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Regional Disparities and the Performance of Peripheral Regions in Turkey¹

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Abstract

The aim of this paper is to analyze interregional disparities and the performance of peripheral/less-developed regions in Turkey regarding the current tools of regional policies. During the planning period in Turkey, two main goals are defined as 'maximizing national income' on the one hand, and 'reducing interregional disparities' on the other. But even in the development plans, it is accepted that no more progress has been made other than the affirmation of the existence of interregional disparities. Therefore, this paper tries to re-examine the regional disparities under the light of regional development policies. However, the availability of data limits the period of the analysis for new regional development framework. Mostly the studies on regional disparities consider economic dimensions and the results indicate that the distribution of GDP per capita highlights the eastern-spatial peripherality of the regional development pattern in Turkey. A previous study by the author emphasizes two significant points for regional policies. First, there is evidence of a strengthening of a two-regime spatial division in the country; secondly, there would appear to be little evidence of positive spillovers from the more-developed to the less-developed parts of the country.

In this paper, evolutions since 1980 of regions in terms of their performances will be examined. The main questions of the paper are: "Which regions can be defined as winners and losers?" and "Is there any differentiation among less developed regions?". Furthermore, we explore the factors which underlie the aggregate trends of the regions, since we know the importance of region-specific policies. The findings of the analyses are discussed with respect to new regional policies in Turkey.

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1. Introduction

With the advent of globalization, regional policy in most countries has become more focused on international competitiveness. As national barriers are lowered, "city regions" are the real arenas for global economic competition. For the purpose of reducing interregional inequalities, regional policy has to be adjusted not only to enhance international competitiveness but to raise the competitive level of backward regions as well. From the theoretical background there are two main directions. Some authors argue that factor movements tend towards equalization and lead to economic convergence between regions following the tenets of neoclassical theory. On the other hand, alternative theories emphasize the polarization process whereby the attractiveness of dynamic rich regions (core) is reinforced at the expense of less dynamic ones, leading to wider income disparities. With respect to the convergence and divergence, several authors emphasize the complexity of the process, since the regions growing faster do not always coincide with the most developed; and slow growth is not confined only to the less developed regions (Cuadrado-Roura et al., 2002; Armstrong, 1995; Cheshire and Carbonaro, 1995)

As Dunford (2002) said, "analytically, it is possible to identify forces that will lead to equalization or convergence and differentiation or divergence. For example, the adoption by companies of similar technologies will contribute to processes of technological catch-up that will reduce development gaps. Conversely, circular and cumulative causation mechanisms associated with the interaction of scale economies, market-size effects, and external economies, as analyzed in new economic geography models, will strengthen core economies relative to peripheral ones".

Thus, due to the second one intervention is inevitable; however, it is not sufficient to decrease the interregional disparities. Therefore, regional policies provide no guarantee that the gap between the successful and the unsuccessful regions will not widen. While the liberalization and free market forces become more dominant, supports from different levels of governmental bodies still have a noticeable role and impact to reduce interregional disparities and provide regional development within backward ones. Well-known experiences are from EU cohesion and regional policies and instruments such as structural funds. Cuadrado-Roura et al. (2002) states that the interest in fomenting the structural is relatively low as the functioning of Structural Funds. In several studies on regional policy, concern about the efficiency-equity compatibility with the question of how a regional and national policy can contribute to attaining higher national growth and decrease regional disparities at the same time (Armstrong and Taylor; 2000; Van Dijk, et al.; 2009). While some regions indicate a very low chance of success even with support, some realize growth without help. Therefore, regional policy measures could be aimed at removing less favorable characteristics and stimulate the creation of success factors (Van Dijk et al., 2009).

In this paper, we analyzed the regional development process of Turkey at the beginning of the 1980s. There is a great deal of evidence that Turkey is assumed to be an emerging country – an economy with a relatively high economic growth compared to developed economies in the world, especially for the last decade. The GDP growth rate of Turkey has been above the OECD countries and EU since the 1990s. The only negative growth rates were in two years with the impact of the earthquakes in 1999 and the economic crisis in 2001. In 2002, the growth rate of Turkey was 6.2%, while EU27 was 1.2% and OECD was 1.7% (OECD, 2010). The stability of growth continued until the global crisis in 2008, which had an impact on all countries in the world. Investment in Turkey highlights the Turkish economy with: "The

visible improvements in the Turkish economy have also boomed due to the foreign trade, while exports reached USD 114 billion by the end of 2010, up from USD 36 billion in 2002. Turkey on the world economic scale is defined as an emerging economy, the 16th largest economy in the world and the 6th largest economy when compared with the EU countries, according to GDP figures (at PPP) in 2010 (www.invest.gov.tr).

Reducing the role of the state, opening up to the world markets, increasing mobility of capital are defined as the main features of the economic transformation in the world since the 1980s. On the other hand, decentralization trends make the cities and regions more ambitious to take a place within the competitive economic environment. Increasing interest on territorial/regional development rather than on national growth/development has become more significant than ever. Furthermore, emphasis has gone to the contribution of the institutional capacity to provide growth and development. Therefore, the main factors explaining the failure of regional policies in Turkey can be traced to the absence of administrative capacity and institutionalization in order to implement spatial-regional plans and policies. Eastern issues have raised a critical part in national, political and economic life for years. A previous study by this author emphasizes two significant points for regional policies. First, there is evidence of a strengthening of a two-regime spatial division in the country; secondly, there would appear to be little evidence of positive spillovers from the more-developed to the less-developed parts of the country (Gezici and Hewings, 2004).

In order to overcome the failures of regional policy, the priorities of regional development have been defined in the 9th Development Plan (2007-2013) as to activate a regional development policy at the central level, to ensure development based on local dynamics, to enhance institutional capacity at the local level, and to ensure rural development (SPO, 2007).

In the following section, regional disparities will be analyzed based on NUTS 2 regions in Turkey. Further, we analyze if there has been any differentiation among less developed regions since 1980. Based on variables such as population and GDP growth rates, assuming that these are the main determinants of regional evolution and performance, we try to define the losing and winning regions among less-developed ones (PPDs). The new incentive policy as one of the main regional policy instruments will be evaluated in order to understand the possible impacts on regional disparities and development.

2. Regional Disparities and Policies in Turkey

Previous studies on regional disparities take into consideration different geographical definitions. However, in this paper we focus on two regional aspects. First, NUTS regions were defined by the State Planning Organization in 2002 as the new regional division of Turkey. For the adjustment and accession process of Turkey to the EU, the absence of regional statistical units has been emphasized in the report of the EU and the requirement of "preparing national development plans covering integrated regional development plans especially for the PPDs at NUTS 2 level in the period of 2003-2005" was noted. After establishing NUTS regions, the State Planning Organization prepared "Regional Development Strategy, Objectives and Operational Programs" especially for the 10 Level-2 regions among 26 of them, as a part of the Preliminary National Development Plan and as a road map in order to direct regional development activities in Turkey.

Second, we analyze what has been changed for so-called "Priority Provinces for Development" (PPD) as the less-developed provinces in Turkey. In the 3rd Development Plan

(1973-77), the definition of PPDs was made to give precedence to those provinces by directing industrial investments towards them in order to reduce interregional disparities in the long term. There have been several critics on incentive policies for PPDs, however recently the new incentive policy has been established.

Therefore, the regional development framework consists not only of the regional development plans and activation of development agencies on NUTS 2 level regions, but regional incentives as well. In this paper, regional disparities due to NUTS regions and differentiations among PPDs will be analyzed regarding the current tools of regional policies.

2.1. Regional Disparities among NUTS regions

The economic geography of Turkey indicates two main features: the east-west dualism and the differentiation between the coastal and the interior provinces without considering any regional definition (Gezici and Hewings, 2004). Figure 1 shows the distribution of GDP across the provinces, and highlights the dominancy of metropolitan cities such as Istanbul, Ankara, Izmir and some provinces close to them. When we look at HDI, which includes social indicators as well, the picture highlights the importance of the western and southern coastlines of the country more than economic indicators. For 25 years from 1975 to 2000 the top four (Kocaeli, Istanbul, Izmir, Bursa) have not changed their positions (Gezici et al., 2009).

There has been a declining trend on regional disparities for all levels of division after 1986 until 1993. Between 1997 and 2001, there was an obvious decrease on Theil index values from 0.10 to 0.07 for NUTS 2 regions (Gezici, 2006) (Figure 2). For this period, rather than improvements within less-developed regions, there were the impacts of two major events: the 1999 earthquakes and the economic crisis in 2001. These events slowed down the national economy and most developed regions, generating a decreasing trend of disparities. However, the results reveal that the NUTS regions present a more appropriate division of the economy; for example, the NUTS-2 (26 regions) regions have the lowest within-region inequality compare to the other regional definitions. The figures of regional disparities can be addressed with aggregation issues, as Rey (2001) found out that "the choice of the partition can fundamentally change the inequality decomposition". As we see from Figure 2, the level of disparities becomes higher when the number of regions increases. Although, it is too early to evaluate the results of a new division and the policies since we can still use the data of GDP for 2001, the results of the disparity analysis point out that the level of NUTS-2 regions might have a chance for the application of regional policy and programs. On the other hand, there have been several critics on the definition of the regions, as some of them do not indicate a meaningful unity.

Furthermore, Figures 1 and 3 show the heterogeneity and homogeneity within NUTS 2 regions with respect to economic development. For instance, in the western Manisa NUTS 2 region consists of three different levels of GDP value among 4 provinces, while in the eastern Van NUTS 2 region has the same level of GDP among 4 provinces. With respect to specific regional contributions to the within-region inequalities, the Kocaeli region, as one of the developed ones (Bolu, Düzce, Kocaeli, Sakarya, Yalova), provides the highest proportion (53%) since it has a large gap between two provinces within the region (Figure 3). Kocaeli province as the center of the region is not only an outlier for its region, but for Turkey as well with its GDP per capita (equal to 290% of national average).

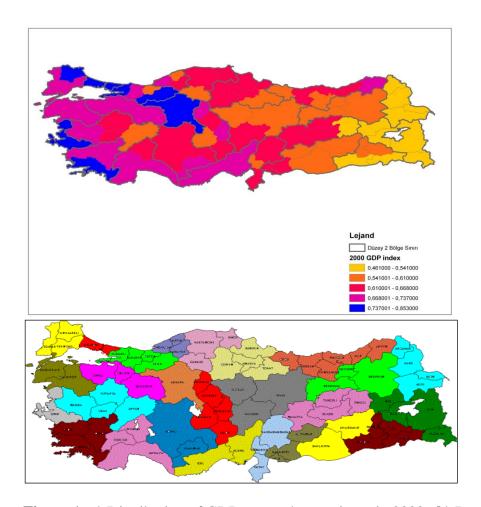


Figure 1: a) Distribution of GDP across the provinces in 2000; b) Regions of NUTS2 level

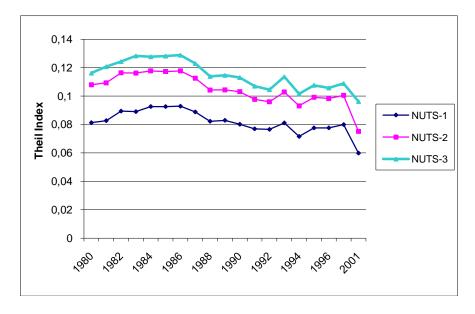


Figure 2: Between Region Inequalities, 1980-2001 (NUTS regions)

One province within the Kocaeli region has less than 60% of the national average. Most eastern provinces have the similar value. Figure 3 shows the sharp east-west contrast, while 12 of 26 NUTS regions are above the national average.

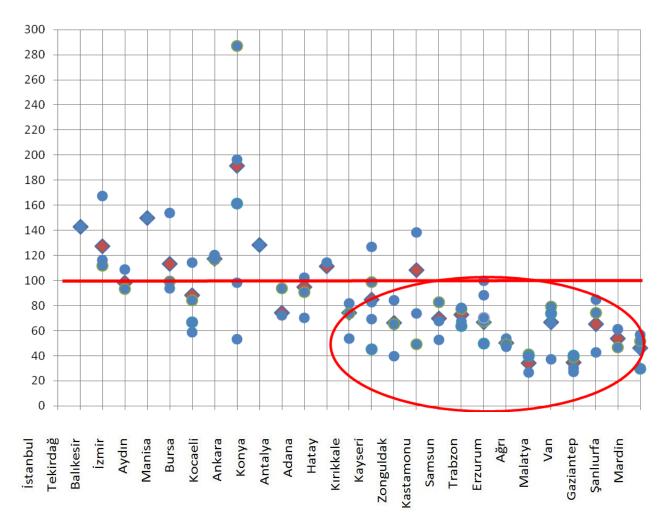


Figure 3: GDP per capita in provinces and regions relative to national average 2001 (Turkey=100, regional averages are shown as red squares)

2.2. Performance of Peripheral-Less Developed Regions

In this part, we are interested in whether PPDs as less developed regions indicate differentiations and if some of them have higher performance than others. Since there has been a new regional development policy framework, we will analyze their economic performance compared to the incentives and investments as tools of regional policy. Furthermore, the new inventive policy (2009) will be evaluated for the future aspects.

The analysis of Gezici and Hewings (2004), which covers the period of 1980-1997, indicates that PPDs have common characteristics compared to the developed provinces, though they have some differentiations with respect to several indicators. PPDs as backward regions are mainly located in the Black Sea, Eastern and Southeastern Anatolia. Some provinces that are included in the Southeast Anatolia Development Project (GAP) have positive population change and are receiving relatively more public investment in total, though they do not have adequate per capita investment and have not yet experienced faster GDP growth. The reason of high public investments in Southeastern Anatolia is mainly due to the engineering and

transportation projects of GAP. In the 8th Development Plan (SPO, 2000), the failure of policy on PPDs may be explained by factors such as declaration of too many provinces, frequent changes by political decisions, considering all PPDs as having the same priority even when they are at different development levels (Figure 4), and failure to provide integration among the investments (Gezici and Hewings, 2004). Therefore, this paper explores the period after 1997, and what a new incentive policy would bring to the less-developed regions.

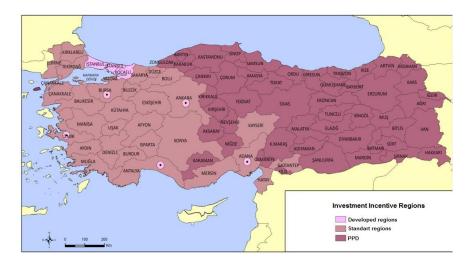


Figure 4: Priority Provinces in Development (PPDs) and the rest - old incentive policy

PPDs have some common characteristics, such as low population growth related to high out-migration; a lower urbanization rate compared to the national average; relatively lower GDP per capita and a decreasing share; high agricultural employment and dominance of the agricultural economy; and relatively lower industrial employment. Although PPDs have common characteristics compared to the developed provinces, there are differentiations among them considering minimum and maximum values for several indicators (Table 1). Figure 5 indicates that there has been a decreasing trend on standard deviation of GDP per capita across PPDs after 1997.

Table 1: Main indicators and differentiations of PPDs

	Maximum	Minimum	Mean
Annual Population Growth (1980-2010)	3,442 Şanlıurfa	-2,767 Kars	0,045
GDP Per Capita (2001)	2969 \$ Zonguldak	578 \$ Muş	1350\$
GDP Growth (1987-2001)	7,60 Hakkari	-3,60 Siirt	3,33
Public Investment Per Capita (2010)	3584 TL Artvin	72 TL Osmaniye	397 TL
Agricultural Employment (2000)	83.44% Muş	42.30 %Tunceli	65.47%
Industrial Employment (2000)	18.71 %Karabük	1.06% Ardahan	5.33%
Unemployment Rate (2009)	20.6 % Diyarbakır	4.2% Ardahan	11.40%
Illiterate Rate (2009)	18.45% Siirt	5.39 % Çanakkale	11.50%

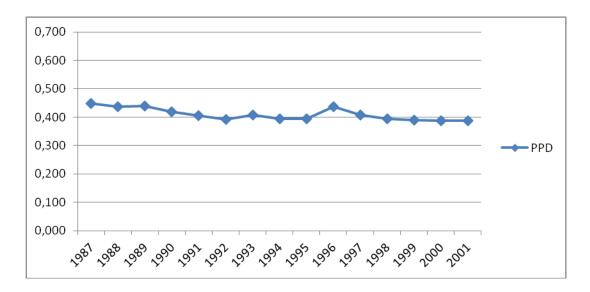


Figure 5: Dispersion of log of GDP per capita across PPDs (1987-2001)

In Figure 6 the upward sloping line represents rates of growth of GDP per capita which equal the national average. Areas to the left of this line experience relative growth, whereas areas to the right experience relative decline. The four quadrants represent different combinations of performance. Most of the provinces located in the east are the main origins for migration flow, therefore comparison between population growth and GDP growth tells more about the picture. There are some outliers as so-called losers, while some are winners. Şanlıurfa and Van have a noticeable increase both in population and GDP, while Kars and Siirt are located in the fourth quadrant with population and GDP decrease during the 15 year period and most of the Black Sea provinces lose their population. From this analysis, we emphasize the noticeable impacts of migration flows on economic development. Sometimes, the provinces which lose their population might have a higher GDP per capita, but it is rather an artificial circumstance than due to improvements within the region.

In the 9th Development Plan (SPO, 2007); the implemented regional development policies are defined as:

- regional plans
- investment incentives
- priority provinces in development
- organized industrial zones
- rural development
- action plan and emergency assistance for the development of Eastern and Southeastern Anatolia.

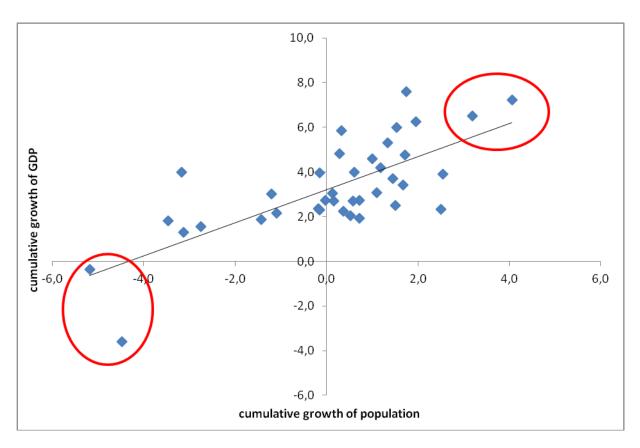


Figure 6: The changing relationship between population and GDP growth in PPDs (population 1985-2000) (GDP 1987-2001)

In this paper, we are mainly interested in the relationship between regional plans and incentive policies. As mentioned above, the State Planning Organization established "Regional Development Strategy, Objectives and Operational Programs" especially for the 10 Level-2 regions as a part of the Preliminary National Development Plan (SPO, 2003). In 2006, development agencies were established in order to stimulate the endogenous growth and attract investment within the center provinces of NUTS 2 level regions. In 2011, all development agencies prepared their regional development plan under the coordination of the State Planning Organization. "How are investment incentive policies integrated into the regional development plans?" is a crucial question. The concept of incentive is defined as support or encouragement, provided by the states, tangible or intangible, to provide certain economic activities to develop faster than others. The positive effects of regional incentive policies would be an increase in employment, a reduction of migration, an increase in quantity of production, an increase in number of firms, and balanced spatial distribution.

With Law No. 5084, 36 provinces, where income per capita for 2001 was below 1500 USD, have been included under the scope of incentive. With this law, incentives for income tax withholding, social security employer's contribution and energy support is provided for. The scope of the application has been extended to cover the provinces, where the socio-economic development index value determined for the year 2003 by SPO was negative (YASED/International Investors Association of Turkey, 2010). Objectives of the new incentive system are to reduce regional development disparities, to ensure clustering, to increase technological and R&D capacity, and to provide a competitive advantage. Within the framework of the implementation of support measures, NUTS 2 Regions have been divided into four groups by their socio-economic development level (Figure 7).



Figure 7: Four groups of incentive regions (Undersecretariat of Treasury, 2010)

Region 1 covers most developed regions with the preponderance of motor vehicles and related industries, electronics, pharmaceuticals that mainly require investment in high technology. While for Region 2 machinery manufacturing, multifunctional textiles, non-metal-mineral products (glass, ceramic, tile), paper, food and beverages, technology-intensive sectors are the sectors that have priority; Regions 3 and 4 as the least development ones are supported with sectors such as agriculture and agro-based manufacturing industries, garments, leather, plastic, labor-intensive sectors such as tourism, health and education services. Table 2 points out that investment incentives have still gone mostly to the developed provinces, as is clear from the first 10 ranks of Turkey. Furthermore, for Region 4 as less developed provinces due to socio-economic development index values, the provinces which have relatively higher GDP growth among PPDs and the centers of their NUTS 2 level region are also in the first 10 ranks. However, even though there is a positive correlation between the investment incentives and GDP growth, it is not sufficient to make such an interpretation, since we need to explore the initial advantages and endogenous dynamics of the provinces.

Table 2: Investment Incentive Certificates - First 10 Ranks (August 2009-July 2010)

Rank	Turkey	Region 1	Region 2	Region 3	Region 4
1	Istanbul	Istanbul	Antalya	Konya	Diyarbakır
2	Konya	Bursa	Adana	Gaziantep	Elazığ
3	Bursa	Izmir	Mersin	Manisa	Mardin
4	Gaziantep	Ankara	Balıkesir	Kayseri	Şanlıurfa
5	Izmir	Kocaeli	Muğla	Samsun	Malatya
6	Antalya	Tekirdağ	Denizli	Hatay	Erzurum
7	Ankara	Sakarya	Aydın	Afyon	Trabzon
8	Manisa	Eskişehir	Isparta	Sivas	Giresun
9	Kocaeli	Düzce	Burdur	Kahramanmaraş	Van
10	Adana	Bolu	Çanakkale	Adıyaman	Kastamonu

Source: Undersecretariat of Treasury

PPDs within NUTS 2 regions are compared due to their economic performance (GDP growth and competitiveness index) and public investment and incentives. The current competitiveness index was calculated by URAK (International Competitiveness Research Institute) in 2010 taking into consideration the four main components of human capital and

life quality, ability of branding and innovation, trade ability and production potential, and accessibility (URAK, 2010). Competitiveness index values of a few provinces are differentiated from other PPDs, such as Gaziantep, Erzurum, Malatya, Elazığ, and Zonguldak (Table 3). These provinces are the regional centers in the east, while Zonguldak is a declining region that used to be a public-owned, heavy manufacturing industrial area. The role of Gaziantep in the east has become more dominant with these figures. Moreover, there is a big gap between Gaziantep and other provinces within the TRC2 region.

Table 3: Comparison between Economic Performance and Investments of PPDs within NUTS 2 regions

NUTS 2 NUTS 2 regions	Provinces (PPDs)	Public investment	Incentives	Competitiveness index value (URAK)	GDP growth
		2010 (thousand TL)	2010 (TL)	2009-2010	1990-2000
TRA 2	Ağrı	121.808	47.228.850	6,33	3,776
	Ardahan	29.345	190.194.350	7,18	-
	Iğdır	51.547	37.066.257	8,79	-
	Kars	84.771	102.726.036	10,39	-4,008
TR 71	Kırıkkale	87 110	42.394.853	18,02	2,451
	Aksaray	143 479	431.750.096	11,23	5,655
	Niğde	37 807	138.312.331	13,52	2,727
	Nevşehir	36 709	152.162.284	17,76	2,175
	Kırşehir	44 430	330.013.171	13,91	1,302
TR 81	Zonguldak	369 615	110.910.835	26,38	-2,076
	Karabük	42 937	103.751.580	17,51	-
	Bartın	35 999	97.842.260	16,66	-
TR 82	Kastamonu	94 435	243.748.039	11,59	2,543
	Çankırı	63 012	692.217.998	10,40	1,636
	Sinop	142 542	108.227.744	16,31	0,977
TRA 1	Erzurum	337 293	353.093.845	21,95	1,157
	Erzincan	118 886	126.519.584	14,57	-0,096
	Bayburt	24 039	40.144.459	7,98	5,109
TRB 1	Malatya	167 436	404.312.636	20,99	2,911
	Elazığ	85 849	262.157.589	21,10	-0,347
	Bingöl	178 301	48.873.639	8,80	3,054
	Tunceli	46 364	48.029.511	8,06	-1,834
TRB 2	Van	145 291	201.751.691	13,56	3,394
	Muş	76 837	59.596.097	9,17	0,894
	Bitlis	70 238	119.654.659	8,37	0,109
	Hakkari	77 271	14.267.586	6,23	3,406
TRC 2	Gaziantep	263 758	1.213.976.788	27,67	1,474
	Adıyaman	289 442	334.870.821	11,42	-0,683
	Kilis	89 909	28.808.931	11,54	-
TRC 2	Şanlıurfa	590 243	537.289.786	17,33	7,679
	Diyarbakır	469 201	331.376.542	19,55	0,673
TRC 3	Mardin	330 623	259.030.279	12,63	2,000
	Batman	260 032	79.055.672	13,51	-
	Şırnak	93 397	62.180.598	6,31	-
	Siirt	91 646	40.843.209	7,37	-5,525

Sources: DPT, 2010, Undersecretariat of the Treasury, 2010; URAK 2010

Concentration of incentives and public investment in one province within the regions is obvious, especially in the regions in Eastern and Southeastern Anatolia (Mardin-TRC3, Gaziantep-TRC2, Van-TRB2, Malatya-TRB1, Erzurum-TRA1). On the other hand, the provinces with negative growth rate such as Siirt and Tunceli have the lowest public investment and incentives (Table 3 in red).

The new incentive policy still considers the PPDs in the 3rd and 4th groups, although they have different potential and performances. However, the objectives and main development strategies of NUTS 2 level regional plans prepared by the development agencies are quite similar to each other by giving emphasis to competitiveness.

3. Concluding Remarks

There have been several studies on interregional disparities, since there is a common sense that reducing disparities would contribute to the performance of the national economy as well. Over time, the efforts to reduce regional disparities have changed from direct investments to less-developed regions, to stimulate endogenous growth dynamics within the region. However, not only the experiences in the EU, such as European Structural Funds for the convergence target across EU regions, show us the significance of support but also on the national level support for some sectors and regions are still considered inevitable to increase the development level of less-developed regions.

To reduce interregional disparities in Turkey has been one of the main targets of regional policies. However, national level regional policies have mostly been criticized since they neglect the regional/local characteristics and dynamics. Instead they conduct a homogeneous approach to all less-developed regions. Therefore, the failure of incentive policy to PPDs is not a surprise. For the adjustment and accession process of Turkey to the EU has been defined as a breaking point in the regional policies of Turkey since 2000. The aim of the establishment of development agencies based on the NUTS 2 level regions is to stimulate endogenous growth, to create an environment for entrepreneurs and to attract investments by using allocated funds of the EU. Thus, development agencies prepared their regional development plans with the main strategies, while most of them focus on an increase of the competitiveness of regions'. The figures for less-developed regions indicate that there is still a requirement for support to less-developed regions and ask how an incentive policy would meet the targets of regional plans. This has become an important question. Since the latest data of GDP is for 2001, to evaluate the real performance of less-developed provinces would be difficult. However, a few provinces such as the regional centers within Eastern and Southeastern Anatolia indicate noticeable performance in terms of competitiveness, while they get the highest incentives within their regions. Finally, PPDs as less-developed provinces within the NUTS 2 level regions are differentiated, not only based on the economic performance, but also related to the public investment and incentives. Therefore, the regional development plans of NUTS 2 level regions should consider this issue, to realize the characteristics of provinces in order to activate, while they are looking at the region as a unity But it is still too early to evaluate the new regional policy and incentive system in order to see the impacts.

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