Hacettepe University Graduate School of Social Sciences

Department of Economics

THE ANALYSIS OF REGIONAL INVESTMENT INCENTIVES SYSTEM IN TURKEY

Ahmet ALICI

Master’s Thesis

Ankara, 2019

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ACCEPTANCE AND APPROVAL

The jury finds that Ahmet ALICI has on the date of May 31,2019 successfully passed the defense examination and approves his Master's Thesis titled "The Analysis of Regional Investment Incentives System in Turkey".

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A. Alıcı

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ABSTRACT

Alıcı, Ahmet. *The Analysis of Regional Investment Incentives System in Turkey*, Master's Thesis, Ankara, 2019.

Incentives are one of the most important economic policies implemented in order to direct the investment decisions of economic units. Incentives are implemented by countries for various purposes such as directing investments to specified sectors, reducing regional development differences, increasing employment and increasing international direct investments. While a wide range of incentives are being implemented across the world, it is possible to consolidate incentive instruments in two classes, tax and non-tax incentives. Discussions on the efficiency of incentive policies in Turkey and across the world are continuing. The aim of this study is to measure the efficiency of regional investment incentives system on employment is being implemented in Turkey since 2012. The study primarily gives general information about incentives. Then, developments in the incentive system in Turkey from 1913 to present were explained in detail. In order to see developments in other countries, the incentive policies in Germany, China, Italy and Poland are examined. In this study, Data Envelopment Analysis which is used to measure efficiency was explained. Other studies on the same subject in Turkey were reviewed. The evaluation of the current regional incentive system is carried out with the help of Data Envelopment Analysis. In this analysis, the current incentive system is compared to the incentive system implemented in 2009-2012 in terms of efficiency on employment. In this study, the expected number of employment and the expected investment amount as results of incentives are determined as inputs and the employment rate is determined as the output. The period of the study covers the years between 2009 and 2013. As a result of the analysis, it is concluded that the current incentive system does not create the expected effect in terms of employment increase. In the conclusion section, policy recommendations are offered to improve the existing incentive system.

Keywords: Investment Incentive System, Incentive, Regional Development, Data Envelopment Analysis

ÖZET

Alıcı, Ahmet. *Türkiye'deki Bölgesel Teşvik Uygulamasının Analizi*, Yüksek lisans Tezi, Ankara, 2019.

Teşvik, ekonomik birimlerin yatırım kararlarını yönlendirme amacıyla uygulanan önemli ekonomi politikalarından biridir. Teşvikler, yatırımları belirlenmiş sektörlere yönlendirme, bölgesel gelişmişlik farklarını azaltma, istihdamı artırma ve uluslararası doğrudan yatırımların artırılması gibi çeşitli amaçlarla ülkeler tarafından uygulanmaktadır. Dünya genelinde çok farklı teşvik araçları uygulanmakla birlikte, teşvik araçlarını genel olarak vergisel ve vergisel olmayan teşvikler olmak üzere iki sınıfta konsolide etmek mümkündür. Türkiye'de ve dünya genelinde teşvik politikasının etkililiğine ilişkin tartışmalar sürmektedir. Bu çalışmanın amacı, Türkiye'de 2012 yılından günümüze uygulanmakta olan bölgesel yatırım teşvik sisteminin istihdam üzerindeki etkililiğini ölçmektir. Bu amacı gerçekleştirmek amacıyla, çalışmada öncelikle teşvikler hakkında genel bilgiler verilmiştir. Ardından, 1913 yılından günümüze Türkiye'deki teşvik sistemindeki gelişmeler detaylı biçimde anlatılmıştır. Diğer ülkelerdeki gelişmeleri görmek amacıyla, Almanya, Çin, İtalya ve Polonya'daki teşvik politikaları incelenmiştir. Çalışmada etkililiği ölçmek amacıyla kullanılacak olan Veri Zarflama Analizi anlatılmıştır. Türkiye'de aynı konuda yapılan çalışmalardan bahsedilmiştir. Mevcutta uygulanmakta olan bölgesel teşvik sistemine ilişkin değerlendirme Veri Zarflama Analizi yardımıyla gerçekleştirilmiştir. Söz konusu analizde mevcut teşvik sistemi, 2009-2012 yıllarında uygulanan teşvik sistemiyle istihdam açısından karşılaştırılmıştır. Çalışmada girdi olarak teşviklerle gerçekleşmesi öngörülen istihdam sayısı ve öngörülen yatırım tutarı alınırken, çıktı olarak ise istihdam oranı belirlenmiştir. Çalışmanın dönemi 2009-2013 yıllarını kapsamaktadır. Gerçekleştirilen analiz sonucunda, mevcut teşvik sisteminin istihdam artışı açısından beklenen etkiyi yaratmadığı sonucuna ulaşılmıştır. Sonuç bölümünde, mevcut teşvik sisteminin iyileştirilmesi için politika önerilerinde bulunulmuştur.

Anahtar Sözcükler: Yatırım Teşvik Sistemi, Teşvik, Bölgesel Kalkınma, Veri Zarflama Analizi

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LIST OF ABBREVIATIONS

DAP	Eastern Anatolia Project
DEA	Data Envelopment Analysis
EU	European Union
EUROSTAT	The Statistical Office of the European Union
GDP	Gross Domestic Product
GRW	Joint Task for the Improvement of Regional Economic Structure
GTAI	Germany Trade & Invest
MoD	Ministry of Development of Republic of Turkey
MoIT	Ministry of Industry and Technology of Republic of Turkey
NUTS	Nomenclature of Territorial Units for Statistics
OECD	Organization for Economic Co-operation and Development
PAIH	Polish Investment and Trade Agency
PLN	Polish Zloty
R&D	Research and Development
RDPDA	Regional Development Program of Development-promoting Area
SEZ	Special Economic Zone
SME	Small and Medium-sized Enterprises
SPO	State Planning Organization of Republic of Turkey
TURKSTAT	Turkish Statistical Institute
UNCTAD	United Nations Conference on Trade and Development
VAT	Value Added Tax

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INTRODUCTION

Investment incentives are one of the methods of government intervention to the economy. When the history of incentives is examined, it is seen that it first appeared in the 1800s in the US. In the 1900s, incentives became popular among other countries all over the world starting to use them. (Miroslava, 2013, p. 108)

Different definitions have been made so far for investment incentives. OECD (2003, p. 12) defines investment incentives as public precautions aiming at amending the size, place and sector of foreign direct investment by changing uncertainty and costs. According to the definition of UNCTAD (1996, p. 11), investment incentives are measures that the state implements to direct companies in specific sectors and regions. Thomas (2007, p. 11) stated that investment incentives are grants applied by the State to influence investor's investment decisions. All of the definitions given above for investment incentives represent part of the incentive notion and have not developed a comprehensive perspective. Investment incentives can inclusively be expressed as economic advantages provided by governments to some sectors and firms in order to attract foreign investment to the country, regional development, economic development, technological progress and development of strategic sectors.

While there are very different classifications of incentives, incentives are divided into two main categories in this study: tax and non-tax incentives. Tax incentives are a policy tool that is applied to develop the region or sector by abandoning, either partially or completely, the tax revenue that governments will receive from companies that invest in certain sectors or regions. Non-tax incentives are instruments such as credit, loan provided by governments to investors in order to reduce the costs of investors during investment phase. (James, 2009, pp. 1-3)

When comparing tax incentives with non-tax incentives, governments generally prefer to implement tax incentives. The reason of this is that governments regard tax incentives as abandoning public revenue and non-tax incentives as money outflow from public treasury. Accordingly, governments perceive that abandoning public revenue is less costly than money outflow from public treasury. (Eser, 2011, pp. 17-18) VAT exemption, customs tax exemption and tax reduction can be expressed as examples of tax incentives. Interest Support, loans and credits can be expressed as examples of non-tax incentives.

Debates over the effectiveness of investment incentives for a very long time are ongoing. Those who have negative opinions about incentives state that investment incentives do not usually have the expected effect in economy and governments are more likely to focus on infrastructure projects instead. Those who have a positive opinion about investment incentives claim that the incentives usually correct the shortcomings of the market mechanism and therefore governments must continue to implement it. (Eser, 2011, pp. 21-23)

This study emerged from the ongoing debate on incentives. The aim of this study is to measure the efficiency of regional investment incentive system being implemented in Turkey. In this context, the existing investment incentive system was compared with the investment incentive system implemented between the years 2009 and 2012. This comparison was made through data envelopment analysis in terms of employment.

The study consists of six chapters, including introduction and conclusion. In the introduction section, general information about incentives and the thesis is mentioned. In the second part, Turkey's investment incentive policies are described in detail from the beginning until recently. In the third chapter, the incentive policies in Germany, China, Italy and Poland are mentioned in detail. In the following section, recent incentive practices are explained. In the fifth chapter, the efficiency of the existing incentive system on employment is analyzed. Data envelopment analysis was used for this study. With the data envelopment analysis method, the existing incentive system was compared with incentive system implemented between 2009 and 2012 in terms of efficiency to employment. In the conclusion section, policy recommendations were made to improve the existing incentive system based on the results of the study.

1. TURKEY’S INVESTMENT INCENTIVE POLICY HISTORY

When Turkey’s incentive policy history is examined, it is seen that there have been incentive policies to support the industry since the last period of the Ottoman Empire. Turkey’s incentive policy history can be classified into three periods. These periods can be named as follows;

- Ottoman Empire’s Last Period (1913 - 1923)
- Pre-Planned Period (1923 -1960)
- Planned Period (1960 – nowadays)

1.1. OTTOMAN EMPIRE’S LAST PERIOD

The investment incentive policy of Turkey begins with the provisional law titled as “Tesvik-i Sanayi Kanun-i Muvakkatı” that the Ottoman Empire put into force in 1913. The aim of this law was to improve the industrialization of the Ottoman Empire and make it capable of competing with the western countries' industries. Incentives under the law are listed below. (Ökçün, 1975, pp. 30-36)

- Land allocation support,
- Tax exemption,
- Customs tax exemption for machines and raw materials,
- Transport Infrastructure Support.

According to the law, factories and carpet looms were determined as companies to benefit from these incentives. Manufacturers in all regions of the Ottoman Empire could apply for the incentives under this law. This indicates that the incentive policy implemented with this law did not have geographical selectivity. Besides, this incentive policy can be analyzed in terms of sectoral selectivity. It is seen that partial sectoral selection was applied because carpet workshops could apply as beneficiaries according to the law. In brief, the Ottoman Empire did not implement geographical selectivity in its incentive policy, but enforced partial sectoral selectivity especially for carpet manufacturing industry.

The Industry Statistics (1913-1915) published by the Ministry of Trade and Agriculture displayed the results of incentive policy within the scope of the law ‘Teşvik-i Sanayi Muvakkatı’. Accordingly, 117 factories (63 of them from İstanbul, 15 of them from İzmir) were beneficiaries of these incentives. (Ökcün, 1970, p. 5) This data proves that the incentive policy was limited to cities such as Istanbul and Izmir where the industrial infrastructure was relatively better than the cities in Anatolia at that time. The reason that this incentive policy was not effective in other cities in Anatolia is that geographical selectivity was not included in the law.

1.2. PRE-PLANNED PERIOD

After Turkish war of independence, economic independence must also be ensured. Within this scope, the 1923 Izmir Economic Congress was held between February 17th and March 4th 1923. There were 1135 delegates consisting of industrialists, farmers, workers, and merchants in Izmir Economic Congress. (Yücel, 2015, p. 18) Thus, all segments of the society were represented in the congress. Each group expressed their requests at the Congress. Industrialists also expressed their requests to support the industry through incentives and protective tariffs. In the event of the Congress, resolutions were taken that assign priority to the private sector. In this frame, the Industry Incentive Law No. 1055 dated May 28, 1927 was published. With the law, it was expected that the development of the national industry, the fulfillment of the domestic needs and the establishment of exporting companies. The incentive measures in the law are listed below; (Duran, 1998, p. 62)

- Land allocation without charge through land expropriation,
- Building and land allocation through loan,
- Tax exemptions,
- Stamp duty exemption on stock and bond issuance,
- Customs exemption,
- Discount on transportation charges,
- Premium on product basis,
- Discounts on input costs,
- Preferential purchase.

When the incentive measures applied under this law are examined, it is seemed that the support of building and land allocation had taken place in order to support investors in terms of fixed capital. Besides, tax, stamp duty and customs exemptions, discounts and premiums were designed for providing support for investors in terms of working capital.

Statistics for the enterprises benefiting from incentives under this law between 1932 and 1939 are given in Table 1.

Years	Total Number of Corporations	Sole Proprietorships	Private Corporations	Public Corporations
1932	1473	831	611	31
1933	1397	806	555	36
1934	1310	738	534	38
1935	1161	631	474	56
1936	1101	554	461	86
1937	1116	562	465	89
1938	1103	529	470	104
1939	1144	522	511	111

Table 1: Enterprises Benefiting from Incentives under the Industry Incentive Law No. 1055 between 1932 and 1939 (Ağaoğlu, 1941, p. 45)

When Table 1 is examined, it is seen that the total number of companies benefiting from the incentive decreased between 1932 and 1939. As seen in the Table 1, public companies also benefitted from these incentives. Another conclusion to be drawn from the table is that sole proprietorships benefited more from these incentives compared to private and public companies in terms of number of beneficiary companies.

Similar to 'Tesvik-i Sanayi Kanun-i Muvakkati', no geographical selectivity was implemented within the scope of this law. When it is examined whether there is sectoral selectivity or not, it is seen that sectoral selection was not been implemented.

Duran (1998, s. 63) states that the incentive law dated 1927 did not provide the expected utility. The reasons for this are listed below.

- Outbreak of the 1929 Great World Depression,
- Lack of entrepreneurship and capital needed for industrialization,
- Inadequate social infrastructure.

After the private sector-oriented development move, which started with the 1923 Izmir Economic Congress, had not shown the expected development by the reasons mentioned above, the government developed policies to improve the industry through public investments. For this reason, the First Five-Year Industrial Plan (1934-1938) was put into practice in 1934. This plan was not a national scale macro plan as it did not include agriculture and service sectors. Within the scope of the plan, the following topics were prioritized; (Yücel, 2015, p. 36)

- Industrial facilities using raw materials available domestically,
- Projects requiring intensive capital and advanced technology,
- Maintaining the industrial facilities’ capacity to meet domestic consumption.

Within the scope of the plan, it was decided to establish a factory in five sub-industry sectors. These sectors are; (Yücel, 2015, p. 36)

- Textile,
- Mining,
- Cellulose,
- Ceramic,
- Chemical.

After that, the second five-year industrial plan was prepared and it was not fully implemented because it coincided with the second world war period. (İlkin, 1970, p. 396)

The Industry Law dated 1927 was repealed in 1942 because the emphasis was on the development of the industry through state-owned enterprises in this period.

In 1950s, a private sector-oriented economic policy was followed. The entry of foreign capital into the country was also encouraged and legal arrangements were made in this policy framework. The Foreign Investment Promotion Law No. 5821, which provided various incentives for foreign investors to invest in the sectors of industry, energy, mining, public works, transportation and tourism, entered into force on 9 August 1951. On January 23, 1954, this law was repealed and replaced by Law No. 6224 on Foreign Investment Promotion. Law No. 6224 was an updated version of the previous law. Sectors within the scope of these incentives in Law No. 6224 were not specified. Additionally, geographical selectivity has not been applied in the two laws mentioned above. Sectoral selectivity was seen in the law numbered 5821 but not in the law numbered 6224.

1.3. PLANNED PERIOD

Planned period in Turkey began with the establishment of the State Planning Organization (SPO) in 1962. Article 166 of the Constitution of the Republic of Turkey regulates scope of Planning. According to this article, planning the economic, social and cultural development, in particular the rapid, balanced and harmonious development of industry and agriculture throughout the country is the duties of the State. Measures to increase national savings and production, to ensure stability in prices and balance in external payments, to promote investment and employment shall be included in the plan; in investments, public interests and necessities shall be taken into account and the efficient use of resources shall be proposed. Thus, development activities shall be realized according to this plan. The Development plans prepared in this context are the ordering principles for the public sector and the guiding principles for the private sector. Until today, ten development plans have been implemented. Preparations for the 11th development plan are ongoing. The ten development plans that have been implemented are listed below;

- First Five-Year Development Plan (1963-1967),
- Second Five-Year Development Plan (1968-1972),
- Third Five-Year Development Plan (1973-1977),
- Fourth Five-Year Development Plan (1979-1983),
- Fifth Five-Year Development Plan (1985-1989),

- Sixth Five-Year Development Plan (1990-1994),
- Seventh Five-Year Development Plan (1996-2000),
- Eighth Five-Year Development Plan (2001-2005),
- Ninth Development Plan (2007-2013),
- Tenth Development Plan (2014-2018).

1.3.1. First Five-Year Development Plan Period (1963-1967)

The first five-year development plan, which is Turkey's first experience in planning, was entered into force with the Official Gazette No. 11272 dated December 3, 1962. In the first five-year development plan, it was stated that the following measures would be implemented for the promotion of the industry; (SPO, 1963, p. 206)

- In the selection of site of establishment in the industry, the movement would be based on the goal of increasing the total productivity as well as achieving a balanced regional development,
- It would be easier to provide credits for industry that produces goods given priority in the plan,
- Accelerated depreciation would be implemented,
- Customs tax regulations to facilitate exports would be made,
- The implementation of production tax, which would lead to the transformation from the assembly to the manufacturing industry, would be changed.

Various measures was implemented to promote the private sector within the context of the first five-year development plan. The most important of them was Law No. 202, dated February 19, 1963, which provides tax reductions to agricultural investments, investments to be made in underdeveloped regions and general investments at various rates. Another one was the Law No. 261, dated June 27, 1963, which allows export restitution. The other was the Law No. 474, dated May 14, 1964. (Duran, 1998, p. 67)

When the implementation results of the first five-year development plan are examined, it is seen that investment allowances, installment of customs tax and export restitution were implemented more than other measures. (SPO, 1967, p. 116)

In addition, regional planning was also been mentioned in the first five-year development plan. The aim of regional planning was to eliminate interregional differences in terms of development and to provide faster development of the backward regions. In this context, cities were studied in three classes: potential development zones, underdeveloped regions and metropolitan regions. Giving priority to the cities that can show rapid development in the backward regions was an indication of the adoption of the artificial development pole practice. (Dinler, 2016, p. 206) The most important of these studies was the indexing work that shows the economic and social situation of the regions. Besides that, private sector tax incentives was provided in order to increase the role of the private sector in the backward regions. It was also mentioned that the work was carried out under the following projects in the plan. (SPO, 1963, pp. 475-476)

- Keban Dam Project,
- Antalya Region Project,
- East Marmara Region Project,
- Zonguldak Region Project.

1.3.2. Second Five-Year Development Plan Period (1968-1972)

The second five-year development plan was entered into force with the Official Gazette No. 12679 dated August 21, 1967. This plan covers the period 1968-1972. The private sector incentive policy was mentioned in detail in this plan. Some measures under the private sector incentive policy are listed below. (SPO, 1967, pp. 117-118)

- Measures related to credit;
    - Regulation of the banking system to meet the credit needs of the private sector,
    - Selective Credit Policy,
    - Preparation of legal arrangements for business pledge and securities lien,
    - Establishing private investment bank to meet the business loan requirement of companies,
    - Promoting the activities of private sector lenders outside Istanbul,
    - Facilitation of meeting foreign exchange needs of private sector investments,

  - Facilitating the external financing of the private sectors' projects that meet the Plan objectives.

- Fiscal Incentive Measures
  - Preventing the double taxation of companies benefiting from Foreign Investment Promotion Law,
  - Reducing the procedures for investment incentives,
  - Removing ineffective incentive measures,
  - Implementing special incentive schemes for backward regions.

- Measures related to marketing
  - Protection of domestic producers through customs duty and foreign trade regime.

In addition to these measures, there were measures related to export, industrial zone and entrepreneurs and personnel training.

In the second five-year development plan, regional development, urbanization and housing were included as a separate chapter. It has been stated that public investments will be made priority for underdeveloped regions in order to reduce the development gap between regions in this plan. Also, it was stated that the incentive measures for realizing the investments of the private sector in underdeveloped regions would be increased. The activities to be carried out in this context are given below; (SPO, 1967, p. 269)

- Special Credit Facilities,
- Tax Reductions,
- Establishing industrial zones,
- Providing access to cheap energy in industrial zones,
- Investment Consultancy.

It is seen that when these plans are made, importance is given to the establishment of development poles, which are regions with potential for growth in underdeveloped regions, similar to the first plan. (Dinler, 2016, p. 208)

It is seen that two important legislative regulations were made in the second plan period when the legal arrangements made in the field of incentives were examined. The first of these was the Law No. 933, which was published in the Official Gazette dated August 11, 1967, of which the application phase was largely in the second plan period due to the publication towards the end of the first plan period. This law can be said to form the basis of the incentive system in Turkey. (Duran, 1998, p. 69) The following are some of the outstanding aspects of the law;

- It was stated that the balanced development principle between the regions would be taken into consideration.
- It was expressed that funds may be allocated for capital transfer in the form of lending from the general and annexed budgets to the sectors foreseen to be developed in the plans.

The incentive measures included in the Law No. 933 are as follows;

- The investment allowance rate can be up to 80%, taking into account sectoral and regional priorities,
- Customs duty exemption or refund for investment goods and raw materials,
- Import taxes and duties exemption or refund for investment goods and raw materials,
- Establishment of industry and tourism zones for investors, land expropriation in case of necessity within this scope,
- Provision of credits suitable for investors who invest in industry or tourism zones,
- Facilitating the authorization process required to start an investment,
- Establishment of "Investment and Export Promotion and Incentive Bureau" for the implementation of the incentive mechanism by a single institution.

The Law No. 933 was an important step in the institutionalization of the incentive system. This law was annulled by the Constitutional Court on October, 25 1969. Subsequently, the decree of 6/12585 dated November 1, 1969 was issued to fill legal gap emerged after the annulment of the Law No. 933. The important change introduced by this decree is that the incentive certificate for incentive procedures has begun to be issued.

With the Decree of the Program of 1968 published in the Official Gazette dated December 12, 1967 and numbered 12774, the execution of the Development Priority Regions was initiated. Within this framework, 22 provinces in Table 2 were designated as Provinces with Development Priority. According to the Decree, the investment allowance rate for private sector companies investing in these mentioned provinces was set at 80 percent. In addition, investments in these provinces were provided with the advantages of a one-year extension of grace year and a 2 percentage points reduction in the loan interest at the credit support received from the Government compared with provinces not covered.

Provinces	**Provinces**
1. Adıyaman	12. Hakkari
2. Ağrı	13. Kars
3. Artvin	14. Malatya
4. Bingöl	15. Kahramanmaraş
5. Bitlis	16. Mardin
6. Diyarbakır	17. Muş
7. Erzincan	18. Sivas
8. Erzurum	19. Siirt
9. Elazığ	20. Tunceli
10. Gaziantep	21. Şanlıurfa
11. Gümüşhane	22. Van

Table 2: Provinces with Development Priority in the Decree of the Program of 1968 (The Decree of the Program of 1968, 1967)

With the Decree of the Program of 1969, Edirne was included in the Development Priority Regions and the number of the Provinces with Development Priority increased to 23. With this change, Provinces with Development Priority in 1969 are shown in Table 3.

Provinces	Provinces
1. Adıyaman	13. Hakkari
2. Ağrı	14. Kars
3. Artvin	15. Malatya
4. Bingöl	16. Kahramanmaraş
5. Bitlis	17. Mardin
6. Diyarbakır	18. Muş
7. Edirne	19. Siirt
8. Elazığ	20. Sivas
9. Erzincan	21. Tunceli
10. Erzurum	22. Şanlıurfa
11. Gaziantep	23. Van
12. Gümüşhane	

Table 3: Provinces with Development Priority in the Decree of the Program of 1969 (The Decree of the Program of 1969, 1968)

With the Decree of the Program of 1972, the Provinces with Development Priority were redefined and in addition some of the districts of the non-covered provinces were also been included in the program. These Provinces and Districts are shown in Table 4 and Table 5 respectively.

Provinces		
1. Adıyaman	12. Elazığ	23. Mardin
2. Afyonkarahisar	13. Erzincan	24. Muş
3. Ağrı	14. Erzurum	25. Niğde
4. Artvin	15. Gaziantep	26. Ordu
5. Bingöl	16. Giresun	27. Sivas
6. Bitlis	17. Gümüşhane	28. Siirt
7. Burdur	18. Hakkari	29. Sinop
8. Çankırı	19. Kars	30. Tunceli
9. Çorum	20. Kastamonu	31. Şanlıurfa
10. Diyarbakır	21. Malatya	32. Van
11. Edirne	22. Kahramanmaraş	33. Yozgat

Table 4: Provinces with Development Priority in the Decree of the Program of 1972 (The Decree of the Program of 1972, 1971)

Districts	Provinces
Bahçe, Feke, Tufanbeyli, Saimbeyli	Adana
Taşova	Amasya
Delice, Şereflikoçhisar	Ankara
Akseki, Gündoğmuş, Korkuteli	Antalya
Balya, Kepsüt	Balıkesir
Pazaryeri	Bilecik
Yenice	Çanakkale
Acıpayam, Çal, Çameli, Çardak, Çivril, Kale, Tavas	Denizli
Altınözü, Yayladağ	Hatay
Atabey, Yalvaç	Isparta
Kiraz	İzmir
Develi, Felahiye, Sarıoğlan, Sarız, Tomarza, Yahyalı	Kayseri
Kofçaz	Kırklareli
Çiçekdağ, Kaman	Kırşehir
Beyşehir, Bozkır, Doğanhisar, Ermenek, Hadim, Kulu, Seydişehir	Konya
Altıntaş, Gediz	Kütahya
Yatağan	Muğla
Derinkuyu, Gülşehir, Hacıbektaş	Nevşehir
İkizdere, Kalkandere	Rize
Terme, Vezirköprü	Samsun
Çerkezköy	Tekirdağ
Artova, Erbaa, Niksar, Reşadiye	Tokat
Arsin, Çaykara, Sürmene, Tonya, Yomra	Trabzon
Banaz, Sivaslı	Uşak
Devrek, Kurucaşile	Zonguldak

Table 5: Districts with Development Priority of the Non-covered Provinces in the Decree of the Program of 1972 (The Decree of the Program of 1972, 1971)

1.3.3. Third Five-Year Development Plan Period (1973-1977)

The Third Five-Year Development Plan was entered into force with the Official Gazette No. 14374 dated November 27, 1972. The following objectives were prioritized in the third plan period. It was stated that policies for solving these problems would be produced in the third plan. (SPO, 1972, p. 119)

- Enhancing the quality of life,
- Industrialization,
- Reduction of dependence on external sources,
- Solving employment problem,
- Improvement of Income Distribution.

The following policies were envisaged to increase industrialization, one of the priority objectives in the third plan. (SPO, 1972, pp. 296-297)

- Taking necessary measures to protect intermediary and investment goods industries that require advanced technology against competitor imports,
- Taking into account that the facilities should be at economic capacity in new investment decisions,
- Integrated design of complementary industry branches,
- Promoting studies in the field of technological development,
- Taking necessary economic measures for the procurement of essential goods and services required for industry at international prices,
- Taking precautions to ensure that the preparation of standards for basic industrial goods and exported products is completed and put into force and that quality control is made more effective,
- Making necessary changes in the tax system in order to get customs and production taxes on the final product,
- The reorganization of the Ministry of Industry and Technology,
- Taking necessary precautions to provide necessary arms for national defense and to sustain national industrialization studies,
- Conducting studies on increasing productivity and quality,
- Promoting re-use of used products during production phase.

In the third plan period, the priority areas in development started to be applied by leaving the implementation of priority regions in development. In the plan, the reason for this change was the evaluation that there was underdeveloped areas in developed regions as well as developed areas in underdeveloped regions in Turkey. (Dinler, 2016, p. 209) To ensure coordination about this implementation, The Department of Priority Areas in Development in the State Planning Organization was established.

In this plan period, no progress was made in terms of legislative amendment compared to previous periods. There are two reasons for this. One of the reasons may be that the establishment of basic principles in incentive legislation has been completed in the previous periods. The other reason can be that the frequent changes in politicians and bureaucrats during the period. (Duran, 1998, pp. 71-72)

In the 1973 program, published in the Official Gazette dated December 8, 1972 and numbered 14385, changes were made in the provinces and districts within the Priority Areas in Development. Provinces and Districts within the program are shown in Table 6 and Table 7, respectively.

Provinces	**Provinces**	**Provinces**	**Provinces**
Adıyaman	Çanakkale	Hakkari	Siirt
Afyonkarahisar	Çankırı	Kars	Sinop
Ağrı	Çorum	Kastamonu	Sivas
Artvin	Denizli	Kırşehir	Tunceli
Bilecik	Diyarbakır	Kahramanmaraş	Tokat
Bingöl	Erzincan	Mardin	Uşak
Bitlis	Erzurum	Muş	Şanlıurfa
Burdur	Giresun	Niğde	Van
Bolu	Gümüşhane	Ordu	Yozgat

Table 6: Provinces with Development Priority in the Decree of the Program of 1973 (The Decree of the Program of 1973, 1972)

Districts	Provinces
Bahçe, Feke, Tufanbeyli, Saimbeyli	Adana
Delice, Şereflikoçhisar	Ankara
Akseki, Korkuteli, Gündoğmuş	Antalya
Taşova	Amasya
Balya, Kepsut	Balıkesir
Altınözü, Yayladağı	Hatay
Atabey, Yalvaç	Isparta
Kiraz	İzmir
Develi, Felahiye, Sarıoğlan, Sarız, Tomarza, Yahyalı	Kayseri
Kofçaz	Kırklareli
Beyşehir, Bozkır, Doğanhisar, Ermenek, Hadim, Kulu, Seydişehir, Çumra	Konya
Altıntaş, Gediz	Kütahya
Yatağan	Muğla
Derinkuyu, Gülşehir, Hacıbektaş	Nevşehir
İkizdere, Kalkandere	Rize
Terme, Vezirköprü	Samsun
Arsin, Çaykara, Sürmene, Tonya, Yomra	Trabzon
Devrek, Kurucaşile	Zonguldak
Çerkezköy	Tekirdağ

Table 7: Districts with Development Priority of the Non-covered Provinces in the Decree of the Program of 1973 (The Decree of the Program of 1973, 1972)

In the 1977 program, published in the Official Gazette dated December 1, 1976 and numbered 15780, changes were made in the provinces and districts within the Priority Areas in Development. With the 1977 program, in addition to the ones listed in Table 6, Kırklareli province was included and the number of provinces within the scope of Priority Areas in Development increased to 37. In addition, Çerkezköy province was removed from the provinces listed in Table 7 that were within the scope of the Priority Areas in Development.

In the 1978 program, published in the Official Gazette dated November 30, 1977 and numbered 16125, changes were made in the provinces and districts within the Priority Areas in Development. With the 1978 program, in addition to 37 provinces mentioned in the 1977 program, Edirne, Elazig, Gaziantep and Malatya provinces were included and the number of provinces within the scope of Priority Areas in Development increased to 41.

1.3.4. Fourth Five-Year Development Plan Period (1979-1983)

The Fourth Five-Year Development Plan was entered into force with the Official Gazette No. 16487 dated December 12, 1978. The fourth development plan consists of two chapters. While the first chapter contains the results of the third plan period and the main objectives and basic policies of the fourth plan, the second chapter specifies the sectoral objectives of the plan.

When the first chapter of the plan is examined, it is observed that in the third plan period, the development gap between the regions increased due to reasons such as lack of institutionalization and inadequacy of the experience in preparing the regional plan. When the regional distribution of the manufacturing industry facilities employing 10 or more workers in 1977 is analyzed in Table 8, it is seen that 40 percent of the companies were established in Istanbul, while only 1 percent of the companies were found in Eastern Anatolia Region.

The Manufacturing Industry Facilities Employing 10 or More Workers (1977)		
Regions	**The Number of Facilities**	**The Number of Facilities in Region/ The Number of Facilities in Turkey**
Istanbul	2380	40%
The Marmara (except Istanbul)	812	14%
Izmir	580	10%
Ankara	461	8%
The Black Sea	456	8%
The Mediterranean	384	6%
The Aegean	353	6%
The Central Anatolia	328	5%

The Southeastern Anatolia	131	2%
The Eastern Anatolia	87	1%
TOTAL	5972	100%

Table 8: Regional distribution of the manufacturing industry facilities employing 10 or more workers in 1977 (SPO, 1979)

Regional imbalances had increased in the previous three plan periods. In 1963, while the provinces in the Priority Areas in Development generated 13.3 percent of the manufacturing value added, this rate was realized as 7.3 percent in 1974. This situation was influenced by the fact that private sector investments could not be drawn into the backward regions. (SPO, 1979, p. 75)

Policies that would be implemented in the plan period in order to reduce regional differences were in the second chapter of the fourth plan. These policies are summarized below;

- Taking into account the space dimension in planning studies,
- Differentiation of incentive measures in terms of goods and space,
- Taking measures to ensure that the local capital in the underdeveloped regions was effective in the development of the region,
- The realization of the work to be done in order to rapidly develop the underdeveloped regions through the implementation of large projects within the concept of regional development,
- Making essential legal arrangements and planning studies to evaluate the potential of lagging regions in livestock and agriculture sectors,
- Improvement of transport networks in Eastern and Southeastern Anatolia regions,
- Increasing public investments in the underdeveloped regions,
- Taking necessary measures to direct industrial investments to priority areas in development,
- Providing active use of fund for supporting priority areas in development.

In the fourth plan period, the following policies were envisaged to encourage industrial investments;

- Implementing selective policies according to product and place while applying industrial promotion and orientation tools,
- Securing private sector entrepreneurs investing in areas eligible for the plan,
- Consolidating the legislation on incentives as a whole under a single law,
- Shaping export promotion policies according to demands.

One of the most important developments in Turkey's economy during the Plan period is to begin implementation of the Stability Program of January 24, 1980. This program has caused fundamental transformations in industrial policies. Turkey had an closed economy based on import substitution and intense public intervention. After launching the Stability Program, it has been transformed into an open economy with export-oriented industrialization approach and where free market conditions prevail. (Köse, 2002, p. 121)

In this period, there were also various changes in the provinces within the Priority Areas in Development. In the 1979 program, Edirne was excluded from the scope of Priority Areas in Development in 1978 program and Nevşehir province was added. The provinces within the Priority Areas in Development in 1979 are listed in Table 9.

Provinces	**Provinces**	**Provinces**	**Provinces**
Adıyaman	Çorum	Kastamonu	Sinop
Afyonkarahisar	Denizli	Kırklareli	Sivas
Ağrı	Diyarbakır	Kırşehir	Tunceli
Artvin	Elazığ	Kahramanmaraş	Tokat
Bilecik	Erzincan	Malatya	Uşak
Bingöl	Erzurum	Mardin	Şanlıurfa
Bitlis	Gaziantep	Muş	Van
Burdur	Giresun	Nevşehir	Yozgat
Bolu	Gümüşhane	Niğde	
Çanakkale	Hakkari	Ordu	
Çankırı	Kars	Siirt	

Table 9: Provinces within the Priority Areas in Development in the Decree of the Program of 1979 (The Decree of the Program of 1979, 1979)

In 1980, Denizli was excluded from the scope of Priority Areas in Development. Thus, the number of provinces within the Priority Areas in Development fell to 40 in 1980.

In 1981, classification was made in the provinces within the priority areas in development. According to the decision of the Council of Ministers dated July 21, 1981, the provinces within the Priority Areas in Development are included in Table 10.

First Degree Priority Areas in Development	**Second Degree Priority Areas in Development**
Ağrı	Adıyaman
Bingöl	Artvin
Bitlis	Çankırı
Gümüşhane	Çorum
Hakkari	Diyarbakır
Muş	Elazığ
Siirt	Erzincan
Tunceli	Erzurum
Kars	Kahramanmaraş
Van	Kastamonu
	Malatya
	Mardin
	Sinop
	Sivas
	Şanlıurfa
	Tokat
	Yozgat

Table 10: Provinces within the Priority Areas in Development in the Decision of the Council of Ministers dated July 21, 1981 ("Yıllar İtibariyle Kalkınmada Öncelikli Yöreler", n.d.)

With the decision of the Council of Ministers dated July 31, 1981, changes were made in the provinces of Priority Areas in Development and the number of provinces within the scope decreased to 25 as shown in Table 11.

First Degree Priority Areas in Development	**Second Degree Priority Areas in Development**
Adıyaman	Çankırı
Ağrı	Çorum
Bingöl	Kastamonu
Bitlis	Sinop
Diyarbakır	Yozgat
Elazığ	
Erzincan	
Erzurum	
Gümüşhane	
Hakkari	
Kars	
Kahramanmaraş	
Malatya	
Mardin	
Muş	
Siirt	
Sivas	
Tunceli	
Şanlıurfa	
Van	

Table 11: Provinces within the Priority Areas in Development in the Decision of the Council of Ministers dated July 31, 1981 ("Yıllar İtibariyle Kalkınmada Öncelikli Yöreler", n.d.)

With the decision of the Council of Ministers dated December 12, 1984, the number of provinces within the priority areas in development increased to 28. These provinces are shown Table 12.

First Degree Priority Areas in Development	**Second Degree Priority Areas in Development**
Adıyaman	Amasya
Ağrı	Artvin
Bingöl	Çankırı
Bitlis	Çorum
Diyarbakır	Elazığ
Gümüşhane	Erzincan
Hakkari	Erzurum
Kars	Kahramanmaraş
Mardin	Kastamonu
Muş	Malatya
Siirt	Sinop
Tunceli	Sivas
Van	Şanlıurfa
	Tokat
	Yozgat

Table 12: Provinces within the Priority Areas in Development in the Decision of the Council of Ministers dated December 12, 1984 ("Yıllar İtibariyle Kalkınmada Öncelikli Yöreler", n.d.)

1.3.5. Fifth Five-Year Development Plan Period (1985-1989)

The Fifth Five-Year Development Plan was entered into force with the Official Gazette No. 18467 dated July 23, 1984. The policies to be followed for the incentive of the industry during the five-year period of the plan were determined in the plan. The incentive policies envisaged by the government for implementation between 1985 and 1989 are summarized below. (SPO, 1985, pp. 32-33)

- Promoting exporting companies in order to increase the share of industrial products among the products, increase the export volume and to diversify export products,
- Implementing selective incentives differentiated by investment capacity, location, the impact of investment on employment contribution, and on balance of payments,
- Consolidating incentive legislation into a single law,
- Attaching importance to labor intensive projects to solve employment problem,
- The promotion of the use of equity in investment financing.

Taking into consideration the measures listed above, it seems that incentive policies have both microeconomic targets like regional development and macroeconomic targets such as employment and balance of payments.

The new incentive tool that started to be implemented in this period is Premium Support for Resource Utilization. The incentive instrument was put into effect by the Decision of the Council of Ministers No. 85/10011. This incentive implementation differs from the others because there are cash incentives in this implementation. As a result of the implementation, investment in the health and tourism sectors has increased significantly. (Eser, 2011, p. 78) In addition, significant investments were made in the manufacturing industry sector in Denizli, Uşak, Karaman, Kahramanmaraş and Gaziantep. Major tourism investments in the Aegean and Mediterranean regions have also been carried out under this incentive mechanism. (SPO, 2000a, p. 63) This incentive tool was abolished in 1991.

When the government's regional development policy foreseen in the period of the Fifth Development Plan is examined, it is seen that regional planning was started once again. It was stated that there are no mention of development poles in this plan, but instead, regional planning studies would be done for economically developing regions and for regions with development potential in certain sectors. Also, the Study on Hierarchy of Settlement Centres prepared by the State Planning Organization identified 16 region. This work was adopted and implemented in the plan period. (Dinler, 2016, p. 210)

In the plan, it was stated that priority would be given to the development of provinces within priority areas in development, including the ones in the Eastern and Southeastern Anatolia regions, and the reduction of inter-regional differences in terms of development. Incentives would be given to large-scale investments as well as small-scale and labor-intensive industrial investments in the provinces covered by the priority areas in development. Companies producing products addressing the Middle East market would be promoted in Eastern and Southeastern Anatolia regions. Incentive measures would be implemented differently according to the sector or provinces. (SPO, 1985, p. 202)

1.3.6. Sixth Five-Year Development Plan Period (1990-1994)

The Sixth Five-Year Development Plan was entered into force with the Official Gazette No. 20217 dated July 6, 1989. In this plan, incentives, regional development and priority areas in development were tackled separately.

Turkey has applied for membership of the European Community in 1987. This development also had an effect on incentive policies. In this context, it was envisaged to promote the modernization and upgrading of the existing facilities and the facilities established in the technological structure with long-term competitiveness. Research and development, high technology, environmental pollution prevention, energy saving was stated as priority in the incentive policy. Within the scope of the priority areas in the development, it was stated that the measures related to the investment and operating period would be implemented effectively. Companies that diversify export products through investments and increase the share of industrial products would be promoted. Within the framework of the incentive policy, emphasis on technology was made for the first time in this period. (SPO, 1990, p. 30-31)

When compared to previous plans, this plan also changed the policies to be followed in the field of regional development. It was stated that when regional development policies are being defined, the European Community's objectives and practices in the area of regional policy would be taken into account. It was emphasized that the construction of the organized industrial zones would be continued in order to ensure the balanced distribution of the industry between regions. (SPO, 1990, p. 318) While the concept of regional planning was abandoned, the concept of regional development was emphasized. (Dinler, 2016, p. 212)

It was envisaged that a special fund would be created in order to promote private sector investments in the provinces covered by priority areas in development. It was emphasized that regional and sub-regional plans would be made for provinces within this scope. Moreover, it was stated that investment incentives would be applied differently in terms of priority province groups. (SPO, 1990, p. 319)

With the decision of the Council of Ministers dated November 8, 1990, the number of provinces within the priority areas in development increased to 32. These provinces are shown in Table 13.

First Degree Priority Areas in Development	**Second Degree Priority Areas in Development**
Adıyaman	Amasya
Ağrı	Artvin
Batman	Çankırı
Bayburt	Çorum
Bingöl	Elazığ
Bitlis	Erzincan
Diyarbakır	Erzurum
Gümüşhane	Kahramanmaraş
Hakkari	Kastamonu
Kars	Malatya
Mardin	Sinop
Muş	Sivas
Siirt	Şanlıurfa
Şırnak	Tokat
Tunceli	Yozgat
Van	Zonguldak (Merkez, Çaycuma)

Table 13: Provinces within the Priority Areas in Development in the Decision of the Council of Ministers dated November 8, 1990 (Decree of the Council of Ministers No. 90/1116, 1990)

In 1992, Ardahan, Bartin and Iğdır provinces were included in the scope of Priority Areas in Development.

1.3.7. Seventh Five-Year Development Plan Period (1996-2000)

The Seventh Five-Year Development Plan was entered into force with the Official Gazette No. 22354 dated July 25, 1995. The policies envisaged to be implemented in the plan period within the scope of the promotion of the industry are given below; (SPO, 1996, p. 68)

- Implementation of activity-based incentives instead of sectoral incentives,
- Updating the incentive system in accordance with international obligations,
- Prioritizing the following areas in the incentive system;
    - Research and Development, Technological Development,
    - Environmental Protection,
    - Creating new jobs, Supporting SMEs,
    - Contributing to the reduction of Regional Development Disparities,
    - Structural Adjustment required by the Customs Union.

It was stated that regional development policy's aim was reducing inter-regional differences in terms of development. The policies given importance in the context of regional development in this period are listed below; (SPO, 1996, pp. 174-177)

- Evaluation of sectoral policies in terms of spatial dimension,
- Preparation of regional development projects for relatively backward regions,
- Supporting the agro-based industry in Priority Areas in Development,
- The government would realize the investments to create employment in order to ensure the development of provinces within the scope of Priority Areas in Development in obligatory cases,
- Accelerating and continuing the work of Southeastern Anatolia Development Project,
- Carrying Zonguldak-Bartın Regional Development Project into execution,
- Realization of transformation into regional development approach considering sustainable development approach,
- Concentration of public investments in determined regional development centers in Eastern and Southeastern Anatolia Regions,

- Intensification of state aid to designated regional development centers with the aim of attracting private sector investments in Priority Areas in Development,
- Effective use of organized industrial zones in the Regional Development Centers.

It is seen that the following legislative arrangement was carried out in order to reduce the developmental differences between the regions in this period.

- The Decree of the Council of Ministers dated November 7, 1996 and numbered 96/8905,
- The Law dated January 23, 1998 and numbered 4325,
- The Decree of the Council of Ministers dated February 26, 1999 and numbered 99/12478.

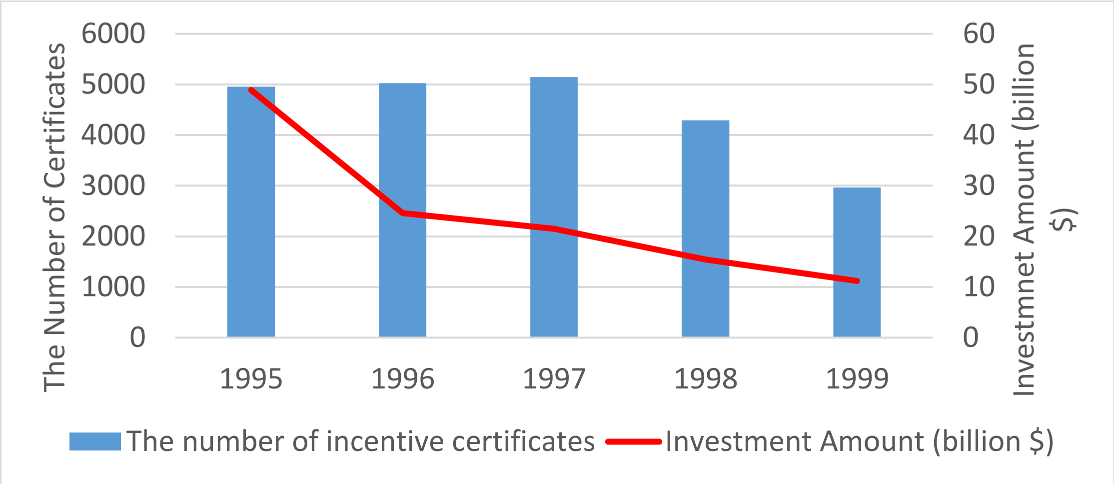
With the Decree of the Council of Ministers numbered 96/8905, it was aimed to complete unfinished investments by granting investment or business loans to businesses in the backward provinces, especially in the Eastern and Southeastern Anatolia Regions. (Eser, 2011, p. 104)

With the Law numbered 4325, it was aimed to increase investment and employment opportunities in mentioned provinces. The incentive measures stated in the law are summarized below; (Eser, 2011, p. 105)

- Income and corporation tax exemption,
- Postponement of tax cuts from employees,
- Exemption of taxes, duties and fees in transactions,
- Promoting employer's national insurance contribution,
- Land allocation without charge.

With the Decree of The Council of Ministers numbered 99/12478, the government provided energy support to businesses in the backward provinces, especially in Eastern and Southeastern Anatolia Regions.

The incentive implementation results during the seventh development plan period are shown in the Graph 1.



Graph 1: Incentive Implementation Statistics during the Seventh Development Plan Period (SPO, 2000b, p. 32)

When the graph is examined, it is seen that there is a decrease in the number of incentive certificates and investment amount during the period.

1.3.8. Eighth Five-Year Development Plan Period (2001-2005)

The Eighth Five-Year Development Plan was entered into force with the Official Gazette No. 24100 dated July 5, 2000. In the plan, the investments listed below would be promoted; (SPO, 2000b, p. 122)

- Technology Development Projects,
- Build-Operate-Transfer Projects,
- Investments in environmental protection,
- Development of SMEs,
- Investments that increase employment,
- Investments that decrease inter-regional differences in terms of development.

The regional development policies envisaged to be implemented in the eighth plan period are summarized below; (SPO, 2000b, pp. 63-64)

- Ensuring alignment of regional development policies with EU policies,
- Updating the Study on Hierarchy of Settlement Centres,
- Taking into account the socio-economic structure of the regions in which the policies of state aid are determined,
- Preparing Provincial Development Plans,
- Initiating Model Industrial Sites implementations,

- Prioritizing model industrial sites implementations,
- Putting Eastern Anatolia Project (DAP) into implementation,
- Continuation of the implementation of additional incentive instruments in provinces within the framework of the Law No: 4325,
- Continuation of the investment and operational loan in provinces within the scope of Priority Regions for Development.

The legal regulations that started to be implemented in the field of investment incentives in this period are listed below;

- The Law numbered 4842,
- The Decree of the Council of Ministers dated June 10, 2002 and numbered 2002/4367.

With the law numbered 4842, the investment allowances applied at different rates according to region, sector and type was fixed. With this legal arrangement, the factor of directing investments to the backward regions or strategic sectors disappeared. In addition, the condition of the incentive certificate required to benefit from the opportunity of the investment allowance was abolished with this legal arrangement. The implementation of the investment allowances was abolished by the law no. 5479, which was enacted in 2006. (Eser, 2011, p. 80)

With the Decree of the Council of Ministers numbered 2002/4367, the following incentives were provided for investments;

- Customs Tax and Mass Housing Fund Exception,
- Investment Allowances,
- Value Added Tax Exception,
- Exemption from taxes, duties and fees,
- Credit Allocation.

According to the Decision of the Council of Ministers, companies with the following characteristics may be benefited from the above mentioned incentive measures;

- Investments in provinces within priority regions for development,
- Investments in provinces within medium-developed regions,
- Investments to be determined by communiqués in developed regions,
- Investments in special purpose regions such as industrial zones, technology development zones, regardless of the region in which they are located.

In the Decree of the Council of Ministers, provinces were classified in three groups according to the level of development. The classification is shown in the Table 14;

Provinces within Developed Regions	**Provinces within Medium-Developed Regions**	**Provinces within Priority Regions for Development**	
Adana (Metropolitan Municipality's Urban Area)	Adana (Rural Districts)	Adiyaman	Mardin
Ankara (Metropolitan Municipality's Urban Area)	Ankara (Rural Districts)	Ağrı	Muş
Antalya (Metropolitan Municipality's Urban Area)	Antalya (Rural Districts)	Aksaray	Nevşehir
Bursa (Metropolitan Municipality's Urban Area)	Bolu	Amasya	Niğde
İstanbul	Burdur	Ardahan	Ordu
İzmir (Metropolitan Municipality's Urban Area)	Bursa (Rural Districts)	Artvin	Osmaniye
Kocaeli	Çanakkale (except Bozcaada, Gökçeada)	Bartın	Rize
	Eskisehir	Batman	Samsun
	Gaziantep	Bayburt	Siirt
	Mersin	Bingöl	Sinop
	Izmir (Rural Districts)	Bitlis	Sivas

Provinces within Developed Regions	**Provinces within Medium-Developed Regions**	**Provinces within Priority Regions for Development**	
	Afyonkarahisar	Çanakkale (Bozcaada, Gökçeada)	Şanlıurfa
	Aydın	Çankırı	Şırnak
	Balikesir	Çorum	Tokat
	Bilecik	Diyarbakir	Trabzon
	Denizli	Elazıg	Tunceli
	Düzce	Erzincan	Van
	Edirne	Erzurum	Yozgat
	Hatay	Giresun	Zonguldak
	Isparta	Gümüşhane	
	Kayseri	Hakkari	
	Kirklareli	Iğdır	
	Konya	Kahramanmaraş	
	Kütahya	Karabük	
	Manisa	Karaman	
	Muğla	Kars	
	Sakarya	Kastamonu	
	Tekirdağ	Kilis	
	Uşak	Kırıkkale	
	Yalova	Kırşehir	
		Malatya	

Table 14: Classification of Provinces in Decree of the Council of Ministers numbered 2002/4367 (Decree of the Council of Ministers No. 2002/4367, 2002)

According to this classification, investments in priority regions in development are more promoted, while relatively less incentive is provided for investments in developed regions. It seems that this incentive application partially applied geographical selectivity through the above classification.

In addition, the following investments are defined as sector investments of particular importance in the decision of the Council of Ministers;

- SME investments,
- R&D investments,
- High technology investments,
- Investments for environmental protection,
- Education investments,
- Tourism investments,
- Health investments,
- Investments for mine extraction.

Given the above situation, it seems that partial sectoral selectivity was also implemented in this incentive practice.

Developments during the ninth and tenth development plan period will be addressed in a separate chapter.

When the first 8 plan periods are examined, it can be said that regional development and incentive policies remain in the planning phase and cannot be implemented in depth. In the aforementioned period, it can be said that regional development policy is generally based on the priority areas in development program. It is seen that the provinces within the scope of priority areas in development program change continuously without relying on any scientific study. For this reason, it is seen that the desired results in the priority areas in development program cannot be obtained.

During the eight plan periods, it is observed that the incentive policy and regional development policy are not considered together. While sectoral priorities are predominant in incentive policy, plans in regional development policy take priority. The most effective incentive policy in this period is the Premium Support for Resource Utilization, which was introduced in the fifth development plan period. Even though this incentive implementation was not aimed at regional development, it has enabled the development of provinces such as Denizli, Uşak, Karaman, Kahramanmaraş and Gaziantep in the fields of health and tourism.

2. THE INVESTMENT INCENTIVE POLICIES IN SELECTED COUNTRIES

This section examines examples of incentive practices in Germany, China, Italy and Poland. By this means, it is aimed to have knowledge about economic situation of the countries, development differences between countries' regions, incentive implementation examples in the world. Different criteria were taken into consideration when selecting these countries. Germany was chosen because it was the biggest economy in Europe, China was examined because it was Asia's largest economy. Poland has been selected because it is one of the most beneficiaries of the Regional Development Funds of the European Union. Italy was chosen to analyze the last situation since it was one of the countries most affected by the 2008 economic crisis.

2.1. GERMANY

Germany has an area of 357,137 km², with a population of 82,522,000 as of 2017. Germany joined the European Union in 1952 as a founding member.

Being the world's fourth largest economy after the United States, China and Japan, Germany is the locomotive of the European economy and the EU. According to the statistics, Germany's economy grew by 2.2% in 2017, with GDP per capita at 39.454 euros. (Federal Statistics Office of Germany, n.d.) The country economy is export-oriented. The amount of exports realized in 2017 is 1 trillion 280 billion euros. Automotive, machinery and chemical industries are at the forefront in exports. (Federal Statistics Office of Germany, n.d.) There are differences in economic development between regions in Germany. According to the NUTS-2 classification, the GDP per capita figures for the regions of Germany in 2016 are shown in the Table 15.

Region	GDP per capita (€)	Region	GDP per capita (€)	Region	GDP per capita (€)
Stuttgart	50042	Bremen	47893	Detmold	36408
Karlsruhe	42263	Hamburg	61778	Arnsberg	33578
Freiburg	36607	Darmstadt	49409	Koblenz	32973
Tübingen	40961	Gießen	32657	Trier	30330
Oberbayern	54583	Kassel	34927	Rheinhessen-Pfalz	36623
Niederbayern	37271	Mecklenburg-Vorpommern	25842	Saarland	35302
Oberpfalz	39852	Braunschweig	36843	Dresden	29739
Oberfranken	35397	Hannover	35559	Chemnitz	27365
Mittelfranken	41499	Lüneburg	27229	Leipzig	30793
Unterfranken	37954	Weser-Ems	33399	Sachsen-Anhalt	26616
Schwaben	37808	Düsseldorf	40413	Schleswig-Holstein	31127
Berlin	36588	Köln	41357	Thüringen	28257
Brandenburg	27647	Münster	32143		

Table 15: GDP per capita of Germany's Regions (2016) (Statistical Office of the European Union (EUROSTAT), n.d.)

As can be seen from the Table 15, Hamburg (per capita GDP: € 61778), which has the highest per capita GDP in Germany, has about three times higher per capita GDP than Mecklenburg-Vorpommern's GDP (per capita GDP: € 25842), which is the lowest per capita GDP in Germany.

When incentive practices in Germany is examined, it seems to be very extensive and affects many sectors. Institutions that promote incentives in Germany are the German Government, the European Union and Individual Federal States. In Germany, under the scope of incentives, the amount funded jointly by the EU and the German government during the period of 2014-2020 is about 17 billion Euros. (GTAI, 2018, p. 2) In this study, incentives in Germany will be examined in five classes;

- GRW Cash Grants,
- Research and Development Project Incentives,
- Incentives for Human Resources,
- Public Loans,
- Public Guarantees.

GRW funds, the fund of "Joint Federal Government / Länder Scheme for the Improvement of Regional Economic Structures", are the most important tool in the area of regional development in Germany, funded by the central government and regional governments. GRW funds managed jointly by central government and regions have been implemented since 1969. (Federal Ministry for Economic Affairs and Energy of Germany, n.d.) The reunification of Eastern and Western Germany has major influences on regional development policies in Germany. The collapse of the Berlin Wall in 1989 and subsequent unification in 1990 brought a tragic developmental distinction between the East and the West of the country. To reduce development differences after unification, priority has been given to the development of five regions in East Germany, called the New Länder.[1] The main objective of regional politics today is to focus on the underdeveloped regions with structural problems and to promote them to converge to developed regions. GRW funds are mainly allocated to underdeveloped regions with structural problems. GRW funds are mostly concentrated in East Germany. (Mitze, 2014, p. 53) Funds provide grant support for investments in trade and industry, infrastructure investments and projects aimed at increasing the competitiveness of SMEs. Funds are semi-financed by central government and regions. There is a coordination framework in which decisions are made by central government and regions and the principles for the use of funds are determined. Within the coordination framework; there are rules, maximum funding rates, tools used and GRW Regional Aid Map. The coordination framework also ensures compliance of state subsidies to the EU acquis.

[1] These regions are Brandenburg, Mecklenburg-Vorpommern, Sachsen, Sachsen-Anhalt and Thüringen

GRW funds have two main objectives. These are to promote employment and support economic development in the underdeveloped regions of Germany. To achieve these objectives, the fund is used as a direct subsidy to cover the capital expenditure and personnel costs of the establishment phase of the investment. When GRW funds are used, two criteria are taken into account. These criteria are the size of the company and the region where the investment is made. Some regions in Germany are within the scope of GRW funds. The "Regional Aid Map" covering Germany's 2014-2020 period, with the approval of the European Commission, entered into force in July 2014 to determine the regions where the funds are used. (GTAI, 2018, p. 5) The Regional Aid Map is shown in Figure 1.

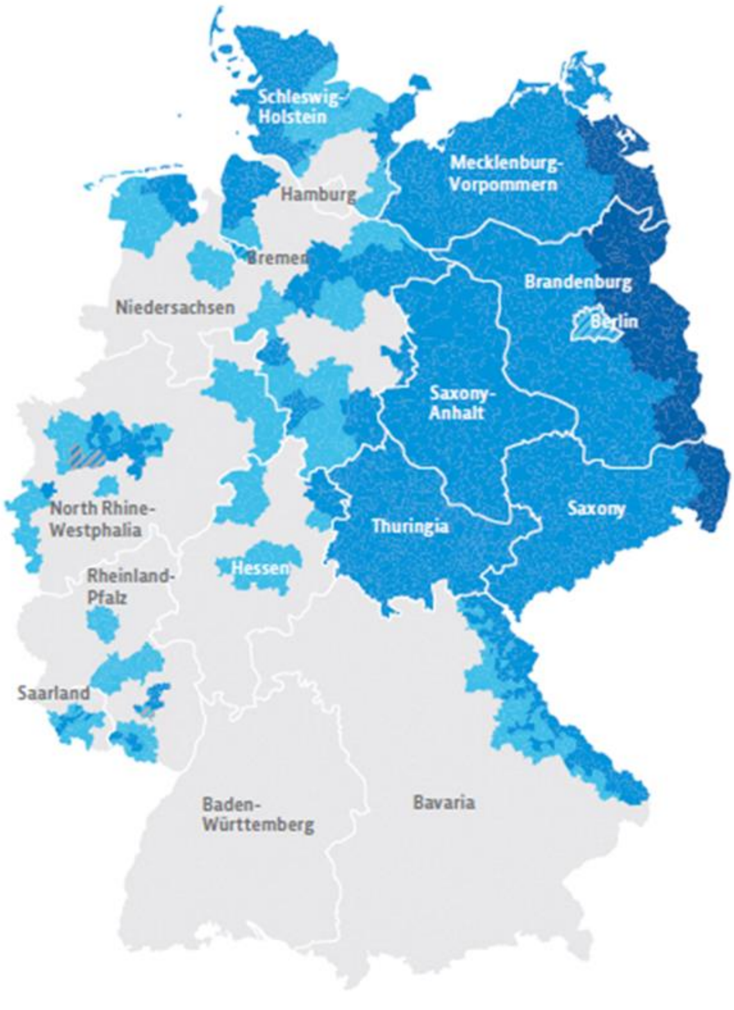


Figure 1: Regional Aid Map of Germany (2014-2020) (GTAI, 2018, p. 5)

As can be seen from the map, when the regions near the Polish border, which is the east of Germany, are less developed, the western regions are seen to be more developed.

The criteria used by the European Union are implemented when looking at the size of the company for the use of funds. When the criteria are set, the number of employees, the annual turnover or annual balance sheet total is examined. According to these criteria, company sizes are shown in Table 16.

Company Size	Staff Head Count	Annual Turnover	Annual Balance Sheet Total
Small Enterprise	< 50	≤ 10 million €	≤ 10 million €
Medium-sized Enterprise	< 250	≤ 50 million €	≤ 43 million €
Large Enterprise	≥ 250	>50 million €	> 43 million €

Table 16: Company Size (European Commission, n.d.)

The incentive rates of GRW funds prepared according to the size of the regions and companies are shown in Table 17.

Region	Small Enterprises	Medium-sized Enterprises	Large Enterprises
Border area to Poland	max. 40%	max 30%	max. 20%
C Region	max. 30%	max. 20%	max. 10%
D Region	max. 20%	max. 10%	max. EUR 200.000

Table 17: Available Incentive Rates of GRW Funds (Federal Ministry for Economic Affairs and Energy of Germany, n.d.)

When the incentives applied to the R&D sector in Germany are examined, it is seen that the incentives are generally given as non-repayable grants. The grant rates are usually 50 percent of the eligible cost, but this figure can be increased for SMEs. When selecting the project, the level of innovation, economic and technical risks are taken into consideration. In addition, loans for R&D investments can be given as an alternative to R&D grants. (Deloitte, 2015, p. 17)

When the incentives given in the field of human resources in Germany are examined, The Federal Employment Agency and The German States appear to give incentives in Germany. In addition, the incentives in the area of human resources in Germany appear to be collected in four main groups; (GTAI, 2018, p. 9)

- Recruitment Support: The Federal Employment Agency provides support to the companies about personnel recruitment through job centers. The job announcements of the companies, the pre-selection of the candidates and provision of facilities for conducting job interviews are within the scope of this support,
- Pre-hiring Training: the German government can subsidize up to 100 per cent of the costs of training required for prospective employees,
- Wage Subsidies: If companies hire unemployed people, up to 50 percent of salary costs can be subsidized by the German Government for a period of 1 year,
- On-the-job training: The German federal states can subsidize up to 50 percent of the on-the-job training costs of companies.

The German Government offers loans with grace periods at low interest rates in comparison to investor market ratios through development banks. Foreign investors can benefit from this incentive under the same conditions as German investors. (GTAI, 2018, p. 11)

Public guarantees are implemented to make it easier for banks to lend to companies. Accordingly, where the company can not repay the loan, the German Government is the guarantor. (GTAI, 2018, p. 12)

2.2. CHINA

China has an area of 9,562,911 km², with a population of 1,382,710,000 as of 2016. (National Bureau of Statistics of China, n.d.) China is a founding member of the Shanghai Cooperation Organization established in 1996. China has had a transformation from a centrally-planned to market-based economy since 1978 reforms. (World Bank, n.d.b) According to 2016 data, China is the world's second largest economy with a GDP of $ 11.2 trillion. (World Bank, n.d.a)

After the economic reform in 1978, China has begun to show rapid economic growth. Economic growth has also brought some problems. Regional disparities are also the most important of these problems. Globalization and liberal policies, which also cause economic growth, have increased the differences between regions in China. (Fujita, & Hu, 2001, p. 1)

In 2005, the Chinese government set a goal of harmonious development aimed at solving these problems. One of the most important dimensions of harmonious development is balanced development among regions. (Fan, Kanbur, & Zhang, 2010, p. 47). When public investments are planned, balanced development between regions is taken into account. The regions in China can be examined in two classes; coastal regions and inland regions. After the economic reform of 1978, the difference in development between coastal and inland regions increased. The reason for this is that coastal regions are integrated more quickly into the outside world than inland regions because they are able to access international markets faster through ports. (Fan, Kanbur, & Zhang, 2010, p. 51). In order to indicate developmental differences between coastal and inland regions, Table 18 shows the per capita GDP values of regions in China.

Region Type	**Region**	**GDP Per Capita (Yuan)**	**Region Type**	**Region**	**GDP Per Capita (Yuan)**
Coastal	Beijing	118198	Inland	Hubei	55665
Coastal	Tianjin	115053	Inland	Hunan	46382
Coastal	Hebei	43062	Coastal	Guangdong	74016
Inland	Shanxi	35532	Coastal	Guangxi	38027
Inland	Inner Mongolia	72064	Inland	Hainan	44347
Coastal	Liaoning	50791	Inland	Chongqing	58502
Inland	Jilin	53868	Inland	Sichuan	40003
Inland	Heilongjiang	40432	Inland	Guizhou	33246
Coastal	Shanghai	116562	Inland	Yunnan	31093
Coastal	Jiangsu	96887	Inland	Tibet	35184
Coastal	Zhejiang	84916	Inland	Shaanxi	51015
Inland	Anhui	39561	Inland	Gansu	27643
Coastal	Fujian	74707	Inland	Qinghai	43531
Inland	Jiangxi	40400	Inland	Ningxia	47194

Coastal	Shandong	68733	Inland	Xinjiang	40564
Inland	Henan	42575			

Table 18: GDP per capita of China's Regions (2016)(National Bureau of Statistics of China, n.d.)

As can be seen from Table 18, there are great developmental differences among regions in China. In particular, it is seen that coastal regions have higher GDP per capita than inland regions. Having the highest per capita GDP (per capita GDP: 118198 Yuan), Beijing has about 4.5 times higher the GDP per capita than the Gansu region with the lowest GDP per capita (GDP per capita: 27643 Yuan).

When the incentive policies in China are examined, it seems that they are often applied to attract foreign direct investment to the country. After the economic reform of 1978, China's economic policies shifted from a centrally planned system to a socialist market economy. (Crane, Albrecht, Duffin, & Albrecht, 2018, p. 100) The Chinese government has attached great importance to attracting foreign direct investments to the country in order to improve the economy. In this context, China has established special economic zones. The Special Economic Zone is the general term used to describe various industrial areas in China. (Crane et al, 2018, p. 99) The first examples of Special Economic Zone were established in the cities of Shen Zhen, Zhuhai, Shantou and Xiamen in the coastal region of the late 1970s. As the years progressed, the number of cities which have specific economic zones have increased. In 1984, fourteen coastal cities were included in the special economic zone implementation. Then, seven coastal cities were also included in the special economic zone implementation. In the following years, numerous special economic zones were established. (Wang, 2010, p. 18)

In Special Economic Zones, different incentives are offered to foreign investors. The most important one is tax incentives. Foreign companies pay corporate tax (15%-24%) at a rate lower than the rate of corporate' tax that domestic companies pay as 33 percent. In addition, various incentives such as zero customs duties and income tax exemption for foreign personnel are also offered to foreign investors. (Wang, 2010, p. 17) In China, land is owned by the state, and foreign investors can enjoy land use and business rights like domestic companies. If the investor invests more than 15 years in investments supported by state, it is exempted from the usage fee for five years and the fee for the remaining five years is collected as half. (Wang, 2010, p. 18)

Special economic zones have also contributed significantly to the development of the regions in which they are located. Special economic zones generally concentrate in coastal regions, but not in central and western regions. Crane et al (1998, p. 101) asserts that regions with more than one or a previously established special economic zone have developed more than other regions. There are serious developmental differences between coastal regions and other regions in China. While coastal regions are developing with foreign direct investments in special economic zones, other regions have not received much investment because there are no special economic zones. Due to the reasons listed, Crane et al (2018, p. 104) claim that the establishment of special economic zones in regions outside of coastal regions is the most effective way to reduce the development gap between regions in China.

Given the above statements, the implementation of the special economic zones incentives lead to the development of the Chinese economy, reduce the development gap between the regions, and the increase of foreign investment in the country.

2.3. ITALY

Italy has an area of 301,388 km², with a population of 60,589,445 as of 2017. (EUROSTAT, n.d.) Italy joined the European Union in 1952 as a founding member. According to Eurostat's 2017 data, Italy is the fourth largest economy of the European Union after Germany, Britain and France with a GDP of 1.7 trillion Euros. Italy's economy grows by 1.5 percent in 2017. (EUROSTAT, n.d.) The economic crisis that started in 2008 deeply affected Italy. The Italian economy has suffered a contraction between 2008 and 2015 and has begun to recover from 2015. The per capita GDP in Italy was 28,400 Euro in 2017. (EUROSTAT, n.d.)

There are differences in economic development between regions in Italy. According to the NUTS-2 classification, the GDP per capita figures for the regions of Italy in 2016 are shown in the Table 19.

Region	**GDP per capita (€)**	**Region**	**GDP per capita (€)**
Piemonte	29405	Marche	26598
Valle d'Aosta	34929	Lazio	31552
Liguria	30795	Abruzzo	24138

Lombardia	36603	Molise	20042
Provincia Autonoma di Bolzano	42585	Campania	18264
Provincia Autonoma di Trento	35004	Puglia	17786
Veneto	31667	Basilicata	20598
Friuli-Venezia Giulia	30275	Calabria	16796
Emilia-Romagna	34614	Sicilia	17173
Toscana	29986	Sardegna	20263
Umbria	23979		

Table 19: GDP per capita of Italy's Regions (2016)(EUROSTAT, n.d.)

As can be seen from Table 19, there are great developmental differences among regions in Italy. Having the highest per capita GDP (per capita GDP: 42585 €), Provincia Autonoma di Bolzano has about 2.5 times higher the GDP per capita than Calabria region with the lowest GDP per capita (GDP per capita: 16796 €).

Looking at the level of development of the regions in Italy, it can be seen that the regions in the north are developed, while the regions in the south (Mezzogiorno) are less developed. (OECD, 2010, p. 168) Mezzogiorno region (southern of Italy) composed of Abruzzo, Molise, Campania, Puglia, Basilicata, Calabria, Sicilia and Sardegna NUTS-2 Regions. When examined in Table 19, it can be seen that these regions have the lowest per capita GDP in Italy.

It appears that Italy's regional development policies focus on relatively less developed southern regions. Until the 1990s, regional development policies seem to be more in the form of incentives and infrastructure investments. From the mid-1990s, it appears that the cohesion policy of the European Union influenced Italy's regional development policy. (OECD, 2010, p. 168) In the area of regional development in Italy, there are studies of both the European Union and the Italian Government. While the European Union focuses on the underdeveloped south of Italy through the cohesion policy, the Italian government is also trying to reduce developmental disparities between regions with various means. In this context, one of the studies made by the Italian government was to regulate the use of EU cohesion funds with the Law no. 255/2013. With this law, an agency has been established with the purpose of coordinating work related to European Union cohesion funds. (OECD, 2014, p. 252)

One of the important programs that Italy is implementing in the field of regional development is the Territorial Pacts that have been implemented since 1997. Territorial Pacts are entered into force with consent provided by local stakeholders. Territorial Pacts composed of plan for private and public investments. With Territorial Pacts, the Italian government aims to support private sector investments in particular. In this context, 70 percent of the resources allocated for the Territorial Pact implementation is reserved for private sector investments. This resource is available through grant and is used for the purpose of factory establishment, expansion and transformation. Grants awarded can not exceed 70 percent of the total investment amount. (Accetturo & Blasio, 2011, p. 9) From this point of view, awarded grants can be considered as an important investment incentive tool, which has a regional dimension.

Another regional incentive instrument in Italy is also implemented under the law no. 488/1992. The incentives under the law are in the form of capital grants. These incentives are implemented in relatively backward regions subject to Objective 1, 2 and 5b[2] as defined by the European Union. Regions covered by the implementation account for about half of Italy. Only the manufacturing industry and mining companies can benefit from incentives. These incentives can be used only for factory establishment, expansion and transformation purposes. When the incentive rates are determined, different ratios are applied according to the region where the investment is made and the size of the company. Under the law, the projects to be promoted are determined according to five criteria. These criteria are listed below;

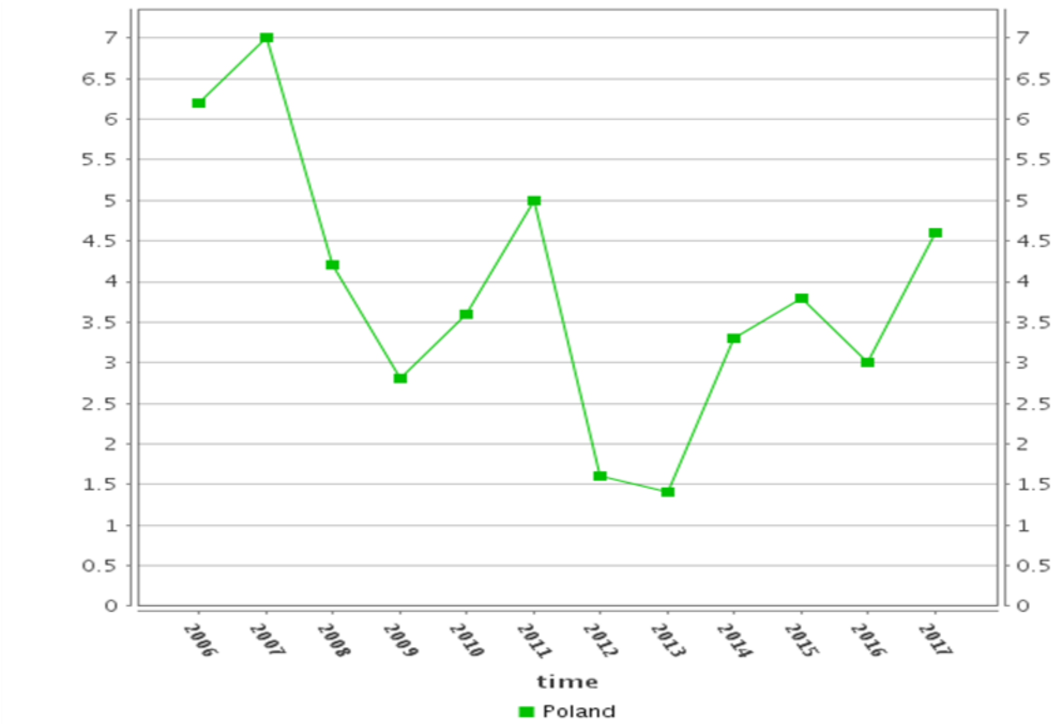
[2] Objective 1 defines the regions where the gross domestic product (GDP) is below 75% of the European Community average. Objective 2 describes areas with structural problems in the industry. Objective 5b describes rural areas.

- The ratio of equity capital to total investment amount,
- Employment to be created within the scope of the project,
- The ratio of the requested grant to the maximum grant amount,
- The score of the region to be invested determined by location, sector and the project type,
- The score of the project about environmentally friendly investment.

In Italy, an agency called "Invitalia" was established by the Ministry of Economy. The agency manages all the incentives applied to support investments that are innovative and the establishment of new companies. Invitalia particularly carry out a work in southern Italy. In this context, Invitalia is applying the Development Contract program. Under the program, investments in industry, food industry, tourism and environmental protection are supported. Under the program, there are two types of incentive instruments: capital grant and soft loan. capital grants which are non-repayable incentives are paid in a maximum of five installments. Soft loans are granted to investors who receive capital grants. In ten years, investors are paying the same amount with the lower interest rates compared to market interest rate. In order to benefit from such incentives, at least 25 percent of the amount of the investment has to be covered by the investor.

2.4. POLAND

Poland has an area of 312,680 km², with a population of 38,426,000 as of July, 2017. (Statistics Poland, n.d.) Poland has had a transformation from planned to market-based economy since 1989. Poland is a member country of the European Union since 2004. According to data from the year 2017, it is the EU’s nineth largest economy with GDP of € 465.6 billion. (EUROSTAT, n.d.) When annual growth rates are examined, it can be seen that Poland has one of the most growing economies in the European Union. In 2017, Poland has a real growth rate of 4.6. (EUROSTAT, n.d.) Moreover, when the real growth rates of Polonia from 2006 to 2017 are examined, it is seen that there is no economic contraction including the crisis period. The annual real growth rates of Poland from 2006 to 2017 are shown in Graph 2.



Graph 2: Real Growth Rate of Poland (2006-2017) (EUROSTAT, n.d.)

When looking at the expenditures of the EU budget, Poland is seen as one of the countries that benefited most from the EU budget. When the budget realizations of 2016 are examined, it is seen that Poland is the fourth country with the highest expenditure by the EU with 10.6 billion Euros after Spain, Italy and France. (European Commission, n.d.)

The developmental differences between the regions of Poland have come since the past. From the period of the partition to the present, the developmental disparities between the regions are intense. In this process, during period of communist regime after World War II, differences in development between regions increased. With the collapse of the communist system in 1989 and the transition to a centrally planned market economy, Poland has not achieved the desired improvements in reducing developmental differences between regions because of the adaptation to the new system in the first years of change. In 2004, with EU membership, it was relatively successful in reducing regional disparities. (Czyż & Hauke, 2011, p. 36) Still, Poland is one of the countries with the greatest interregional development gap among OECD countries. There are interregional development differences in the following three different forms; (OECD, 2010, p. 230)

- Ongoing developmental differences between eastern and western Poland,
- Development differences between the capital Warsaw and other regions,
- Intra-regional development differences, especially in the Warsaw (Mazowieckie), Poznan (Wielkopolskie) and Cracow (Malopolskie) regions.

According to Poland's NUTS-2 classification, per capita GDP is shown in Table 20.

Region	**GDP per capita (€)**	**Region**	**GDP per capita (€)**
Lódzkie	10352	Wielkopolskie	12102
Mazowieckie	17645	Zachodniopomorskie	9261
Malopolskie	10062	Lubuskie	9303
Slaskie	11500	Dolnoslaskie	12287
Lubelskie	7642	Opolskie	8848
Podkarpackie	7817	Kujawsko-Pomorskie	9060
Swietokrzyskie	7943	Warminsko-Mazurskie	7901
Podlaskie	7861	Pomorskie	10730

Table 20: GDP per capita of Poland's Regions (2016)(EUROSTAT, n.d.)

When the Table 20 is examined, it is seen that the region with the highest per capita GDP (17645 €) is the Mazowieckie region where the capital city Warsaw is also located. Furthermore, when the per capita GDP per capita of the regions is examined, it is seen that there are also developmental differences between Poland's west and east. Accordingly, per capita GDPs in the Slaskie, Wielkopolskie, Zachodniopomorskie, Lubuskie, Dolnoslaskie and Opolskie regions that are located in the west of Poland are higher than the per capita GDPs of the Lubelskie, Podkarpackie, Swietokrzyskie, Podlaskie and Warminsko-Mazurskie regions located in the east of Poland.

When the incentives offered to investors in Poland are examined, it can be seen that these incentives can be grouped into the following 5 classes;

- EU Structural Funds (2014-2020),
- Incentives for Investments in Special Economic Zones (SEZs),
- Program for the support of investments of considerable importance for Polish economy for years 2011-2020,
- Real Estate Tax Exemption,
- Labour Market Instruments.

One of the most important investment incentive policy instruments in Poland is the EU Structural Funds. Funds under the EU Cohesion Policy are implemented in 2014-2020 period. In the period of 2014-2020, 76.7 billion Euros were allocated for Poland, which is the most benefited EU country from EU funds. During the period of 2014-2020, 6 national operational programs and 16 regional operational programs are implemented. Distribution of the 2014-2020 budget according to operational programs is given in Table 21. Supports under operational programs are generally provided to investors through repayable instruments, as well as grants. (PAIH, 2017, p. 117-118)

Operational Program	Amount (billion €)
Infrastructure and Environment	27.4
Smart Growth	8.6
Knowledge, Education and Development	4.7
Eastern Poland	2
Digital Poland	2.2
Technical Assistance	0.7
16 Regional Operational Programs	31.1

Table 21: Allocation of EU funds on the basis of operational programs in Poland (2014-2020) (European Funds Portal, n.d.)

The information about which investors can be beneficiary within the scope of national operational programs is given in Table 22. In Table 22, when investors benefiting from the operational program are indicated with a check mark, non-benefiting investors are indicated with a cross mark. It can be seen that private sector investments can benefit from a variety of operational programs except from technical assistance.

	SMEs	Large Enterprises	Research Units	Consortia of Enterprises and Research Units	Entrepreneurs
Infrastructure and Environment	✓	✓	X	X	X
Smart Growth	✓	✓	X	✓	X
Knowledge, Education and Development	X	X	✓	X	✓
Eastern Poland	✓	X	✓	X	✓
Digital Poland	X	X	✓	X	✓
Technical Assistance	X	X	X	X	X

Table 22: Beneficiaries of the Operational Programs in Poland (2014-2020) (European Funds Portal, n.d.)

Another incentive instrument implemented in Poland is incentives for investments in the special economic zones (SEZs). The Polish government established the Special Economic Zones to reduce the development gap between the regions and to develop the industry with the 1989 reforms. (Smetkowski, 2002, p.1) At the present time, there are 14 Special Economic Zones in Poland as can be seen in Figure 2.

Figure 2: Special Economic Zones in Poland (PAIH, n.d.)

It is envisaged that the incentives to be applied to the investments in the Special Economic Zones will be valid until 2026. The most important one of the incentives under the program is the exemption from the corporate income tax of the investments in the Special Economic Zones. Investments may be exempt from corporate income tax by 100% unless they exceed the regional aid intensity. In addition, when the tax exemption is around 15-20% of the investment amount in similar implementations in other countries, this rate is reaching 50% in Special Economic Zones in Poland. (Ernst & Young, 2013, p. 35)

Another incentive instrument implemented in Poland is the program entered into force by the Decision of the Council of Ministers in July 2011 to support the projects that are important for the Polish economy. The program covers the period 2011-2020. Grants under the program are distributed to investors by the Ministry of Economic Development. Sustainability of the initiated investments is aimed with the incentive mechanism. For this reason, a time condition is set. It is stipulated that the investment and the newly employed persons must be continued for at least 5 years. These periods have been set as 3 years for SMEs. The program aims to attract foreign investments in high technology sectors such as automotive, electronics, aviation, biotechnology, R & D. There are two types of incentives in the program. The first one is incentive given by considering the amount of investment. In this kind of incentive sector, the incentive is applied between 1.5% and 10% of the investment amount considering the employment and investment amount. Differentiation has also been made among sectors and the highest incentive is given to R&D investments. The other type of incentive is the wage support provided to the employee in the investment. The incentive varies from 3200 PLN to 15600 PLN depending on the sector, amount of employment and investment amount. (PAIH, 2017, p. 121-122)

In addition to these incentive mechanisms, there is also a real estate tax exemption incentive offered by local governments in Poland. This tax exemption applies to new investments in that region. Land, buildings and structures belonging to these investments are in the scope of this incentive mechanism. When the local governments implement the mentioned incentive system, the ceiling amounts determined by the national government are not exceeded. Up to the present, the ceiling amount is set at 200000 Euro for 3 fiscal years. (Ernst & Young, 2017, p.28)

The last of the incentive instruments implemented in Poland is the incentives provided by the Local Labor Offices. Programs implemented by Local Labor Offices include training activities, financial incentives and intermediation activities. Local Labor Offices offer on-the-job training and technical training for companies to ensure the vocational development of their personnel. When the financial incentives provided by the Local Labor Offices are examined, it is often seen that part or all of the salary payments, social security contributions of the newly recruited personnel is met under certain conditions and time. There is a requirement to sign a contract between the local labor offices and the company for these financial incentives. When financial incentives are provided, it is seen that priority is given to recruitment of personnel who are below 30 years of age, handicapped or with difficult situation. In addition to the salary and social security contributions, the financial support for the newly hired personnel is also provided to the companies in terms of providing the necessary physical environment in the workplace and training programs.

Another support that local labor offices offer to investors and potential employees is intermediary activities between companies and potential employees. This activity includes advertising, career fairs and other events that bring companies and potential candidates close together. (PAIH, 2017, p. 123-124)

When four countries are examined, it is seen that there are developmental differences between their regions. In order to reduce these regional developmental gaps, countries implement different instruments. It is seen that the basis of regional development policy of China and Poland are incentives provided to companies in Special Economic Zones. In Germany, Italy and Poland; the European Union has important studies in terms of regional development. When the examples are examined, it is seen that the incentives generally use tools such as grants, loans, tax exemption, salary support and staff training support. From the sectoral point of view of incentives, it is observed that Germany and Poland give special importance to technology and R & D. It can be said that there are regionally diversified incentive practices in 4 countries.

3. NEW INVESTMENT INCENTIVE SYSTEM OF TURKEY

In this section, incentives and regional development policies in the 9th and 10th Development Plan Periods will be mentioned. Then, the legal regulations that came into force in these periods will be explained in detail.

3.1. RECENT POLICIES ABOUT INVESTMENT INCENTIVES

3.1.1. Ninth Development Plan Period (2007-2013)

The Ninth Development Plan was entered into force with the Official Gazette No. 26215 dated July 1, 2006. The Eighth Development Plan, which is the previous development plan, covered 2001-2005. The year 2006 is not included in any planning period. Accession negotiations between Turkey and the EU have been opened on October 3, 2005. Since 2005, the EU membership perspective has gained importance. Therefore, the ninth development plan was postponed by one year and prepared for 2007-2013 considering the EU fiscal calendar. (SPO, 2006, p. 2)

In the ninth development plan, priority was given to the five key issues mentioned below;

- Increasing Competitiveness,
- Increasing Employment,
- Strengthening Human Development and Social Solidarity,
- Ensuring Regional Development,
- Increasing Quality and Efficiency in Public Services.

The policies of the government in this period in the fields of incentives and regional development are explained in the "Increasing Competitiveness" and "Ensuring Regional Development" sections of the Ninth Development Plan.

The studies that are foreseen to be implemented by the government in the Ninth Development Plan for investment incentives are summarized below;

- Making adjustments to increase selectivity in the system,
- Ensuring the necessary coordination in incentive implementations,
- Adjustment of incentive system with EU and World Trade Organization rules,
- Creating new attraction centers by directing private sector investments to middle developed cities,
- Supporting investments involving R & D and innovative activities.

The studies that are foreseen to be implemented by the government in the Ninth Development Plan for regional development are summarized below;

- Preparation of regional development strategy at national level,
- Preparation of regional development strategies through Development Agencies established in 2006 in NUTS 2 regions,
- Strengthening of transportation, physical and social infrastructures by identifying attraction centers with potential for development,
- Reviewing the public sector's regional incentive policies considering development levels,
- Prioritizing innovative, competitive, value-added sectors in regions,
- Revision of the incentive system, taking into account regional and sectoral priorities.

As a result, it is seen that the Turkish government attaches importance to relations with the EU during the ninth development plan period. In addition, it is understood that investments in innovation, R & D and technology are given importance in the context of incentive policies. In the field of regional development, the investment incentive system and Development Agencies are seen as prominent tools.

Activities about regional development undertaken during ninth development plan period are summarized below; (OECD, 2014, p. 282)

- The Supreme Regional Development Council and the Regional Development Committee have been established to ensure coordination at the central level in regional development.

- In addition to the Southeastern Anatolia Project Regional Development Administration, three Regional Development Administrations have been established. These are the Konya Plain Project, the Eastern Anatolia Project and the Eastern Black Sea Project Regional Development Administrations.
- The establishment of Development Agencies in 26 NUTS-2 regions and Investment Support Offices in 81 provinces has been completed and these institutions started to operate.

Activities about investment incentives undertaken during ninth development plan period are summarized below; (MoD, 2013, p. 83)

- Regional and large investments were given priority with the investment incentive system that was revised in 2009.
- With the amendment made in 2012, strategic investments were included in the scope of investment incentive system. In 2012, the regional incentives were rearranged according to the six-region system in the Social and Economic Development Index that is prepared by Ministry of Development in 2011.
- Within the scope of the EU harmonization process, Law No. 6015 on the Monitoring and Control of State Aids was accepted and published on 23 October 2010 in the Official Gazette No. 27738. In addition, the State Aids Monitoring and Supervision Board was established with the aim of monitoring and reviewing the appropriateness of state aids by law.

3.1.2. Tenth Development Plan Period (2014-2018)

The Tenth Development Plan was entered into force with the Official Gazette No. 28699 dated July 6, 2013. In the tenth development plan, priority was given to the four key issues mentioned below; (MoD, 2013, p. 28)

- Qualified People, Strong Society,
- Innovative Production, Stabilized High Growth,
- Liveable Spaces, Sustainable Environment,
- International Cooperation for Development.

When the main agenda of the tenth development plan listed above and those in the ninth plan are compared, it can be seen that the tenth development plan is distinguished from the ninth plan. Environmental and international cooperation issues are given importance in the tenth development plan. Issues related to investment incentives are explained in the section "Innovative Production, Stabilized High Growth" and regional development policies are explained in "Liveable Spaces, Sustainable Environment" in the plan.

Unlike previous development plans, Priority Transformation Programs were prepared in order to solve structural problems in the tenth development plan. In these programs, multisectoral problems were identified and tasks were given to the relevant public institutions for their solution. There are issues related to investment incentives in the Program for the Improvement of Business and Investment Environment that is No. 7 program from the priority transformation program of 25.

3.2. DEVELOPMENTS IN THE INCENTIVE SYSTEM IN TURKEY

3.2.1. Law No. 5084

Law No. 5084 on Investments and Employment and Amendments to Certain Laws was adopted on January 29, 2004 and published in the Official Gazette No. 25365 dated February 6, 2004.

By this law, it is aimed to make progress in investment and employment in certain provinces with the incentive instruments listed below; (The Law No. 5084, 2004)

- Income Tax Withholding Incentives,
- Employer's National Insurance Contribution Incentives,
- Investment Land Allocation without Charge,
- Energy Support.

Incentives within the scope of the law were applied in some provinces in Turkey. While determining these provinces, 2001 GDP per capita values, 2003 Social and Economic Development Index Values and Development Priority Region program were taken into consideration. Although there are changes in the provinces within the scope of this law, the final version is shown on the map below;

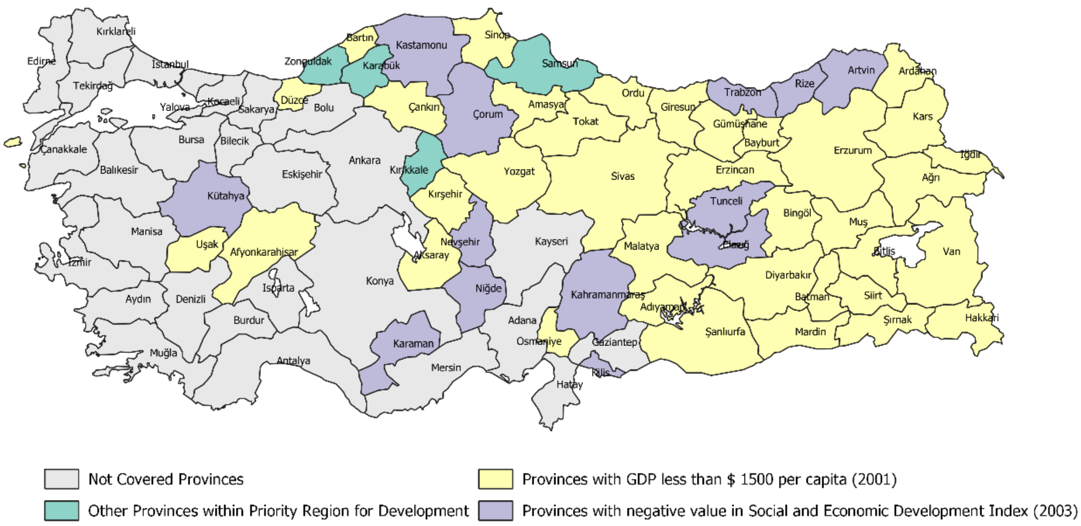


Figure 3: Map of the Final Version of the Incentive Implementation under the Law Numbered 5084 (The Law No. 5084, 2004)

In the map shown in Figure 3, the provinces with GDP less than $ 1500 per capita or the provinces with negative value in the Social and Economic Development Index can benefit from all types of incentives. Other provinces within the priority region for development can benefit only from the incentive of investment land allocation without charge. In other provinces, there is no incentive implementation under this law. In addition, Bozcaada and Gökçeada districts of Çanakkale can benefit from all types of incentives. As it can be seen from the map, it is concluded that the incentives mentioned in the law are generally implemented in the provinces in the east, southeast and black sea regions. In the western regions, only Uşak, Afyonkarahisar, Kütahya provinces and Bozcaada and Gökçeada districts are within the scope of the incentive implementation.

The scope of the types of incentives recognized to investors is summarized below;

3.2.1.1. Income Tax Withholding Incentives

Provided that a company employs at least ten workers in the above-stated provinces,

- The absolute amount of income tax on the wage of the workers is waived, if the workplace is located in organized industrial zones or industrial zones,
- 80 percent of the income tax on workers' wages is waived if a company is located outside the organized industrial zone or industrial zone.

3.2.1.2. Employer's National Insurance Contribution Incentives

Provided that the company employs at least ten workers in the above-stated provinces,

- The absolute amount of employer’s national insurance contribution is waived, if the workplace is in organized industrial zones or industrial zones,
- 80 percent of the employer’s national insurance contribution is funded by the Treasury if a company is located outside the organized industrial zone or industrial zone.

3.2.1.3. Investment Land Allocation without Charge Incentives

Provided that the company employs at least ten workers in the above-stated provinces, the ownership of the land belonging to the Treasury, annexed budgets institutions, municipalities and special provincial administrations could be transferred to investors without any charge. In order to benefit from such support, investors are required to meet the following requirements. In order to benefit from such support, investors are required to meet the following requirements;

- Employment requirements for five years,
- Completion of investment in the foreseen period.

With the Law No. 5838 dated February 18, 2009, the incentive that is the investment land allocation without charge was abolished.

3.2.1.4. Energy Support

Provided that the enterprise employs at least ten workers in the below-mentioned sectors in the above-mentioned provinces, 20 percent of electricity costs are covered by the Treasury. Sectors within the scope of the support are listed below;

- Stockbreeding,
- Agriculture,
- Manufacturing Industry,
- Tourism,
- Education,
- Health.

If the enterprise employs the number of workers above the employment requirement in the legislation, the rate of energy support can be increased.

It can be said that these incentives mostly focus on employment increase. Although this law was still valid, changes were made in the incentive implementation in 2009. Desired results could not be obtained from the implementation of this law between the years of 2004 and 2009. The fact that incentives do not have sectoral and regional priorities and continuous changes within the scope of incentives can be considered as the reason for this situation. These shortcomings have created the need for a new incentive system that takes into account regional and sectoral priorities. In 2009, the new incentive system was introduced. (Dinler, 2016, pp. 341-342)

3.2.2. The Decree of the Council of Ministers No. 2009/15199

The need for a new incentive system, which takes into account regional and sectoral priorities, and the end of the incentive implementations under the Law No. 5084 induce the emergence of a new incentive system in 2009. (Eser, 2011, p. 135) The Decree of the Council of Ministers numbered 2009/15199 on State Aids in Investments was published in the Official Gazette dated July 16, 2009 and numbered 27290. According to the Decree, it can be said that the incentive system is focused on the following issues;

- High Value Added Investments,
- Increase in Production and Employment,
- Sizable Investments involving R&D,
- Foreign Direct Investments,
- Reducing development gap between regions,
- Eco-investing.

These incentives program was implemented in all the cities in Turkey. In order to reduce the development gap between the regions, NUTS-2 regions in the Decree of the Council of Ministers dated February 28, 2002 and numbered 2002/4720 were classified into four groups considering socioeconomic development levels. Thus, it is aimed to provide more incentives to investments in less developed regions. Aforementioned classification is shown in Figure 4.

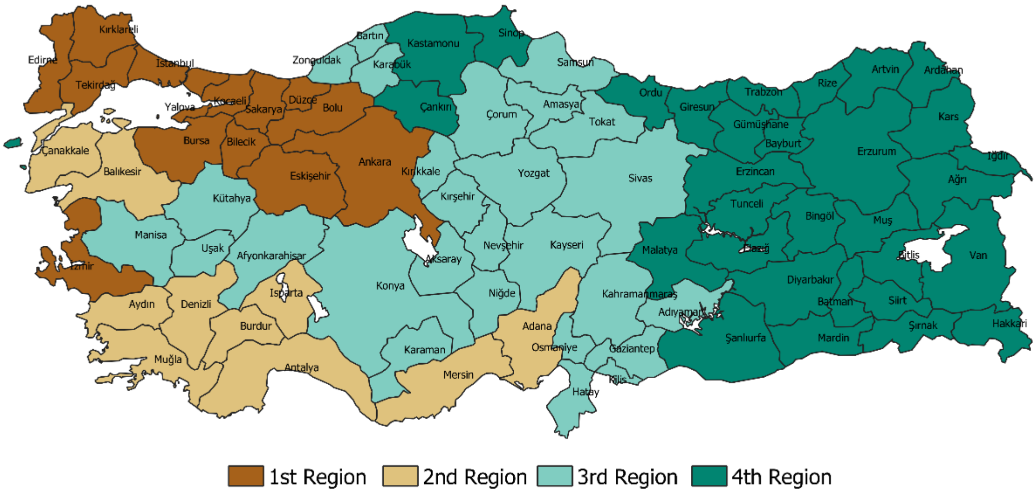


Figure 4. The Map of the Incentive Implementation under the Decree of the Council of Ministers No. 2009/15199 (Decree of the Council of Ministers No. 2009/15199, 2009)

On the map, while the cities in the fourth group indicate the provinces in less developed regions, the first group refers to the developed NUTS-2 regions. When the map is examined, it is observed that Eastern Anatolia, Southeastern Anatolia, Black Sea and Central Anatolia regions are underdeveloped and Marmara, Aegean and Mediterranean regions are more developed.

In the 2009 incentive system, it was aimed to support different sectors by region. The sectors to be supported on the basis of regions are given below; (Dinler, 2016, p. 343)

- In provinces in the first region; investments requiring high technology such as motor vehicles, electronics, pharmaceuticals, machinery manufacturing,
- In provinces in the second region; capital intensive investments such as textiles, mineral products, paper, food manufacturing,
- In provinces in the third and fourth region; labor-intensive investments such as agriculture, apparel, manufacturing industry and investments in the service sector such as tourism, health and education.

Within the scope of this incentive implementation, regional and large-scale investments can be supported. The incentives provided to investors within the scope of implementation are listed below; (Decree of the Council of Ministers No. 2009/15199, 2009)

- Customs Duty Exemption,
- Value Added Tax Exemption,
- Tax Reduction,
- Employer's National Insurance Contribution Support,
- Investment Land Allocation,
- Interest Support,
- Transportation Support for Textile, Leather and Apparel Sectors.

The Table 23 shows which investments will benefit from which types of support.

Investments / Incentive Types	First Region	Second Region	Third Region	Fourth Region	Large-Scale
Customs Duty Exemption	✓	✓	✓	✓	✓
Value Added Tax Exemption	✓	✓	✓	✓	✓
Tax Reduction	✓	✓	✓	✓	✓
Employer's National Insurance Contribution Support	✓	✓	✓	✓	✓
Investment Location Allocation	✓	✓	✓	✓	✓
Interest Support	–	–	✓	✓	–
Transportation Support for Textile Sectors	–	–	–	✓	–

Table 23: The table showing which investments can benefit from which types of incentives under the Decree of the Council of Ministers No. 2009/15199 (Decree of the Council of Ministers No. 2009/15199, 2009)

In order for the investments to benefit from the incentives, there is a requirement of minimum TL 1.000.000 fixed investment in the 1st and 2nd regions and a minimum TL 500.000 fixed investment in the 3rd and 4th regions. In addition, there may be special requirements above these amounts depending on the investment subject. The exception to this condition is “Transportation Support for Textile, Leather and Apparel Sectors". This type of support does not require minimum fixed investment amount.

The types of incentives within the Decree of the Council of Ministers are explained below.

3.2.2.1. Customs Duty Exemption

Within the scope of the incentive implementation, the import of the goods listed below are exempt from customs duty during the investment period;

- Investment goods under incentive certificates,
- Disassembled machinery and equipment in automobile investments,
- Hull used in shipbuilding.

3.2.2.2. Value Added Tax Exemption

Import and delivery of machinery and equipment within the scope of incentive certificate can be exempt from Value Added Tax.

3.2.2.3. Tax Reduction

Corporation income taxes and income taxes to be applied to regional investments and large-scale investments are discounted at the rates indicated in the Table 24. These discounts continue until they reach the investment contribution rate.

	Regional Investments		Large-Scale Investments	
Regions	Investment Contribution Rate (%)	Tax Reduction Rate (%)	Investment Contribution Rate (%)	Tax Reduction Rate (%)
I	10	25	25	25
II	15	40	30	40
III	20	60	40	60
IV	25	80	45	80

Table 24. Tax Reduction Rates within the scope of the Incentive Implementation under the Decree of the Council of Ministers No. 2009/15199 (Decree of the Council of Ministers No. 2009/15199, 2009)

Investors who start early investment are subject to more tax deduction than the amounts shown in Table 24. In the Decree of the Council of Ministers, the deadline to start the investment in order to benefit from this additional tax deduction is stated as December 31, 2010.

3.2.2.4. Employer's National Insurance Contribution Support

The part of the employer’s national insurance contribution that corresponds to the minimum wage to be paid for the personnel employed in large-scale or regional investments with incentive certificate shall be covered by the Government for the periods specified in Table 25. In this kind of support, higher incentives were offered to investors who started early to invest in a similar way to tax deduction. Here too, investors who had made their investments early have the opportunity to benefit from employer’s national insurance contribution support for a longer period.

Regions	Investments starting until December 31, 2010	Investments starting after December 31, 2010
I	2 Years	-
II	3 Years	-
III	5 Years	3 Years
IV	7 Years	5 Years

Table 25: Durations in Employer's National Insurance Contribution Support under the Decree of Council of Ministers No. 2009/15199 (Decree of the Council of Ministers No. 2009/15199, 2009)

3.2.2.5. Investment Land Allocation

For large-scale or regional investments with an incentive certificate, an investment land may be allocated within the framework of the rules and procedures set by the Ministry of Finance.

3.2.2.6. Interest Support

The amount of interest of the bank credits to be paid by the Government in the regional, R & D or environmental investments is shown in Table 26.

Investments	Loans in TL	Loans in Foreign Currency
In First Region	-	-
In Second Region	-	-
In Third Region	3 Points	1 Point
In Fourth Region	5 Points	2 Points
R&D and Environmental (All Regions)	5 Points	2 Points

Table 26: Interest Support Rates under the Decree of Council of Ministers No. 2009/15199 (Decree of the Council of Ministers No. 2009/15199, 2009)

3.2.2.7. Transportation Support for Textile, Leather and Apparel Sectors

Companies, which are operating in the textile, apparel and leather sectors in the 1st and 2nd regions and which move to the 4th region and employ at least 50 employees, can benefit from the following incentives;

- Corporate income or income tax is applied to these companies at a discount of 75 percent for 5 years.
- Investment land can be allocated.
- The proportion of the Employer's National Insurance Contribution, which corresponds to the minimum wage, is fully covered by the Government for 5 years.
- Transportation expenditure can be covered by the Government.

With the Decree of the Council of the Ministers No. 2009/15199, the incentive system that takes into account regional and sectoral priorities has been implemented. Sectors to be supported are differentiated by regions. While investments with high technology were supported in regions with strong industrial infrastructure, the development of labor-intensive sectors was given importance in regions with weak industrial infrastructure. Regional selectivity was also implemented with this incentive system. In this context, the following types of support were applied by differentiating between regions;

- Tax Reduction,
- Employer’s National Insurance Contribution Support,
- Interest Support,
- Transportation Support for Textile, Leather and Apparel Sectors.

While the level of development of the regions was determined, the arrangement according to the NUTS-2 regions instead of the provinces decreased the effectiveness of the implementation. Because there are provinces at different level of development in the same NUTS-2 region. Thus, investments are concentrated in the relatively more developed provinces in the same NUTS-2 region. Thus, it led to the failure to achieve the desired results in terms of the policy of reducing regional development differences. There was a need to reorganize the incentive system.

3.2.3. The Decree of the Council of Ministers No. 2012/3305

In order to improve the incentive system, which was started to be implemented in 2009, amendments were made in 2012 and the incentive system in force was adopted. (Dinler, 2016, p.344) The new incentive system entered into force with the Decree of the Council of Ministers no. 2012/3305 published in the Official Gazette numbered 28328 and dated June 19, 2012. The Decree of the Council of Ministers states that the incentive system was implemented by the Ministry of Economy. The institution implementing the incentive system was amended in 2018. With the Presidential Decree No. 1 published in the Official Gazette No. 30474 dated July 10, 2018, the incentive system is implemented by the Ministry of Industry and Technology. With this incentive system, it is seen that the investments listed below are given priority;

- High Value-Added Investments,
- Investments that increase production and employment,
- Investments with high R & D content,
- Investments that contribute to reduce regional development disparities,
- Investments in clustering and environmental protection.

In the incentive system, there are four different implementations: general, regional scale, large scale and strategic investment incentives. Table 27 shows which incentive tools are presented to investors in the context of the mentioned implementation.

Implementation Types / **Incentive Tools**	General Incentives	Regional-Scale Incentives	Large – Scale Incentives	Strategic Investment Incentives
Customs Duty Exemption	✓	✓	✓	✓
Value Added Tax Exemption	✓	✓	✓	✓
Income Tax Withholding Support	✓	✓	✓	✓
Employer's National Insurance Contribution Support	✓	✓	✓	✓
Tax Reduction	-	✓	✓	✓
Investment Location Allocation	-	✓	✓	✓
Interest Support	-	✓	-	✓
Insurance Premium Support	-	✓	✓	✓
Value Added Tax Refund	-	-	-	✓

Table 27: The table showing which incentive tools are presented in the context of the incentive implementations under the Decree of the Council of Ministers No. 2012/3305 (Decree of the Council of Ministers No. 2012/3305, 2012)

When the incentive instruments in Table 27 are analyzed, it can be seen that the investments supported under the strategic investment incentive implementations can benefit from all the incentive tools.

Within the scope of the regional incentive implementation, provinces were classified into six groups by considering the Social and Economic Development Index published by the Ministry of Development in 2011. The distribution of provinces according to development differences is shown in Figure 5. According to this, the most developed provinces are in the 1st degree developed region, while the least developed provinces are located in the 6th degree developed region.

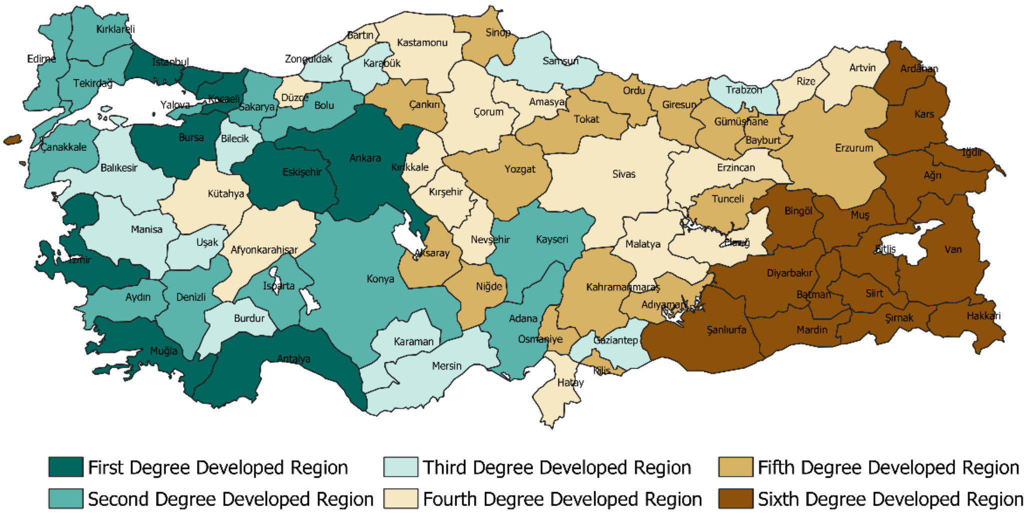


Figure 5: The Map of the Incentive Implementation under the Decree of the Council of the Ministers No. 2012/3305 (Decree of the Council of the Ministers No. 2012/3305, 2012)

In order for investments to benefit from the incentives, a minimum investment requirement is TL 1.000.000 in the first and second degree development regions, and TL 500.000 in the third, fourth, fifth and sixth degree development regions. As can be seen from the map, while the provinces in the Eastern Anatolian and Southeastern Anatolian regions are less developed, the provinces in the Western regions are relatively developed. In order to reduce regional development disparities, when more incentives are provided to investments in less developed regions, less incentives are provided to provinces in developed regions.

For the projects to be evaluated within the scope of strategic investments, a minimum investment of TL 50.000.000 and the production of products with high dependence on imports is required for investment.

If prior investments listed below are made in provinces other than the sixth region, they can be benefited from the incentives in fifth region. In the case of prior investments in the sixth region, investors can benefit from incentives in sixth region incentives.

- Investments in cargo or passenger transport by sea,
- Railway investments,
- Test centers and wind tunnel investments,
- Tourism accommodation investments in Cultural and Tourism Protection and Development Regions,
- International fair investments with a minimum indoor space of fifty thousand square meters,
- Investments in production of biotechnological drugs, oncology drugs and blood products with a minimum amount of TL 20.000.000,
- Investments in defense, aviation and space with a minimum amount of TL 20.000.000.
- Mining extraction or processing investments,
- Production of products developed as a result of R & D.

Furthermore, if investments in large-scale and regional incentives are carried out in the Organized Industrial Zones or carried out on a sectoral cooperation, the investments can benefit from the incentives of the region at a lower development level. (Gökmen & Kartaloğlu, 2012, pp. 44-45) In this way, it is seen that it is aimed to develop clusters and organized industrialization in provinces. (Acar & Çağlar, 2012, p. 5)

The types of incentives within the Decree of the Council of Ministers are explained below.

3.2.3.1. Customs Duty Exemption

Within the scope of the incentive implementation, the import of the goods listed below are exempt from customs duty during the investment period;

- Investment goods under incentive certificates,
- Disassembled machinery and equipment in automobile investments,
- Hull used in shipbuilding.

3.2.3.2. Value Added Tax Exemption and Refund

Import and delivery of machinery and equipment within the scope of incentive certificate can be exempt from Value Added Tax.

Building and construction expenditures of strategic investments with fixed investment amount over TL 500.000.000 can benefit from VAT Refund.

3.2.3.3. Interest Support

The portion of interest to be paid for up to 75 percent of the fixed investment amount of the investments within the scope of regional, strategic, R&D and environmental investment incentives can be covered by the Government. Within the scope of regional incentives, this support is only available in regions 3, 4, 5 and 6. The amount of interest of the bank credits to be paid by the Government in the regional, strategic, R&D or environmental investments is shown in Table 28.

Investments	Loans in TL	Loans in Foreign Currency
In Third Region	3 Points	1 Point
In Fourth Region	4 Points	1 Point
In Fifth Region	5 Points	2 Points
In Sixth Region	7 Points	2 Points
Strategic, R&D, Environmental (All Regions)	5 Points	2 Points

Table 28: Interest Support Rates under the Decree of the Council of the Ministers No. 2012/3305 (Decree of the Council of the Ministers No. 2012/3305, 2012)

The amount of interest support to be provided for investments shall not exceed the amounts in Table 29.

Investments	Maximum Amount of Interest Support
In Third Region	TL 500.000
In Fourth Region	TL 600.000
In Fifth Region	TL 700.000
In Sixth Region	TL 900.000
R&D, Environmental	TL 500.000
Strategic	TL 50.000.000

Table 29: Maximum Amount of Interest Support under the Decree of the Council of Ministers No. 2012/3305 (Decree of the Council of the Ministers No. 2012/3305, 2012)

3.2.3.4. Employer's National Insurance Contribution Support

The part of the employer's national insurance contribution that corresponds to the minimum wage to be paid for the personnel employed in large-scale, strategic or regional investments with incentive certificate shall be covered by the Government for the periods specified in Table 30. In this kind of support, more incentives were offered to investors who started early to invest in a similar way to tax deduction. Here too, investors who had made their investments early have the opportunity to benefit from employer's national insurance contribution support for a longer period.

Regions	Investments starting until December 31, 2013	Investments starting after December 31, 2013
I	2 Years	-
II	3 Years	-
III	5 Years	3 Years
IV	6 Years	5 Years
V	7 Years	6 Years
VI	10 Years	7 Years

Table 30: Durations in Employer's National Insurance Contribution Support under the Decree of the Council of Ministers No. 2012/3305 (Decree of the Council of the Ministers No. 2012/3305, 2012)

For Strategic Investments, these durations shall be applied for a period of ten years in the sixth region and for a period of seven years in other regions.

Unlike the incentive system which was started to be implemented in 2009, the employer's national insurance contribution support in this incentive system can not exceed a certain percentage of the fixed investment amount that is given in Table 31.

	Regional Incentives	**Large- Scale Investment Incentives**	**Strategic Investment Incentives**
Regions	**Employer's Nation Insurance Contribution Support/Fixed Investment Amount (%)**		
1	10	3	15
2	15	5	15
3	20	8	15
4	25	10	15
5	35	11	15
6	50	15	15

Table 31: Maximum Amounts of the Employer's National Insurance Contribution Support under the Decree of the Council of Ministers No. 2012/3305 (Decree of the Council of the Ministers No. 2012/3305, 2012)

3.2.3.5. Insurance Premium Support

In provinces within the sixth region, the portion of the insurance premium employee's share corresponding to the minimum wage in the investments under the scope of large-scale, strategic or regional incentive applications may be covered by the Government for a period of ten years.

3.2.3.6. Income Tax Withholding Support

For investments in the scope of incentive certificates for the sixth region, income tax calculated on the part of the workers' wages corresponding to the minimum wage shall be cancelled from the tax accrued for a period of ten years.

3.2.3.7. Tax Reduction

Only the regional, large scale and strategic investments can benefit from the tax reduction incentives. Corporation income taxes and income taxes are discounted at the rates indicated in the Table 32. These discounts continue until they reach the investment contribution rate. For strategic investments, tax reduction rates is 90% and the investment contribution rate is 50% in all regions.

	Regional Investments		**Large-Scale Investments**	
Regions	**Investment Contribution Rate (%)**	**Tax Reduction Rate (%)**	**Investment Contribution Rate (%)**	**Tax Reduction Rate (%)**
I	10	30	20	30
II	15	40	25	40
III	20	50	30	50
IV	25	60	35	60
V	30	70	40	70
VI	35	90	45	90

Table 32: Tax Reduction Rates within the scope of the Incentive Implementation under the Decree of the Council of Ministers No. 2012/3305 (Decree of the Council of the Ministers No. 2012/3305, 2012)

Investors who start early investment are subject to more tax deduction than the amounts shown in Table 32. In the Decree of the Council of Ministers, the deadline to start the investment in order to benefit from this additional tax deduction is stated as December 31, 2013.

When these ratios are examined, it is seen that the most support opportunities are provided to strategic, large-scale and regional investments, respectively.

3.2.3.8. Investment Land Allocation

Investment land can be allocated to investments that benefit from large-scale, strategic and regional investment incentives.

4. EFFICIENCY OF THE CURRENT INCENTIVE SYSTEM

In this section, the effectiveness of the incentive system executed in 2012 will be analyzed through comparison with the incentive system implemented between 2009 -2012. In this context, the methodology used in this thesis and previous studies on the same subject will be explained. Then, analysis of the incentive system will be carried out and the results will be interpreted.

4.1. METHODOLOGY

In this thesis, Data Envelopment Analysis method will be used in order to measure the effectiveness of incentive system executed in 2012. Data Envelopment Analysis (DEA), which is based on the principles of linear programming, is a technique designed to measure the relative efficiency of business or economic organizations responsible for converting input into output.

The emergence of Data Envelopment Analysis is based on the concept of technical efficiency put forward by Farrell. Farrell (1957, pp. 254-255) determined price efficiency and technical efficiency as efficiency measures. While the technical efficiency measures the success of the firm in producing maximum output from the given input set, the price efficiency measures the effectiveness of the company when selecting inputs. (Farrell, 1957, p. 259) Data envelopment analysis was emerged with the suggestion of the boundary production function proposed by Farrell. Data envelopment analysis has reached its current status through the work of Charnes, Cooper and Rhodes (1978).

According to this analysis method, the efficiency is calculated as the ratio of the weighted sum of the outputs to the weighted total of the inputs, as can be seen in the equation (1). This method is based on the assumption of constant returns to scale. In the equation, (y_i) and (x_i) represent outputs and inputs respectively. In addition, (u) and (v) represent the vector of output weights and input weights, respectively. (Karacabey, 2001, p.4)

$$\text{Efficiency} = \frac{\text{Weighted Sum of Outputs}}{\text{Weighted Sum of Inputs}} = \frac{u'Yi}{v'Xi} \qquad (1)$$

The purpose of all rational units is to maximize the value of efficiency in the above equation. Charnes, Cooper and Rhodes (1978, p. 430) defined the formulation for efficiency measurement as described in the equation (2). This model is called the CCR model.

$$\text{Max } Z = \frac{u'Yi}{v'Xi}$$

$$\text{st} \quad \frac{u'Yj}{v'Xj} \leq 1 \qquad j = 1,2,3 \ldots. N \qquad (2)$$

$$u,v \geq 0$$

When unit (i) has the maximum efficiency, the model in the formula is repeated for each unit, and the other units' efficiencies will be less than or equal to one. If $v^{I}x_{i} = 1$ constraint is added in order to facilitate the implementation of this model, the model will be transformed into equation (3). (Karacabey, 2001, p. 5)

$$\text{Max } Z = u^{I}y_{i}$$

$$\text{st} \quad v^{I}x_{i} = 1 \qquad (3)$$

$$u^{I}y_{j} - v^{I}x_{j} \leq 0 \qquad j = 1,2,3 \ldots N$$

$$u, v \geq 0$$

The model in equation (4) may also be used in place of the model mentioned in formula (3). In this model, Ө is the real number, S is a vector, Y is the output matrix, and X is the input matrix.

$$\text{Min } Z = \Theta$$

$$\text{st} \quad -y_{i} - YS \geq 0 \qquad (4)$$

$$\Theta x_{i} - XS \geq 0$$

$$S \geq 0$$

Banker, Charnes and Cooper (1984, pp. 1082-1085) have developed the above model to take into account variable returns to scale. Accordingly, the model is updated as in equation (5). In this model, N1 is a vector of N * 1 size with all elements 1. This model is called BCC model.

$$\begin{aligned}
&\text{Min } Z = \theta \\
&\text{st} \quad -y_i - YS \geq 0 \qquad\qquad (5) \\
&\qquad \theta x_i - XS \geq 0 \\
&\qquad N1'S = 1 \\
&\qquad S \geq 0
\end{aligned}$$

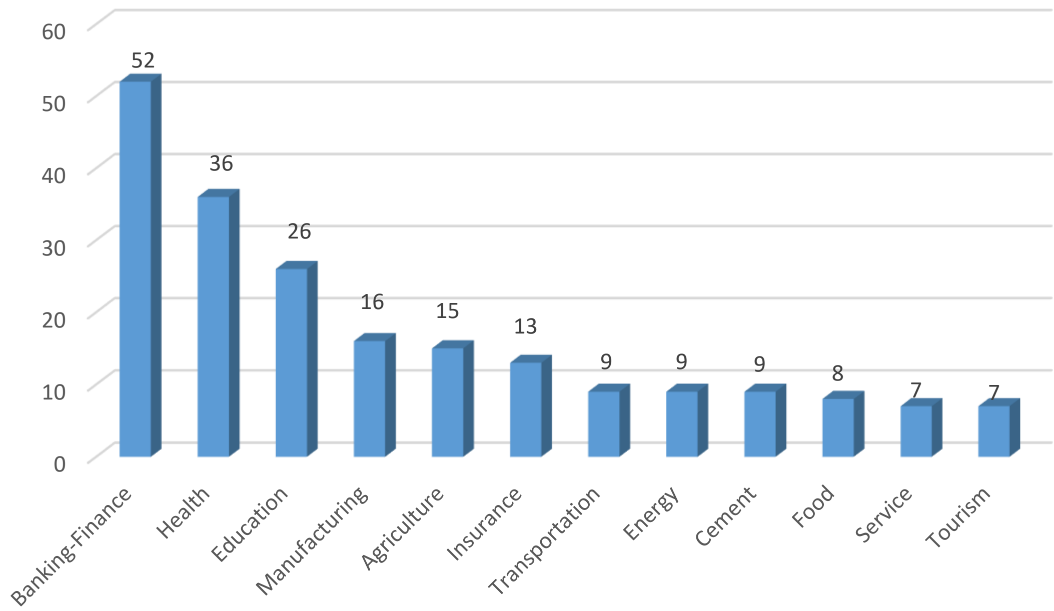
There are many advantages of using the data envelopment analysis method in scientific studies which are listed below; (Sarı, 2015, pp. 15-16)

- It can be used in the measurement of efficiency with multiple input and output situations,
- There is no need to make various transformations to measure inputs and outputs in the same way,
- It allows the units whose efficiencies are examined to be compared with the units having full efficiency.

There are also disadvantages in the use of data envelopment analysis which are listed below; (Sarı, 2015, p. 16)

- As the analysis is very sensitive to measurement errors and variable selection, there may be deterioration in the measurement,
- There is difficulty in applying statistical hypothesis tests to the analysis results,
- Solving large-sized data with this analysis takes time.

Data envelopment analysis is often used in scientific studies in various fields in economies. When scientific studies using data envelopment analysis are examined, most studied sectors are banking-finance, health, education, agriculture and transportation. (Liu, Lu, Lu,& Lin, 2013, p. 901) Sectoral distribution of the studies using data envelopment analysis in Turkey between 2000 and 2013 are shown in Graph 3.



Graph 3: Sectoral distribution of scientific studies using data envelopment analysis in Turkey (2000-2013) (Atıcı, Şimşek, Ulucan, & Tosun, 2016, p. 16)

Data envelopment analysis is also used in studies related to the effectiveness of public policies. In particular, it is often used to measure the effectiveness of regional development policies. There are various studies on this issue in Turkey and in the world.

Woo (2007) analyses efficiency of South Korea’s Regional Development Program of Development-promoting Area (RDPDA) using data for 1994-2005 period. The program has been implemented in Korea since 1994 with the aim of developing underdeveloped regions via infrastructure, culture and tourism projects. The program has been implemented in 49 regions and 24 regions where the data have been reached have been included in the analysis.

In Woo's study (2007), data envelopment analysis was used to determine the efficiency value. Financial resources as a result of the local and private investments and money from the central budget are determined as input. The size of constructed area and the length of constructed road are determined as output. As a result of the analysis, the program was efficient in 4 out of 24 regions. In the remaining 20 regions, the efficiency value was lower than 1. As a result of the study, it was concluded that more pecuniary resources should be allocated to the inefficient regions. (Woo, 2007, pp. 33-40)

4.2. LITERATURE REVIEW

Several studies used data envelopment analysis to measure the efficiency of public policy in Turkey. Many studies have also been carried out on the efficiency of the regional development policies and investment incentive system which is the subject of this thesis. In this section, the studies conducted on the efficiencies of investment incentives in Turkey are examined.

Çiftçi (2007) analyses the investment incentives for the period between 1980 and 2007. While the data of real fixed investment amount in the incentive documents is defined as input, employment data is defined as output. The provinces are divided into four groups according to their socioeconomic development status. In this study, the efficiency of the incentive system at the regional level was measured. Efficiency measurements have been made on an annual basis, and evaluations have been made for the ten-years periods. In less developed regions, it was concluded that the investment incentive system is more effective on employment compared to advanced regions. When the periods are compared, it is concluded that the incentive system is more efficient in the 1980-1989 period. (Çiftçi, 2007, pp. 12-21)

Çiftçi and Koç (2013) analyses the incentive policies using data for 1980 and 2011 period. While the data of real fixed investment amount in the incentive documents is defined as input, employment data is defined as output. The provinces are divided into four groups according to their socioeconomic development status. In this study, the efficiency of the incentive system at the regional level was measured. Efficiency measurements have been made on an annual basis, and evaluations have been made for the ten-years periods. In less developed regions, it was concluded that the investment incentive system is more effective on employment compared to advanced regions. When the periods are compared, it is concluded that the incentive system is more efficient in the 1980-1989 period. (Çiftçi & Koç, 2013, pp. 19-37)

Bakirci, Ekinci and Şahinoğlu analyses the regional development policies for the period between 2007 and 2012. The size of the space consists of 12 NUTS-1 regions. Data envelopment analysis was used as a method in the study. The regional distribution of public investments and investment incentives were determined as input variables. Regional employment levels in service, agriculture and industry sectors are determined as output variables. Public investments and investment incentive system seem to be fully efficient on employment across the country in 2010 and 2012. When the situation is examined on regional basis, it is seen that the public policy instruments mentioned are generally efficient. In particular, public investments and the incentives provided in the Central Anatolia region, which is the TR7 region, except for 2009, are fully efficient on employment. (Bakırcı, Ekinci & Şahinoğlu, 2014, pp. 282-296)

Şengül, Eslemian and Eren (2013) analyses economic activities of the regions of level 2 according to statistical regional units classification (NUTS) in Turkey for the period 2007-2008. 24 of the 26 NUTS-2 regions in Turkey were selected for the geographical units to be analyzed. In the study, public investments per capita, investments with incentive certificates and total bank loans were determined. Gross value added, employment created by incentive certificates, number of opened work places and foreign trade balance were defined as output. In this study, data envelopment analysis was chosen as a method to find the economic activities of the regions. Tobit model was used to measure the effect of input-output variables on economic efficiency. According to the results of the data envelopment analysis, 11 of the 24 regions achieved economic efficiency in both 2007 and 2008. 6 of the remaining 13 regions failed to provide efficiency in both years. The remaining 7 regions was efficient for only one year. When evaluated on yearly basis, 13 regions were economically efficient in 2007 and 16 regions were efficient in 2008. (Şengül, Eslemian & Eren, 2013, pp. 76-96)

Aydemir (2002) analyses the regional competitiveness for the period 1986-1999. 77 provinces were included in the analysis due to lack of data. Public investments between the years 1986-1999, investment incentive certificates between the years 1990-1999 and the credit supports given to SMEs between 1997-1999 were determined as input., Per capita gross domestic product data for the year 2000 was determined as output. When it was analyzed with CCR model, it is seen that 37 provinces are efficient and average efficiency value is 85,72. When analyzed by BCC model, it is seen that 56 provinces are efficient and average efficiency value is calculated as 92. (Aydemir, 2002, pp. 95-108)

In all the studies described above, it is observed that the investment incentive system is generally effective. In some studies, it was found to be efficient in some regions and not efficient in other regions. At the same time, when the investment incentive system as a policy tool across the country is evaluated based on the above result, it is seen that results are seen to be efficient.

This dissertation differs from the above-mentioned studies in several respects. First of all, while above-mentioned studies do not take into account the changes in legislation when evaluating the incentive system, this dissertation compares the existing system started to be implemented in 2012 and the previous incentive system. In addition, while other studies were conducted on a regional basis, the province-based analysis was chosen as the method in this dissertation. In addition, while other studies were conducted on a regional basis, the province-based analysis was chosen as the method in this study. While other studies do not address the current incentive system, this dissertation aims to measure the efficiency of the new incentive system.

4.3. ANALYSIS

In this section, the analysis performed in the study will be explained. Firstly, information about the data and method used in the study will be given. The results of the analysis will then be explained in detail. Finally, detailed comments on the results will be made.

4.3.1. Data and Sample

The main purpose of this study is to measure the efficiency of the regional investment incentive system, which came into force in 2012, by comparing it with the incentive system implemented between 2009 and 2012. Data envelopment analysis was used to achieve this purpose. CCR model was used as a method in Data Envelopment Analysis.

In this study, provincial based input and output values are used. The literature review was taken into consideration when determining input and output variables. The total amount of investments supported by the incentive system on an annual basis and the employment that are expected to be created with these investments were determined as input variables. province-based employment rate was also determined as output. The reason for the expected employment as a result of the incentives provided was chosen as input is that it is able to directly affect the increase in employment rate. The size of the investments supported by incentives is chosen as input since the investment to be realized through the incentives in the region contributes to the employment increase indirectly due to the synergy and economic mobility it will create in the region as well as its direct effect on employment. The reason why employment rate is chosen as output is that it is one of the important indicators showing the situation in the economy. In the literature, the per capita GDP or employment rate is generally selected as the output when measuring the efficiency of the investment incentives. As there are many factors affecting the GDP data, employment rate data is selected as output.

2009-2013 period was selected as the period to be analyzed. The reason for choosing the period to be analyzed as 2009-2013 is that province-based employment data were last released in 2013. Province-based employment rate data were taken from the database of Turkish Statistical Institute (TURKSTAT). The amount of investment created with investment incentives and the employment data foreseen in the province with these investments which are input variables were compiled from the database of the Ministry of Industry and Technology (MoIT). In order to provide more effective results of the analysis, the investment amounts have been converted from the current values to constant values considering 2018 year's prices.

4.3.2. Descriptive Statistics

Before applying Data Envelopment Analysis (DEA), descriptive statistics study was conducted to obtain general information about the data. In this study, mean, minimum value, maximum value, standard deviation and coefficient of variation values were calculated by using Microsoft Excel. The results of the analysis are presented in Table 33.

	Maximum Value	**Minimum Value**	**Mean**	**Standard Deviation**	**Coefficient of Variation**
Foreseen Investment Amount	40399689572	918744,7	1259333519	165810152,4	0,131
Foreseen Employment	20345	11	1648,2	127,7	0,077
Employment Rate	62,8	25	45,204	0,355	0,007

Table 33: Descriptive Statistics of the Data

When the data in Table 33 are analyzed, the highest value of the province based annual investment amount in 2018 prices, which is expected to be realized by the incentives, was approximately TL 40.4 billion in 2010. The lowest investment amount supported by investment incentives in 2018 prices is expected to be realized as approximately TL 920 thousand in 2009 in Kars. In the provinces, an annual average of TL 1.2 billion investment was supported by incentives. When the coefficient of variation, which measures the distribution of the data points around the mean, it is seen that the highest value belongs to the foreseen investment amount data. This reveals that the provinces have received very different sizes of investment according to their economic size, population and attractiveness.

When the employment projected to be supported by the investment incentive system is evaluated, the most employment is expected to be generated in Istanbul in 2013 with 20.345 people. The minimum increase in employment is expected to occur in Ardahan in 2012 with 11 people. The average employment increase in provinces is estimated to be 1.648. The variance in the increase in employment is not as high as the variance in the investment amount.

In the employment rate data, the highest employment rate was observed in Rize in 2009 with 62.8%. The lowest employment rate was observed in Diyarbakır in 2012 with 25%. The coefficient of variation is quite low and there is less variation in the employment rate compared to the input values.

4.3.3. Data Envelopment Analysis

This analysis measures the effect of the provincial based investment incentive system implemented in 2012 on employment by comparing it with the NUTS-2 regions based incentive system implemented between 2009 and 2012. In this context, 2009, 2010 and 2011 years were taken as the period of the incentive system implemented in 2009. The year 2012 and 2013 were taken as the period of the current incentive system, which was introduced in 2012. Data were analyzed annually for each province with the help of Microsoft Excel Solver Add-in.

The efficiency conditions for each province according to years are shown in detail in Table 34. Year-based efficiency values of provinces are given in Appendix 1. As it can be seen in Table 34, efficiency was achieved in 64 provinces in 2009 and therefore the most efficient year was 2009. Efficiency was ensured in 31 provinces in 2011, thus the second most effective year was 2011. Efficiency was ensured in 28 provinces in 2012, 22 provinces in 2013 and 20 provinces in 2010.

Year / Province	2009	2010	2011	2012	2013
Adana	Efficient	Efficient	Not Efficient	Efficient	Not Efficient
Adıyaman	Efficient	Not Efficient	Efficient	Not Efficient	Not Efficient
Afyonkarahisar	Efficient	Not Efficient	Not Efficient	Efficient	Not Efficient
Ağrı	Efficient	Not Efficient	Not Efficient	Efficient	Not Efficient
Aksaray	Efficient	Efficient	Efficient	Not Efficient	Not Efficient
Amasya	Efficient	Not Efficient	Not Efficient	Not Efficient	Not Efficient
Ankara	Efficient	Not Efficient	Not Efficient	Not Efficient	Not Efficient
Antalya	Efficient	Not Efficient	Not Efficient	Not Efficient	Not Efficient
Ardahan	Not Efficient	Not Efficient	Efficient	Efficient	Not Efficient
Artvin	Efficient	Not Efficient	Efficient	Not Efficient	Efficient
Aydın	Efficient	Not Efficient	Not Efficient	Not Efficient	Efficient
Balıkesir	Efficient	Not Efficient	Efficient	Not Efficient	Not Efficient
Bartın	Efficient	Not Efficient	Not Efficient	Not Efficient	Efficient
Batman	Efficient	Efficient	Efficient	Not Efficient	Not Efficient
Bayburt	Not Efficient	Efficient	Efficient	Not Efficient	Efficient
Bilecik	Efficient	Not Efficient	Efficient	Not Efficient	Not Efficient
Bingöl	Efficient	Not Efficient	Not Efficient	Not Efficient	Efficient
Bitlis	Efficient	Efficient	Not Efficient	Not Efficient	Not Efficient
Bolu	Not Efficient	Efficient	Not Efficient	Efficient	Not Efficient
Burdur	Efficient	Not Efficient	Not Efficient	Not Efficient	Not Efficient
Bursa	Efficient	Not Efficient	Efficient	Not Efficient	Efficient
Çanakkale	Efficient	Not Efficient	Not Efficient	Not Efficient	Efficient
Çankırı	Efficient	Not Efficient	Not Efficient	Not Efficient	Not Efficient
Çorum	Efficient	Efficient	Efficient	Not Efficient	Not Efficient
Denizli	Efficient	Efficient	Not Efficient	Not Efficient	Not Efficient

Year / Province	2009	2010	2011	2012	2013
Diyarbakır	Efficient	Not Efficient	Not Efficient	Not Efficient	Not Efficient
Düzce	Not Efficient	Not Efficient	Efficient	Not Efficient	Not Efficient
Edirne	Efficient	Not Efficient	Not Efficient	Not Efficient	Efficient
Elazığ	Efficient	Not Efficient	Efficient	Efficient	Not Efficient
Erzincan	Not Efficient	Not Efficient	Not Efficient	Efficient	Efficient
Erzurum	Not Efficient	Not Efficient	Not Efficient	Efficient	Efficient
Eskişehir	Efficient	Not Efficient	Not Efficient	Not Efficient	Efficient
Gaziantep	Efficient	Not Efficient	Not Efficient	Not Efficient	Not Efficient
Giresun	Not Efficient	Not Efficient	Efficient	Not Efficient	Not Efficient
Gümüşhane	Not Efficient	Efficient	Not Efficient	Efficient	Not Efficient
Hakkari	Not Efficient	Efficient	Efficient	Efficient	Not Efficient
Hatay	Not Efficient	Efficient	Efficient	Not Efficient	Not Efficient
Iğdır	Efficient	Not Efficient	Efficient	Not Efficient	Not Efficient
Isparta	Efficient	Not Efficient	Efficient	Efficient	Not Efficient
İstanbul	Efficient	Efficient	Not Efficient	Not Efficient	Not Efficient
İzmir	Efficient	Not Efficient	Not Efficient	Efficient	Not Efficient
Kahramanmaraş	Efficient	Efficient	Efficient	Not Efficient	Not Efficient
Karabük	Not Efficient	Not Efficient	Not Efficient	Efficient	Not Efficient
Karaman	Efficient	Not Efficient	Not Efficient	Not Efficient	Efficient
Kars	Efficient	Efficient	Not Efficient	Not Efficient	Not Efficient
Kastamonu	Efficient	Not Efficient	Efficient	Not Efficient	Not Efficient
Kayseri	Efficient	Not Efficient	Not Efficient	Efficient	Efficient
Kırıkkale	Efficient	Not Efficient	Not Efficient	Not Efficient	Efficient
Kırklareli	Efficient	Not Efficient	Not Efficient	Not Efficient	Not Efficient
Kırşehir	Efficient	Not Efficient	Not Efficient	Efficient	Not Efficient
Kilis	Not Efficient	Not Efficient	Efficient	Not Efficient	Not Efficient

Year / Province	2009	2010	2011	2012	2013
Kocaeli	Efficient	Not Efficient	Not Efficient	Not Efficient	Efficient
Konya	Efficient	Not Efficient	Not Efficient	Not Efficient	Not Efficient
Kütahya	Efficient	Not Efficient	Not Efficient	Efficient	Not Efficient
Malatya	Efficient	Not Efficient	Not Efficient	Not Efficient	Efficient
Manisa	Not Efficient	Efficient	Efficient	Efficient	Not Efficient
Mardin	Efficient	Not Efficient	Efficient	Efficient	Not Efficient
Mersin	Efficient	Not Efficient	Efficient	Efficient	Not Efficient
Muğla	Efficient	Not Efficient	Not Efficient	Not Efficient	Not Efficient
Muş	Efficient	Not Efficient	Efficient	Efficient	Not Efficient
Nevşehir	Efficient	Not Efficient	Efficient	Not Efficient	Not Efficient
Niğde	Efficient	Not Efficient	Not Efficient	Not Efficient	Not Efficient
Ordu	Efficient	Not Efficient	Efficient	Efficient	Not Efficient
Osmaniye	Efficient	Not Efficient	Not Efficient	Efficient	Not Efficient
Rize	Efficient	Not Efficient	Not Efficient	Efficient	Not Efficient
Sakarya	Efficient	Not Efficient	Not Efficient	Not Efficient	Not Efficient
Samsun	Efficient	Efficient	Not Efficient	Efficient	Efficient
Siirt	Efficient	Not Efficient	Not Efficient	Efficient	Not Efficient
Sinop	Efficient	Not Efficient	Efficient	Efficient	Not Efficient
Sivas	Efficient	Not Efficient	Efficient	Efficient	Not Efficient
Şanlıurfa	Efficient	Not Efficient	Not Efficient	Not Efficient	Not Efficient
Şırnak	Not Efficient	Efficient	Not Efficient	Not Efficient	Efficient
Tekirdağ	Efficient	Efficient	Efficient	Not Efficient	Efficient
Tokat	Efficient	Not Efficient	Not Efficient	Not Efficient	Not Efficient
Trabzon	Efficient	Not Efficient	Not Efficient	Not Efficient	Efficient
Tunceli	Not Efficient	Not Efficient	Not Efficient	Efficient	Not Efficient
Uşak	Not Efficient	Not Efficient	Not Efficient	Not Efficient	Efficient
Van	Not Efficient	Not Efficient	Efficient	Not Efficient	Not Efficient
Yalova	Efficient	Efficient	Efficient	Not Efficient	Not Efficient

Year / Province	2009	2010	2011	2012	2013
Yozgat	Efficient	Not Efficient	Not Efficient	Not Efficient	Not Efficient
Zonguldak	Efficient	Efficient	Not Efficient	Not Efficient	Efficient

Table 34: The Efficiency Conditions for Each Province According to Years

When the analysis results are examined, it is observed that the efficiency of the incentives on employment is significant in some provinces. It is seen that the results are efficient in all years except for 2011 in Samsun. In Tekirdağ province, the results are efficient in all years except for 2012.

When the investment incentive system implemented between 2009 and 2012 and investment incentive system in 2012 are compared in terms of employment in provincial level, the result is shown in Figure 6 in the context of efficiency.

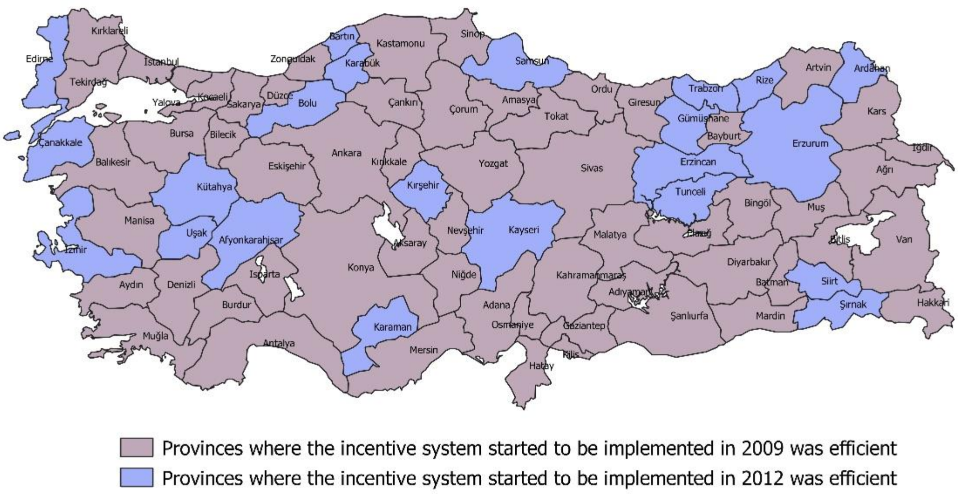


Figure 6: Results of Comparison of Incentive Systems

When the map is examined, it is observed that the investment incentive system implemented in 2009 is more efficient in 59 provinces. In the remaining 22 provinces, it is observed that the current system, which was implemented in 2012, are efficient. When these results are evaluated, it is observed that the current system does not provide the expected effect on employment. Although the same situation is not the case in all provinces, the results generally show that the system implemented between 2009 and 2012 is more efficient than the current system.

12 of the 22 provinces that are efficient in the investment incentive system implemented in 2012 have moved to the lower class, which is more advantageous than the class in the incentive system, which was introduced in 2009. These provinces and class changes are shown in Table 35. The reason for the fact that the provinces shown in Table 35 are more efficient in the new incentive system in terms of employment is considered to be advantages arising from the class change.

Classes / **Provinces**	**In the Incentive System between 2009 and 2012**	**In the Current System after 2012**
Afyonkarahisar	3.	4.
Ardahan	4.	6.
Bartın	3.	4.
Bolu	1.	2.
Edirne	1.	2.
Erzurum	4.	5.
Gümüşhane	4.	5.
Kırşehir	3.	4.
Kütahya	3.	4.
Siirt	4.	6.
Şırnak	4.	6.
Tunceli	4.	5.

Table 35: Provinces that are efficient in the new incentive system and Class Changes

The other 10 provinces were not classified in more advantageous regions in the new system compared to the system introduced in 2009. Therefore, it is considered that system change is not the cause of the efficiency in these provinces. The reason for the efficiency on employment in current incentive system may be that the province has hosted an extraordinary investment.

The province-based efficiency assessment of two systems can be made clearly. When the country-wide evaluation is made, a generalization covering all provinces cannot be made. The number of provinces where the incentive system implemented between 2009 and 2012 is efficient is significantly more than the number of provinces where the current system is efficient. Therefore, the system implemented between 2009 and 2012 can be considered to be more efficient. Furthermore, it can be said that the existing incentive system does not provide the expected efficiency on employment.

From a regional perspective, the system between 2009 and 2012 is considered to be efficient in all provinces of the Mediterranean region. When the current incentive system is evaluated from a regional perspective, it is seen that it is efficient in the inner western, western black sea, eastern black sea and northeast Anatolian regions.

Constraints were also encountered in terms of data in the study. The first constraint encountered in the study was in terms of employment data. The province-based employment rate data were not released after 2013. For this reason, 2012 and 2013 years are taken into consideration as the current incentive system period. Another limitation is that the employment and investment amount data of the incentive system are not realized values. The statistics on these issues are the figures stipulated by the commitments received from the investors during the application for incentives.

CONCLUSION

The aim of this dissertation was to measure the efficiency of the current investment incentive system on employment by comparing it with the incentive system implemented between 2009 and 2012.

Before realizing this aim, the definition of the incentive, the purpose of implementation and types of incentives were explained. The history of the incentive policies implemented in Turkey were examined in detail taking into account the dimension of regional development. Then, the developments in the incentive policies in the world were tried to be examined with the examples of the selected countries. In addition, a literature review was carried out on the subject and then the analysis was carried out.

As previously stated, it is possible to define incentives as economic advantages provided to specific sectors or firms with various motives as attracting foreign investments, regional development, economic development and the development of strategic sectors. Incentives can be divided into two groups as tax and non-tax incentives.

Examining the history of Turkey's incentive policies, it is seen that the incentives introduced first in 1913. In early years, while incentives were mostly used for the development of the industry, in later years, with the development of the industry, it focused mostly on the balanced distribution of industry throughout the country and the development of strategic sectors. In each plan period, incentives have taken place as a tool in terms of both the development of industry and regional development. Except for the last two plan periods, it is seen that the priority areas in development are given priority in the planned period. As stated earlier, provinces were grouped into four classes considering socioeconomic development levels in the incentive system implemented between 2009 and 2012. In the incentive system, which has been implemented since 2012, the provinces were grouped into six classes by considering socioeconomic development levels.

Germany, China, Italy and Poland were selected to examine developments about incentive policies in the world. It is observed that there are inter-regional differences in terms of development in all aforementioned countries. It is deducted that investment incentives in China are generally concentrated on attracting foreign investment to special economic zones. In Germany, Poland and Italy, it is seen that European Union funds are important tools in regional development. It is noteworthy that the regionally differentiated incentive system is implemented in all four countries. When the incentive tools in these countries are examined; it is observed that there are tools like grants, loans, tax exemption, salary support and staff training support. These incentive tools show similarities with incentive tools in Turkey. In addition, special incentives are implemented to Technology and R & D sectors.

As stated before, the ultimate goal of this thesis is to determine the efficiency of the current incentive system, which has been implemented since 2012, on employment. In this context, literature review was performed. It is concluded that Data Envelopment Analysis is a widely used method to measure the efficiency of regional incentive policies. When previous studies are examined, it is seen that studies were carried out with NUTS-1 and NUTS-2 data. The most important difference of this study from previous studies is that the efficiency of incentive system was measured at the level of NUTS-3 in this dissertation. This efficiency measurement was performed by comparing the existing incentive system with the incentive system implemented between 2009 and 2012 with the help of data envelopment analysis.

In this analysis, the total amount of investments supported by the incentive system on an annual basis and the employment that are expected to be created with these investments were determined as input variables. Province-based employment rate was also determined as output. The period 2009-2013 was chosen as the period of analysis. The reason for choosing this period is that the data on province-based employment, which is output data, was recently released by TURKSTAT in 2013.

Before data envelopment analysis was carried out, descriptive statistics study was performed to have general information about the data. According to the results of descriptive statistics, it is seen that there are big differences between provinces in the provincial based investment amounts which should be realized by the incentives and the employment increase expected to be realized and the province based employment rate. This shows that provinces benefit from investment incentives provided differently.

In the data envelopment analysis, 2012 and 2013 were considered as the period in which the current incentive system was implemented, and 2009, 2010 and 2011 were determined as the period of the incentive system implemented between 2009 and 2012. CCR model was used as a method in Data Envelopment Analysis. Data were analyzed for each year on a provincial basis. When the results of the analysis are examined, it is seen that the incentive system implemented between 2009 and 2012 is efficient in 59 provinces. In the remaining 22 provinces, it is seen that the incentive system implemented since 2012 is efficient. Accordingly, there are explicit results on the efficiency of the incentive system on the basis of provinces. If evaluated throughout country, it is seen that the system implemented between 2009 and 2012 in the majority of provinces is efficient compared to the existing incentive system. Thus, it is concluded that the current incentive system does not create the expected effect on employment compared to the previous incentive system.

Some changes should be made to increase the efficiency of the incentive system. One of the most important requirements for the incentive system to be effective is to monitor whether the investments supported by the incentives have realized the figures investors declared. The determination of prior and potential sectors in the province is important. In this way, offering more advantageous incentives to investors in the sectors determined in the provinces will contribute more to the development of provinces. Increasing the incentives provided to investors in Organized Industrial Zones will ensure organized industrialization. Moreover, the synergy that will occur as a result of the investments realized in the Organized Industrial Zones can contribute to the faster development of the regions. Finally, attracting large investments into underdeveloped regions by providing more advantageous incentives will contribute to the development of underdeveloped regions by bringing about the development of sectors that provide input to that investment.

There were several limitations to the study. One of them is that the province-based employment data after 2013 were not released by TURKSTAT. Another important constraint is that there may not be sufficient awareness among investors about the incentive system in 2012 and 2013 because the existing incentive system started to be implemented in 2012. Unfortunately, it was not possible to eliminate this limitation since TURKSTAT has not published the data after 2013. Another limitation is that input data which are the amount of investment and employment increase data expected to be realized through incentives are figures declared when the incentive certificate is received by the investor. There are no realization statistics for these data. Another limitations encountered during the study is the technical limitations about Data Envelopment Analysis. The analysis is very sensitive to measurement errors and variable selection, so it requires careful study. In addition, it took time to solve large amounts of data with this analysis method. While regional development policies were implemented on the basis of NUTS 2 level regions, the implementation of incentive policy on the basis of NUTS 3 level regions was an important limitation in the study.

Considering the results of this thesis, it is possible to expand the literature with new studies. Such a study on the basis of NUTS 2 Regions may be important to see the compatibility of regional development policies and the incentive system. Another new study proposal is that provincial-based GDP can be selected as output in order to determine the efficiency of the incentive system on the GDP of the provinces. Thus, it can be determined whether the incentive system is more effective on GDP or employment.

BIBLIOGRAPHY

Acar, O., & Çağlar, E. (2012). *Yeni Teşvik Paketi Üzerine Bir Değerlendirme* (Report No: N201221). Ankara: TEPAV

Accetturo, A., & Blasio G. (2011). *Policies for Local Development: An Evaluation of Italy's "Patti Territoriali"*. Rome: Banca D'Italia.

Ağaoğlu, S. (1941). *Teşvik - i Sanayi Kanunundan İstifade Eden Müesseselerin Vaziyeti*.

Atıcı, K. B., Şimşek, A. B., Ulucan, A., & Tosun, M. U. (2016). Veri Zarflama Analizi ile Uygulama Alanı Türkiye olan Performans Ölçümü Çalışmaları: Literatür Araştırması ve Değerlendirmeler. *Verimlilik Dergisi*, 1, 7-47.

Aydemir, Z. C. (2002). *Bölgesel Rekabet Edebilirlik Kapsamında İllerin Kaynak Kullanım Görece Verimlilikleri: Veri Zarflama Analizi Uygulaması*. Thesis for Planning Expertise, Devlet Planlama Teşkilatı, Ankara.

Bakırcı, F., Ekinci, E. D., & Şahinoğlu, T. (2014). Bölgesel Kalkınma Politikalarının Etkinliği: Türkiye Alt Bölgeler Bazında Bir Uygulama. *Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 18*(2), 281-298.

Banker, R. D., Charnes, A., & Cooper, W. W. (1984). Some Models for Estimating Technical and Scale Inefficiencies in Data Envelopment Analysis. *Management Science, 30*(9), 1078-1092.

Charnes, A., Cooper, W. W., & Rhodes, E. (1978). Measuring The Efficiency of Decision Making Units. *European Journal of Operational Research, 2*(6), 429-444.

Crane, B., Albrecht, C., Duffin, K. M., & Albrecht, C. (2018). China's Special Economic Zones: An Analysis of Policy to Reduce Regional Disparities. *Regional Studies, Regional Science, 5*(1), 98-107.

Czyż, T., & Hauke, J. (2011). Evolution of Regional Disparities in Poland. *Quaestiones Geographicae, 30*(2), 35-47.

Çiftçi, H. (2007). 1980-2007 Teşvik Belgeli Yatırımların Teşvik Bölgeleri Açısından Analizi. *Çukurova Üniversitesi İİBF Dergisi, 11*(2), 11-23.

Çiftçi, H., & Koç, M. (2013). İstihdamın Artan Önemi ve Teşvik Belgeli Yatırımlar Etkinlik Analizi. *21. Yüzyılda Eğitim ve Toplum, 2*(6), 19-41.

Decree of the Council of Ministers No. 90/1116. (1990). *The Official Gazette, 20692,* November 11, 1990.

Decree of the Council of Ministers No. 2002/4367. (2002). *The Official Gazette, 24810,* July 9, 2002.

Decree of the Council of Ministers No. 2009/1519. (2009). *The Official Gazette, 27290,* July 16, 2009.

Decree of the Council of Ministers No. 2012/3305. (2012). *The Official Gazette, 28328,* June 19, 2012.

Decree of the Program of 1968. (1967). *The Official Gazette, 12774,* December 12, 1967.

Decree of the Program of 1969. (1968). *The Official Gazette, 13075,* December 12, 1968.

Decree of the Program of 1972. (1971). *The Official Gazette, 14058,* December 30, 1971.

Decree of the Program of 1973 (1972). *The Official Gazette, 14385,* December 8, 1972.

Decree of the Program of 1979 (1979). *The Official Gazette, 16575,* March 11, 1972.

Deloitte. (2015). 2015 Global Survey of R&D Incentives.

Dinler, Z. (2014). *Bölgesel İktisat.* Bursa: Ekin Basım Yayın Dağıtım.

Duran, M. S. (1998). *Türkiye'de Uygulanan Yatırım Teşvik Politikaları.* Ankara: Hazine Müsteşarlığı.

Ernst & Young. (2013). *Poland – A True Special Economic Zone*. Poland: Ernst & Young.

Eser, E. (2011). *Türkiye'de Uygulanan Yatırım Teşvik Sistemleri ve Mevcut Sistemin Yapısına Yönelik Öneriler*. Thesis for Planning Expertise, Devlet Planlama Teşkilatı, Ankara.

European Commission. (n.d.). Budget. Retrieved from http://ec.europa.eu/budget/index_en.cfm.

Fan, S., Kanbur, R., & Zhang, X. (2011). China's Regional Disparities: Experience and Policy. *Review of Development Finance, 1,* 47-56.

Farrell, M. J. (1957). The Measurement of Productive Efficiency. *Journal of the Royal Statistical Society*, *120*(3), 253-290.

Federal Statistics Office of Germany. (n.d.). Facts & Figures. Retrieved from https://www.destatis.de/Europa/EN/Country/EUMemberStates/Germany.html

Federal Ministry for Economic Affairs and Energy of Germany. (n.d.). Regional Policy. Retrieved from https://www.bmwi.de/Redaktion/EN/Dossier/regional-policy.html

Fujita, M., & Hu, D. (2001). Regional Disparity in China 1985-1994: The Effects of Globalization and Economic Liberalization. *The Annals of Regional Science, 35*(1), 3-37

Germany Trade & Invest (GTAI). (2018). *Incentives in Germany.* Berlin: GTAI

Gökmen, S., & Kartaloğlu, E. (2012). *Yeni Teşvik Sistemi 2012.* İstanbul: İSMMO Yayınları.

İlkin, A. (1970). Türkiye'de Sanayi Politikası. *İstanbul Üniversitesi İktisat Fakültesi Mecmuası, 30,* 377-423

James, S. (2009). *Incentives and Investments: Evidence and Policy Implications.* Washington, DC: World Bank.

Karacabey, A. A. (2001). Veri Zarflama Analizi. *A.Ü SBF GETA Tartışma Metinleri, 33,* 1-12.

Köse, S. (2002). 24 Ocak 1980 ve 5 Nisan 1994 İstikrar Programlarının Karşılaştırılması. *Planlama Dergisi,* 119-128.

Law No. 5084. (2004). *The Official Gazette*, *25365*, February 6, 2004.

Liu, J. S., Lu, L. Y. Y., Lu, W., & Lin, B. J. Y. (2013). A Survey of DEA Applications. *Omega The International Journal of Management Science, 41*(5), 893-902

Ministry of Development (MoD). *Onuncu Kalkınma Planı (2014-2018).* Ankara: Kalkınma Bakanlığı.

Miroslava, C. (2013). The Effectiveness of Investment Incentives in Certain Foreign Companies Operating in the Czech Republic. *Journal of Competitiveness, 5*(1), 108-120.

Mitze, T. (2014). Does Regional Science Need an Experimentalist Buzz?. Regional Studies, Regional Science, 1(1), 51-59.

National Bureau of Statistics of China. (n.d.). Data. Retrieved from http://www.stats.gov.cn/english/

Organisation for Economic Co-operation and Development (OECD). (2003). *Checklist for Foreign Direct Investment Incentive Policies*. Paris: OECD.

Organisation for Economic Co-operation and Development (OECD). (2010). *Regional Development Policies in OECD Countries*. Paris: OECD.

Organisation for Economic Co-operation and Development (OECD). (2014). *Regional Outlook Regions and Cities: Where Policies and People Meet*. Paris: OECD.

Ökçün, A. G. (1970). *Osmanlı Sanayii 1913, 1915 Yılları Sanayi İstatistiki*. Ankara: Devlet İstatistik Enstitüsü

Ökçün, A. G. (1975). Teşvik-i Sanayi Kanun-I Muvakkatı, 1913. *Ankara Üniversitesi SBF Dergisi, 30*(1), 25-44.

PAIH. (n.d.). Why Poland. Retrieved from https://www.paih.gov.pl/why_poland/investment_incentives/sez.

PAIH. (2011). *Investor's Guide-Poland*. Warsaw: PAIH

Poland Central Statistics Office (Statistics Poland). (n.d.). Databases. Retrieved from http://stat.gov.pl/en/.

Sarı, Z. (2015). *Veri Zarflama Analizi ve Bir Uygulama*. Master's Thesis, Hacettepe University, Ankara.

Smetkowski, M. (2002). Polish Special Economic Zones as an Instrument of Regional and Industrial Policy. Retrieved from http://mpra.ub.uni-muenchen.de/39184/

SPO. (1963*). Kalkınma Planı (Birinci Beş Yıl)*. Ankara: Devlet Planlama Teşkilatı

SPO. (1967). *İkinci Beş Yıllık Kalkınma Planı 1968-1972.* Ankara: Devlet Planlama Teşkilatı.

SPO. (1972). *Üçüncü Beş Yıllık Kalkınma Planı 1973-1977.* Ankara: Devlet Planlama Teşkilatı.

SPO. (1979). *Dördüncü Beş Yıllık Kalkınma Planı 1979-1983.* Ankara: Devlet Planlama Teşkilatı.

SPO. (1985). *Beşinci Beş Yıllık Kalkınma Planı 1985-1989.* Ankara: Devlet Planlama Teşkilatı.

SPO. (1990). *Altıncı Beş Yıllık Kalkınma Planı 1990-1994.* Ankara: Devlet Planlama Teşkilatı.

SPO. (1996). *Yedinci Beş Yıllık Kalkınma Planı 1996-2000.* Ankara: Devlet Planlama Teşkilatı.

SPO. (2000a). *Sekizinci Beş Yıllık Kalkınma Planı Rekabet Hukuku ve Politikaları Özel İhtisas Komisyonu Raporu.* Ankara: Devlet Planlama Teşkilatı.

SPO. (2000b). *Uzun Vadeli Strateji ve Sekizinci Beş Yıllık Kalkınma Planı 2001-2005.* Ankara: Devlet Planlama Teşkilatı.

SPO. (2006). *Dokuzuncu Kalkınma Planı (2007-2013).* Ankara: Devlet Planlama Teşkilatı

Statistical Office of the European Union (EUROSTAT). (n.d.). Database. Retrieved from http://ec.europa.eu/eurostat/data/database.

Şengül, Ü., Eslemian, S., & Eren, M. (2013). Türkiye'de İstatistiki Bölge Birimleri Sınıflamasına göre Düzey 2 Bölgelerinin Ekonomik Etkinliklerinin VZA Yöntemi ile Belirlenmesi ve Tobit Model Uygulaması. *Yönetim Bilimleri Dergisi*, *11*(21), 75-99.

Thomas, P. (2007). *Investment incentives: Growing use, uncertain benefits, uneven controls.* Geneva: Global Subsidies Initiative.

UNCTAD. (1996). *Incentives and Foreign Direct Investment.* Current Studies, Series A, No. 30. New York and Geneve: United Nations.

Wang, J. (2010). *Essays on Incentives and Chinese Economic Reform.* Doctoral Dissertation, The London School of Economics and Political Science, London.

Woo, Y. (2007). Evaluating Efficiency Level of Regional Development Program of Development-promoting Area using Data Envelopment Analysis. *International Journal of Urban Sciences, 11*(1), 30-41.

World Bank. (n.d.a). Data. Retrieved from https://data.worldbank.org/country/china

World Bank. (n.d.b). The World Bank in China. Retrieved from http://www.worldbank.org/en/country/china/overview.

Yıllar İtibariyle Kalkınmada Öncelikli Yöreler. (n.d.). Retrieved from http://www3.kalkinma.gov.tr/PortalDesign/PortalControls/WebIcerikGosterim.aspx?Enc=83D5A6FF03C7B4FC0B6C445B8568FF66

Yücel, T. F. (2015). *Cumhuriyet Türkiyesi'nin Sanayileşme Öyküsü.* Ankara: TTGV

APPENDIXES

AP.1. YEAR-BASED EFFICIENCY VALUES OF PROVINCES

Years / Provinces	2009	2010	2011	2012	2013
Adana	100%	100%	85%	100%	79%
Adıyaman	100%	38%	100%	23%	54%
Afyonkarahisar	100%	36%	63%	100%	63%
Ağrı	100%	58%	45%	100%	45%
Aksaray	100%	100%	100%	8%	62%
Amasya	100%	16%	17%	51%	31%
Ankara	100%	53%	69%	44%	27%
Antalya	100%	68%	77%	68%	62%
Ardahan	11%	43%	100%	100%	22%
Artvin	100%	81%	100%	51%	100%
Aydın	100%	88%	68%	40%	100%
Balıkesir	100%	62%	100%	42%	56%
Bartın	100%	57%	17%	38%	100%
Batman	100%	100%	100%	28%	10%
Bayburt	98%	100%	100%	93%	100%
Bilecik	100%	58%	100%	28%	74%
Bingöl	100%	88%	42%	48%	100%
Bitlis	100%	100%	67%	40%	18%
Bolu	27%	100%	64%	100%	40%
Burdur	100%	47%	34%	27%	22%
Bursa	100%	69%	100%	53%	100%
Çanakkale	100%	55%	16%	51%	100%
Çankırı	100%	1%	3%	12%	0%
Çorum	100%	100%	100%	33%	24%
Denizli	100%	100%	76%	79%	70%
Diyarbakır	100%	51%	74%	41%	35%
Düzce	47%	48%	100%	19%	38%
Edirne	100%	48%	55%	85%	100%
Elazığ	100%	73%	100%	100%	38%
Erzincan	27%	55%	18%	100%	100%
Erzurum	51%	43%	64%	100%	100%
Eskişehir	100%	49%	99%	33%	100%
Gaziantep	100%	84%	59%	58%	81%
Giresun	41%	19%	100%	50%	16%
Gümüşhane	18%	100%	21%	100%	41%
Hakkari	65%	100%	100%	100%	53%
Hatay	80%	100%	100%	62%	65%

Years / Provinces	2009	2010	2011	2012	2013
Iğdır	100%	83%	100%	55%	24%
Isparta	100%	34%	100%	100%	57%
İstanbul	100%	100%	62%	73%	67%
İzmir	100%	77%	66%	100%	66%
Kahramanmaraş	100%	100%	100%	47%	56%
Karabük	82%	81%	86%	100%	69%
Karaman	100%	33%	62%	47%	100%
Kars	100%	100%	36%	14%	22%
Kastamonu	100%	27%	100%	67%	25%
Kayseri	100%	48%	49%	100%	100%
Kırıkkale	100%	54%	25%	15%	100%
Kırklareli	100%	27%	16%	19%	17%
Kırşehir	100%	4%	49%	100%	53%
Kilis	81%	31%	100%	13%	30%
Kocaeli	100%	88%	86%	68%	100%
Konya	100%	56%	30%	35%	37%
Kütahya	100%	69%	89%	100%	87%
Malatya	100%	98%	93%	73%	100%
Manisa	52%	100%	100%	100%	61%
Mardin	100%	91%	100%	100%	31%
Mersin	100%	65%	100%	100%	40%
Muğla	100%	62%	61%	71%	63%
Muş	100%	58%	100%	100%	52%
Nevşehir	100%	36%	100%	49%	28%
Niğde	100%	56%	56%	55%	32%
Ordu	100%	99%	100%	100%	43%
Osmaniye	100%	64%	71%	100%	25%
Rize	100%	84%	56%	100%	78%
Sakarya	100%	28%	91%	49%	48%
Samsun	100%	100%	84%	100%	100%
Siirt	100%	17%	15%	100%	3%
Sinop	100%	70%	100%	100%	31%
Sivas	100%	44%	100%	100%	54%
Şanlıurfa	100%	52%	44%	24%	17%
Şırnak	55%	100%	51%	70%	100%
Tekirdağ	100%	100%	100%	98%	100%
Tokat	100%	5%	7%	6%	2%
Trabzon	100%	58%	65%	78%	100%
Tunceli	36%	16%	57%	100%	26%
Uşak	73%	86%	52%	45%	100%
Van	86%	78%	100%	74%	51%

Years / Provinces	2009	2010	2011	2012	2013
Yalova	100%	100%	100%	23%	23%
Yozgat	100%	95%	58%	29%	30%
Zonguldak	100%	100%	51%	47%	100%

AP. 2. ORIGINALITY REPORT

HACETTEPE UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
MASTER'S THESIS ORIGINALITY REPORT

HACETTEPE UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
ECONOMICS DEPARTMENT

Date: 18/06/2019

Thesis Title : **THE ANALYSIS OF REGIONAL INVESTMENT INCENTIVES SYSTEM IN TURKEY**
According to the originality report obtained by my thesis advisor by using the Turnitin plagiarism detection software and by applying the filtering options checked below on 14/06/2019 for the total of 103 pages including the a) Title Page, b) Introduction, c) Main Chapters, and d) Conclusion sections of my thesis entitled as above, the similarity index of my thesis is 17 %.

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I declare that I have carefully read Hacettepe University Graduate School of Social Sciences Guidelines for Obtaining and Using Thesis Originality Reports; that according to the maximum similarity index values specified in the Guidelines, my thesis does not include any form of plagiarism; that in any future detection of possible infringement of the regulations I accept all legal responsibility; and that all the information I have provided is correct to the best of my knowledge.

I respectfully submit this for approval.

A. Alıcı

Date and Signature

Name Surname: Ahmet ALICI
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Department: Economics
Program: MA

ADVISOR APPROVAL

APPROVED.

Doç. Dr. Selcen Öztürk

(Title, Name Surname, Signature)

AP. 3. ETHICS COMMISSION FORM

HACETTEPE UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
ETHICS COMMISSION FORM FOR THESIS

HACETTEPE UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
ECONOMICS DEPARTMENT

Date: 31/05/2019

Thesis Title: The Analysis of Regional Investment Incentives System in Turkey

My thesis work related to the title above:

1. Does not perform experimentation on animals or people.
2. Does not necessitate the use of biological material (blood, urine, biological fluids and samples, etc.).
3. Does not involve any interference of the body's integrity.
4. Is not based on observational and descriptive research (survey, interview, measures/scales, data scanning, system-model development).

I declare, I have carefully read Hacettepe University's Ethics Regulations and the Commission's Guidelines, and in order to proceed with my thesis according to these regulations I do not have to get permission from the Ethics Board/Commission for anything; in any infringement of the regulations I accept all legal responsibility and I declare that all the information I have provided is true.

I respectfully submit this for approval.

Date and Signature
31.05.2019
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ADVISER COMMENTS AND APPROVAL

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