



Megaron

<https://megaron.yildiz.edu.tr> - <https://megaronjournal.com>
DOI: <https://doi.org/10.14744/megaron.2024.68726>

MEGARON

Article

Regional development, institutions and policies in Türkiye: Dynamic shift-share analysis (2004-2023)

Zühal ÇELEBİ DENİZ^{1,*}, Gülden ERKUT²

¹Istanbul Technical University Graduate School, Karacadag Development Agency, Diyarbakır, Türkiye

²Department of Urban and Regional Planning, Istanbul Technical University, İstanbul, Türkiye

ARTICLE INFO

Article history

Received: 30 August 2023

Revised: 27 June 2024

Accepted: 21 August 2024

Key words:

Regional development policies, development agencies, economic growth, dynamic shift-share analysis.

ABSTRACT

Inequalities between regions tend to increase worldwide. In Türkiye, where inter-regional inequalities are quite high, regional inequalities and regional policies came to the fore along with the EU harmonization principles and the candidacy process, following the approval of EU candidacy in 1999. In the early 2000s, new regions were created in Türkiye in parallel with the EU regional classification, and Development Agencies (DAs) were established in these regions to accelerate regional development. In this research, the effects of the new regional development policies in Türkiye post-2000 and the DAs, which are the prominent actors of regional development, on the economic growth and competitive performances of the regions were examined. As the research method, regional policies after 2000 and regional economic growth performances in the 2004-2009 period and the 2013-2018 period, based on the year 2010 when DAs were established, were examined with dynamic shift-share analyses. In parallel with the changes in public administration, the period after 2018 was analyzed separately as the 2019-2023 period. According to the analysis results obtained, compared to the performance of the pre-2010 period, the regional competitiveness effect has increased in some middle-low-income and low-income regions in the periods after the establishment of DAs, especially in sub-regions in the Southeastern Anatolia Region, where the Southeastern Anatolia Project is being implemented. On the other hand, negative regional competitiveness effects were observed in the economic growth performances of nine regions from different income groups after 2010. Additionally, a positive medium-low level correlation was determined between the financial support of DAs and the regional growth performances.

Cite this article as: Çelebi Deniz, Z., Erkut, G. (2024). Regional development, institutions and policies in Türkiye: Dynamic shift-share analysis (2004-2023). *Megaron*, 19(3), 389-402.

INTRODUCTION

Regional inequalities arising from the uneven distribution of economic growth in space or its concentration in certain regions become deeper over time with the accumulation of the population and the increase in infrastructure and some

other investment opportunities. Interregional disparities and related discontent are increasing both in developed and developing countries, especially in the USA and England (McCann, 2020). Inequalities, unfair distribution of wealth, neglected regions and people, and regional discontent are

*Corresponding author

*E-mail adres: zuhalcelebi16@gmail.com

This article is based on PhD Dissertation entitled as *Türkiye’de Bölgesel Gelişme ve Kalkınma Ajansları: Bölgeler Arası Performans Değerlendirme Modeli* by Zühal Çelebi Deniz under supervision of Prof. Dr. Gülden Erkut at Istanbul Technical University, Department of Urban and Regional Planning.



Published by Yıldız Technical University, İstanbul, Türkiye

This is an open access article under the CC BY-NC license (<http://creativecommons.org/licenses/by-nc/4.0/>).

considered threats to the EU's economic and social cohesion goals and future, causing negative consequences for countries in the Global North and South (Iammarino et al., 2019; Pike, 2020). The relevant literature on the globalization of the economy, the mobility of production factors, the negative effects of global economic crises on regions, and regional development traps for left-behind regions draw attention to existing economic, social, and political risks, showing that new and effective measures should be taken for regional development and resilience of local economies (Dicken, 2015; Pike, 2020; Diemer et al., 2022; Dijkstra et al., 2015).

The OECD (2023) points out that after 2000, there was income convergence between countries, but divergence occurred between regions. Regional inequalities increased in high-income countries and Eastern European countries, but decreased in high-income countries such as Germany, Finland, Norway, and New Zealand, as well as low-growth countries like Spain, Greece, Portugal, and New Zealand. These different paths across countries show that longstanding inequalities can be reduced with the right policies (OECD, 2023). Among OECD countries, Türkiye stands out in terms of high income differences and regional development imbalances between the east and west of the country, with the highest ratio of the richest region to the poorest region. As for the Gini coefficient, Türkiye ranks third among OECD countries after Mexico and Chile, where income is most unequally distributed. On the other hand, Türkiye's four lowest-income regions (TRC2, TRC3, TRB2, TRA2 NUTS II Regions) are among the 20 poorest regions of 285 OECD regions, according to OECD data (OECD, 2019). It has been stated in the related literature that, despite exceptional disparities between regions in Türkiye (Tekeli, 2009), regional development policies have been discussed since the 1960s, but negligible progress was made in reducing the persistent regional differences until the 2000s (Gezici & Hewings, 2003; Yıldırım et al., 2004). When evaluating development policies, changes in economic and political trajectories are also important. After the decisions of January 24, 1980, Türkiye followed neoliberal economic policies, integration into the global economy, public restructuring policies, and economic integration with Europe. With the announcement of Türkiye's candidacy to the EU in 1999, a wave of reforms was triggered, transforming Türkiye's political and legal system, including regional policies based on a new regionalism approach that corresponds to the liberalization process of the economy. At the beginning of the 2000s, having high income differences with both the EU countries and among its regions, Türkiye defined this as a challenge in national strategies and emphasized the necessity and possible structure of regional development institutions in EC National Progress Reports 2000, 2001, 2003, and 2004 (Sezgin & Erkut, 2020).

RDAs, which spread rapidly in Europe in the 1990s and with the increasing political influence of the EU, were established in Türkiye as of 2010 to improve regional competitiveness

based on internal dynamics, enhance the investment (Sezgin & Erkut, 2017) environment, and accelerate local economic development. DAs existing in Europe have played important roles in the globalization era, changing economic conditions, bottom-up development in localization processes, the success of local initiatives, and the positive effects of good governance on regional and local development (Danson et al., 2017). Regional policies and relevant institutions evolve according to the characteristics and needs of localities. In the example of England, RDAs have been transformed into more localized and specialized local enterprise partnership organizations. Nevertheless, there are many successful DAs in European countries, working at the networks and governance levels, that remain indispensable actors of regional development (Pike et al., 2017; Tomaney, 2010).

Local and regional development organizations are shaped by states from the “developmentalism” era to the current “globalism” era, according to the different conditions, needs, and aims of countries and regions, and they definitely play governing roles in legal and institutional changes (McMichael, 2012). Regional development policies and related institutions have been affected by changes in the public administration of Türkiye within the last two decades. DAs in Türkiye were established based on Law No. 5449 (T.C. Resmi Gazete, 2006) and operated under the coordination of the State Planning Organization, a supra-ministerial planning authority, until 2011 when SPO transformed into the Ministry of Development. Afterwards, with Presidential Decree No. 4 (T.C. Resmi Gazete, 2018), DAs started working under the coordination of the Ministry of Industry and Technology with the closure of the Ministry of Development in 2018. According to audit reports of DAs in Türkiye (Devlet Denetleme Kurulu, 2014; Sayıştay Başkanlığı, 2018), especially low-income regions need DAs as a governance mechanism for development, but due to the inadequacy of resources, the contribution of DAs to development is limited. Despite the positive effects of varied activities of DAs on their regions (Aydoğdu & Sezer, 2018; Bakır & Bahtiyar, 2019; Şahin & Kabayel, 2017; Pektaş & Demirkol, 2018), the weakness of multi-level governance functions reduces the effectiveness of DAs in their regions (Ertugal, 2017).

According to Yücel's (2024) research on development traps and regions of Türkiye, six regions are already in the development trap, and seven regions are at risk of entering the development trap. The capacity to adapt to changing conditions, local development, the creation of good jobs, and the role of strong development agencies are quite important in these regions. Over the last two decades, there have been some interruptions in the functioning of governance and a loss of capacity in some respects (Yücel, 2024). According to the findings of the authors on the performance of DAs in conjunction with the socio-economic development levels of the 26 regions of Türkiye from 2010-2018, the performance of DAs is highly dependent on local stakeholders, with key

factors being the adequacy of financial and human resources. Besides the discussions on the structure and effects of DAs, the roles of DAs in Türkiye require more detailed study and evaluations with the experience gained (Halkier, 2007). Considering the relationship of DAs with the state, the business world, and other social actors in Türkiye, the effectiveness of DAs in supporting regional economies is also among the main questions (Lagendijk et al., 2009) and needs to be evaluated. Iammarino et al. (2019) propose a new "place-sensitive" approach against increasing inequalities in Europe, instead of people-based and as a complement to place-based policies. Having a very special geography, Türkiye's regions are diversified from each other by their development and income levels. They also have genuine characteristics depending on historical, cultural, economic, social, and ecological aspects. In this research, the effects of the policies and DAs followed in Türkiye after 2000 on the growth performances and internal competitiveness potentials of the regions are examined. The aim is to contribute to the development of new policies that are sensitive to the uniqueness of the regions in Türkiye, which have noteworthy inequalities in Europe.

Literature Review

Inter-regional development differences, causing unequal income distribution and inequality of opportunity in different parts of a country, are attributed to initial advantages or disadvantages, institutional factors, or the inability of lagging regions to adapt to critical change processes (Cörvers & Mayhew, 2021). On the other hand, it has been stated that inter-regional inequalities are resistant and persist for generations (Rice & Venables, 2021). Moreover, the convergence expectation due to labor and capital mobility in the post-2000 globalization processes is quite insufficient. Many studies conducted in the first years of the millennium showed that the problem of income inequality tended to increase as globalization processes increased investments in metropolises, especially with the rapid growth of developing countries in the 2000s (Pernia & Quising, 2003; Brenner, 2003; Farole, 2013). Pike (2020) argues that the geographical political economy approach, as a new perspective for underdeveloped regions and people focusing on differentiated pathways and institutions, stimulates engagement, dialogue, and cross-national learning for development. Diemer et al. (2022) identified some regions that face structural challenges in increasing income, employment, and welfare as regions either in a development trap or at significant near-term risk of falling into it within the EU geography. They suggest interventions and approaches that go beyond traditional concerns for these less-developed regions and urge policymakers to take preventive measures (Diemer et al., 2022). In their research on inequality increases in Europe, Iammarino et al. (2019) propose that a new "place-sensitive" approach is needed, instead of people-based policies, as a complement to place-based policies.

With the influence of the new regionalism movement, local and regional development around the world over the last

30 years has been shaped by multi-actor and decentralized systems of government and good governance at all levels, spanning multiple geographic scales and relational networks (Pike et al., 2017). The institutional capacity of regions has been cited by the OECD as the implicit reason why some of its member countries' regions tend to grow steadily, based on advanced human capital and innovation (OECD, 2012). In this direction, many states have tended to give more authority and decentralization to regional and local governments and governance institutions in support of regional development (Rodríguez-Pose, 2013). Research on the future of RDAs, governance mechanisms playing important roles in development, shows that supra-regional scale and urban scale are on the rise globally, with specialization in certain fields coming to the fore (Bellini et al., 2012). The success of DAs in the near future depends on their highly qualified and knowledge-based structures (Bellini et al., 2012).

At the beginning of the 2000s, Türkiye changed its regional policy under the direction of EU policies, so NUTS level regions were created. Development Agencies (DAs) were established in these regions to initiate planning studies and strengthen the institutional capacity responsible for regional development (Kayasü & Yaşar, 2006). DAs have not been included in the central-local hierarchy in the administrative structure of Türkiye but have been institutionalized as a scale for planning and development at the regional level. According to Ertugal (2017), DAs in Türkiye differ from eastern EU counterparts by representing policy instruments, implementation, and governance functions rather than decentralization.

According to EURADA, DAs in Türkiye operate on the principles of regionalization and good governance, aiming to use resources efficiently and reduce exceptional disparities. Tekeli (2009) points out that since Türkiye's high-income regions are behind the EU average, for real progress in Türkiye, DAs should be differentiated according to the various qualities and capacities of the regions rather than being uniform. Ertugal (2017) stated that the problems in the governance functions of DAs in Türkiye and the deficiencies in their processes significantly reduce DA effectiveness. Some studies investigated the effects of DA activities in their regions (Çetinkaya & Akkurt, 2016; Özkan et al., 2014; Kayasü & Eldeniz, 2013; Günaydın, 2012; Aydoğdu & Sezer, 2018; Pehlivan, 2013; Bakır & Bahtiyar, 2019; Türkoğlu, 2016; Pektaş & Demirkol, 2018; Şahin & Kabayel, 2017) and concluded that DA financial supports have positive effects in their regions. However, some studies (Tarı et al., 2017; Kırankabeş, 2013; Şimşek, 2013) measuring the effectiveness of the DAs in Türkiye concluded that most of the DAs are not financially effective. Current studies investigating the change in income distribution in Türkiye post-2000 note a convergence for the 2004-2017 period, but others point out that there was no convergence or there was club convergence, especially after 2018 (Sakarya et al., 2024; Karahasan, 2020; Doğan & Kındap, 2019; Öztürk & Gültekin, 2021; Gündem, 2017; Kartal & Karşıyakalı, 2023). According to a current inter-regional performance assessment analysis of DAs

in Türkiye, the performance of DAs also depends on the participation of regional stakeholders in DA activities, and half of the six high-performing DAs are in low-income regions (Celebi Deniz & Erkut, 2022). According to the results of research in which the performances of DAs were analyzed, financial resources and the adequacy of expert staff are key factors. Agencies responsible for four or more provinces have difficulty in regional adaptation and coordination, reducing the success of DAs, especially in low-income and medium-low-income regions (Celebi Deniz & Erkut, 2022).

Yücel (2024), in his research on development traps in Türkiye for the 2014-2022 period, found that TR51 and TR41 regions representing the high-income group, TR61 and TR22 regions representing the middle-income group, and TR90, TR83, and TRC2 regions representing the low-income group are in the development trap. Additionally, TR10, TR32, TR72, TR82, TRA1, TRB1, and TRB2 regions are at risk of falling into the development trap. It emphasizes that DAs and regional/local development mechanisms in these regions should be strengthened and restructured (Yücel, 2024).

METHODOLOGY AND DATA

This research aims to examine the effects of post-2000 policies on the economic performance of regions in Türkiye and to contribute to the development of genuine approaches for the success of regional and local development policies. In this context, this research analyzes the effects of post-2000 regional policies and Development Agencies on the 26 NUTS 2 regions using dynamic shift-share analyses (DSSA) in Türkiye within the periods of 2004-2009 (before DAs) and 2013-2018 (after DAs), in parallel with regional data. Afterwards, the 2019-2023 period was analyzed separately in accordance with the changed public administrative system of the country.

The variation shift-share analysis method, developed by Dunn, 1960; was presented as a statistical and analytical method to understand and interpret the reasons for sectoral growth in a particular region of a country. Traditional, dynamic, spatial, and sectoral versions of the methods are used in a wide variety of fields such as production, industry, international trade, tourism, and regional policy, and demographic changes have been studied as referred to in academic literature (Haynes & Dinç, 1997; Knudsen, 2000; Shi & Yang, 2008). Barff & Knight (1988) developed the DSSA method using annual growth performances to measure employment growth from 1939 to 1984 in New England, using data from the U.S. Bureau of Labor Statistics.

The analysis is the decomposition of regional growth into three components, as follows (Wieland, 2019):

- **National Growth Effect (NGE):** This gives the expected value of the national growth effect of growth in certain sectors of the region, in other words, the national growth rate.

- **Industrial Mix Effect (IME):** This is the growth effect resulting from the effect of the total growth in the sectors of the region, the contribution of specialized sectors, or the low growth of weak sectors.
- **Regional Competitiveness Effect (CE):** This gives the amount of growth realized due to the internal competitive advantages of the region. The competitiveness effect component, which is the most important and key component of the analysis, shows the growth or decline in the examined sector depending on spatial advantages and disadvantages.

In this study, the dynamic variation analysis method (Barff & Knight, 1988) was used to include the growth changes and components in the analysis in all the years examined in detail. The model used in the analyses made within the scope of the research is shown below.

$$e_i^{t+n} - e_i^t = NGE_i + IME_i + CE_i$$

$$NGE_i = \sum_{k=t+1}^{t+n} [e_i^{k-1} (G^k)]$$

$$IME_i = \sum_{k=t+1}^{t+n} [e_i^{k-1} (G_i^k - G^k)]$$

$$CE_i = \sum_{k=t+1}^{t+n} [e_i^{k-1} (g_i^k - G_i^k)]$$

In the above model, e represents employment, $t+n$ represents the end of the period, and i represents a certain region.

Andrikopoulos et al. (1990), Huaxiong & Fang (2011), Sobczak (2012), Otsuka, (2016), and Márquez et al. (2009) examined different aspects of regional growth performances, competitiveness of selected different sectors from manufacturing to energy demands in selected periods, and the effects of public development policies and demographic changes by using the DSSA method in different contexts. Akıncı & Yılmaz (2014) and Şahin et al. (2015) applied the traditional shift-share analysis method, and Akıncı & Yılmaz (2014) concluded that the competitiveness of NUTS 2 regions in the Marmara and Aegean Regions and the Central and Southeast Anatolian regions increased, while the North and East Anatolian regions showed negative performance in 2004-2011. Elburz & Korten (2018) used DSSA to explore the relationship between the specialization/diversification patterns of regions in Türkiye between 2009 and 2014.

In this empirical analysis, the data specified for the following periods were used on the basis of the 26 NUTS 2 Regions of Türkiye. Regional employment data used for these years after 2000: 2004, 2005, 2006, 2007, 2008, and 2013, 2014, 2015, 2016, 2017, 2018. Furthermore, the 2019-2023 period was also analyzed within this research using the DSSA method with 2019, 2020, 2021, 2022, and 2023 regional employment data to evaluate the current situation of competitiveness

performance in the regions. Additionally, a correlation analysis was conducted to explore the relationship between regional growth and the financial support provided by DAs.

Changing Regional Development Policies in Türkiye after the 2000s

Türkiye has changed its regional development policy based on incentives for nearly 40 years and has switched to a new regional policy and approach aligned with the principles of harmonization with the EU. A Preliminary National Development Plan (PNDP) was prepared, setting the framework for economic and social cohesion programs as EU financial aid in 2003 (Devlet Planlama Teşkilatı, 2006). One of the four priorities of the PNDP is "Increasing the economic power of the regions, reducing regional disparities, and accelerating rural development" (Devlet Planlama Teşkilatı, 2003). The classification of statistical regional units in

accordance with the EU regional statistical system was made in three levels in 2002 as follows: 12 regions at the NUTS 1 level, 26 regions at the NUTS 2 level, and 81 (provincial) regions at the NUTS 3 level (Devlet Planlama Teşkilatı, 2006).

As an important turning point in terms of regional development policies, DAs were established in these NUTS 2 regions in Türkiye by 2010. DAs in Türkiye are not investor organizations, and the resources they use are not sufficient for regional development goals (Turkish Court of Accounts, 2015). However, through activities such as regional development planning, governance, financial support programs, technical support, and training programs, they have had positive effects in their regions. The financial support given by the DAs through their calls for project proposals in their regions for the period of 2010-2018 is presented in Table 1.

Table 1. Financial supports given by Development Agencies in the period of 2010-2018.

	Financial supports provided by development agencies in Türkiye via project calls for proposals (1000 TL)								
	2010	2011	2012	2013	2014	2015	2016	2018	Total
TR10 İSTKA		120.000	95.000	36.830	78.966	83.896	69.650	86.594	570.936
TR21 TRAKYAKA		13.500	20.000	12.035	10.886	14.053	10.538	5.718	86.730
TR22 GMKA		12.000	15.200	29.242	12.125	12.155	0	50.987	131.709
TR31 İZKA	31.600	18.000	14.000	24.401	49.864	14.642	18.332	24.544	195.384
TR32 GEKA		16.000	0	20.143	23.594	23.851	0	29.315	112.904
TR33 ZAFER		20.000	18.100	14.736	25.932	23.723	20.548	19.167	142.206
TR41 BEBKA		12.000	16.000	17.182	41.247	12.166	13.140	10.314	122.049
TR42 MARKA		15.000	16.000	11.960	18.395	12.713	14.225	22.899	111.192
TR51 ANKARAKA		25.000	0	10.292	23.381	17.012	20.443	10.814	106.942
TR52 MEVKA	10.000	35.000	0	17.374	14.977	13.677	0	21.534	112.561
TR61 BAKA		10.000	20.000	15.387	15.365	15.627	7.452	18.151	101.982
TR62 ÇUKUROVA	25.000	40.000	27.000	31.717	31.124	22.834	4.680	20.372	202.726
TR63 DOĞAKA		13.500	17.000	22.805	18.327	12.634	10.587	17.069	111.922
TR71 AHİKA		13.000	15.510	22.028	11.161	11.227	6.801	13.009	92.736
TR72 ORAN		18.000	16.800	16.415	21.707	16.582	31.984	14.354	135.842
TR81 BAKKA		11.000	14.500	11.159	13.707	10.712	6.904	14.827	82.809
TR82 KUZKA		16.000	0	10.068	20.684	20.176	0	4.774	71.701
TR83 OKA	14.500	18.000	18.000	6.945	23.878	0	0	26.162	107.484
TR90 DOKA		14.500	15.000	16.303	8.130	15.940	0	17.728	87.601
TRA1 KUDAKA	15.000	0	16.000	14.551	8.860	10.273	9.833	15.994	90.510
TRA2 SERKA		16.500	12.000	8.175	12.820	13.348	13.483	0	76.326
TRB1 FIRAT		22.500	14.700	11.072	16.790	8.200	14.270	17.900	105.433
TRB2 DAKA	14.100	18.500	9.000	20.879	16.782	25.229	0	15.582	120.072
TRC1 İKA		29.500	6.500	37.438	15.592	9.021	2.613	19.559	120.223
TRC2 KARACADAĞ	22.900	19.200	0	19.615	22.058	29.005	4.896	27.321	144.995
TRC3 DİKA	18.000	17.000	0	19.984	13.912	23.290	2.466	39.606	134.258

Prepared by using data from annual DAs activity reports published by Ministry of Development and and Ministry of Industry and Technology between 2010-2018 period. (Ministry of Industry and Technology, 2018).

New regional development administrations were established as EAP (Eastern Anatolia Project), the Eastern Black Sea Project (DOKAP) and the Konya Plain Project (KOP) (Ministry of Development, 2013) during the 10th Development Plan period. Regional Development National Strategy 2014-2023 was prepared at the same period. The regional classification according to these income levels included in the

regional development national strategy (Ministry of Development, 2014) is shown in the Table 2.

The incentive system of Türkiye renewed in 2011 according to the results of the socio-economic development index of regions and provinces, the provinces were divided into 6 regions and incentives were put into practice according to these groups (Figure 1).

Table 2. Regional classification by income (Ministry of Development, 2014).

Code of the region	Regions	GDP per capita (\$)	Income Levels
TR10	Istanbul	17 827	High Income Regions
TR51	Ankara	14 253	
TR42	Kocaeli, Sakarya, Düzce, Bolu, Yalova	13 911	Middle-High Income Regions
TR31	Izmir	12 344	
TR41	Bursa, Eskisehir, Bilecik	11 793	
TR21	Tekirdag, Edirne, Kırklareli	11 512	
TR61	Antalya, Isparta, Burdur	12735	
TR	Türkiye's average	10 602	
TR22	Balikesir, Çanakkale	10 034	
TR32	Aydin, Denizli, Mugla	9 320	
TR33	Manisa, Afyon, Kütahya, Usak	9 194	
TR52	Konya, Karaman	8 595	
TR72	Kayseri, Sivas, Yozgat	8 486	Middle-Low Income Regions
TR62	Adana, Mersin	8 132	
TR81	Zonguldak, Karabük, Bartın	7 598	
TR71	Kırıkkale, Aksaray, Niğde, Nevşehir, Kırşehir	7 454	
TR82	Kastamonu, Çankırı, Sinop	7 319	
TR90	Trabzon, Ordu, Giresun, Rize, Artvin, Gümüşhane	7 257	
TRC1	Gaziantep, Adiyaman, Kilis	7 011	
TR83	Samsun, Tokat, Çorum, Amasya	6 944	
TRA1	Erzurum, Erzincan, Bayburt	6 814	
TR63	Hatay, Kahramanmaraş, Osmaniye	6 716	
TRB1	Malatya, Elazığ, Bingöl, Tunceli	6 350	Low Income Regions
TRC3	Mardin, Batman, Şırnak, Siirt	5 031	
TRA2	Ağrı, Kars, Iğdır, Ardahan	4 727	
TRC2	Şanlıurfa, Diyarbakır	4 403	
TRB2	Van, Muş, Bitlis, Hakkari	4 162	



Figure 1. New incentive system regions according to the development rank of the provinces (Ministry of Development, 2013).

In the table below, statistics on investment incentives of Türkiye in the 2001-2009 and 2010-2018 periods are classified. Incentive realizations were examined within the periods before and after 2010 due to the establishment of the DAs in 2010 (Figure 2).

While the share of Istanbul in total investment incentives was %23.68 in the 2001-2009 period, its share decreased to %17.59 in the 2010-2018 period. In the 2001-2009 period, the top 5 regions (Istanbul, Kocaeli, Antalya, Bursa and

Hatay Region) received the 52.35 percent of total, whereas the first 5 regions (Istanbul, Adana, Kocaeli, Bursa, İzmir regions) received 55.41 of total incentives in the 2010-2018 period (Figure 3).

While the regions with the highest job creation by investments in the 2001-2009 period were high-income regions (TR10 Istanbul, TR41 Bursa, TR42 Kocaeli, TR61 Antalya, and TR31 Izmir), the regions with the highest employment creation in the 2010-2018 period were TR10

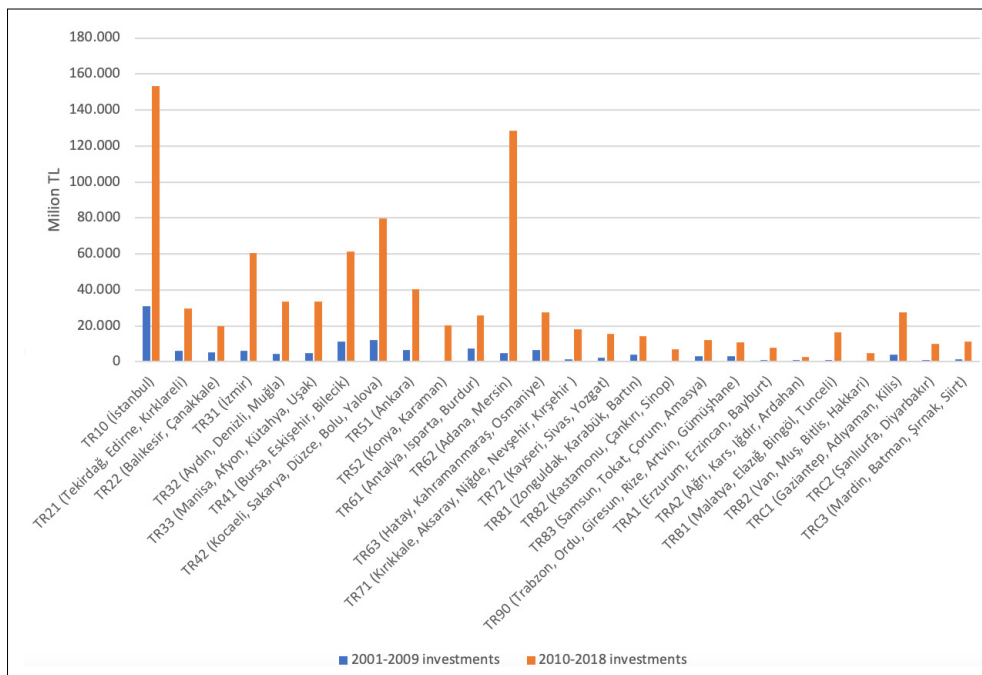


Figure 2. Investment with incentives in NUTS2 Regions in 2001-2009 and 2010-2018 periods.

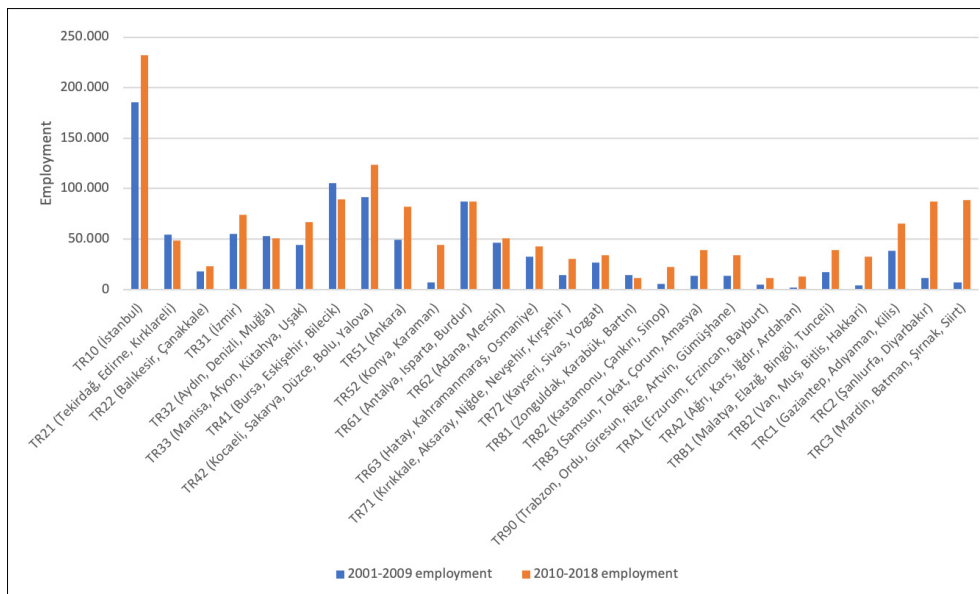


Figure 3. Employment created in NUTS2 Regions with investment incentives in 2001-2009 and 2010-2018 periods.

Istanbul, TR42 Kocaeli, TR41 Bursa, TRC3 Mardin, and TRC2 Diyarbakır-Şanlıurfa regions. This shows that after 2010, Southeast Anatolian Regions with low income levels showed progress in this regard.

With the EU harmonization processes, to support local development initiatives and reduce regional income gaps, the Regional Development Program and Türkiye-Bulgaria Cross-Border Cooperation Program implementations started in 12 low-income NUTS 2 Regions (TRB1, TRB2, TRC1, TRC2, TRC3, TR82, TR83, TRA1, TR72, TR52 regions) (Ministry of Development, 2013). Türkiye benefited from EU financial support to make legal and institutional arrangements during the candidacy process in the 2002-2006 period (AB Başkanlığı, 2020). According to EU Presidency data, 30% of these funds were used for institutional restructuring, 35% for harmonization with the EU acquis, and 35% for economic and social cohesion purposes. During the 2007-2013 IPA I period, 37% of the financial aid was used for regional development, 35% for institutional development, 18% for rural development, 10% for human resources development, and 1% for cross-border cooperation purposes. Financial assistance under the 2014-2020 IPA II amounted to EUR 11.7 billion, and its components were "Political reforms," "Economic, social, and regional development," "Strengthening capacity regarding common rights and obligations," and "Regional integration and regional cooperation."

Effects of Post-2000 Regional Policies and Development Agencies on Regional Economic Growth Performances: Comparative Dynamic Shift-Share Analysis

High unemployment is among the main problems for both Türkiye and most of its regions. Accordingly, new

job creation and employment are targets both in national policies and in the regional development plans of all NUTS 2 regions, prepared by DAs with the participation of regional actors in Türkiye. The table below shows the results of DSSA for the 2004-2009 and 2013-2018 periods of employment growth, which is crucial for regional development in Türkiye and all its regions (Table 3).

While the employment change in Türkiye was 1.6 million in 2004-2009 period, it was 3.2 million in 2013-2018 period. Considering the change in employment of regions in 2013-2018, with their rapid growth TR10 İstanbul, TRC2 Diyarbakır-Şanlıurfa Region and TR83 Samsun Region stands out. One of the lowest-income region of the country TRC2 Diyarbakır-Şanlıurfa Region, has risen to the 3rd rank in the 2013-2018 period and while TR83 Samsun Region was in the last place in the 2004-2009 period, took place in the top 5 of the employment growth in the 2013-2018 period. As a result of the comparison of the analyzed periods; regions that have increased their employment growth based on the regional competitive factors in 2013-2018 period are respectively; TR10 İstanbul, TRC2 Diyarbakır-Şanlıurfa Region, TR83 Samsun Region, TR33 Manisa Region, TR90 Trabzon Region, TRA1 Erzurum Region and TRC3 Mardin Region.

The contribution of dynamic shift share components to regional employment growth during the analysis periods is shown in the charts Figure 4.

It has been observed that the national growth effect is high in regional employment growth in this period, and the regional competitiveness effects are relatively low in regions where unemployment is higher. The Figure 5 shows the components DSSA for the 2013-2018 period.

Table 3. DSSA Results for 2004-2009 and 2013-2018 Periods

TR Türkiye	2004-2009 Dynamic Shift Share Analysis Results (Thousand)				2013-2018 Dynamic Shift Share Analysis Results (Thousand)			
	Total Change	NGE	IME	CE	Total Change	NGE	IME	CE
TR10 (İstanbul)	205	303	210	-307	1.241	638	319	284
TR21 (Tekirdağ, Edirne, Kırklareli)	45	43	-7	10	80	84	1	-4
TR22 (Balıkesir, Çanakkale)	19	45	-25	-2	53	73	-19	0
TR31 (İzmir)	125	90	40	-5	149	185	49	-85
TR32 (Aydın, Denizli, Muğla)	10	73	-23	-40	55	139	-42	-42
TR33 (Manisa, Afyon, Kütahya, Uşak)	-130	77	-48	-160	109	139	-64	35
TR41 (Bursa, Eskişehir, Bilecik)	59	90	11	-43	126	166	27	-67
TR42 (Kocaeli, Sakarya, Düzce, Bolu, Yalova)	242	67	24	152	90	160	2	-72
TR51 (Ankara)	187	101	71	16	332	221	110	2
TR52 (Konya, Karaman)	168	48	-6	125	91	95	-20	16
TR61 (Antalya, Isparta, Burdur)	129	70	9	48	70	135	-11	-54
TR62 (Adana, Mersin)	169	77	13	80	124	154	1	-33
TR63 (Hatay, Kahramanmaraş, Osmaniye)	149	55	-5	100	72	102	-6	-25
TR71 (Kırıkkale, Aksaray, Niğde, Nevşehir, Kırşehir)	3	33	-22	-8	24	61	-18	-17
TR72 (Kayseri, Sivas, Yozgat)	43	46	-8	5	-13	93	-23	-84
TR81 (Zonguldak, Karabük, Bartın)	108	28	0	80	-42	46	-18	-69
TR82 (Kastamonu, Çankırı, Sinop)	76	19	-3	60	64	36	-19	47
TR83 (Samsun, Tokat, Çorum, Amasya)	-36	81	-59	-57	145	117	-56	85
TR90 (Trabzon, Ordu, Giresun, Rize, Artvin, Gümüşhane)	-21	86	-79	-28	87	122	-71	35
TRA1 (Erzurum, Erzincan, Bayburt)	-45	28	-36	-39	29	42	-24	12
TRA2 (Ağrı, Kars, Iğdır, Ardahan)	5	25	-20	0	-36	46	-40	-42
TRB1 (Malatya, Elazığ, Bingöl, Tunceli)	70	31	-5	45	3	69	-25	-41
TRB2 (Van, Muş, Bitlis, Hakkari)	33	30	-22	24	6	66	-35	-26
TRC1 (Gaziantep, Adıyaman, Kilis)	59	38	8	12	57	85	3	-31
TRC2 (Şanlıurfa, Diyarbakır)	20	38	-8	-10	236	96	-30	169
TRC3 (Mardin, Batman, Şırnak, Siirt)	-48	23	-8	-63	63	45	10	7

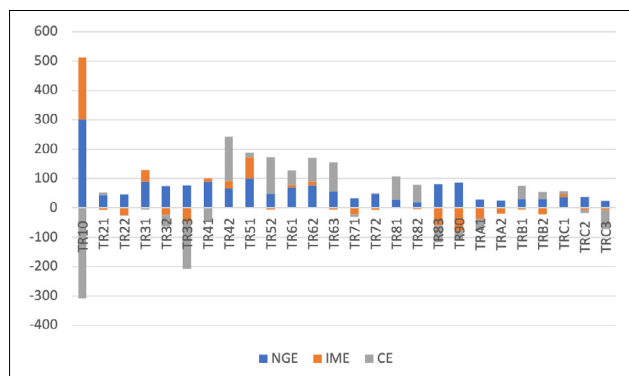


Figure 4. Contribution of the DSSA components to growth in 2004-2009 period.

It is noteworthy that Istanbul significantly increased its competitiveness effects in regional employment growth in the 2013-2018 period. Unlike other high-income regions, the dominant competitive power of TR10 Istanbul increases.

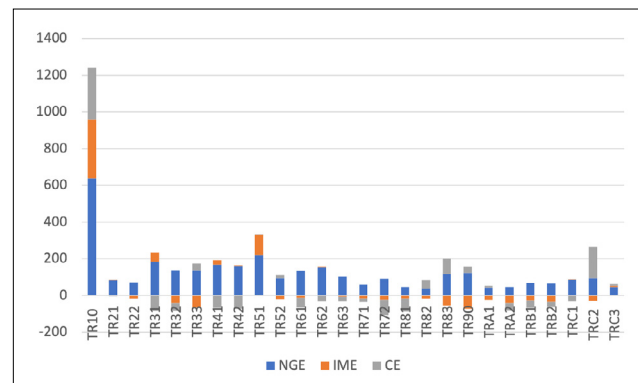


Figure 5. Contribution of the DSSA components to growth in 2013-2018 period.

On the other hand, it has been seen that the internal potentials of some low-income and underdeveloped regions also increased in this period and regional share effected growth performance more.

According to the results DSSA, the contribution of the competitiveness component of the regions to the increase in employment in the 2004-2009 period before the DAs and the increase in employment in the 2013-2018 period when DAs were active can be seen comparatively in the chart below (Figure 6).

According to the findings; the effects of regional development policies and implementations on regions with different income levels are evaluated for 2004-2009 and 2013-2018 periods and shown on the Table 4.

Accordingly, TRC2 and TRC3 Regions from low-income regions and TR83, TR90 and TRA1 regions from middle-low-income regions increased their regional

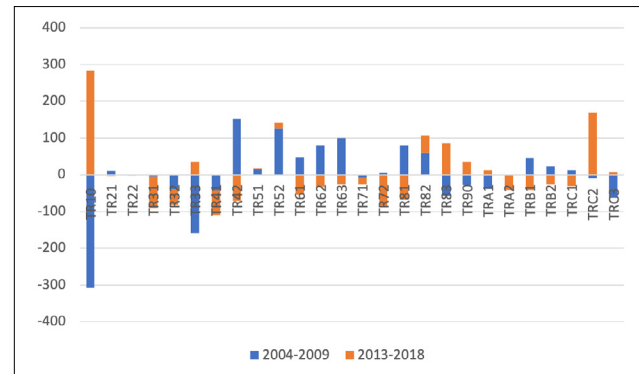


Figure 6. Comparison of the regional competitiveness effect component on employment growth.

Table 4. Income levels of regions that improved competitive performance after DAs

High-income Regions	Middle-high income Regions	Middle-low income Regions	Low-income Regions
TR10 İstanbul	TR33 (Manisa, Afyon, Kütahya, Uşak)	TR83 (Samsun, Tokat, Çorum, Amasya)	TRC2 (Şanlıurfa, Diyarbakır)
		TR90 (Trabzon, Ordu, Giresun, Rize, Artvin, Gümüşhane)	TRC3 (Mardin, Batman, Şırnak, Siirt)
		TRA1 (Erzurum, Erzincan, Bayburt)	

Table 5. DSSA Results for the period of 2019-2023

NUTSII Regions	Total Change	NGE	IME	CE
TR10 (İstanbul)	791	708	239	-155
TR21 (Tekirdağ, Edirne, Kırklareli)	82	97	6	-19
TR22 (Balıkesir, Çanakkale)	111	83	-13	41
TR31 (İzmir)	139	194	38	-94
TR32 (Aydın, Denizli, Muğla)	56	148	-19	-73
TR33 (Manisa, Afyon, Kütahya, Uşak)	139	147	-35	27
TR41 (Bursa, Eskişehir, Bilecik)	276	197	42	35
TR42 (Kocaeli, Sakarya, Düzce, Bolu, Yalova)	330	183	22	125
TR51 (Ankara)	280	250	57	-28
TR52 (Konya, Karaman)	95	106	-16	3
TR61 (Antalya, Isparta, Burdur)	288	159	-14	142
TR62 (Adana, Mersin)	137	167	-9	-22
TR63 (Hatay, Kahramanmaraş, Osmaniye)	50	120	-6	-63
TR71 (Kırıkkale, Aksaray, Niğde, Nevşehir, Kırşehir)	23	65	-15	-26
TR72 (Kayseri, Sivas, Yozgat)	132	99	-6	41
TR81 (Zonguldak, Karabük, Bartın)	9	44	-7	-28
TR82 (Kastamonu, Çankırı, Sinop)	17	38	-16	-5
TR83 (Samsun, Tokat, Çorum, Amasya)	57	133	-55	-21
TR90 (Trabzon, Ordu, Giresun, Rize, Artvin, Gümüşhane)	47	128	-64	-15
TRA1 (Erzurum, Erzincan, Bayburt)	51	43	-17	26
TRA2 (Ağrı, Kars, Iğdır, Ardahan)	29	40	-27	18
TRB1 (Malatya, Elazığ, Bingöl, Tunceli)	-21	70	-20	-73
TRB2 (Van, Muş, Bitlis, Hakkari)	43	68	-28	3
TRC1 (Gaziantep, Adıyaman, Kilis)	122	109	0	13
TRC2 (Şanlıurfa, Diyarbakır)	134	102	-35	68
TRC3 (Mardin, Batman, Şırnak, Siirt)	134	55	-1	81

competitiveness in employment growth performance. In other words, it has been observed that the internal advantages of the region on economic growth have increased in these regions.

The subsequent years following the comparative analysis periods, 2019-2023 were analyzed using regional employment data for 2019, 2020, 2021, 2022 and 2023. Current period DSSA results can be evaluated together with the socio-economic changes, and crisis periods during the period (Covid-19 pandemic, Kahramanmaraş centered earthquakes). The results of DSSA for the 2019-2023 period are presented in the table 5.

In the 2019-2023 period, the total employment change at the national level is 3.5 million. During this period, the largest growth occurred in Istanbul, and the second largest employment growth occurred in the Antalya region. In the 2019-2023 period, the region with the highest regional competitiveness factor is TR61 Antalya Region, followed by TR42 Kocaeli Region, TRC3 Mardin Region and TRC2 Diyarbakır-Şanlıurfa Region, respectively. In current period TRC3 Mardin Region and TRC2 Diyarbakır-Şanlıurfa Regions, the two of the four lowest income regions of the country, stand out with their CE performance. This is seen as a positive situation in terms of regional development policies and points to the existing potential. According to findings of the DSSA, from different income groups TR62 Adana, TR63 Hatay, TRB1 Malatya, TR71 Kırıkkale, TR81 Zonguldak, TRB2 Van, also TR51 Ankara, TR31 İzmir, TR32 Aydın regions have negative CE within 2013-2018 and 2019-2023 periods.

The contribution of dynamic shift share components to regional employment growth during the 2019-2023 period is shown in the Figure 7.

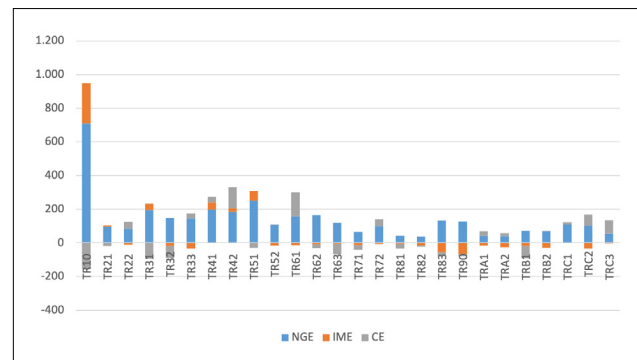


Figure 7. Contribution of the DSSA components to growth in 2019-2023 period.

The CE components of TRC1, TRC2 and TRC3 regions are positive as Southeastern Anatolian Region’s sub-regions. This situation observed after 2010, thus it can be evaluated that activities of DAs with the existence of GAP Project has affected the competitive potential of the region positively.

The growth performances of the NUTS2 regions in the mentioned periods were examined with the correlation analysis with the financial supports given by the DAs, taking into account both GDP and employment growth. The statistical analysis results obtained are shown in the Table 6.

The results of the statistical correlation analysis indicate that there is a middle-low positive linear correlation between the financial support of DAs and the GDP growth and employment growth of the regions.

Table 6. Correlation Analysis Results

			GDP	Employment	Agency Support
Spearman’s rho	GDP	Correlation Coefficient	1.000	0.693**	0.503**
		Sig. (2-tailed)	.	p=0.000	p=0.009
		N	N=26	N=26	N=26
	Employment	Correlation Coefficient	0.693**	1.000	0.458*
		Sig. (2-tailed)	p=0.000	.	p=0.018
		N	N=26	N=26	N=26
	Agency Support	Correlation Coefficient	0.503**	0.458*	1.000
		Sig. (2-tailed)	p=0.009	p=0.018	.
		N	N=26	N=26	N=26

** correlation is significant at the 0.01 level (2-tailed); * correlation is significant at the 0.05 level (2-tailed).

CONCLUSION

In Türkiye, where interregional inequalities are high, new regional development policies began to be implemented during the EU harmonization process after 2000, and DAs were established to accelerate regional development. Within the scope of this research, the effects of Türkiye's post-2000 regional development policies were analyzed comparatively for separate periods, both before and after the establishment of DAs. According to the economic growth performances of the regions, during the period before 2010, the effects of rapid national economic growth were significant on regional economies. On the other hand, with the decrease in national growth rates in the 2013-2018 period, the sectoral composition effect and especially the regional competitiveness effect were seen to be the determinants of regional growth. According to DSSA results, while the highest employment growth occurred in high-income regions during the 2004-2009 period, the TRC2 Diyarbakır-Şanlıurfa and TR83 Samsun regions ranked 3rd and 5th, respectively, among the 26 NUTS II regions during the 2013-2018 period. In the 2013-2018 period, the regions with the highest regional competitiveness effect were TR10 Istanbul, TRC2 Diyarbakır-Şanlıurfa, TR83 Samsun, TR33 Manisa, TR90 Trabzon, TRA1 Erzurum, and TRC3 Mardin. As for the 2019-2023 period, the highest employment growth was again realized in high-income and metropolitan regions. However, the highest competitiveness effect was seen in the TR61 Antalya, TR42 Kocaeli, TRC3 Mardin, and TRC2 Diyarbakır-Şanlıurfa regions during 2019-2023. The results show that the internal competitiveness advantages of sub-regions in the Southeast Anatolian Region, where the GAP project is being implemented, increased relatively compared to other regions after 2010, when DAs began to operate. On the other hand, regions from different income groups, including TR62 Adana, TR63 Hatay, TRB1 Malatya, TR71 Kırıkkale, TR81 Zonguldak, TRB2 Van, as well as TR51 Ankara, TR31 Izmir, and TR32 Aydın, experienced negative CE within the 2013-2018 and 2019-2023 periods.

Türkiye has a special geography in terms of historical, economic, social, and cultural aspects, as it is located near the continents of Asia, Europe, and Africa and has been a main transit route throughout history. Due to these characteristics, it has been affected by historical turning points, significant changes, and transformations. As a result, the country consists of regions that are quite different from each other in terms of income, development levels, and structural characteristics. As Iammarino et al. (2019), Diemer et al. (2022), and Pike (2020) argued, and as Tekeli (2009) suggested, it is clear that approaches based on genuineness and place-sensitive strategies are needed to address the challenges of increasing inequalities and discontent. The research findings indicate the necessity of good governance at all levels and strengthened institutional capacity in all regions. It has been observed that strengthened institutions, in terms of governance processes, the financial resources they use, qualified expert staff, and close relations and coordination with the central and local governments, are important for the success of regional

development policies. It is recommended that, based on the different structures and needs of regions, rather than relying on uniform institutions, supra-regional DAs and localized, urban-scaled DAs should be established in low-income regions. Additionally, urban-scaled DAs focusing on specific fields in higher-income regions are necessary for regional development and real progress in Türkiye.

ETHICS: There are no ethical issues with the publication of this manuscript.

PEER-REVIEW: Externally peer-reviewed.

CONFLICT OF INTEREST: The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

FINANCIAL DISCLOSURE: The authors declared that this study has received no financial support.

REFERENCES

- Akıncı, M. & Yılmaz, Ö. (2014). Türkiye'de sektörel istihdam ve bölgesel kalkınma ilişkisi: Shift – Share (değişim payı) analizi. *İstanbul Üniversitesi İktisat Fakültesi Mecmuası*, 63(2), 25–51.
- Andrikopoulos, A., Brox, J., and Carvalho, E. (1990). Shift-share analysis and the potential for predicting regional growth patterns: Some evidence for the Region of Quebec, Canada. *Growth and Change*, 21, 1–10.
- Aydoğdu, A. & Sezer, M. (2018). Kalkınma ajanslarının turizmin gelişmesine etkileri: Kuzey Anadolu Kalkınma Ajansı-Kastamonu örneği. *International Journal of Social Humanities Sciences Research*, 19, 584–601.
- Bakır, H. & Bahtiyar, G. (2019). Sustainable development and its applicability through regional development agencies. *Yönetim ve Ekonomi Araştırmaları Dergisi*, 17(1), 1–21.
- Bachtler, J. (2001). Where is regional policy going? Changing concepts of regional policy. 22nd meeting of the Sponsors of the European Policies Research Center. University of Strathclyde.
- Bachtler J. & Yuill, D. (2001). Policies and strategies for regional development: A shift in paradigm?. (Regional and Industrial Policy Research Paper:46). Glasgow: European Policies Research Center.
- Barff, R. ve Knight, P. L. (1988). Dynamic shift-share analysis. *Growth and Change*, 19(2), 1–10.
- Bellini, N., Danson, M., & Halkier, H. (2012). *Regional Development Agencies: The Next Generation? Networking, Knowledge and Regional Policies*. Routledge Taylor & Francis Group.
- Brenner, N. (2003). Metropolitan institutional reform and the rescaling of state space in contemporary Western Europe. *European Urban and Regional Studies*, 10(4), 297–324.
- Cörvers, F. & Mayhew, K. (2021). Regional inequalities:

- Causes and cures. *Oxford Rev Econ Pol*, 37(1), 1–16.
- Çetinkaya, Ş., & Akkurt, İ. M. (2016). Türkiye’de kalkınma ajanslarının istihdam üzerindeki etkisi: Zafer kalkınma ajansı örneği. *Uşak Üniv Sos Bilim Derg*, 9(3), 254–277.
- Çelebi Deniz, Z., & Erkut, G. (2022). Development agencies in Turkey: an inter-regional performance assessment. *Innovation: Innovation: The European Journal of Social Science Research*, 1–29.
- Danson, M., Halkier H., & Damborg, C. (2017). *Regional Development Agencies in Europe*. Routledge.
- Devlet Denetleme Kurulu. (2014). Türkiye’nin Kalkınma Ajansları Uygulamasının Değerlendirilmesi Araştırma ve İnceleme Raporu.
- Çelebi Deniz, Z. (2023). Türkiye’de bölgesel gelişme ve kalkınma ajansları: Bölgeler arası performans değerlendirme modeli [PhD Thesis], Istanbul Technical University.
- Dicken, P. (2015) *Global Shift: Reshaping the Global Economic Map in the 21st Century* (7th Ed). Thousand Oaks.
- Diemer, A., Iammarino, S., Rodríguez-Pose, A., & Storper, M. (2022). The regional development trap in Europe. *Economic Geography*, 98(5), 487–509.
- Dijkstra, L., Garcilazo, E., & McCann, P. (2015). The effects of the global financial crisis on european regions and cities. *Journal of Economic Geography*, 15 (5), 935–949.
- Doğan, T., & Kındap, A. (2019). Regional economic convergence and spatial spillovers in Turkey. *International Econometric Review*, 11(1), 1–23.
- Devlet Planlama Teşkilatı. (2003). *Ön Ulusal Kalkınma Planı (2004-2006)*. Devlet Planlama Teşkilatı Yayını.
- Devlet Planlama Teşkilatı. (2006). *Dokuzuncu Kalkınma Planı (2007-2013)*. Devlet Planlama Teşkilatı Yayını.
- Dunn, E.S. (1960). A statistical and analytical technique for regional analysis. *Papers of the Regional Science Association*, 6, 97–112.
- Elburz, Z., & Korten, F. G. (2018) Looking for diversified specialization in the regions of Türkiye, *MEGARON*, 13(4), 623–635.
- Ertugal, E. (2017). Challenges for regional governance in Türkiye: The role of development agencies. *METU J Fac Archit*, 34 (2), 203–224.
- Erkut, G. & Sezgin, E. (2017). Bölgesel politikalar için Etkin İş Birliği Projesi, Değerlendirme Raporu ve Politika Önerileri. Diyarbakır: T.C. Karacadağ Kalkınma Ajansı Yayını.
- Farole, T. (2013). *The Internal Geography of Trade: Lagging Regions and Global Markets*. World Bank Publications.
- Gezici, F. & Hewings, G. J. D., (2003, August 27-30). Spatial Analysis of Regional Inequalities in Türkiye [Paper presentation]. 43rd Congress of European Regional Science, Jyväskylä, Finland.
- Günaydın, D. (2012), Türkiye’de bölgeler arası gelişmişlik farklarının giderilmesinde kalkınma ajansların yeri: İZKA mali destek programları örneği. *Dokuz Eylül Üniv Sos Bilim Enst Derg*, 15, 73–01.
- Gündem, F. (2017). Is there income convergence between nuts 2 territories in Turkey? A spatial statistical and spatial econometrics contribution. *Sosyoekonomi*, 25 (34), 145–160.
- Halkier, H. (2007). Regional development agencies and multilevel governance: European perspectives. In *Bölgesel Kalkınma ve Yönetişim Sempozyumu* (pp. 3-15). ODTÜ Mimarlık Fakültesi. https://www.tepav.org.tr/sempozyum/2006/bildiri/bolum1/1_1_halkier.pdf.
- Haynes, K. E., & Dinç, M. (1997). Productivity change in manufacturing regions: A multifactor Shift Share Approach. *Growth and Change*, 28, 201–221.
- Huaxiong, Z., & Fang, Y. (2011). Research on regional economic and industrial structure based on dynamic shift-share analysis: An empirical analysis of six provinces in Central China. <https://ieeexplore.ieee.org/document/6003827>.
- Iammarino, S., Rodríguez-Pose, A., & Storper, M. (2019). Regional inequality in Europe: Evidence, theory and policy implications. *Journal of Economic Geography*, 19(2), 273–298.
- Karahasan, B. C. (2020). Can neighbor regions shape club convergence? Spatial Markov chain analysis for Turkey. *Letters in Spatial and Resource Sciences*, 13(2), 117–131.
- Kartal, T., & Karşıyakalı, B. (2023). Türkiye’de bölgesel gelir eşitsizliği: Düzey-2 bölgeleri bazında yakınsama analizi. *Pamukkale Üniv Sos Bilim Enst Derg*, 59, 61–82.
- Kayasü, S., & Eldeniz, F. (2013). Institutional performance of İzmir Development Agency. *METU J Fac Archit*, 30(1), 57–78.
- Kayasü, S., & Yaşar, S. S. (2006, Eylül 7–8). Avrupa Birliği’ne üyelik sürecinde kalkınma politikaları. Yasal ve kurumsal dönüşümler. *TEPAV, Bölgesel Kalkınma ve Yönetişim Sempozyumu*, pp. 199–215, Türkiye.
- Kırankabeş, M. (2013). Yeni bölgesel kalkınma politikasının yerel aktörleri olarak kalkınma ajanslarının etkinliğinin değerlendirilmesi: Türkiye örneği. *Dumlupınar Üniv Sos Bilim Derg*, 35, 253–268.
- Knudsen, D. C. (2000). Shift-share analysis: Further examination of models for the description of economic change. *Socio-Economic Planning Sciences*, 34(3), 177–198.
- Lagendijk, A., Kayasu, S., & Yaşar, S. (2009). The role of regional development agencies in Türkiye: From implementing EU directives to supporting regional business communities? *European Urban and Regional Studies*, 16(4), 383–396.
- Márquez, M. A., Ramajo, J., & Hewings, G. J. D. (2009). Incorporating sectoral structure into shift-share analysis. *Growth and Change*, 40, 594–618.
- McCann, P. (2020). Perceptions of regional inequality and

- the geography of discontent: Insights from the UK. *Regional Studies*, 54(2), 256–267.
- McMichael, P. (2012). *Development and social change: A global perspective* (5th ed.). Thousand Oaks.
- Ministry of Development. (2013). *Development Agencies General Activity Reports for 2012*. <https://static.ka.gov.tr/files/11/FaaliyetRaporlari/KA2012Yili-GenelFaaliyetRaporu.pdf>
- Ministry of Development. (2014). *Development Agencies General Activity Reports for 2013*. https://static.ka.gov.tr/files/11/FaaliyetRaporlari/KA2014_Y%C4%B1l%C4%B1_Genel_Faaliyet_Raporu.pdf
- Ministry of Industry and Technology. (2018). *Kalkınma Ajansları 2017 Yılı Genel Faaliyet Raporu*. <https://www.sanayi.gov.tr/assets/pdf/plan-program/Kalk%C4%B1nmaAjanslar%C4%B12017Y%C4%B1l%C4%B1GenelFaaliyetRaporu.pdf>
- OECD. (2012). *Promoting growth in all regions*. https://www.oecd.org/en/publications/promoting-growth-in-all-regions_9789264174634-en.html
- OECD. (2019). *Regional outlook 2019*. Paris: https://www.oecd.org/en/publications/oecd-regional-outlook-2019_9789264312838-en.html
- OECD. (2023). *Regional development policy*. <https://www.oecd.org/en/topics/regional-development.html>
- Otsuka, A. (2016). Regional energy demand in Japan: Dynamic shift-share analysis. *Energy, Sustainability and Society*, 6, 10.
- Özkan, Ç., Saçılık, M., & Yeşiladağ, B. (2014). Kalkınma ajanslarının sürdürülebilir bölgesel turizmin gelişimine etkisi: GMKA örneği. *Karamanoğlu Mehmetbey Üniv Sos Ekon Araş Derg*, 2014(2), 34–44.
- Öztürk, A., & Gültekin, L. (2021). Türkiye'de iller arası ekonomik yakınsama: 2008 Küresel krizinin rolü. *Hacettepe Üniv J Fac Econ Admin Sci*, 39(2), 253–270.
- Pehlivan, P. (2013). Türkiye'de kalkınma ajanslarının yerel ekonomi üzerine etkileri: Zafer Kalkınma Ajansı örneği. *Manisa Celal Bayar Üniv Sos Bilim Derg*, 11(3), 412–438.
- Pektaş, E., & Demirkol, A. (2018). Kalkınma ajanslarının bölgesel kalkınma sürecindeki rolü ve etkileri: Zafer Kalkınma Ajansı örneği. *Celal Bayar Üniv Sos Bilim Derg*, 16(2), 77–98.
- Pernia, E. M., & Quising, P. F. (2003). Trade openness and regional development in a developing country. *The Annals of Regional Science*, 37, 391–406.
- Pike, A., Pose, A. R., & Tomaney, J. (2017). *Local and regional development*. Routledge Publishing.
- Pike, A. (2020). Coping with deindustrialization in the global North and South. *International Journal of Urban Sciences*, 26(1), 1–22.
- Rodríguez-Pose, A. (2013). Do institutions matter for regional development? *Reg Stud*, 47(7), 1034–1047.
- Sakarya, B., Baran, V., & İpek, M. (2024). Türkiye'de iller arasında gelir farklılıkları: Kulüp yakınsama analizi. *Bölgesel Kalkınma Derg*, 2(1), 9–27.
- Sayıştay Başkanlığı. (2018). 2017 Yılı Kalkınma Ajansları Genel Denetim. <https://www.sayistay.gov.tr/reports/OqY74r3oN1-2018-yili-kalkinma-ajanslari-genel-denetim-raporu>
- Sezgin, E., and G. Erkut. 2020. “Kalkınma Ajansları ve Türkiye'de Mekansal Planlama Sisteminin Dönüşümü [Development Agencies and Transformation of Spatial Planning System in Turkey],” in Dinçer İ, Enlil Z. (Ed) *Kent ve Planlama*. YEM yayın İstanbul 149–168
- Shi, C., & Yang, Y. (2008). A review of shift-share analysis and its application in tourism. *The International Journal of Management*, 1, 21–30.
- Sobczak, E. (2012). Smart specialization of workforce structure in the European Union countries – Dynamic analysis applying shift-share analysis method. *Comp Econ Res*, 15(4), 219–232.
- Şahin, İ. E. A., & Kabayel, M. (2017, September 21–24). Sürdürülebilir kalkınma sürecinde kalkınma ajanslarının rolü: İZKA örneği. *International Congress of the New Approaches and Technologies for Sustainable Development*, Isparta, Türkiye.
- Şahin, M., Uysal, Ö., & Kuru, E. (2015). Türkiye turizm politikasının shift-share analizi. *Marmara Univ J Econ Admin Sci*, 32(1), 95–122.
- Şimşek, A. (2013). Kalkınma Ajanslarının Performans Ölçümü. *Kalkınma Bakanlığı Yayını*.
- Tarı, R., Pehlivanoğlu, F., & Özbilgin, M. (2017). *Dokuz Eylül Üniv J Econ Admin Sci*, 32(2), 47–78.
- T.C. Resmi Gazete. (2006). 5449 sayılı Kalkınma Ajanslarının Kuruluşu, Koordinasyonu ve Görevleri Hakkında Kanun. <https://www.mevzuat.gov.tr/MevzuatMetin/1.5.5449-20110213.pdf>
- T.C. Resmi Gazete. (2018). 4 No'lu Cumhurbaşkanlığı Kararnamesi: Bakanlıklara Bağlı, İlgili, İlişkili Kurum ve Kuruluşlar ile Diğer Kurum ve Kuruluşların Teşkilatı Hakkında Cumhurbaşkanlığı Kararnamesi <https://www.mevzuat.gov.tr/MevzuatMetin/19.5.4.pdf>
- Tekeli, İ. (2009). Türkiye'de bölgesel eşitsizlik ve bölge planlama yazıları. *Tarih Vakfı Yurt Yayınları*.
- Tomaney, J. (2010). *Place-based approaches to regional development: Global trends and Australian implications*. Australian Business Foundation.
- Türkoğlu, M. (2016). Kalkınma ajanslarının bölgesel kalkınma açısından önemi: BAKA örneği. *Uluslararası Alanya İşletme Fak Derg*, 7(3), 183–198.
- Yıldırım, J., Özyıldırım, S., & Öcal, N. (2004). Regional income inequality and economic convergence in Türkiye: A spatial data analysis. *Int Reg Sci Rev*, 32(2), 221–254.
- Yücel, B. (2024). Türkiye'de hangi iller bölgesel kalkınma tuzağında? *Değerlendirme Notu*. Türkiye Ekonomi Politikaları Vakfı.
- Wieland, T. (2019). REAT: A regional economic analysis toolbox for R. *REGION, The Journal of ERSA* 6(3), R1–57.