,210703923	0,280757089	-	-	-
6	Trade, Hotel and Restaurant	0,452833866	0,827242161	-	-	-
7	Transportation and Communication	0,866981195	0,695595884	-	-	-
8	Financial	1,329857285	1,076930358	+	+	++
9	Services	0,793298924	1,318817399	-	+	+

	RANCAKALONG	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-20,82262486	122,720316	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,18057513	0,121496373	-	-	-
4	Electricity, Gas and Water Supply	1,07881378	1,425249898	+	+	++
5	Construction	0,210703923	0,572506975	-	-	-
6	Trade, Hotel and Restaurant	0,195155851	0,614722668	+	-	+
7	Transportation and Communication	0,58785312	0,357553774	-	-	-
8	Financial	0,846781503	1,029606509	-	+	+
9	Services	0,653631376	1,372533996	-	+	+

	SUMEDANG SELATAN	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-17,97208337	44,52941799	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,30854557	0,075548163	-	-	-
4	Electricity, Gas and Water Supply	1,365869565	0,713303303	+	-	+
5	Construction	0,210703923	0,214481935	-	-	-
6	Trade, Hotel and Restaurant	0,591781662	1,216705545	-	+	+
7	Transportation and Communication	0,778217437	1,051576246	-	+	+
8	Financial	1,180124454	0,90438962	+	-	+
9	Services	1,193793771	2,21863501	+	+	++

	SUMEDANG UTARA	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-23,60008869	33,63074234	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,542858753	0,112674374	-	-	-
4	Electricity, Gas and Water Supply	1,376496843	0,627591592	+	-	+
5	Construction	1,047517786	0,450360231	+	-	+
6	Trade, Hotel and Restaurant	0,609590511	2,01375497	-	+	+
7	Transportation and Communication	0,405068257	0,522429758	-	-	-
8	Financial	0	0	-	-	-
9	Services	0,953950586	1,144619089	-	+	+

	SITURAJA	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-13,33587572	122,7831765	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,503496725	0,049587321	-	-	-
4	Electricity, Gas and Water Supply	1,051310774	0,876849986	+	-	+
5	Construction	0,210703923	0,347007568	-	-	-
6	Trade, Hotel and Restaurant	0,872330537	0,843064997	-	-	-
7	Transportation and Communication	0,44693294	0,353676808	-	-	-
8	Financial	1,336840263	0,961036576	+	-	+
9	Services	0,864644191	1,205323217	-	+	+

	DARMARAJA	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-23,41759718	121,0264699	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,272846643	0,074960026	-	-	-
4	Electricity, Gas and Water Supply	1,463009515	0,678001491	+	-	+
5	Construction	0,210703923	0,430433508	-	-	-
6	Trade, Hotel and Restaurant	0,492341965	0,782470129	-	-	-
7	Transportation and Communication	0,789213521	0,467448305	-	-	-
8	Financial	0,669622406	0,933545011	-	-	-
9	Services	0,625068114	1,270441602	-	+	+

	WADO	GRS	LQ	GRS	LQ	TOTAL
1	Agriculture	-23,19692462	136,9659452	-	+	+
2	Mining and Quarrying	-	-	-	-	-
3	Manufacturing	0,425829967	0,06138753	-	-	-
4	Electricity, Gas and Water Supply	1,06114256	1,017519392	+	+	++
5	Construction	0,210703923	0,360087672	-	-	-
6	Trade, Hotel and Restaurant	0,484833672	0,732387913	-	-	-
7	Transportation and Communication	0,621187396	0,433280373	-	-	-
8	Financial	0,887286283	0,9192197	-	-	-
9	Services	0,494152518	0,881885522	-	-	-