

## Industrialization Policies in Türkiye 1980-2000 Period

*Türkiye’de 1980-2000 Dönemi Sanayileşme Politikaları*

Haluk İŞLER<sup>a</sup>

### Abstract

In the 1970s, with the blockage of the Fordist production method and “the import substitution accumulation regime”, most of the capitalist economies in the world fell into economic crisis, and efforts to overcome this crisis brought neoliberal policies to the agenda under the name of globalization.

In Türkiye, which was affected by the crisis of Fordism and the globalization trend, a series of economic stability and structural adjustment decisions were taken on January 24, 1980, envisaging an emphasis on market mechanisms and export-based-outward-open development strategies. In the 1980s, Türkiye began to adopt policies, to open the economy to world markets and foreign capital, to facilitate the entry of foreign goods into the domestic market, to accelerate privatization policies and to integrate small-medium-sized enterprises (SMEs) into large enterprises. These policies inevitably had great effects on industrialization policies in Türkiye.

In this study, the dynamics of neoliberalism and the outlines of the process it follows along with globalization in the world were revealed and the effects of this process on the economy and industrialization policies in Türkiye were examined. In this regard, economic and industrialization policies in Türkiye, specifically for the 1980-2000 period, have been discussed under the following headings: Transition dynamics to the 1980s in the world and in Türkiye, basic economic policies, technology policies, research and development (R&D) policies, investment and production policies, small and medium-sized enterprise (SME) policies.

**Jel Codes:** E2, L5, L6, O1, O3

**Keywords:** Industrialization, Globalization, Neoliberalism, SME

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### Öz

Dünyada 1970’li yıllarda, Fordist üretim biçiminin ve ithal ikameci birikim rejiminin tıkanmasıyla kapitalist ekonomilerinin büyük bir bölümü ekonomik bunalıma girmiş, bu bunalımı aşma çabaları küreselleşme adı altında neoliberal politikaları gündeme getirmiştir.

Fordizmin krizinden ve küreselleşme akımından etkilenen Türkiye’de, 24 Ocak 1980 tarihinde, piyasa mekanizmalarına ağırlık kazandırılması ve ihracata dayalı-dışa açık kalkınma stratejilerini öngören bir dizi ekonomik istikrar ve yapısal uyum kararları alınmıştır. Türkiye’de 1980’li yıllarla birlikte, ekonomiyi dünya piyasalarına ve yabancı sermayeye açma, iç pazara yabancı malların girişini kolaylaştırma, özelleştirme politikalarına hız verme ve küçük-orta boy işletmeleri (KOBİ) büyük işletmelere eklemeye politikaları benimsenmeye başlamıştır. Bu politikaların Türkiye’de kaçınılmaz olarak sanayileşme politikaları üzerinde büyük etkileri olmuştur.

Bu çalışmada, dünyada küreselleşmeyle birlikte neoliberalizmin dinamikleri ve izlediği sürecin ana hatları ortaya koyulmuş, söz konusu sürecin Türkiye’deki ekonomi ve sanayileşme politikaları üzerindeki etkileri incelenmiştir. Bu doğrultuda Türkiye’deki ekonomi ve sanayileşme politikaları 1980-2000 dönemi özelinde şu başlıklar altında ele alınmıştır: Dünyada ve Türkiye’de 1980’li yıllara geçiş dinamikleri, temel ekonomi politikaları, teknoloji politikaları, araştırma-geliştirme (Ar-Ge) politikaları, yatırım ve üretim politikaları, küçük ve orta boy işletme (KOBİ) politikaları.

**Jel Kodları:** E2, L5, L6, O1, O3

**Anahtar Sözcükler:** Sanayileşme, Küreselleşme, Neoliberalizm, KOBİ

## 1. INTRODUCTION

Industrial Revolutions, in accordance with their own dynamics, have determined the production pattern and production relations, hence, have changed the nature of the world capitalist economies. The world capitalist system has never followed a stable development process, and has always tried to overcome the periods of crisis and depression it entered periodically, with new forms of regulation.

In the 1970s, with the blockage of fordism based on mass production and the “import substitution accumulation regime”, the world went into a great economic depression, and the efforts to overcome this crisis necessitated radical transformations called globalization in economic structures, especially in production methods. The neoliberal policies that left their mark on the 1980s and beyond have influenced Türkiye as well as the whole world.

In this study, the dynamics of the emergence and the course outlines of neoliberal trend, which has become dominant with globalization in the world, have revealed, and then the effects of the neoliberal process on the economy and industrialization policies in Türkiye have researched. In this context, the economy and industrialization policies in Türkiye have discussed under the following headings, covering the 1980-2000 period:

- a. The dynamics of the transition to the 1980s in the world and in Türkiye,
- b. Main economic policies,
- c. Technology policies,
- d. Research and development (R&D) policies,
- e. Investment and production policies,
- f. Small and medium-sized enterprise (SME) policies.

The content of the study has been designed in a way that will be the basis for the studies that are the continuation of this study.

### 1.1. Problem

The history of world capitalist economy is, in a way, the history of crises and depressions. In the 1970s, with the crisis of fordism and the blockage of the “import substitution accumulation regime”, the world entered a new economic depression, and the efforts to overcome this crisis necessitated some radical economic transformations under the name of globalization. Türkiye, too, was affected by these developments and made radical transformations in its economy and industrialization policies. The problem of this study is how the industrialization policies in Türkiye were formed and how they were implemented between 1980-2000.

### 1.2. Aim of the Study

The aim of this study is to reveal the main lines of the industrial policies formed in Türkiye in the 1980-2000 period in relation to the economic policies followed in the world and in Türkiye. In addition, it is aimed to develop general suggestions based on the results of the industrial policies followed in Türkiye in the 1980-2000 period.

### 1.3. Importance of the Study

This study is important in terms of providing a theoretical basis for studies researching the industrial policies after the year 2000, and the relationship between education policies and industrialization policies in the 1980-2000 period in Türkiye.

### 1.4. Method of the Study

Literature review method was used in the study

## 2. THE DYNAMICS OF TRANSITION TO THE 1980S IN THE WORLD AND TÜRKİYE

In the 1970s, the crisis of fordism based on mass production gradually turned into a world economic depression, and the efforts to overcome this crisis necessitated radical transformations in economic structures, especially in production processes.

With the collapse of the “import substitution accumulation regime”, which played an important role in the establishment of national industries and reaching a certain size in the World, in the late 1970s, the protectionist/interventionist/inward looking economic policy, which had dominated the industrialization process and foreign economic relations until then, left its place to the outward looking/liberal/market approach. The 1980s, which significantly changed the institutional structures, economic organization forms, socio-economic balances and political structures, constituted a turning point with this feature and had a great impact on Türkiye's long-term growth and industrialization processes. (Berksoy and Boratav, 1993: 38). Türkiye has begun to be affected by this transformation process, which manifested itself with the winds of globalization in the 1980s in the world.

Türkiye entered a new era with a series of economic stability and structural adjustment policies it took on January 24, 1980 to get rid of the deep economic crisis it fell into at the end of the 1970s. These policies, which led to a radical change in economic policy, was based on two fundamental axes that closely interconnected. The first of these was the implementation of the market mechanism instead of centralized management, and the other was the transition to an export-based-outward development strategy instead of an inward development strategy based on import substitution. ([https://www.egiad.org.tr/...](https://www.egiad.org.tr/)).

In Türkiye, in the 1980s, in parallel with the general trend in the world, there was a tendency to increase relations with the outside world. Opening the economy to world markets by abandoning protectionist policies; to allow more foreign capital to come in; facilitating the entry of foreign goods into the internal market by lowering customs barriers; accelerating privatization policies; joining small and medium-sized enterprises (SMEs) to large enterprises has formed the general lines of this trend. Since the early 1980s, Türkiye has placed its economic policies within the framework of the export-oriented and private entrepreneurship-based free market economy model, and has started to implement these policies with a series of legal and institutional arrangements.

### **3. THE MAIN ECONOMIC POLICIES IN TÜRKİYE (1980-2000)**

The winds of globalization, which emerged in the 1970s and express the tendencies towards the world being a single market in terms of production conditions and product markets, have become an important factor shaping Türkiye's economic policies. Concordantly, Türkiye's industrial policies have began to change with the adoption of an economy model, aimed at global integration and export-based. The main principles and objectives of the new industrial policies created within this framework have grouped under three interrelated titles:

#### **3.1. The Policy of Transition to a Free Market Economy**

For this, it was envisaged that price controls should be completely abolished, the relevant units should make price adjustments in the public sector frequently, all protectionism and subsidy practices should be ended, and public enterprises should be operated in accordance with competition conditions.

The dynamics that shape the new liberal system, which is based on the liberalization of capital markets, can be grouped under four main headings (Cited from Yeldan, 2002; Çelik, 2006: 55):

- a. Crisis based on overproduction caused by the high pace of accumulation during the golden age of capitalism,
- b. Profit squeeze caused by fordist relations that marked the capital/labor conflict,
- c. Intensification of international capitalist competition,
- d. Financial capital and speculative accumulation preferences that have risen because of the liberalization of the financial system precede industrial investments.

#### **3.2. Industrialization Policies for Export-Import and Sectoral Priorities**

Unlike previous policies, investment incentives were reduced and exports were promoted in various ways. With these policies implemented after 1980, significant increases were achieved in exports. Measures such as devaluations, contraction in domestic demand, enhance in capacity utilization rates, low-interest loans for export, duty-free inputs and tax refunds were effective in this increase. The export promotion policy has been applied intensively in sectors such as weaving and clothing. The number of goods whose import is prohibited and subject to authorization, has been reduced and gradual reductions have been made in customs tax rates.

While the share of intermediate goods in total imports increased rapidly, the share of investment goods imports decreased. After 1980, while the manufacturing industry was trying to use its current capacity as fully as possible, it increased the import of intermediate goods, and the demand for investment goods began to decrease with the stagnation of investments. This structure, which increased exports after 1980, without based upon new investments and without providing a structural transformation in the industry, affected the production and import of new technologies and the investment potential of the country in a very negative way (Yentürk, 1991: 258).

**Table 1.** 1980-1994 Period of Türkiye's Import-Export Values and the Import Coverage Ratio of Exports

	Export Million Dollars	Import Million Dollars	Import Coverage Ratio of Exports
1980*	2.910	7.909	0.37
1988*	11.662	14.340	0.81
1990*	12.959	22.302	0.58
1991**	13.593	21.047	0.65
1993**	15.345	29.428	0.52
1994**	18.106	23.270	0.78

Reference: \*(Yentürk, 1993: 102); \*\* (DiE, 1995)

When the table is examined, exports showed a significant spike between 1980 and 1988, but could not show the same rate of increase in the following years. Imports, on the other hand, increased three times between 1980 and 1990, and the increase that occurred in 1993 decreased to its previous level again with the effect of the crisis in 1994.

### 3.3. Investment Policies and Privatization

After 1980, radical changes were seen in terms of investment policies. The decline in the manufacturing industry, which started at the end of the 1970s, continued in the 1980s. Manufacturing industry investments, whose share in total investments was 31.3% in 1980, decreased to, 20.5% in the 1984-1986 period, 17.5% in the 1985-1989 period, 15.1% in 1988 and 13.5% in 1989. After 1980, while public investments were concentrated in sectors such as transportation, communication and energy, a decline was observed in the manufacturing industry. While the share of the public sector in the total fixed capital investments was 54.2% in the 1985-1989 period, the share of the manufacturing industry in the public sector investments was only 9.1% (Yüce, 1993: 56). In 1989, the production share of the manufacturing industry was 38.4% in consumer goods, 45.2% in intermediate goods, and 16.4% in investment goods, which are the center of technical development (Kuruç, 1992: 59). Existing public projects have been greatly abated and narrow limits have been imposed on the new investments of this segment, especially in the heavy manufacturing industry sub-sectors. Similarly, taxes, credits, customs facilities and privileges brought to this segment have been terminated. The Sixth Five-Year Development Plan (ABYKP), adopted the principle that the manufacturing industry investments of the public sector would be limited only to investments in priority regions in development and reiterated that the leadership in manufacturing industry investments was left to the private sector (Şenses and Kırım, 1989: 363). More importantly, the privatization of the determined ones from the existing public enterprises as soon as possible has been remarked as one of the priority objectives.

In parallel with these developments, restrictive practices on foreign capital investments were abrogated and comprehensive new measures were taken to encourage private foreign capital investments (Şenses and Kırım, 1989: 363). The foreign capital policy followed, after 1980 and the legislative changes made in this direction caused a rapid increase in foreign capital permits, and the total permits, which could reach 228 million dollars in 25 years until 1980, increased 14 times in the following nine years and exceeded 3 billion dollars (Business People's Association-TÜSİAD, 1995:16). Another important development at the institutional level was a noticeable decrease in the impact of planning, which had played an active role in the industrialization process in the previous period (Şenses and Kırım, 1989: 363).

As can be seen from the developments gathered under these three headings, the globalization and privatization trend that dominated the 1980s all over the world had profound effects on the economy and industrialization policies determined in Türkiye.

## 4. TECHNOLOGY POLICIES IN TÜRKİYE (1980-2000)

The efforts to overcome the crisis that the world economy went through in the 1970s led to significant changes in the structure of the industrial sector. The most basic features of this change have been microelectronics and computer technology, covered all areas of management, production and distribution, the emergence of new organizational structures within enterprises, and the production systems becoming more flexible in the face of changing demands. With the opportunities provided by computer and telecommunication technologies, "just-in-time-JIT" has started to be implemented, and "zero defect production" has become one of the most important goals, with quality awareness coming to the fore. In the new conditions, cost has ceased to be the most important factor in the market share struggles of companies; instead, product quality

and diversity have gained more importance. For example, Toyota Automobile Factory has started to produce approximately 160,000 different types of automobiles per year, depending on the variety of demands in the 1990s.

Technological developments have brought SMEs, which are dispersed geographically and sectorally, into a network where they can interact with each other, and have made flexible production with automation technologies in production. However, the mutual coordination and equipping with new production techniques of SMEs, which are not able to realize this transformation on their own, have been possible with the support of large companies and various organizations.

The new network of relations based on just in time (JIT), zero-defect production and flexibility in the product, which should be between companies that provide semi-finished inputs and main companies, has emerged as a different organizational feature. This relationship between the main company and the subcontractor includes two-way design and information flow, collaboration and integration for product flexibility. (Yentürk, 1993: 50).

The fact that these developments brought new radical change imperatives to Türkiye, which was in the process of industrialization, especially with the selection of an outward-oriented industrialization policy, changed the direction of industrialization after 1980 largely. The comparative advantage of labor-intensive technologies based on cheap labor has ceased to be an advantage with the technological innovations realized in the last two decades. The fact that quality and diversity in the product came to the fore required radical transformations in terms of gaining new qualifications to the workforce, subjecting education systems to new regulations and creating new technology policies, as well as new organizations in industrial production.

Technology, which is the main determinant of the industrialization, is one of the most important criteria that should be used in the researching of industrialization policies. The acquisition of technology, which is the most basic parameter of industrialization, generally includes two manners. First, the transfer of technologies required for the industry from abroad; the second is learning, assimilating this transferred technology, spreading it to all areas of production and reproducing the acquired technology at a higher level or creating original new technologies.

Technology transfer is at the forefront among the channels of access to technology by industrial organizations in Türkiye. License, patent and know-how agreements, turnkey factory agreements, joint ventures with foreign capital, machinery and equipment imports are the main ways of this (Törel, 1991: 237). Although it has been mentioned in development plans from time to time, the second manner to get technology has not been implemented in Türkiye. Regarding technology, the following targets were set in the 5th, 6th and 7th Development Plans: "Projects that require high financing and advanced technology will be encouraged to be realized with appropriate foreign capital investments" (Fifth Five-Year Development Plan-BBYKP, 1984: 32); "for appropriate technology transfer, technology selection and adaptation will be emphasized" (BBYKP, 1984: 32); "projects and programs that provide technology transfer will be supported in order to obtain the maximum benefit from technical cooperation opportunities" (ABYKP, 1989: 311); "technology transfer will be supported through foreign capital investments, especially in production areas that require the use of high technology, and a policy where technology transfer and technology production complement each other, will be followed" (Seventh Five-Year Development Plan-YBYKP, 1995: 68). In addition, it has been announced by the State Planning Organization (SPO) that the method of bringing high technology to Türkiye through multinational companies will be encouraged through privatization (Tekeli, 1993: 213).

The Organization for Economic Cooperation and Development (OECD) defines high-tech or technology-intensive products as, which at least 2.6% of their added value is spent on research and development (R&D). When we look at the technology level of the Turkish industry in this period, it is seen that, very advanced and large-scale technologies (space, aviation, measurement-control, etc.) have not yet entered the country, but advanced technologies, such as artificial fiber, some electronic parts, tire chemistry have applied by a few companies in sub-sectors. These advanced technologies were also provided by transfer. State-owned enterprises (SOEs) have not made technological innovation for a very long time.

The report published in the December 1988 of Sixth Five-Year Development Plan (ABYKP), Science, Research and Technology Specialization Commission, which was formed under the coordination of State Planning Organization (DPT), it is said about technology production: "Technology production cannot be done in our country. Technology transfer, on the other hand, is often being expensive because it requires a certain basis formed by dominating technology, and is insufficient in terms of contributing to the technological accumulation of the country" (Işık, 1989: 99).

In the report of the Advanced Technology Transfer Sub-Committee of the Special Specialization Commission mentioned above, the following assessment was made on technology transfers in the defense industry: "With slogans such as established manufacturing, tried product, safe logistics support, 15-20 years of Technologies, ready-made and disassembled products, processed components, raw materials, workbenches and equipments have transferred with very expensive packages which also included technical support and training; when the 3-5 years application periods are added, it has been seen that the technologies obtained are not very advanced technologies (Işık, 1989: 99).

There are certain conditions to be able to transfer technology and benefit from it. We can group these conditions in general as follows:

- a. To know the main technology and to have the competence to learn new technologies,
- b. To have the necessary information processing and evaluation techniques to transform technological developments into a way that can meet current requirements,
- c. To carry out applied R&D activities in order to follow the technological developments.

Because of wrong approaches to technology, technology is considered as a "package program" that can be purchased ready-made or transferred by foreign capital. Whereas, when a foreign company develops a new technology, uses the monopoly power it provides to the fullest. However, when this technology is no longer innovative, it is ready to be transferred to the outside world through a license agreement or a subsidiary company. If the technology requester does not have enough knowledge about it, it is possible to get the wrong, costly, outdated technology. The result of this is low quality and high cost products (Kazgan, 1985: 487). It is also seen that companies or countries that are in a position to transfer technology demand certain requirements for transfer.

The Ministry of Industry and Trade, which evaluated the results of the national technology inventory in the Standard Journal, stated that developed countries would not transfer technology to our country unless they see greater market potentials and create much more attractive commercial and financial conditions. (Tekeli, 1993: 214).

As a result of the technology inventory studies carried out by the Ministry of Industry and Trade by establishing a commission with the Scientific and Technological Research Council of Türkiye (TÜBİTAK), the State Institute of Statistics (DİE) and the State Planning Organization (DPT), it has been understood that Türkiye's does not have advanced and great technologies in 61 fields such as aerospace, aviation, environment, communication, chemistry, electronics, mechanical engineering, measurement-control, metallurgy, even through imports. In this research, it has been determined that 66% of our companies produce through imported technology, and the number of companies using domestic and foreign technology together is 24.7%. According to the inventory results, it was understood that 86 of 739 technologies included in 32 main technology groups are not available in Türkiye and 653 of them are in industrial application. 88.3% of the total number of technologies in the new technology code is not available in Türkiye (Tekeli, 1993: 214). However, few companies have been able to produce advanced machinery and equipment without institutional technology transfer. These activities, carried out by highly trained engineers, developed based on copying and turned into technologies unique to Türkiye. These technologies have emerged mostly in the production of laser erosion devices, medical devices, textile looms, food products machinery. Among the limited number of collaborations between universities and other institutions that have been put into practice; the studies carried out by the Department of Electrical and Electronics Engineering of Middle East Technical University (ODTÜ), within the High Specialization Hospital (YİH) and yielding original results can be cited as an example. Apart from these, in order to give direction to science and technology policies in Türkiye, three important studies titled "Turkish Science Policy 1983-2003", "Türkiye Advanced Incentive Project Preliminary Report" and "Science and Technology Policy Working Document" were carried out.

Among the science and research priorities of the first study, "Turkish Science Policy 1983-2003", electronic engineering, computer science, instrumentation and telecommunications are within the "*fields of science to be supported in the first priority*"; projects such as integrated circuit device development, micro hardware and software studies, semiconductor technology development, electronic material technology, digital communication system researchs, remote and satellite communication systems were within the "*research projects to be addressed with first priority*". The second study, "Türkiye Advanced Technology Incentive Project Preliminary Report", was prepared in 1985 by a commission formed at İstanbul Technical University (İTÜ). The following projects have proposed in this report: "Communication, telecommunications"; "automation of infrastructure of metropolitan municipalities"; "computer-controlled production machines"; "industrial robots"; "remote sensing technologies"; "special material alloys (silicon technology, industrial ceramics, composite materials and super alloys) (Göker, 1991: 3.). The third document named "Science and Technology Policy Working Document" is dated August 1987.

The first two of these three documents have not been put into practice, and most of the institutional structures proposed by the third document, especially the "Science and Technology High Council", have not been implemented. There was no remarkable result from the 1st Science-Technology Council convened on 14-16 May 1990.

As can be seen from these studies, the scientific and technological revolution, which started in the second half of the 1970s and affected Türkiye as well, could not be internalized for the creation of national science and technology. R&D policies, which are directly related to industrialization preferences, have been a significant impact on this being so.

## 5. RESEARCH AND DEVELOPMENT (R&D) POLICIES IN TÜRKİYE (1980-2000)

The importance given to R&D activities is one of the indicators of the way countries perceive scientific and technological development.

Whether in the investment goods industry or in other sectors, the advancement of technology based on the general economy and company in today's conditions depends on the amount of the shares allocated to R&D expenditures. Because R&D activities have become a part of contemporary production and distribution processes (Kaynak, 1989: 353).

The share allocated to R&D expenditures from Gross National Product (GNP) in Türkiye and in some countries and national patent applications are given below:

**Table 2.** Ratio of R&D Expenditures to GNP (%) in Some Countries

Countries	Ratio	Countries	Ratio
USA	2.8	India*	0.9
Japan	2.8	Brazil*	0.7
Germany	2.7	Nigeria*	0.3
England	2.3	Greece	0.3
S. Korea*	1.8	TÜRKİYE	0.2
Poland	1.5		

Reference: (ESO, 1993: 83); \*(Işık, 1989: 100)

**Table 3.** Number of National Patent Applications for OECD Countries

Countries	Number of Applications	Countries	Number of Applications
Japan	322.455	Greece	5.324
USA	122.141	Portugal	2.268
Germany	77.408	TÜRKİYE ( 1986)	726
Spain	14.361		

Reference: (Işık, 1989: 100)

When the tables are examined, it is seen that Türkiye lags far behind in terms of both R&D expenditures and patent applications.

In a study investigating the composition of qualified labor in the context of the national technological system in Türkiye (DİE, 1992), the ratio of those working in R&D units among the total number of scientists/engineers in Türkiye was determined as 3%, and it was determined that 92% of this 3% were employed in public and university research institutions (Soyak, 1986: 236).

According to the research conducted by the Ministry of Industry and Trade in the post-1980 period to determine the technology structure used by industrial organizations based on 1080 companies, it was determined that 60% of the companies did not attach importance to R&D expenditures and there was no institutionalization in this direction (Berksoy and Boratav, 1993: 35). The number of R&D personnel per 10,000 employees in Türkiye in 1985 was only 6 (Berksoy and Boratav, 1993: 36). It was determined that 116 R&D personnel per 10,000 employees in Japan in 1988 and 80 R&D personnel in Canada in 1990 (Berksoy and Boratav, 1993: 37).

In Türkiye, where comprehensive and long-term policies for R&D activities could not be produced in the 1980s, a number of regulations, examples of which are given below, were made.

With the Decree on Encouragement of R&D Projects of Industrial Organizations, which would be realized in cooperation with the Undersecretariat of Foreign Trade, the Turkish Technology Research Foundation and the Scientific and

Technological Research Council of Türkiye (TÜBİTAK) (Official Gazette, 1995, No: 22300), it was aimed to meet the costs of companies' R&D activities at certain rates and to provide capital support.

R&D programs carried out under the leadership of the European Union are as follows: ESPRIT (Information Technology); VLSI (Large Scale Integrated Circuits); RACE (Communication Technology); BRITE (Bringing Advanced Technologies to Traditional Industries); EURAM (Advanced Materials); EUPNET-DIANE (Information Communication Network and Data Banks); COMMETT (Program for Providing Education on New Technologies through Collaboration Between Companies and Educational Institutions); EUREKA (Coordination of Projects Conducted by Countries and Based on Cooperation between Research Institutions and Companies in the Field of Advanced Technology). Of these, Türkiye has participated in the EUREKA program.

### 6. INVESTMENT AND PRODUCTION POLICIES IN TÜRKİYE (1980-2000)

In the 1970s, developed capitalist countries began to look for ways to transfer their traditional production units to developing countries due to the crisis of mass-fordist production. Underdeveloped and developing countries, which do not yet have the ability to create flexible demand, have also aspired to these fordist production units for domestic consumption. As one of the countries included in this group, Türkiye has started to take up the assembly industry, mostly for consumption and the production of intermediate goods. For example, in the automotive sector in Türkiye, where the consumption potential was high, the following companies started production with the licenses they bought from the main companies: Otosan from British Ford in 1959, Tofaş from Italian Fiat in 1971 and Oyak-Renault from France Renault in 1971. These companies continued their production in Türkiye with the traditional fordist system until the 1990s. However, in Türkiye, which entered into more relations with the world capitalist system in the 1980s and was increasingly influenced by the dynamics created by the globalization policies in the world, new flexible production organizations that were integrated into the mass production system with technology transfer began to be established. Especially in the consumer goods sectors such as textile, food, home appliances, electronic appliances and automobiles, the flexible production approach and technology have begun to settle, this process has proceeded compatible with export-oriented industrialization policies. Regarding this issue, it was stated in the Sixth Five-Year Development Plan: "...it is aimed to determine industrial policies by taking into account the changing production and market structures and to direct new investments within this framework (ABYKP, 1989: 84).

As the export orientation forces the existing companies to increase their capacity and quality, the inflow of new technology and foreign capital has accelerated. Foreign capital inflows were also encouraged by utilizing privatization practices. These incentives were clearly stated in the 5th and 6th Plans: "In parallel with the developments in the world, measures and incentives will be developed that will allow the establishment of companies (offshore business) whose commercial and industrial activities are outside of Türkiye" (BBYKP, 1984: 192). Privatization and free zone practices will continue in order to increase capital inflows" (ABYKP, 1989: 30).

These incentive practices also coincide with the demands of foreign companies. Multinational companies want to use domestic private capital, developed to a certain extent in countries like Türkiye. Because, first, transnational companies share the risks with domestic capital by establishing partnerships and have the advantage of transferring the cost to the domestic state in this way, and secondly, transnational companies can overcome the constraints of being "foreign capital" because they operate by merging with the domestic private sector (Güler, 1996: 48). . For example, Brisa, which was established with the partnership of Lassa-Bridgestone, aimed to increase the capacity of 50 thousand tons to 140 thousand tons with an investment of 166 million dollars and to export 100 million dollars to Europe, Africa and the Middle East, and exceeded this target in the 1990s.

As of 1991, all 19 companies producing in the automotive industry, which is one of the dominant sectors of the economy with a turnover of 12.426 trillion lira in Türkiye, produce under a foreign license or in the form of foreign capital participation. It has been observed that foreign capital and technology inflows accelerated in other sectors such as chemistry, rubber, ready-made clothing, paper, banking, trade, tourism, electricity, electronics and computers. This entry was generally in the form of partnership and cooperation with Turkish companies. Of these, Borusan-Tenneco (USA) in the plastics industry; Akbank-NV Bekaert SA (Belgium) in the iron and steel sector; Lassa-Bridgestone Corp. (Japan) in the tire industry; Akbank-NV Philips Gloe (Netherlands) in the electrical and electronics sector; Akbank-Du Pont DC Nemours and Co. in the chemical industry. (USA); Koç Holding-DMC (France) in the textile sector; Cankurtaran Holding-BATA (Canada) in the ready-to-wear industry; Turkish Petroleum-Burmah Castrol (England) in the Petro-Chemistry sector; Otoyal (Koç Holding)-IVECO (Italy) in the automotive sector; the Machinery and Chemical Industry Corporation-MKEK Nobel Türk-Nitrol Nobel AG (Sweden) in the chemical sector can be given as an example.

As can be seen, in the 1980s and 1990s, big firms in Türkiye mostly adopted to be a bridge in the market development initiatives of multinational companies and to specialize in service activities. Because of these partnerships, new targets have been set in the fields of, renewal of existing technology, flexibility in management and organization, creation of new sales



opportunities, capital and production increase, export orientation and increase, product diversification. However, R&D activities have largely excluded from these.

During the 1980-1988 period, 332 technology transfer agreements were signed. 75% of these agreements were between domestic capital companies and multinational companies and generally in the form of "license" or "trademark" agreements. 25% of the agreements were made between foreign capital companies and main companies operating in Türkiye.

When we look at the 1990s, it is seen that there is a hybrid production structure in Türkiye, which includes small production based on traditional handicrafts and fordist production based on mass mass production, as well as flexible production with relatively high technology. Therefore, there has been a diversification in the work force qualities demanded by this hybrid production structure. This hybrid structure in the industry was also reflected in the existing policies, on the one hand, flexible production structure was supported, on the other hand, traditional labor-intensive investments were encouraged. One of the most important changes experienced in this period was the abandonment of national planning and putting project approach to the fore. The concept of project management turned into "structural adaptation" policies that were compatible to new developments in the world with the World Bank project loans. Structural adaptation policies have undertaken the function of transforming existing national institutions and creating new institutions within the framework of globalization and privatization formulation. These policies are also supported by legal regulations. In order to fulfill this function, "Structural Adjustment Loans-SAL" of the World Bank and "Sectoral Adjustment Loans-SECAL" have started to be used. An example of these is, "Labor Intensive Industry Loan" in 1981, "Export-Oriented Industry Loan" in 1982, "Industrial Education Loan" in 1984, "Small and Medium Size Industry Loan" in 1986, and "Agricultural Industry Loan" in 1989, can be given.

## **7. SMALL AND MEDIUM ENTERPRISES (SME) POLICIES IN TÜRKİYE (1980-2000)**

In the 1970s, the increased in, competition, and market fluctuations in world markets; the shortened of product life cycles caused by rapid technological developments and the ever-changing conditions of international trade together with the diversification of demand in the markets, forced enterprises to make flexible production and created a requirement for a enterprise type that had structural flexibility, could adapt to market fluctuations, and respond instantly to demands.

The 1980s were the years in which SMEs were more prominent in the world, depending on the new developments in inter-firm relations. Policies regarding small industrial sites and organized industrial zones were, also formed an integrity with SME policies.

Small industrial sites are a system developed to provide a more comfortable and healthier working environment and to allow them to work in cooperation for small industrial enterprises, which are scattered in cities and generally operate in bad conditions (Demirörs, 1993: 122). Organized industrial zones, on the other hand, are defined by the Ministry of Industry and Trade as planned industrial areas with infrastructure and common service units necessary for the development of small and medium-sized industries.

In addition to the above-mentioned developments, due to the fact that, technological developments make possible small businesses to do many works that were previously done by large businesses, the importance given to SMEs started to increase in all industrialized countries, especially in European Union. However, the importance given to SMEs did not emerged only because of their flexible specialization and flexible body organization characteristics. Other reasons also played an important role in the increase in the importance given to SMEs. We can list them as follows:

- a. SMEs' appeal to smaller and fragmented markets by requiring less capital intensity,
- b. The fact that SMEs, create more employment per unit capital and were seen as a solution to the increased unemployment, especially in the 1980s,
- c. Large enterprises' desire to spread the damage to a wider base in times of crisis by transferring some of their previous works to subcontracted SMEs,
- d. Businesses want to take advantage of cheap raw materials, trained cheap labor and legal facilities by shifting all or some units of production to different countries depending on the "industrial shift" approach,
- e. The desire to get rid of mass actions such as strikes and slowdowns, which are more easily manifested in mass production,
- f. SMEs are preferred by local and national governments as they contribute to local employment and provide solutions to social movements such as migration to a certain extent,
- g. Large enterprises have to transfer many parts of their increasingly complex products to SME-scale sub-industry enterprises.

## Industrialization Policies in Türkiye 1980-2000 Period

Also in Türkiye, which was affected by, the developments that took place with the crisis of the fordist system based on mass production in industrialized countries and the SME policies that were on the agenda, some studies were started for SMEs. However, while the process of establishing comprehensive and international SME policies in industrialized countries, especially EU countries, started in the 1980s, this process began to be experienced in Türkiye after about 10 years, namely in the early 1990s. After the 1990s, SMEs have become one of the issues that policy-making mechanisms are increasingly interested in in Türkiye.

The dissemination of organized industrial zones, where SMEs predominantly located, turned into a general policy applied at the national level after 1980.

In the 5th, 6th and 7th Development Plans, the following have stated regarding the industrial zones: "In order to use the small industrial sites as an effective tool in the development of the small industrial potential, there will be concentrate on the widespread construction of these sites" (BBYKP, 1984: 157). "Specialized organized industrial zones will be established in developed regions... The establishment of small industrial sites with complementary activities in places with organized industrial zones will be encouraged" (BBYKP, 1984: 165). "Necessary incentives will be provided for, the intensification of small industrial sites in settlements with small industry potential; integrating small industry with medium and large industry, and developing them within the sub-industry system" (ABYKP, 1989: 307).

In the 1984-1990 period, 121 small industrial sites covering a total of 32,729 workplaces were built (Törel, 1991: 241). The number of organized industrial zones, which was 13 at the beginning of the Fifth Five-Year Development Plan-BBYKP (1985-1989) period, increased to 38 with 25 added in this plan period. 81 organized industrial zone projects were included in the 1995 investment program (YBYKP, 1995: 66).

It has seen that the policies of small industrial sites and organized industrial zones in Türkiye have closely related to the SME policies. SMEs, which are dispersed geographically and sectorally, have been tried to gather in organized industrial zones in order to ensure the division of labor and convergence required by flexible specialization. The majority of SMEs in Türkiye continue their existence by doing order type works or contract works from large companies. Almost all of the SMEs, cannot enter the tenders and get first-hand order works due to capital and technical inadequacy, and become subcontractors who perform the works to be given by the large companies that won the tenders. SMEs, which are in a struggle to get a second or even third hand orders, compete among themselves and work with low profit rates due to forced price cuts. In SMEs, due to low profits, R&D and technological innovation investments are almost never made and wages are kept very low. SMEs are dependent on large companies in areas such as raw materials, intermediate goods, technology supply and marketing, in addition to these, sub-industry enterprises, on the other hand, are subject to the supervision and coordination of the main company they work with. However, although SMEs, especially in the position of sub-industry, are dependent on large companies that hold dominance in all sectors from raw material procurement to marketing, it is observed that some SMEs have developed collaborations based on specialization within international subcontracting. For example, the number of SMEs working in this manner has increased in cities such as Denizli, Bursa, İzmir and Manisa. These SMEs, which have relative independence at the marketing stage, become dependent on large companies when it comes to the supply of raw materials, intermediate goods and technology. SMEs, which are dependent on large companies in many respects, cannot become an alternative business in times of crisis as claimed, on the contrary, they suffer from the crisis more than large companies. The collapse of tens of thousands of SMEs in the crisis experienced on April 5, 1994 is a palpable example of this.

It is illusion that small enterprises are "autonomous" and "free" enterprises thanks to fragmented production technologies (Güler, 1996: 102). The following figures reveal the strength of SMEs in Türkiye as of 1987 and 1991.

**Table 4.** Share of SMEs in Manufacturing Industry in Türkiye

Year	Type of Business	Number of Businesses	Employment Share %	Value Added Share %
1987	SME	81.93	23.11	12.36
1987	Large Business	18.06	76.88	87.64
1991	SME	78.37	22.30	10.59
1991	Large Business	21.63	77.70	89.41

Reference: (Sarıkaya, 1995: 16-18-19)

In the table above, it is seen that SMEs are very weak in terms of the last two criteria and are in decline. In Türkiye, 92.29% of small enterprises and 85.12% of medium-sized enterprises did not have an R&D unit in the 1990s. For the stated reasons, SMEs have been supported in various ways by the relevant public institutions and large companies, in order to, they can respond to the orders at the desired standards. SME policies in Türkiye envisaged the integration of SMEs with large companies both in the supplier industry and in the subcontracting relationship.

The Small and Medium Enterprises Development and Support Administration (KOSGEB) was established in 1990 with the Law No. 3624 in order to implement the policies regarding SMEs. KOSGEB has provided services and supports to manufacturing industry SMEs from this date until 2009. However, due to the demands from SMEs in sectors other than the manufacturing industry, KOSGEB's founding law was amended in 2009 and SMEs in the service and trade sectors were included in the KOSGEB target group (<https://www.kosgeb.gov.tr...>). KOSGEB, which was established for implementing SME policies, which constitute one of the weightiest parts of industrialization policies after 1980, has undertaken the most tasks and has become the largest and most effective organization in Türkiye.

## 8. CONCLUSION

In the 1970s, the world went into a great economic depression with the crisis of fordism based on mass production and the blockage of the “import substitution accumulation regime”, and the efforts to overcome this crisis necessitated radical transformations in economic structures, especially in production structures. Towards the 1980s, the protectionist/interventionist/inward-looking economic policies implemented by the nations began to give way to open/liberal/market-oriented policies.

After the 1980s, the dynamics of the new liberal system, which is based on the liberalization of capital markets, can be grouped under four main headings:

- a. The crisis based on overproduction caused by the accumulation regime of capitalism,
- b. Profit squeeze caused by fordist relations and capital/labor conflict,
- c. Intensification of international capitalist competition,
- d. Financial capital and speculative accumulation regime to get ahead of industrial investments.

These developments, called globalization, had great effects on Türkiye in the same direction. Türkiye took a series of economic stability and structural adjustment decisions on January 24, 1980 in order to get rid of the deep economic crisis it fell into at the end of the 1970s. These decisions taken in order to adapt to the globalization trend have based on the following two axes: First, the emphasis market mechanism instead of the central government, and the second, the transition to an export-based, outward development strategy instead of import substitution.

In Türkiye, in parallel with the general trend in the world in the 1980s, the policies have been adopted which, opening the economy to world markets; to ensure more foreign investment; facilitating the entry of foreign goods into the internal market; accelerating privatization policies and to join of SMEs to large enterprises. Türkiye has started to implement these policies with various legal and institutional regulations since the early 1980s.

Türkiye's industrial policies have grouped under the following main principles and titles in line with the new economic policies it has adopted:

### *A. The policy of transition to a free market economy:*

To this end, it was envisaged, to completely abolish price controls, end all protectionism and subsidy practices, and make public enterprises suitable for competition conditions.

### *B. Industrialization policies and sectoral priorities for export and import:*

By reducing investment incentives, exports were encouraged in various ways. With these policies implemented after 1980, significant increases were achieved in exports. Measures such as devaluations, contraction in domestic demand, enhance in capacity utilization rates, low-interest loans for export, duty-free inputs and tax refunds were effective in this increase.

### *C. Investment policies and privatization:*

Public projects and investments were severely restricted by ending privileges such as tax exemption, eligible credit. Privatization of public enterprises as soon as possible has been counted as one of the priority objectives. Restrictions on foreign capital investments have been abrogated. Planning, which played an active role in the industrialization process, was abandoned.

The efforts of the world economies to overcome the crisis faced by the changing market demands in the 1970s revealed the tendency of the industrial sector to become more flexible in the fields of management, production and distribution. In the new competitive conditions, cost has ceased to be the most important factor; instead product qualities and diversity have gained more importance.

The comparative advantage of labor-intensive technologies based on cheap labor has ceased to be an advantage with technological innovations. In addition to new organizations in industrial production, new qualifications for the workforce, reorganization of education systems, and the creation of new technology policies have come to the fore.

Technology transfer has been at the forefront among the channels of access to technology by industrial organizations in Türkiye. It has been observed that in the 1980-2000 period, very advanced and large-scale technologies did not enter the Turkish industry, and there was no technological innovation in SEEs for a very long time. During this period, large companies in Türkiye mostly adopted to be a bridge to multinational companies. However, R&D activities largely excluded from this. Because of entering into more relations with the world capitalist system, new flexible production organizations have begun to be established in Türkiye, which have integrated into the mass production system. There has also been a diversification in the work force qualities demanded by this hybrid production structure.

The 1980s were the years when SMEs were more prominent. However, SMEs continued to be subject to large companies in matters such as coordination, technology and R&D. In addition, large enterprises wanted to spread the damage to other companies in times of crisis by transferring many of their own works to subcontracted SMEs. In Türkiye, some studies were started for SMEs in the 1990s. The dissemination of organized industrial zones and industrial sites has become a national policy. These policies envisaged the integration of SMEs with large companies in a subcontracting relationship.

As in the world, in Türkiye, SMEs have never been independent enterprises, and have remained dependent on large enterprises in every respect.

### 9. SUGGESTIONS

- a. Fordist production models, which are based on large-scale and excessive mass production, produce products with a small number of types and quality diversity, predominate on simple and routine works performed by low-skilled labor, and include inhumane working conditions, should be abandoned.
- b. Sustainable production models that prioritize people and the environment, have high added value, and are based on micro and macro plans should be adopted.
- c. Human and national competencies in all social and economic fields, especially in education, health, science, technology, production and R&D, should be rapidly increased with a planned mobilization.
- d. The subordination of national markets and economic areas to the sovereignty of the imperialist system, privatization and subcontracting in production, envisaged by neoliberal policies imposed on the whole world under the name of globalization, must be stopped. Economic and industrial policies based on the principles of full independence and mutual equality in the international arena should be adopted.
- e. Policies based on planning should be developed in all social and economic areas, private enterprises and privatizations should be completely stopped in common service areas such as education, health, defense, communication, energy, mining, transportation and infrastructure, and publicism/statism should be spread as much as possible in all areas of social and economic life.

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