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Regional Economic Development and Competitiveness: A Study of Leading and Competitive Sectors of Diyarbakir-Sanlıurfa Region, Turkey

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**REGIONAL ECONOMIC DEVELOPMENT AND COMPETITIVENESS: A
STUDY OF LEADING AND COMPETITIVE SECTORS AND SHIFT-SHARE
ANALYSIS OF DIYARBAKIR-ŞANLIURFA REGION, TURKEY**

Z. ÇELEBİ DENİZ¹

Abstract

Disparities across regions and provinces are on the agenda of both developed and developing countries. Differences in terms of development and income between regions are becoming more important policy challenge particularly in developing countries. As a developing country, inter-regional disparities are seen intensively at east-west direction in Turkey. In recent years with the process of harmonization with the European Union policies, inter-regional disparities problem and regional development policy issues came to the fore in Turkey.

In this paper, Diyarbakır-Şanlıurfa region, located in Southeast Anatolia, the largest region with respect to population identified as regional growth poles by Ministry of Development, is discussed in the framework of regional economic development and competitiveness. Diyarbakır-Şanlıurfa Region is the seventh largest region in Turkey according to population, but socio-economic development rank of the region is 23 between 26 NUTS 2 regions in Turkey.

According to economic base model, local economy shapes regions' size and welfare level. "Information about an area's future population is incomplete without a parallel understanding of the local economy that largely shapes its future." (Klosterman, 1990) As method of the study; in order to determine the basic and leading sectors of regional economy, location quotient technique will be used. Then shift-share analysis will be used to determine competitive areas/sectors of the region and to see economic projection of region. Finally findings and results of the two analyses will be compared and regional economic policy will be developed in the light of the findings.

The findings showed that the region has a rapidly growing economy depend on "agriculture", "construction", "mining", "transportation and storage" and "human health" sectors and also for manufacturing industry "food products", "textiles", "non-metallic products"

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and “*wood products*” are basic sub-manufacturing sectors. But results of shift-share analysis showed that regional economy offers competitive advantages especially in “*agriculture*”, “*transportation and storage*”, “*trade and wholesale*” and sub-service sectors related to “*urbanization economies*” and “*tourism*” sector. Although the region has some basic/exporter manufacturing sectors increasing their concentration, the regional economy have *low competitiveness for attracting investment in manufacturing*. Therefore, in this period many of the manufacturing industry investments have shifted to other more competitive regions.

Keywords: *Regional development, economic growth, competitiveness, economic base, shift-share analysis*

1. Introduction

Differences in terms of development and income between regions are becoming more important policy challenge particularly in developing countries. As a developing country, inter-regional disparities are seen intensively at east-west direction in Turkey. In this paper, one of the less developed Region in Turkey located in Southeast Anatolia Region will be discussed in the context of regional economic growth and sectoral competitiveness.

TRC2 NUTS-2 Region, consisting of two major centers -Diyarbakır and Şanlıurfa- of Southeast Anatolia, is among less developed regions with respect to socio-economic development indicators in 2011 (Ministry of Development, 2011); in the ranking of 81 provinces, Diyarbakır is 67th and Sanliurfa is 73th. In contrast the region is the seventh largest region in Turkey with respect to population, and Diyarbakır is the largest 11th city where Şanlıurfa is 13th by urban population. However the region has the highest unemployment rates in Turkey. Compared to the population and high potential of the region, the economic size of region is inadequate.

According to economic base model, local economy shapes regions’ size and welfare level. “Information about an area's future population is incomplete without a parallel understanding of the local economy that largely shapes its future.” (Klosterman, 1990) As mentioned by Klosterman, it is very important to understanding strengths, weaknesses, and changes within the local economy in order to planning the future of a city or a region.

In this context, the aim of this paper is to examine current situation of regional economy, and identify the dynamics and problems of the economy in Diyarbakır and Şanlıurfa cities. Initially we will try to identify problems of the regional economy by comparing the region with national economy and understand the status of each province. In this study it is intended to determine main causes of regional economic growth as leading and competitive sectors of region, and then to develop an analytic point of view for accelerating economic development and boosting economic growth in the context of regional economic policy.

As method of the study; in order to determine the basic and leading sectors of regional economy, location quotient technique will be used. Then shift-share analysis will be used to determine competitive sectors of the region and to see economic projection of region. Finally findings and results of the two analyses will be compared and regional economic policy will be developed in the light of the findings.

2. Literature Review and Methodology

In this section the literature review of *Location Quotient Technique* and *Shift Share Analysis* are detailed. The Location Quotient technique is a commonly used economic base analysis method. LQ method was first used for measuring spatial concentration of manufacturing in New York by Haig (1926). The LQ technique bases on economic base theory. Klosterman (1990) indicates that the economic base technique "is the oldest, simplest and most widely used technique for regional economic analysis." (p. 113). According to economic base model; economic activities in local economy can be divided into two very general sectors: a basic (or non-local) sector or a non-basic (or local) sector. The basic sector is made up of local businesses (firms) that are entirely dependent upon external factors, while the non-basic sector, in contrast, is composed of those firms that depend largely upon local business conditions.

Location Quotient (LQ) is an index for comparing a local/regional economy with a larger reference economy to identify concentrated sectors. To calculate the LQ, the following formulation is used:

$$LQ = \frac{(ei/e)}{(Ei/E)}$$

Where e_i is regional employment in industry i , e is total regional employment; E_i is national employment in industry i and E is total national employment. If $LQ > 1.0$ it means the industry i is a basic sector in local economy and it is source of local economic growth. But in some conditions LQ method may not be enough for understanding and forecasting the regional economic growth. So in this study it is intended to support LQ index with shift-share analysis method.

The shift-share method analyzing regional growth originated in the 1940s by Daniel Creamer and was summarized by Dunn in 1960 (Herath et al., 2011; Shi & Yang, 2008). Then the method was developed by several studies. The technique has been used heavily in analyzing regional and international growth impacts. The technique has generally been used for describing regional and industrial growth and examining the competitiveness of regional and industrial growth in a particular time period. In other words the analysis is meant to identify industries considered to have a comparative advantage in that region or particular area.

Shift-share analysis enables regional planners or policy makers to measure the competitiveness of the regional industries. Adapting to the regional economic growth, categories correspond to different geographical scales, basically and respectively national (higher) and regional (lower) level. The essential idea is to analyze the extent to which the difference in growth between each region and the national average is due to the region performing uniformly better than average on all industries or to the fact that the region happens to be specialized in fast growing sectors. Shift-share analysis decomposes total regional growth into three distinct effects for better analyses of employment growth. These components are namely national growth effect (NGE), industrial mix effect (IME) and competitiveness effect (CE). This says that change in employment in the study area's i^{th} activity from time t to time $t+n$ can be measured:

$$e_i^{t+n} - e_i^t = \text{national share} + \text{industrial mix} + \text{regional share}$$

$$\Delta E_{ir} = NS_{ir} + IM_{ir} + RS_{ir}$$

$$e_i^{t+n} - e_i^t = e_i^t \left[\frac{E^{t+n}}{E^t} - 1 \right] + e_i^t \left[\frac{E_i^{t+n}}{E_i^t} - \frac{E^{t+n}}{E^t} \right] + e_i^t \left[\frac{e_i^{t+n}}{e_i^t} - \frac{E_i^{t+n}}{E_i^t} \right]$$

e_i^{t+n} = activity in an industry (i), in particular region in the year of $t+n$,

e_i^t = activity in an industry (i), in particular region in the year of t ,

E_i^{t+n} = activity in an industry (i), in the nation in the year of $t+n$,

E_i^t = activity in an industry (i), in the nation in the year of t,
 E^{t+n} = activity in all industry , in the nation in the year of t+n.
 E^t = activity in all industry , in the nation in the year of t.

NGE component shows how many jobs in the industry can be attributed to the growth of the national economy, where IME show how much growth can be attributed to the region's mix of industries. And the most important component CE show how many jobs in the industry in region attributed to the competitiveness of that industry in that region.

As method of the study location quotient technique and shift-share analysis method will be used in order to determine the basic and competitive sectors of regional economy. The two analyses will be implemented for the period of 2008-2012 with employment statistics (2008-2012 years) released by Social Security Institute (SSI) annually. Finally findings and results of the two analyses will be compared in the context of regional economic growth and regional economic policy.

3 Sectoral Analysis of Regional Economy

3.1 Basic Sectors of Regional Economy

Economic base theory assumes that basic sectors of the region are the main reason of local economic growth. Therefore the basic sector is identified as the "engine" of the local economy. In this section regional economy will be examined via some regional analysis methods. To determine the basic sectors of regional economy *location quotient technique* is used for the period of 2008-2012. We could see the development of sectors by adding the sectoral growth rate to model over time.

Employment by sectors of TRC2 Region and comparison of growth rates with national average is shown by table 3.

Table 1- Employment and actual changes in sectors in TRC2 Region

Sectors		TRC2 Region Emp.			Change in Turkey
		2008	2012	Change	
A	<i>Agriculture, forestry and fishing</i>	2.646	7.928	200%	48%
B	<i>Mining and quarrying</i>	1.653	2.641	60%	23%
C	<i>Manufacturing</i>	24.799	27.199	10%	24%
D	<i>Electricity, gas, air conditioning supply</i>	3.062	3.661	20%	2%

<i>E</i>	<i>Water Supply; Sewerage, Waste Management</i>	4.150	1.693	-59%	-15%
<i>F</i>	<i>Construction</i>	28.555	52.810	85%	44%
<i>G</i>	<i>Wholesale And Retail Trade</i>	15.881	24.968	57%	43%
<i>H</i>	<i>Transportation And Storage</i>	7.168	21.234	196%	55%
<i>I</i>	<i>Accommodation And Food Service</i>	751	7.057	840%	341%
<i>J</i>	<i>Information And Communication</i>	149	2.762	1754%	505%
<i>K</i>	<i>Financial And Insurance</i>	1.186	1.364	15%	20%
<i>L</i>	<i>Real Estate</i>	2	57	2750%	1896%
<i>M</i>	<i>Professional, And Technical Activities</i>	11.646	5.622	-52%	-28%
<i>N</i>	<i>Administrative And Support Service</i>	6.168	27.666	349%	113%
<i>O</i>	<i>Public Administration And Defence</i>	217	386	78%	-6%
<i>P</i>	<i>Education</i>	14.723	15.541	6%	44%
<i>Q</i>	<i>Human Health And Social Work</i>	2.544	10.177	300%	229%
<i>R</i>	<i>Arts, Entertainment And Recreation</i>	3.383	999	-70%	-69%
<i>S</i>	<i>Other Service</i>	7.668	10.871	42%	-9%
<i>T</i>	<i>Producing Activities Of Households For Own Use</i>	120	6	-95%	-7%
<i>U</i>	<i>Extraterritorial Organizations</i>	98	13	-87%	-71%
TOTAL		136.547	224.655	65%	36%

Source: SGK, 2013.

Table shows, percentage of employment change in *Agriculture, Mining, Accommodation and Food Service, Information and Communication, Human Health* and some other services are much higher than national average. In the period of 2008-2012 the growth rate of TRC2 region is 65%, while the national average is 36%. But the change in manufacturing as second biggest sector of region is very low. Table 1 shows the basic sectors of Diyarbakır's economy and sectoral growth rates in the period of 2008-2012.

Table 2- Basic sectors and sectoral growth rates of Diyarbakır, 2008-2012

Sectors	Emp. 2008	Emp. 2012	Growth rate %	LQ
<i>Agriculture, forestry and fishing</i>	824	1.610	95,4	1,2
<i>Mining and quarrying</i>	1.383	1.987	43,7	1,5
<i>Electricity, gas, air conditioning supply</i>	2.128	2.712	27,4	2,8
<i>Water Supply; Sewerage, Waste Management</i>	2.047	1.215	-40,6	1,7
<i>Construction</i>	16.671	28.128	68,7	1,6
<i>Transportation And Storage</i>	4.021	9.306	131,4	1,1
<i>Administrative And Support</i>	3.515	12.682	260,8	1,5

<i>Service</i>				
<i>Public Administration And Defence</i>	167	228	36,5	2,4
<i>Education</i>	8.181	6.729	44%	1,4
<i>Human Health And Social Work</i>	848	4.683	229%	1,7

Source: SGK, 2012.

According to results, sectoral growth rates of “*Agriculture, forestry and fishing*”, “*Mining and quarrying*”, “*Electricity, gas, air conditioning supply*” “*Construction*”, “*Administrative and Support Service*”, “*Public Administration And Defence*”, “*Human Health And Social Work*” sectors are higher than national average growth in the period of 2008-2012. As Diyarbakir is a *regional center*, there are a lot of basic sectors in services activities/sectors in Diyarbakir’s economy. The following table shows basic sectors of Şanlıurfa’s economy.

Table 3- Basic sectors and sectoral growth rates of Şanlıurfa, 2008-2012

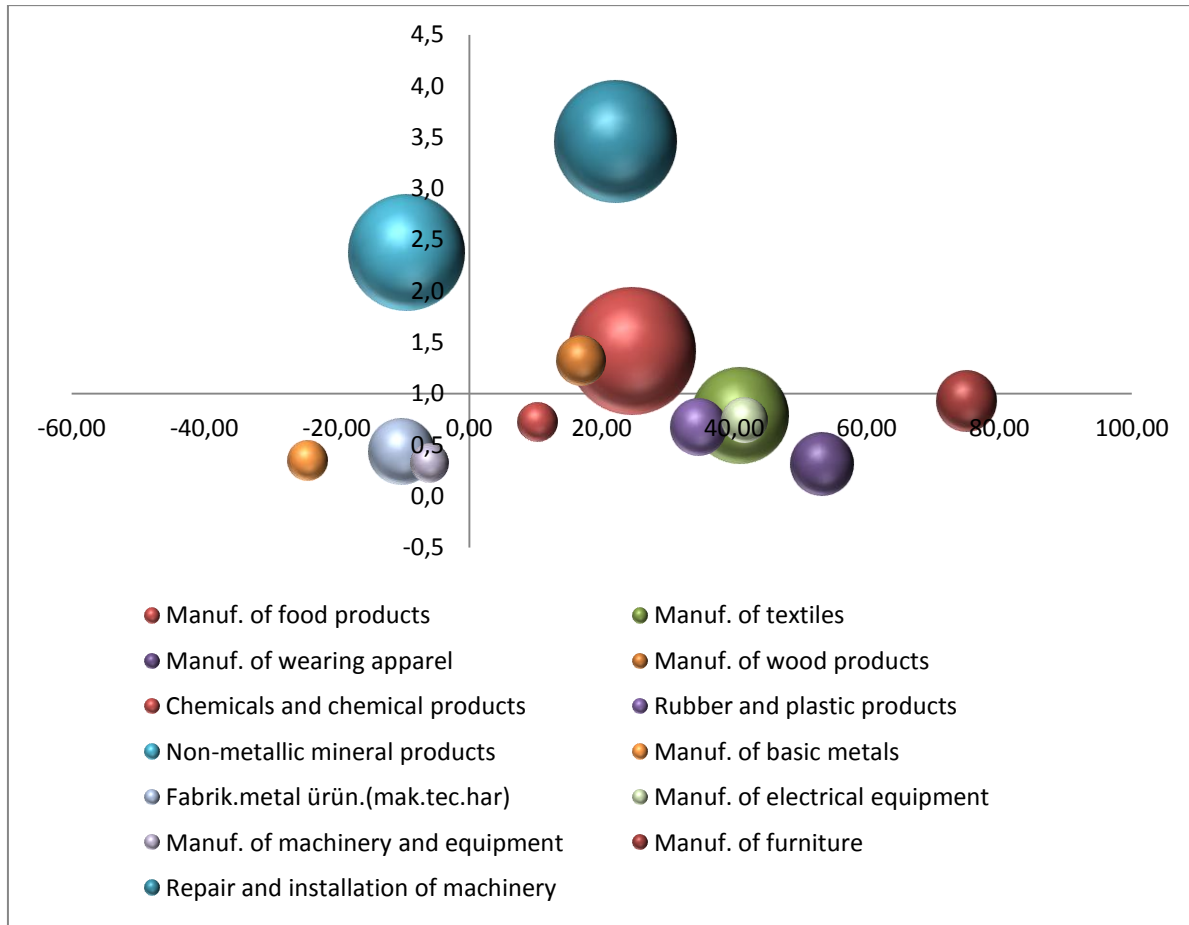
Sectors	Emp. 2008	Emp. 2012	Growth rate %	LQ
<i>Agriculture, forestry and fishing</i>	1822	6.318	246,8	5,1
<i>Construction</i>	16.671	11.884	107,7	1,5
<i>Transportation And Storage</i>	3147	11.928	279,0	1,5
<i>Administrative And Support Service</i>	2653	14.984	216,0	1,8
<i>Education</i>	6.542	8.812	34,7	2
<i>Human Health And Social Work</i>	1.696	5.494	223,9	2

Source: SGK, 2012.

Among basic sectors of Şanlıurfa, depending the huge potential and investments, “*agriculture*” sector has remarkable concentration in the city. Growth rate of the agriculture sector in Şanlıurfa is five times more than the national average.

The growth rate of manufacturing sector is lower than the national average. However there are different situation about sub manufacturing sectors/industries. The following graph shows the results of the LQ analysis in manufacturing industries. Graph shows that the first 12 sectors with respect to employment; which are the region's basic and rising sectors are identified. In the graphs vertical axis shows the level of specialization, horizontal axis shows growing or development of the sector, bubble size indicates the industry's share in total manufacturing.

Graph 1- Basic, Rising and Static Sectors in Diyarbakır's Manufacturing Industry

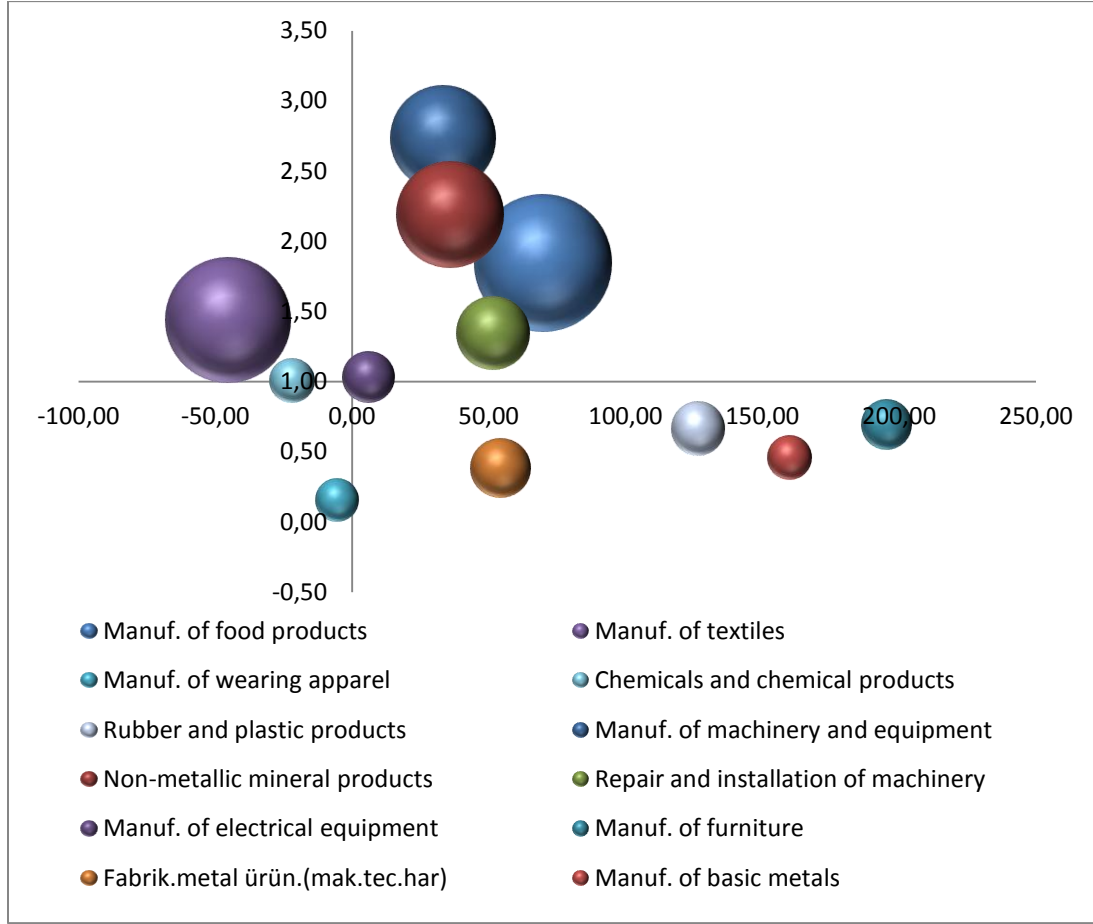


Source: Produced by using SGK insured person data in 2008-2012.

Accordingly, the basic manufacturing sectors of Diyarbakir are *installation of machinery and equipment, manufacturing of food products, wood and wood products, non-metallic products* sectors increasing their concentration over the period of 2008-2012.

In the same period the rising sectors are; *manufacture of furniture, manufacture of textiles, manuf. of wearing apparel, manuf. of electrical equipment, manuf. of rubber and plastic products* as determined by results of analysis. Decreasing upward on the left axis of specialized non-metallic products manufacturing industry sectors is shown. Manuf. of machinery and equipment, basic metals and chemical products manufacturing shows a static situation.

Graph 2- Basic, Rising and Static Sectors in Şanlıurfa's Manufacturing Industry



Source: Produced by using SGK insured person data in 2008-2012.

According to results, the basic manufacturing sectors of Şanlıurfa are *manufacture of food product, machinery and equipment, non-metallic mineral products, textiles*. As for rising sectors in the same period, *manufacture of electrical equipment, furniture, basic metals, rubber and plastic products* sectors as determined by results of analysis. In the same period the textile industry and clothing industry seem to be stable situation. However, textile industry has been increasing after 2011.

3.2 Results of Shift-Share Analysis

In this section we will examine the projection of regional economy on sectoral basis in the context of regional competitiveness by using shift-share analysis. Employment by sectors of TRC2 (Diyarbakır-Şanlıurfa) Region and comparison of growth rates/percentage change of each sector in national economy and regional economy 2008 to 2012 is shown by table 1.

Table 4- Employment and percentage changes in each sector from 2008 to 2012

Sectors		TRC2 Region			Change in Turkey
		2008	2012	Change	
A	<i>Agriculture, forestry and fishing</i>	2.646	7.928	200%	48%
B	<i>Mining and quarrying</i>	1.653	2.641	60%	23%
C	<i>Manufacturing</i>	24.799	27.199	10%	24%
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L	<i>Real Estate</i>	2	57	2750%	1896%
M	<i>Professional, And Technical Activities</i>	11.646	5.622	-52%	-28%
N	<i>Administrative And Support Service</i>	6.168	27.666	349%	113%
O	<i>Public Administration And Defence</i>	217	386	78%	-6%
P	<i>Education</i>	14.723	15.541	6%	44%
Q	<i>Human Health And Social Work</i>	2.544	10.177	300%	229%
R	<i>Arts, Entertainment And Recreation</i>	3.383	999	-70%	-69%
S	<i>Other Service</i>	7.668	10.871	42%	-9%
T	<i>Producing Activities Of Households For Own Use</i>	120	6	-95%	-7%
U	<i>Extraterritorial Organizations</i>	98	13	-87%	-71%
TOTAL		136.547	224.655	65%	36%

Source: SSI, 2013.

Table shows, percentage change of employment in *Agriculture, Accommodation and Food Service, Information and Communication, Human Health* sectors and some other services are much higher than national average. In the period of 2008-2012 the growth rate of TRC2 region is 65%, while the national average is 36%. But on the other hand change in the manufacturing sector in region much lower than national average.

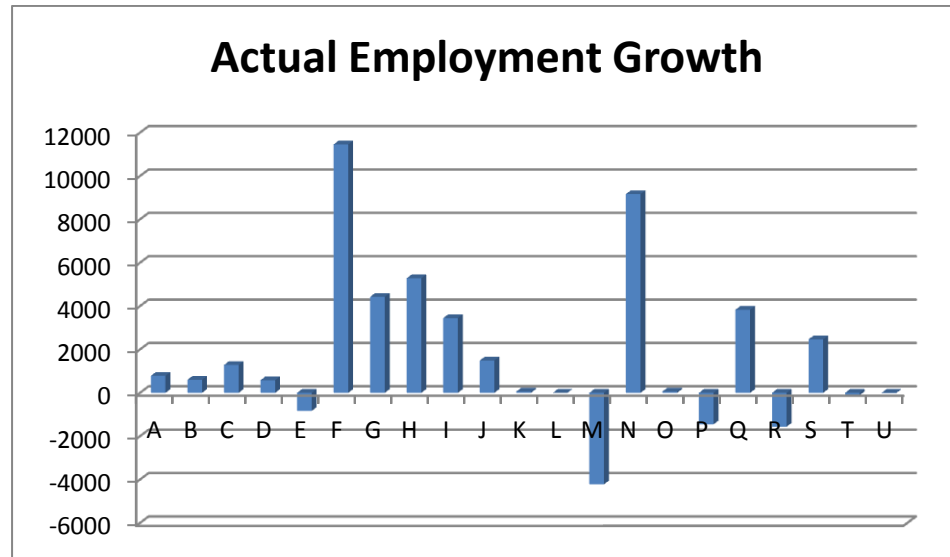
Table 5: Results of Shift Share-Analysis in Diyarbakır's Economy

Sectors		NGE	IME	CE	Emp. Change
A	Agriculture, forestry and fishing	293	116	377	787
B	Mining and quarrying	493	-108	219	604
C	Manufacturing	4611	-2554	-771	1286

D	Electricity, gas, air conditioning supply	758	-717	543	584
E	Water Supply; Sewerage, Waste Management	729	-1106	-456	-832
F	Construction	5940	825	4692	11.457
G	Wholesale And Retail Trade	3380	1199	-151	4428
H	Transportation And Storage	1433	859	2993	5285
I	Accommodation And Food Service	169	1546	1734	3448
J	Information And Communication	35	754	704	1493
K	Financial And Insurance	218	-240	80	57
L	Real Estate	0	19	-18	1
M	Professional, And Technical Activities	2864	-6965	-120	-4220
N	Administrative And Support Service	1252	3987	3927	9167
O	Public Administration And Defence	60	-70	72	61
P	Education	2915	674	-5041	-1452
Q	Human Health And Social Work	302	1400	2132	3835
R	Arts, Entertainment And Recreation	813	-2546	173	-1560
S	Other Service	1579	-1516	2403	2466
T	Producing Activities Of Households For Own Use	37	-51	-91	-104
U	Extraterritorial Organizations	4	-12	-3	-11
TOTAL		27887	-4506	13398	36779

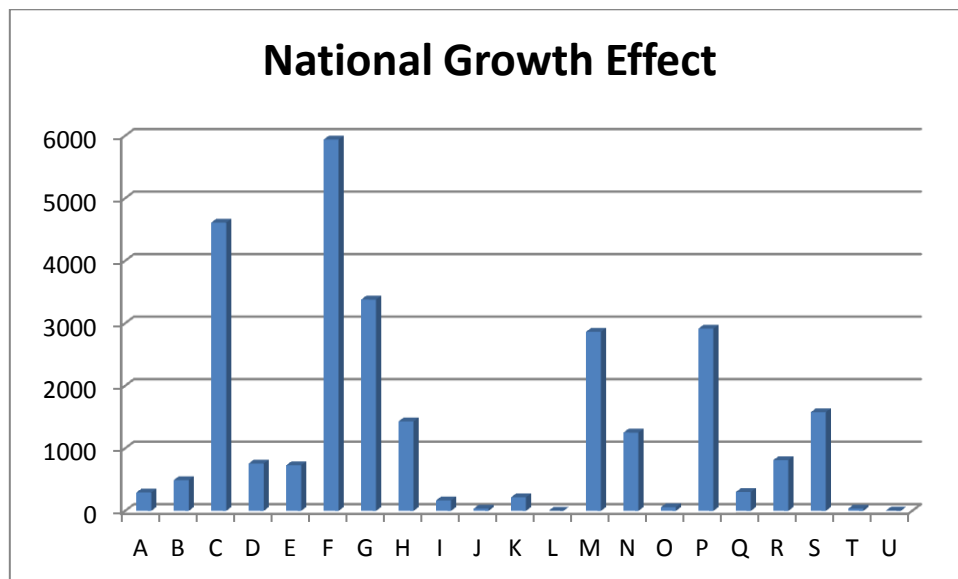
Source: Produced by using SSI insured person data in 2008-2012.

According to the table; in the growth of the employment in local economy between 2008-2012, **13.398 jobs** have been created by competitiveness factor of Diyarbakır. Regional Competitiveness Effect (RCE) component of Diyarbakır shows; construction, services, manufacturing, trade and transportation sector are major sectors of Diyarbakır. As for percentage change of employment from 2008-2012, it is seen that construction, administrative and support service, transportation and storage wholesale and retail trade, human health and social work, accommodation and food service and information and communication sectors are the most contributing sector to the local economy.



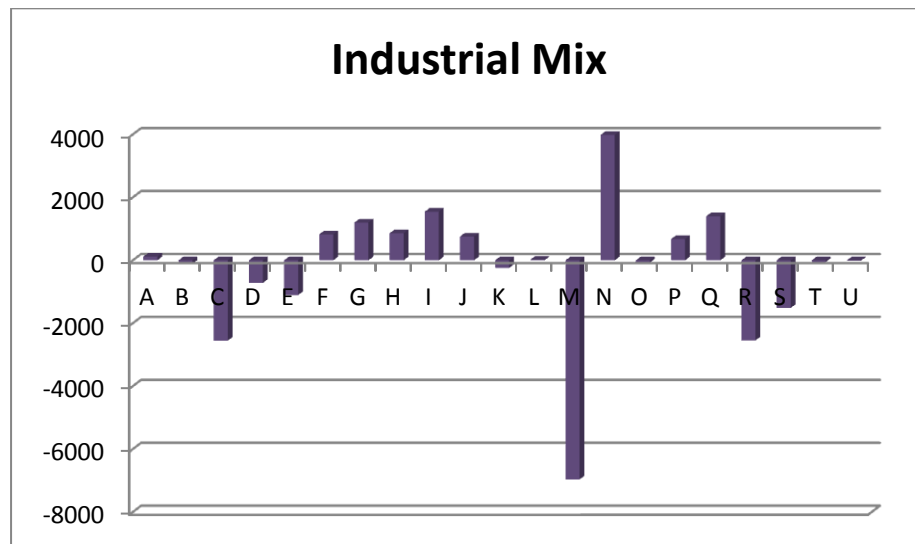
Source: SSI, 2012.

The national growth effect (NGE) shows employment growth that would have occurred if a sector in a regional or local economy had grown at the same rate as the national economy. Accordingly, the biggest growth anticipated in the construction and manufacturing industries in Diyarbakır, but the biggest actual growth took place in “*construction*” and “*administrative and support service*” sectors. (Actual Growth Graph).

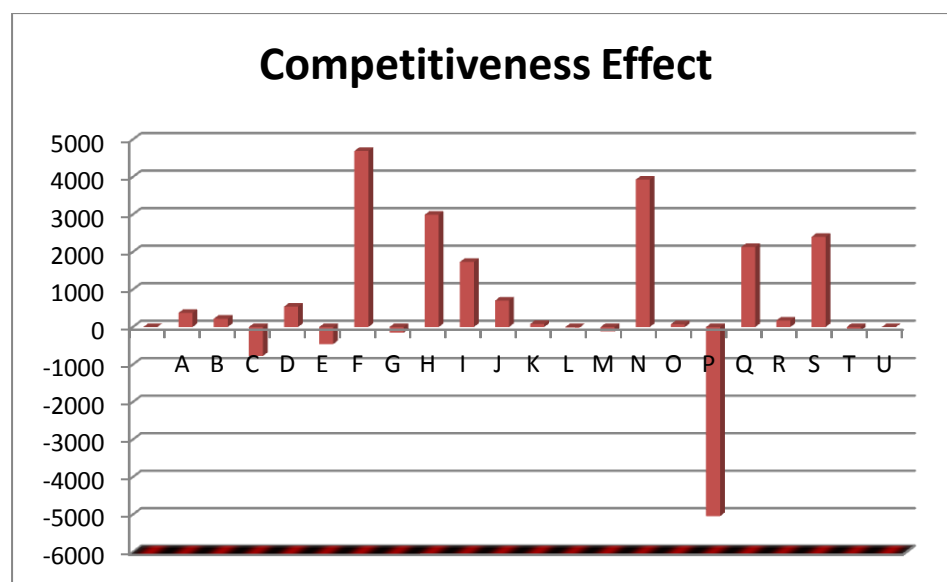


The industrial mix effect (IME) measures the amount of local or regional employment sector growth compared to the national employment growth. A positive IME in a particular sector

indicates that it is growing faster than the national economy. We can see that the growth performance of local industry mix is low.

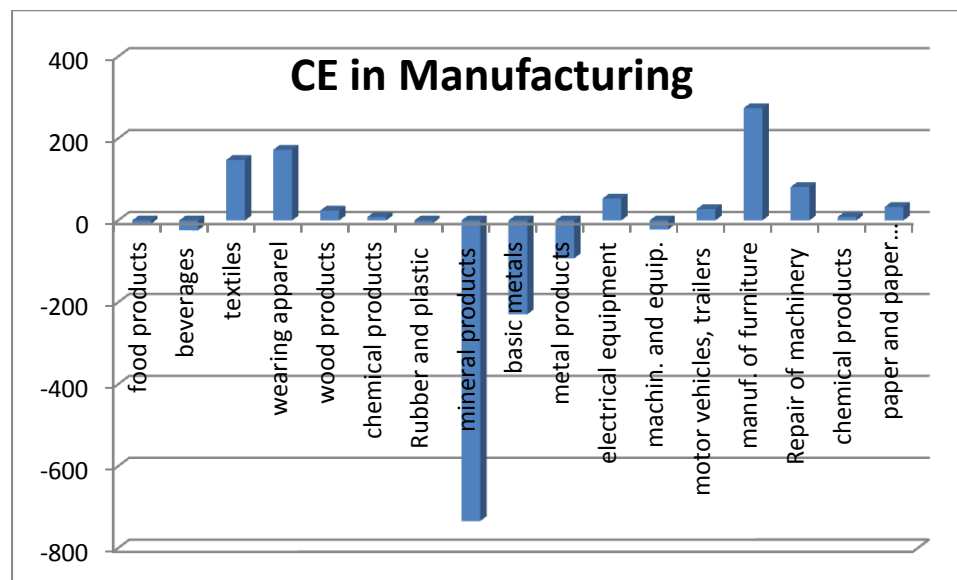


The competitiveness effect (CE) measures how a particular sector is growing in an area compared to growth of the same sector at the national level and is an endogenous indicator. A positive effect means that the local economy has been successful in attracting investment to a particular sector. This component indicates growth or decline in industries due to location advantages or disadvantages. A positive local share combined with a positive industrial mix effect show a potential competitive advantage in that sector. A negative competitive effect show a potential competitive advantage in that sector. A negative competitive effect indicates that the local economy is losing its share to other regions.



So we can say that among service sectors *construction, transportation and storage, administrative and support service, human health services, accommodation and food services* sectors have the highest competitiveness effect in Diyarbakır. In other words these sectors provide strategic investment areas for *boosting economic growth*. Moreover having positive *IME* and *CE* values, *accommodation and food service* which is closely related with the tourism, *human health, transportation and storage, information and communication, administrative and support services* (which is closely related to urbanization economies) and *agriculture* sectors seem to be more dynamic and have bright futures in Diyarbakır. But from the results we understand that Diyarbakır's competitiveness effect to attract manufacturing is very low.

IME and *CE* of manufacturing sector in Diyarbakır, indicates that the local economy is losing its share to the other regions. CE in manufacturing industries in Diyarbakır is shown below.



According to results of sub-manufacturing sectors of Diyarbakır; Competitive effect is positive in manufacturing of furniture, wearing apparel, textiles, and electrical equipment sectors.

Results of Shift-Share analysis of Şanlıurfa are shown in the following table.

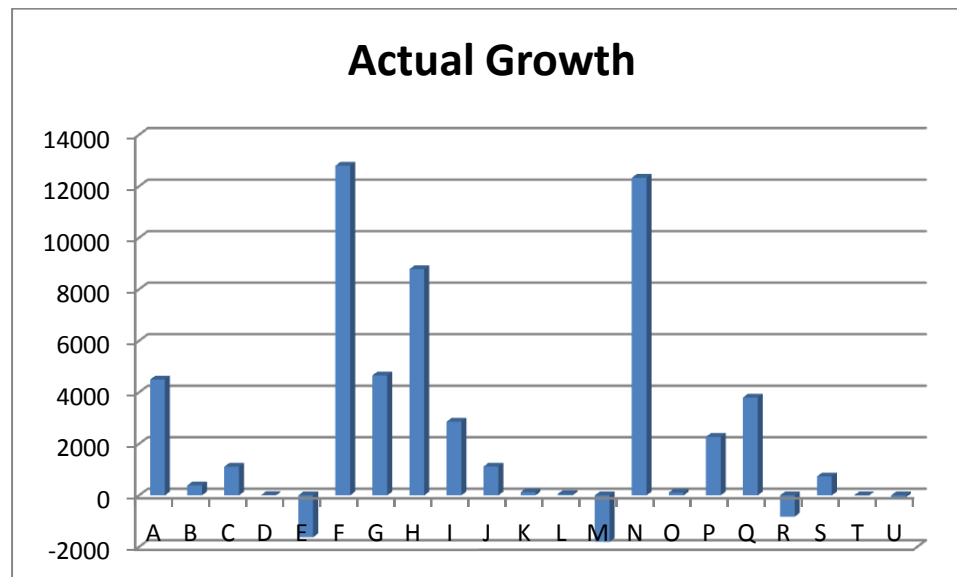
Table 6- Results of Shift Share-Analysis in Şanlıurfa's Economy

Sectors		NGE	IME	RCE	Emp. Change
A	Agriculture, forestry and fishing	649	269	3578	4496
B	Mining and quarrying	96	-29	317	384

C	Manufacturing	4225	-1716	-1395	1114
D	Electricity, gas, air conditioning supply	333	-315	-3	15
E	Water Supply; Sewerage, Waste Management	749	-1044	-1330	-1625
F	Construction	4234	539	8024	12798
G	Wholesale And Retail Trade	2279	799	1581	4659
H	Transportation And Storage	1121	709	6951	8781
I	Accommodation And Food Service	99	844	1915	2858
J	Information And Communication	18	377	725	1120
K	Financial And Insurance	205	-11	-73	121
L	Real Estate	0	19	35	54
M	Professional, And Technical Activities	1285	-2996	-93	-1804
N	Administrative And Support Service	945	1726	9659	12331
O	Public Administration And Defence	18	-21	111	108
P	Education	2331	539	-600	2270
Q	Human Health And Social Work	604	3195	-2	3798
R	Arts, Entertainment And Recreation	393	-1387	171	-824
S	Other Service	1153	-876	460	737
T	Producing Activities Of Households For Own Use	5	57	-72	-10
U	Extraterritorial Organizations	31	-93	-12	-74
TOTAL		20775	586	29947	51322

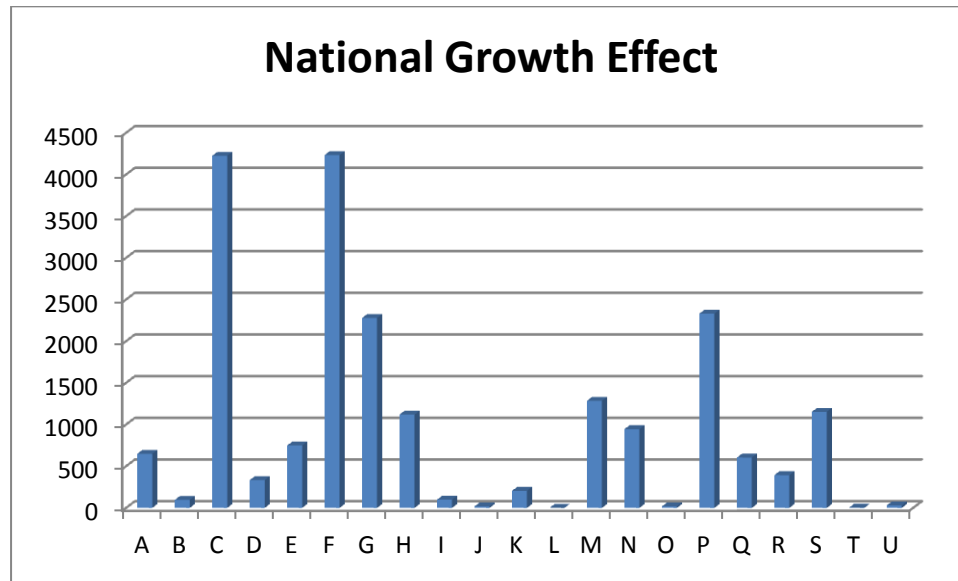
Source: Produced by using SSI insured person data in 2008-2012.

According to the table, **29.947** jobs have been created by competitiveness effect of Şanlıurfa, within the growth of the 51.322 jobs from 2008 to 2012, in the local economy.

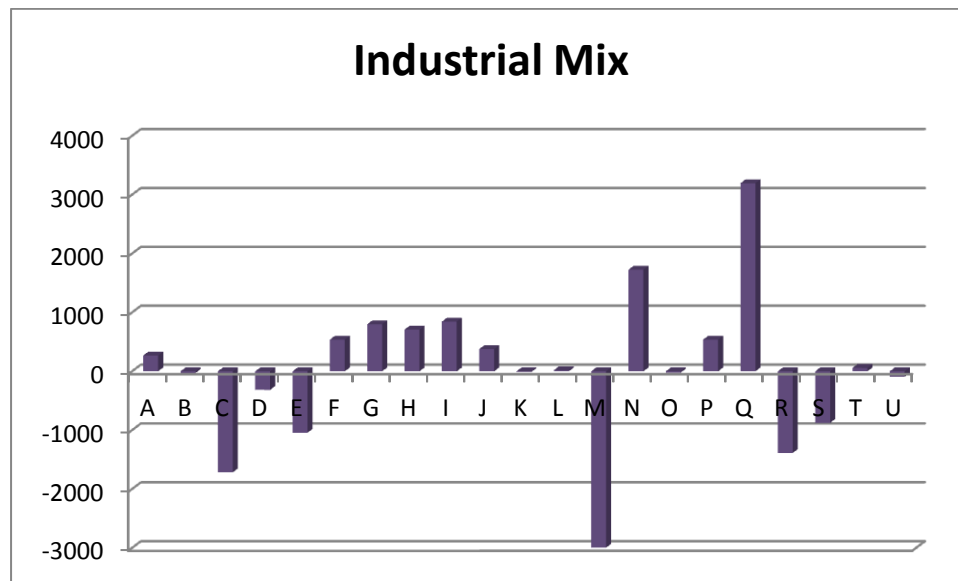


As shown on the graph, sectors having the highest contribution to actual employment growth are construction, administrative and support service, transportation and storage, agriculture, accommodation and food services from 2008 to 2012. Although the second biggest

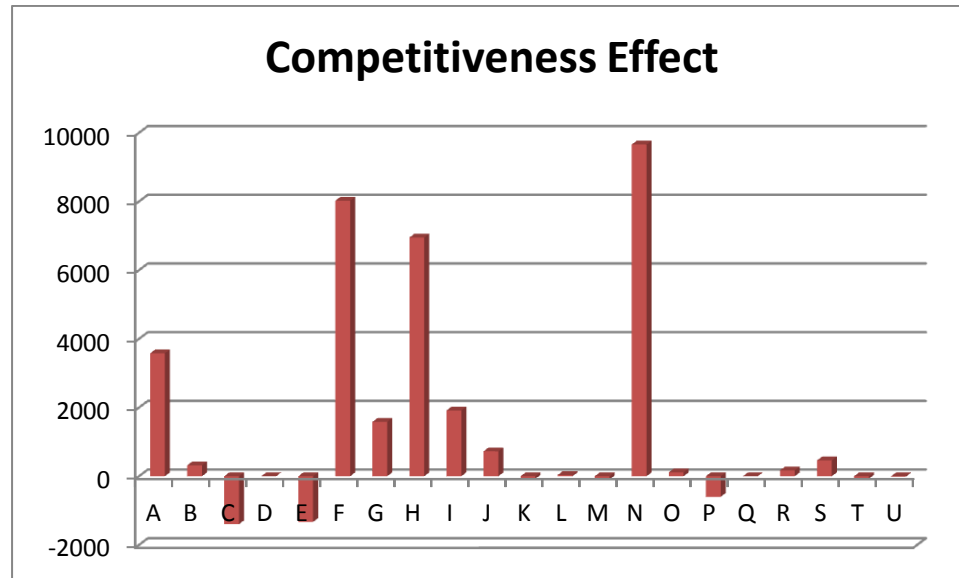
growth anticipated in manufacturing in Şanlıurfa, the real growth is different due to competitiveness effect.



According to NGE of Şanlıurfa, while the two biggest growth anticipation are in the construction and manufacturing industries in Şanlıurfa, the biggest actual growth took place in “*construction*” and “*administrative and support service*” sectors. (Actual Growth Graph).

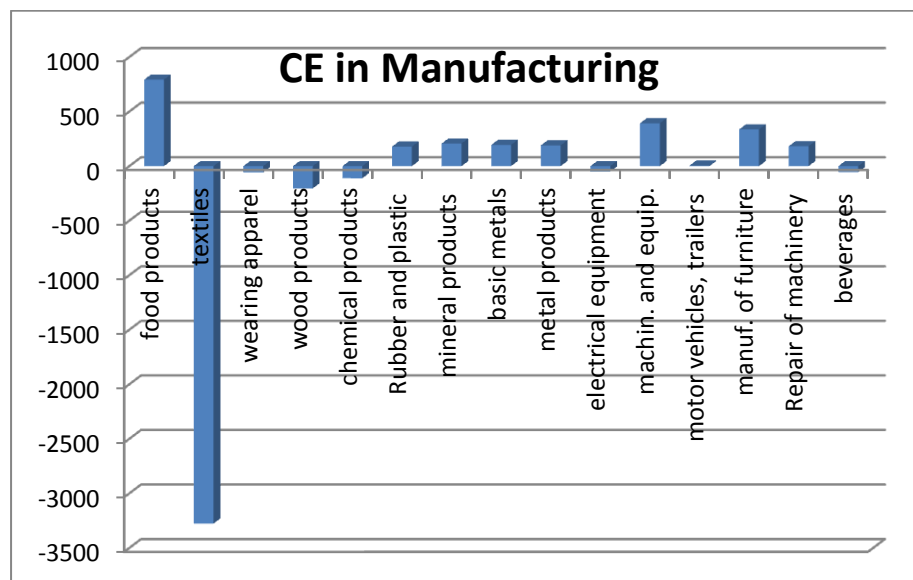


As Diyarbakır’s results, we can see that the growth performance of local industry mix is low in Şanlıurfa.



According to the table; among service sectors *administrative and support service* closely related with urbanization economies, *construction, transportation and storage, agriculture, accommodation and food services* closely related with tourism, sectors have the highest competitiveness effect in Şanlıurfa. In other words these sectors seem to be more dynamic and have bright futures in Şanlıurfa.

But from the results we understand that Şanlıurfa's competitiveness effect to attract manufacturing is very low in proportion to anticipated growth.



Competitiveness effect of sub-manufacturing industries results show us, although some sectors has positive values, the expected growth is not realized in Şanlıurfa, and it is understood that industrial investments in manufacturing shifted to other more competitive provinces from 2008 to 2012.

4. Findings and Comparison of the Results

Regional economic growth and competitive sectors of regional economy have been analyzed by using some regional analysis methods in this paper. It is known that about the regional economy despite the size and potential of the region, employment, productivity level, and gross value added level are insufficient in the regional economy. According to comparison of findings, the main reason for this is mainly depended on low industrial competitiveness level of region.

The results of LQ analysis showed that among the main economic activities, agriculture and sub-services sectors are the basic sectors of region. In manufacturing industry; the basic sector of Diyarbakır determined as *installation of machinery and equipment, manufacturing of food products, wood and wood products, non-metallic products* sectors increasing their concentration over the period of 2008-2012. And the basic manufacturing sectors of Şanlıurfa are *manufacture of food product, machinery and equipment, non-metallic mineral products, textiles*. Likewise *there are rising sectors such as manuf. of textiles and wearing apparel, manufacture of furniture, electrical equipment, basic metals, rubber and plastic products* in regional economy. As a result of analysis, it can be said that there is a positive trend to supply agglomeration and urbanization economies in regional economy.

However, according to results of S-S analysis, regional economy is more dynamic in proportion to national growth in the period of 2008-2012. Also Şanlıurfa's economy and competitiveness of Şanlıurfa city is much higher than Diyarbakır's economy. Results showed that regional economy offers competitive advantages especially in *agriculture, sub-service sectors* related to urbanization economies and in *tourism* sector. But as for manufacturing sector and competitiveness, the situation differs.

Both *Diyarbakır* and *Şanlıurfa's* economies have *low competitiveness for attracting investment in manufacturing*. Although the region has some basic manufacturing sectors

increasing concentration, the region is lagging behind in attracting investment in manufacturing industry. According to results of S-S analysis, in the period of 2008-2012, *NGE* indicates **8836** jobs would be created in the region, due to the less competitiveness of TRC2 Region the actual employment change was **2400** jobs. So we understand 6436 jobs shifted other regions in this period. Therefore it is urgently needed to take measures to increase competitiveness of the region for attracting investments in manufacturing.

5. Conclusion

In the light of the findings, it has been seen that the regional economy entered a development process especially since 2000. In this period the manufacturing sector increased its share in economies of Diyarbakır and Şanlıurfa. Also Diyarbakır and Şanlıurfa's economies have some leading manufacturing industries increasing their concentration. But results of Shift-Share analysis, an economic projection technique, show that the region has not been successful in attracting manufacturing investment in the period of 2008-2012. However, in this period many of the manufacturing industry have shifted to other more competitive regions. One of the main reasons of this problem is negative image of the region. And the other main reason of this problem is known as insufficient industrial infrastructure in region especially in Diyarbakır. So it is very important to establish sufficient industrial infrastructure in cities as soon as possible in order to utilize investment incentives.

In sum, to empower regional economy and to decrease unemployment rate of the region, in other words boosting economic growth in region, value and supply chain should be provided between the basic sectors and rising sectors in regional economy. Last but not least developing and empowering labor force of the region is crucial for social and economic development process.

References

- Armstrong H. and J. Taylor (2000) *Regional Economics and Policy*, Blackwell Publishers, Oxford.
- Barff, R. A., & Knight III, P. L. (1988). Dynamic Shift Share Analysis. *Growth and Change*, 19(2), 1-10.

DTSO (2013). "Distribution Establishment of Enterprises in Diyarbakır between 1985-2013", Diyarbakır Chamber of Commerce and Industry, Diyarbakır.

Dunn, E. S. (1960). A statistical and analytical technique for regional analysis. Papers of the Regional Science Association, 6, 97-112.

Fothergill, S., & Gudgin, G. (1979). In Defense of Shift-Share. Urban Studies.

Herath, Gebremedhin & Maumbe (2011). A Dynamic Shift-Share Analysis of Economic Growth in West Virginia. Journal of Rural and Community Development 6, 2 (2011) 155–169.

Johansson, B., C.Karlsson and R.Stough (2000) Theories of Endogenous Regional Growth, Heidelberg, Springer-Verlag.

Karacadag Development Agency (2013). TRC2 (Diyarbakır-Şanlıurfa) Regional Development Plan (2014-2023) and Analysis and Overall Evaluation, <http://www.karacadag.org.tr/default.asp>, 08.10.2013.

Klosterman, R.E. (1990), Community Analysis and Planning Techniques, Rowman & Littlefield Publishers, Inc., USA.

Shi, C., & Yang, Y. (2008). Review of Shift Share Analysis and Its Application in Tourism. International Journal of Management Perspectives, ISSN:1307-1629, 1(1), 21-30.

SSI (2013). "SSI Statitistical Yearbook", Social Security Institution, <http://www.sgk.gov.tr>, 20.12.2013.

State and Local Policy Program (SLPP) research center at the Hubert H. Humphrey Institute of Public Affairs of the University of Minnesota (2000) Understanding Your Industries, on the internet: [http:// www.hhh.umn.edu/centers/slp/projects/edweb/indcook.htm](http://www.hhh.umn.edu/centers/slp/projects/edweb/indcook.htm)

State and Local Policy Program (SLPP) research center at the Hubert H. Humphrey Institute of Public Affairs of the University of Minnesota (2000) *Understanding Your Industries*, on the internet: [http:// www.hhh.umn.edu/centers/slp/projects/edweb/indcook.htm](http://www.hhh.umn.edu/centers/slp/projects/edweb/indcook.htm).

TURKSTAT (Turkish Statistical Institute) (2013). "Statitistical indicators and databases" <http://www.tuik.gov.tr/>, 10.10.2013.

Zeyneloğlu S. (2008) The Distribution of Settlement Units and Change in The Population Figures of Central Places in Turkey: Suggestions Towards A Balanced Settlement Structure. PhD thesis. Istanbul Technical University. Graduate School of Science, Engineering and Technology.