

FREE ZONES IN TURKEY AND THEIR MACROECONOMIC EFFECTS

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1. *Definition and Kinds of the Free Zones*
 2. *FZs in the World Economy*
 3. *Theoretical Literature on FZs*
 4. *On the Contributions of the FZs to the Host Country*
 5. *Basic Characteristics and Macroeconomic Effects of the FZs in Turkey*
 6. *Conclusions*
- Appendix 1: Free Zone Incentives and Advantages in Turkey
Literature*

Journal of Economic Literature Classification Numbers: O190, F130.

Revised version of the paper prepared for the Seminar on the *Concepts and Instruments of the Economic Development in Turkey: A Model for Palestine?* on 26-30 October, 1995, Antalya, Turkey. All comments are welcome.

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Ankara, February 5, 1996

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1. Definition and Kinds of the Free Zones

Since the end of the World War II, depending on the General Agreement on Tariffs and Trade (GATT), which is recently resulted in the foundation of World Trade Organisation (WTO), it is tried to gradually remove tariffs and non-tariff barriers on international trade of goods and services. Besides the liberalisation attempts on the world trade, customs regimes have the following main exceptions: entrepot regime, temporary admission regime, transit trade regime and regime of free zones (FZs).

Political borders of an independent country may be considered as its custom lines too. Generally, by crossing of its customs lines, foreign goods are customisable according to the customs laws of this country. But as a fiscal exception of this regulation, a FZ is accepted as a foreign country, for which the domestic customs laws are not valid. Intermediate or final goods can be imported duty-free to these zones for the purpose of both domestic and international trade. In FZs, all sorts of activities such as storing, exhibition, manufacturing, assembling, disassembling, testing, packing and unpacking can be carried out.

Actually, there is no general consensus on the usage of the concept of FZ in the literature. Duty-free zones, free economic zones, industrial free zones, free trade zones, free processing zones, free export zones, export free zones, export processing zones, investment promotion zones, free ports, free banking zones (off-shore banking), free insurance zones, free enterprise zones, free gambling zones and free medical zones are similar concepts used in the context of FZs, sometimes with different activity purposes.

According to *the exception degree* in the zones, there are two sorts of FZs, namely open free zones (OFZs) and closed free zones (CFZs). In

OFZs, all customs laws of the country are invalid. All kinds of industrial or commercial activities are permitted in these zones. On the other hand, in CFZs, such activities are only possible under specific conditions.

Another classification basis for FZs, is *the kind of the activities* permitted in the regions. Free trade zones, free processing (or export) zones, free zones for financial activities (off-shore banking, insurance etc.), free medical zones and free gambling zones are the main kinds or categories of the FZs, which can be cited under this classification system. Free trade zones for example are mainly used to store, exhibit or pack goods and to export it from or import it into the zone.

In the late 60s and during the 70s, too many developing countries abandoned their import-substitution strategies and tried to attract foreign capital to support their export-oriented industrialisation strategy. Founding of free (processing) zones was an interim solution by this transition process. Abolishing the general customs rules fully or partially for a specific region of the country was helpful for exposing their hidden relative or comparative advantages, which was not usable (sufficiently) because of the (high) protection walls [Ilkin and Tekeli (1987: 13-14)]. Therefore, free processing zones can be seen as a good combination of "free trade zones" and "organised industrial zones". Since manufacturing activities are permitted in free processing zones, imports of intermediate goods into the zone is cheaper for the domestic exporters which will produce their final good in the same zone and then export it to the rest of the world.

Besides the geographical advantages of a FZ for the investors or user firms, the infrastructure and superstructure of the zone can be realised by the government or a private founder(-operator) firm. To attract foreign and/or domestic capital into a FZ there are various possible incentives and exceptions apart from the abolished general customs laws. Fiscal incentives like tax exemptions and reduced bureaucracy are among them.

2. FZs in the World Economy

First examples of FZs were founded before app. 2000 years in the Northeast Mediterranean region. But the first FZs with similar structures

and functions to the today's FZs are established nearest before 300 years ago.¹ After the Great Depression at the end of 1920s and especially in the second half of the 1960s, there was a massive orientation to the foundation of FZs in the world. The successful FZ-implementations in Ireland (Shannon region, 1959), Puerto Rico (1962), Panama, Taiwan and South Korea contributed to the foundation of new FZs all around the world.

At the beginning of the 1970s there was more than 130 active FZs in the world, only 20 of them in 10 developing countries. In 1986, in 46 developing countries 175 FZs were at the planing stage. The total number of the FZs in the world reached then 362 in 1980 and exceeded 500 in the middle of the 1990s. Today some 80 countries around the world operate a total of about 500 FZs, mostly in less developed countries. The geographical distribution of the FZs in the world are given in Table 2.1. Table 2.2 shows the total trade volume of the FZs, its share on the world trade in goods, and total (direct) employees in the FZs of the world.

Table 2.1: Geographical Distribution of the FZs in the World

	1970	1980	1994
USA *	10	62	183
Latin America	40	95	97
Europe	50	90	93
Africa	10	55	43
Middle East	2	25	27
Far East	15	35	83
<i>Total</i>	127	362	526

* Subzones excluded.

Source: Akyürek (1983: 21), Erdoğan (1985: 20) and Güner (1995: 16-18).

¹ See Erdoğan (1985: 9-12) and Güner (1995: 1).

Table 2.2: Selected Data on the FZs in the World Economy

	1970	1980	1985	1994
Total Number of the FZs in the World	127	362	n. a.	526
Total Trade Volume of the FZs (trillion US\$)	n. a.	1.6	n. a.	n. a.
FZs Share on the World Trade in Goods (%)	n. a.	9	20	n. a.
Total Direct Employees in FZs (persons) ^{***}	50 000	736 500*	1 300 000**	n. a.

Sources: Akyürek (1983: 21), Erdoğan (1985: 20-21), Ilkin and Tekeli (1987: 75), Çankçı (1989: 9), Karluk (1994: 334) and Güner (1995: 1-2, 16-18).

* 1978, ** 1986, *** only in developing countries, n. a.: not available.

In the middle of the 1990s, the total trade volume of more than 500 FZs was around 700 billion US\$. Actually, there is a big statistical lack on the FZs of the world; especially the data on the directly employed persons in FZs is fully unreliable. Therefore, it is unfortunately impossible to make meaningful and detailed international comparisons.

3. Theoretical Literature on FZs

While it may seem as if FZs have an extensive history, it is only within the last decade that, they have begun to play a prominent role in international trade. Therefore, there is not too much theoretical study on the FZs.

The theoretical discussions in the FZs-literature are concentrated mainly on the possible *wealth (national income) effects* of a FZ in the context of a standard Heckscher-Ohlin model with *full employment and final goods*.² The case for *intermediate goods* is analysed by Young (1987).

² See Hamada (1974), Rodriguez (1976), Hamilton and Svensson (1982), and Miyagiwa (1986).

The possible *employment* and wealth effects of the formation of a FZ in a developing country with Harris-Todaro unemployment is considered by Young and Miyagiwa (1987) and Chaudhuri and Adhikari (1993).

Besides the wealth and employment effects of FZs on host country, it is also discussed whether, the formation of a FZ is important by attracting foreign investors into the FZs. Miyagiwa (1993), on the other hand, discusses the rural versus urban locational choice options for FZs. The contributions of FZs to the *regional development* within a developing country are discussed in the context of industrial location theories [see Kocaman (1994)].

Finally, Basile and Germidis (1985) developed a four-phase life cycle of the FZs, from the build-up of basic infrastructure and increasing foreign direct investment and exports, through a levelling-off and (hopefully) upgrading phase, to eventual integration of the zone into the local economy, by disinvestment or take-overs by domestic entrepreneurs.³ Now, I can give some more detail on the results of the well-known models developed for FZs.⁴

(i) *The possible wealth effects of a FZ*

To my knowledge, Hamada (1974) presents the first theoretical framework to analyse the economic implication of a duty-free zone, where duties are exempted in order to attract foreign investments. Using the standard two-factor, two commodity model in which domestic production of the capital-intensive good is protected by a tariff, while producers in the duty-free zone face world prices, he shows that, in the absence of foreign investment, the establishment of a FZ does not affect production, if the protection is in the form of import tariff; also that the increase in foreign investments in the FZs does not necessarily improve the consumption possibilities available to a developing country. Hamada's conclusion as a negative welfare effect of a foreign-capital

³ See Sklair (1986).

⁴ For a detailed survey of the theoretical framework for FZs see Ilkin and Tekeli (1987: 16-28).

inflow into a FZ is however, based on the assumption that, in the host country labour forces are fully employed, which is unrealistic for many developing countries which have FZs.

Rodriguez (1976), two years later, extended some of the results of Hamada (1974) on the economic effects of a FZ. Rodriguez (1976) notes that, in the presence of factor mobility between the FZ and the rest of the host economy, the final equilibrium will yield the same trade pattern which would have prevailed under free trade; moreover, all of the trade will be done by the FZ.

Hamilton and Svensson (1982), on the other hand, attempted to extend and correct the results of Hamada (1974). They analysed the implications of the opening up a FZ for (the location of) production, consumption and welfare, taking different kinds of zones and of trade barriers for final goods into account. They also show that, capital inflow either into the zone or into the host country diminish welfare, and welfare comparatively diminishes more, when imported into the zone.

Miyagiwa's (1986) alternative model of a FZ incorporates the fact that, such zones are often established by government subsidies, and they are designed to promote non-traditional exports. The condition is derived under which the establishment of a FZ can increase welfare, regardless of the relative factor intensity of a zone-based industry. In an economy, in which industrial production is protected by tariffs, he shows that, if a FZ is established by granting an exports subsidy to another industry, which draws resources from the existing protected sector, then welfare will be increased. However, Miyagiwa (1986) states that, the relative factor intensity of a FZ plays a crucial role in determining the change in welfare following economic growth and foreign investment.

(ii) *The possible effects of the imported intermediate goods into a FZ*

The removal of tariff protection on *final* goods is the key feature of FZs for the abovementioned authors. As Hamada (1974: 235) shows, this feature tends to *discourage* foreign investment by lowering its return, whereas the ostensible purpose of a zone is to encourage such investment. In Young (1987), it is focused on the duty-free feature which provides this encouragement: the reduction of tariffs on imports of *intermediate*

goods used in the zone and of taxes on repatriated profits. Young (1987) treats, on the other hand, the effects of the *endogenous* changes in investment induced by the changes in tariffs and taxes which create the zone, whereas Hamada (1974) and Hamilton and Svensson (1982) consider the effects of *exogenous* changes in foreign investment in an existing FZ. Thus the model developed by Young (1987) is driven by the price changes accompanying the formation of the FZ, while the above mentioned models focused on changes in factor allocations and outputs for fixed commodity and factor prices. As a result, Young (1987) shows that, when the tariff on imports of intermediate goods into a zone is lowered, then this can also reduce national income and welfare in the host country by exacerbating the losses from the tariff on intermediate imports into the rest of the economy. In reaching these negative conclusions, Young (1987) too assumes that, there is full employment in the host country.

(iii) *The possible employment effects of a FZ*

A common motivation for setting up a FZ is the existing high domestic unemployment in the host country. Therefore, Young and Miyagiwa (1987) consider the effects of removing tariffs on intermediate imports when domestic unemployment is of the Harris-Todaro type. They show that, the formation of the zone then, *always* increases national income at world prices. In contrast to Young's (1987) results under full employment, the reduction of the distortionary tariff on intermediate imports does *not* exacerbate the losses from the tariff on intermediate imports into the rest of the economy and reduces the losses from the distortion which creates the unemployment (the rigid urban wage). Thus, the formation of a FZ appears to be a sound "second-best" policy in an economy with this type of unemployment.

Chaudhuri and Adhikari (1993) attempts to generalise the Young-Miyagiwa (1987) results for an economy with a FZ and Harris-Todaro unemployment by incorporating intersectoral mobility of domestic capital and an upward sloping supply function of foreign capital. Their analysis reveals that, under reasonable assumptions, creating a FZ may lead to a loss in national welfare. Further, a conflict may arise between the twin objectives of increasing employment and increasing national welfare.

(iv) Rural versus urban locational choice options for FZs

In Miyagiwa (1993), urban and rural areas are compared as appropriate locations for a free-trade zone within a developing country suffering from urban unemployment. If domestic capital is mobile between the two regions, then the rural area is shown to be preferable to the urban area. This conclusion may be reversed, however, if capital is sector-specific.

4. On the Contributions of the FZs to the Host Country

The economic contributions of a FZ to the host country can be *directly* or *indirectly* in nature. A FZ as a region within the political but outside the customs borders of the host country has mutual trade in goods, services, capital and labour with the host country. The value of the trade in goods, services and capital of the domestic FZs can be considered in the framework of a *quasi-balance-of-payments*, which is actually not available for FZs. In this context, a positive net goods and services exports of the host country into its zones builds a sort of positive direct effect. Foreign capital moved into the FZs has a positive direct effect too. On the other hand, a possible additional foreign direct investment in the host country in connection with the foreign activities in a FZ may be neglectable.

But there is other contributions of FZs to the host country and they are not explicitly reflected in the so-called quasi-balance-of-payments. Labour "movements" and technology transfer to the FZs are other sources of macroeconomic effects. The magnitude of labour "inflow" into the zones from the host country can be seen as *direct employment effect*. It reduces possible unemployment of labour in the host country.⁵ The *indirect employment effect* of FZs results from the zone-oriented production in the host country which creates additional jobs in the country. This indirect effect is not easy to estimate in many cases.

⁵ It is important to note here that generally the domestic labour forces employed in the FZs are resident in the host country and not in the FZ.

The positive and negative macroeconomic effects of a FZ are a complex one. The theoretical analysis-framework developed from the view point of a host country is summarised in Table 4.1 and Table 4.2.⁶

Table 4.1: Expected Effects of FZs: A Host-Country View

	<i>Positive Contributions to the HC Economy</i>	<i>Negative Contributions to the HC Economy</i>
<i>Goods</i>	(1) Exports from HC into FZs. (2) Domestic consumers pay less to the imported goods from the FZs at the amount of the difference between the actual value of imports from the FZs into the HC and the potential value of the directly imported goods from the RW into the HC.	(9) Imports from FZs into HC.
<i>Non Factor Services</i>	(3) Income which results from the exports of services (transports, storing, communication, tourism, etc.).	(No sensitive negative effects)
<i>Factor Income</i>	(4) Wages and salaries paid to the domestic labour employed in FZs. (5) Profit and interest-income transfers from FZs.	(10) Wages and salaries paid by domestically owned firms to the foreign labour employed in FZs.
<i>Capital</i>	(6) Foreign direct investments in FZs and possibly in HC too.	(No sensitive negative effects)
<i>Labour</i>	(7) Increasing domestic labour employment because of the FZs.	(No sensitive negative effects)
<i>Technology</i>	(8) Foreign technology transferred into FZs and possibly into HC too.	(No sensitive negative effects)

FZ: free zone

HC: host country

RW: rest of the world

⁶ See for the UNCTAD's analysis framework of the main costs and benefits of FZ projects Çankıçı (1989: 46-47).

Table 4.2: The Possible Effects of FZs on Domestic and Foreign Economic Actors

	<i>Domestic</i>	<i>Foreign</i>
<i>Labour Suppliers</i>	(1) can find a well paid job in the FZs.	(7) can find a job in the FZs.
<i>Consumers</i>	(2) pay less to the imported goods.	(8) pay less to the imported goods from the FZs.
<i>Producers in the FZs</i>	(3) profits more than in HC. (4) exports more to the RW.	(9) exports more to the HC and within the RW countries.
<i>Producers outside the FZs</i>	(5) have to compete with imports from the FZs.	(No sensitive effects)
<i>Government</i>	(6) loses tax revenues.	(No sensitive effects)

FZ: free zone

HC: host country

RW: rest of the world

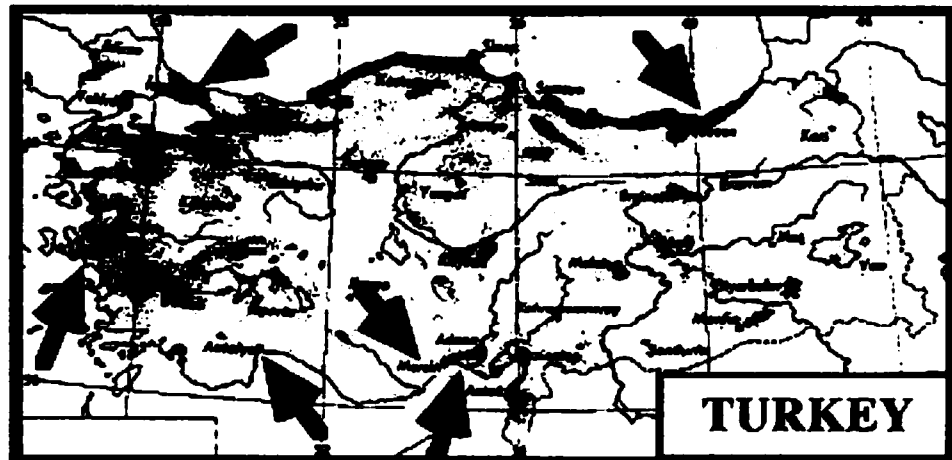
5. Basic Characteristics and Macroeconomic Effects of the FZs in Turkey

Turkey, as a country of 780 thousand square kilometres and in the middle of Europe, Asia and Middle East, is about three times the size of the former Federal Republic of Germany. The idea of establishing FZs goes back to late 1920s when Turkish Parliament passed a law in 1927 related to this issue. However, late 1920s and decade of 1930s were not suitable for the establishment of these zones due to the world economic crisis during these periods [Çankıcı (1989: 50)].

After the inward-oriented trade and industrialisation strategies during the period of 1946-1979, Turkey started to emphasise export-oriented strategies. Therefore, the attempts to establish FZs are reinforced once again in Turkey. On June 15, 1985, *Free Zones Law* no. 3218 was issued to increase export-oriented investment and production, reduce unemployment, accelerate the inflow of foreign capital and technologies, procure the inputs of the economy in an economic and orderly fashion.

and increase the utilisation of external finance and trade possibilities.⁷ At that moment, it was planned the foundation of four zones nearby by Mersin, Antalya, Adana, and Izmir. All of these regions has / have a broad hinterland with relative developed international transit way systems. The number of the active FZs is six in the middle of 1995: Mersin FZ, Antalya FZ, Aegean FZ, Istanbul Atatürk Airport FZ, Trabzon FZ and Istanbul Leather-FZ. Furthermore, the location and boundaries of seven more FZs, Adana-Yumurtalık, Istanbul-Trakya, Istanbul Atatürk Airport FZ Off-Shore Banking Centre, Zonguldak-Filyos, Mardin, Eastern Anatolia and Istanbul Stock Exchange FZ, have been already determined.⁸ The geographical distribution of the six active FZs in Turkey can be seen on Graph 5.1.

Graph 5.1: Free Zones in Turkey



While trade activities constitute the main field of activity in Mersin FZ,

⁷ For a more detailed historical background of the FZs in Turkey, see Cimilli (1979: 180-192), Akyürek (1983: 76-113), Erdoğan (1985: 89-121), Ilkin and Tekeli (1987: 88-149) and UFT GDFZ, *Free Zones Monthly Report*, June 1995.

⁸ In general, all kind of activities can be performed in Turkish FZs such as manufacturing, general trading, warehousing, banking-insurance, packing, maintenance, assembling-disassembling, leasing, consulting engineering and exhibition. And there is no export prohibition of goods manufactured in the zones into Turkey.

textile and ready-wear manufacturing activities have intensified. The works for establishing tourism oriented shopping-centres in Antalya FZ have started to operation in order to contribute the tourism potential of the region. The manufacturing activities based on advanced technology take place in Aegean FZ. Istanbul Atatürk Airport FZ mainly specialised in import and export of textile, ready-wear, electronic and optic appliances and storing. Istanbul Leather FZ is the first specialised zone of the private sector for all kinds of activities regarding the manufacturing, storing and trade of leather and leather products. The Trabzon FZ serves as a base for the transit transport of the goods among the European countries, member of the Commonwealth of Independent States and Turkic Republics in particular.⁹

The foundation and operation of the Turkish free zones are realised within the framework of "Build-Operate and Transfer" model being adopted in Turkey. Accordingly, the infrastructure and land of Mersin and Antalya Free Zones, which are the first implementation of the FZs Law no 3218, have been provided by the Government and the finance of the superstructure has been met by the private sector. As the experience has been gained in the FZ implementations, the financing of the superstructure works by the private sector is preferred.

Both the infrastructure and superstructure of Aegean, Istanbul-Leather and Trabzon FZs are being built by the private sector. The model has gone further, and as in the example of Istanbul-Leather FZ, the land of the zone has been provided by the private sector.

In summary, the founding and/or operating of free zones are realised by Operators or Founder-Operators from the private sector being formed subject to a Decree of the Council of Ministers. Those companies which have founded and operated the Aegean and Trabzon FZs are enterprises with substantial share of foreign capital. The foreign capital shares in these companies are 96.4 % and 94 % respectively.¹⁰

⁹ See UFT GDFZ, *Free Zones Monthly Report*, May 1995.

¹⁰ See UFT GDFZ, *Free Zones Monthly Report*, May 1995.

The basic characteristics of the Turkish FZs¹¹ are given in Table 5.1 and 5.2. The main incentives and advantages in the Turkish FZs are given in Appendix 1 attached to this paper. The annual volume and direction of trade of these zones are summarised in Tables 5.3, 5.4, 5.5, 5.6 and 5.7. According to these data, the FZs in Mersin, Izmir and Antalya have relatively more trade in goods with the rest of the world compared with other zones in Turkey. The zones in general are *net exporter* in trade with Turkey, but *net importer* in trade with the rest of the world. The net result of trade with all countries of the world is positive from the view point of the FZs in Turkey since three years (Table 5.4). Furthermore, the share of FZs on the trade of Turkey reached 2.9 % last year (Table 5.5). Table 5.6 shows that, cotton, textiles and garments sectors have the highest trade volume among the FZs.

According to the information of the *Monthly Report* of the Undersecretariat of Foreign Trade General Directorate of Free Zones, the direct employed labour forces in the Turkish FZs are around 5 000 persons. The indirect jobs created by the zones inside Turkey is estimated as 15 000 persons.

¹¹ The full harmonisation of FZ implementations within the EU has not yet been achieved. So the Turkish side does not need a new legal arrangement on this subject during the customs union period. See UFT GDFZ, *Free Zones Monthly Report*, April 1995.

Table 5.1: The Characteristics of the Turkish FZs (1995.01-07)

	Mersin FZ	Antalya FZ	Aegean FZ	Istanbul (Airport)	Trabzon FZ	Istanbul (Leather) FZ	Adana-Yumurtalik FZ	Istanbul-Trakya FZ	All FZs	
Total Area (m ²)	750 000	550 000	2 200 000		38 000		4 800 000	314 500	8 652 500	
Start Date of the Activities	03.11.1987	14.11.1987	15.08.1990	04.08.1990	04.06.1992	1995		09.04.1993	-	
Territory Proprietorship	public	public	public	public	public	private	public	private	-	
Financing of the Infrastructure	public	public	private (ESBAŞ)	public	private (TRANSBAŞ)	private (DESBAS)	private (TAYSEBAŞ)	private (ISBAŞ)	-	
Financing of the Superstructure	private (users)	private (users)	private (users)	public	private (TRANSBAŞ)	private (users)	private (users)	private (users)		
Operator-Firm of the Zone	private (ASBAŞ)	private (MESBAŞ)	private (ESBAŞ)	-	private (TRANSBAŞ)	private (DESBAS)	private (TAYSEBAŞ)	private (ISBAŞ)		
Foreign Share on OF (%)	0.0	0.0	96.4	0.0	94.0	0.0	25.0	0.0		
Turkish UFs in FZs	1993	224	86	81	69	7	0	0	0	467
	1995	255	80	143	78	11	46	0	0	613
Foreign UFs in FZs	1993	27	15	21	14	8	0	0	0	85
	1995	52	19	51	12	7	7	0	0	148
Total UFs in FZs	1993	251	101	102	83	15	0	0	0	552
	1995	307	99	194	90	18	53	0	0	761

OF: Operator-Firm. UF: User-Firm.

Source: UFT GDFZ, *Free Zones Monthly Report*, July 1995, Ankara.

Table 5.2: Breakdown of FZs Users' Activities (1995.01-08)

Type of Facilities	Mersin FZ		Antalya FZ		Aegean FZ		Istanbul (Airport)		Trabzon FZ		Istanbul (Leather)		All FZs in Turkey	
	L	F	L	F	L	F	L	F	L	F	L	F	L	F
Operator	1	0	1	0	0	0	0	0	0	0	0	0	2	0
Establisher-Operator	0	0	0	0	0	1	0	0	0	1	1	0	1	2
Purchasing-Selling	129	46	29	6	107	34	71	12	12	5	42	6	390	109
Banking-Insurance	18	0	9	0	6	0	4	0	2	0	3	0	42	0
Leasing	39	3	17	1	2	2	0	0	0	1	1	0	99	7
Production	29	2	9	4	26	11	0	0	0	0	6	2	70	19
Storing	42	5	9	1	2	1	0	0	0	1	1	0	54	8
Assembling-Dissas.	2	0	2	0	5	1	0	0	0	0	0	0	9	1
Repair-Maintenance	2	0	1	0	0	2	0	0	0	0	0	0	3	2
Others	5	1	3	7	7	2	3	0	0	0	0	0	18	10
Total	267	57	80	19	155	54	78	12	14	8	54	8	648	158
Total	324		99		209		90		22		62		806	

L: Local. UF: Foreign.

Source: UFT GDFZ, *Free Zones Monthly Report*, August 1995, Ankara.

Table 5.3: Volume of Trade of the Turkish FZs (1988-95, 1000 US\$)

	Mersin 1%	Antalya 1%	Aegean 1%	Istanbul (Airport)	Trabzon FZ	Istanbul (Leather)	All FZs
1988	152 447	1 321	0	0	0	0	153 768
1989	117 782	34 683	0	0	0	0	152 465
1990	272 533	7 910	82	1 984	0	0	282 109
1991	420 354	14 781	28 124	27 948	0	0	491 207
1992	414 641	30 428	55 832	121 789	4 878	0	627 568
1993	543 148	62 750	227 653	173 742	13 616	0	1 020 910
1994	927 740	88 955	453 030	444 915	44 112	0	1 958 752
1995 *	696 114	89 859	340 566	241 077	55 049	26 671	1 449 337
1994 *	-83 606	33 147	227 505	171 547	18 218	0	934 022
Total	3 544 761	330 687	1 105 287	1 011 055	117 656	26 671	6 136 117

* Data only for first seven months.

Source: UFT GDFZ, *Free Zones Monthly Report*, July 1995, Ankara.

Table 5.4: Annual Volume and Direction of Trade of the Turkish FZs (1988-95, 1000 US\$)

	Exports into:		Imports from:		Total Trade Volume	Selected Ratios		
	Turkey (1)	Other Countries (2)	Turkey (3)	Other Countries (4)		(1) /	(2) /	[(1)+(2)] /
	(1)	(2)	(3)	(4)	Volume	(3)	(4)	[(3)+(4)]
1988	53 955	21 298	42 908	35 607	153 768	1.26	0.60	0.96
1989	37 664	28 673	18 769	67 360	152 465	2.01	0.43	0.77
1990	118 632	21 559	50 909	91 009	282 109	2.33	0.24	0.99
1991	181 847	60 140	126 856	122 364	491 207	1.43	0.49	0.97
1992	209 906	94 902	136 243	186 517	627 568	1.54	0.51	0.94
1993	333 914	177 860	215 760	293 375	1 020 910	1.55	0.61	1.01
1994	702 030	321 685	492 320	442 718	1 958 752	1.43	0.73	1.09
1995 *	476 762	260 211	272 940	439 424	1 449 337	1.75	0.99	1.03
Total	2 114 710	986 329	1 356 706	1 678 372	6 136 117	1.56	0.99	1.02

* Data only for first seven months.

Source: UFT GDFZ, *Free Zones Monthly Report*, July 1995, Ankara.

**Table 5.5: Trade Share of Turkish FZs on Trade of Turkey
(1988-95, million US\$)**

	Total Trade Volume of Turkey			Turkey's Trade with Turkish FZs			FZs Share on Trade of Turkey (%)		
	Exports	Imports	Total	Exports	Imports	Total	Exports	Imports	Total
1988	11 929	14 335	26 264	43	54	97	0.36	0.38	0.37
1989	11 780	15 792	27 572	19	38	56	0.16	0.24	0.20
1990	13 026	22 302	35 328	51	119	170	0.39	0.53	0.48
1991	13 667	21 047	34 714	127	182	309	0.93	0.86	0.89
1992	14 891	22 871	37 762	136	210	346	0.91	0.92	0.92
1993	15 611	29 428	45 039	216	334	550	1.38	1.13	1.22
1994	18 390	23 270	41 660	492	702	1 194	2.68	3.02	2.87
1995 *	11 935	18 350	30 285	273	477	750	2.29	2.60	2.48
Total	111 229	167 395	278 624	1 357	2 115	3 471	1.22	1.26	1.25

* Data only for first seven months.

Sources: UFT GDFZ, *Free Zones Monthly Report*, July 1995, Ankara.
Central Bank of RT, *Electronic Data Distribution System*, Ankara.

Table 5.6: Sectoral Breakdown of Volume of Trade of the Turkish FZs (1995.01-07, 1000 US\$ and percentage), Part 1

	Mersin FZ		Antalya FZ		Aegean FZ	
	1000 US \$	%	1000 US \$	%	1000 US \$	%
AGRICULTURE	324 582	46.6	2 866	3.2	36 679	10.8
A. Vegetable Products	285 082	41.0	2 849	3.2	6 066	1.8
Cotton	228 746	32.9	1	0.0	1 323	0.4
Tobacco	20 180	2.9	0	0.0	29	0.0
Hazelnuts	4 363	0.6	0	0.0	737	0.2
Raisins	411	0.1	0	0.0	2 904	0.9
Others	31 383	4.5	2 847	3.2	1 074	0.3
B. Livestock Products	34 637	5.0	12	0.0	27 770	8.2
C. Fishery Products	40	0.0	0	0.0	2 053	0.6
D. Forestry Products	4 824	0.7	5	0.0	790	0.2
INDUSTRY	371 532	53.4	86 992	96.8	303 887	89.2
E. Mining and Quarrying	32 399	4.7	0	0.0	276	0.1
F. Processed Petroleum Prod.	71 554	10.3	0	0.0	15 772	0.0
G. Manufacturing Industry	267 579	38.4	86 992	96.8	303 596	89.1
Processed Agriculture Prod.	19 333	2.8	8 536	9.5	878	0.3
Textiles and Garments	86 406	12.4	54 911	61.1	114 707	33.7
Hides and Skin	591	0.1	1 626	1.8	197	0.1
Glass and Ceramics	291	0.0	34	0.0	77	0.0
Cement	71	0.0	0	0.0	2	0.0
Chemical Products	67 970	9.8	6 607	7.4	12 018	3.5
Rubber and Plastic	16 261	2.3	0	0.0	303	0.1
Iron and Steel	5 831	0.8	0	0.0	6 644	2.0
Non-ferrous metals	1 601	0.2	11	0.0	581	0.2
Metalic Products	0	0.0	46	0.1	9 034	2.7
Machinery Ind. Prod.	34 886	5.0	2 265	2.5	44 769	13.1
Elect.-Electronic Ind. Prod.	9 215	1.3	168	0.2	57 636	16.9
Motor Vehicles	20 369	2.9	567	0.6	49 688	14.6
Others	4 752	0.7	12 222	13.6	7 060	2.1
TOTAL	696 114	100.0	89 859	100.0	340 566	100.0

Table 5.6: Sectoral Breakdown of Volume of Trade of the Turkish FZs (1995.01-07, 1000 US\$ and percentage), Part 2

	Istanbul (Airport)		Trabzon FZ		Istanbul (Leather)		All FZs	
	1000 US \$	%	1000 US \$	%	1000 US \$	%	1000 US \$	%
AGRICULTURE	0	0.0	612	1.1	12 463	46.7	377 204	26.0
A. Vegetable Products	0	0.0	245	0.4	0	0.0	294 243	20.3
Cotton	0	0.0	0	0.0	0	0.0	230 070	15.9
Tobacco	0	0.0	0	0.0	0	0.0	20 209	1.4
Hazelnuts	0	0.0	8	0.0	0	0.0	5 108	0.4
Raisins	0	0.0	22	0.0	0	0.0	3 337	0.2
Others	0	0.0	215	0.4	0	0.0	35 519	2.5
B. Livestock Products	0	0.0	0	0.0	20	0.1	62 439	4.3
C. Fishery Products	0	0.0	342	0.6	41	0.2	2 475	0.2
D. Forestry Products	0	0.0	25	0.0	12 403	46.5	18 047	1.2
INDUSTRY	241 077	100.0	54 437	98.9	14 207	53.3	1 072 133	74.0
E. Mining and Quarrying	0	0.0	0	0.0	0	0.0	32 675	2.3
F. Processed Petroleum Prod.	0	0.0	0	0.0	0	0.0	71 570	4.9
G. Manufacturing Industry	241 077	100.0	54 437	98.9	14 207	53.3	967 888	66.8
Processed Agriculture Prod.	0	0.0	27 515	50.0	78	0.3	56 340	3.9
Textiles and Garments	216 940	90.0	152	0.3	7 170	26.9	480 286	33.1
Hides and Skin	663	0.3	63	0.1	187	0.7	3 328	0.2
Glass and Ceramics	0	0.0	42	0.1	783	2.9	1 226	0.1
Cement	0	0.0	272	0.5	254	1.0	599	0.0
Chemical Products	4 228	1.8	167	0.3	181	0.7	91 171	6.3
Rubber and Plastic	0	0.0	180	0.3	40	0.1	16 785	1.2
Iron and Steel	0	0.0	1 134	2.1	0	0.0	13 610	0.9
Non ferrous metals	0	0.0	663	1.2	5 404	20.3	8 261	0.6
Metalic Products	0	0.0	0	0.0	23	0.1	9 102	0.6
Machinery Incl. Prod.	136	0.1	269	0.5	89	0.3	82 414	5.7
Elect.-Electronic Ind. Prod.	14 439 313	6.0	548	1.0	0	0.0	82 007	5.7
Motor Vehicles	0	0.0	15 747	28.6	0	0.0	86 371	6.0
Others	4 672	1.9	7 684	14.0	0	0.0	36 390	2.5
TOTAL	241 077	100.0	55 049	100.0	26 671	100.0	1 449 337	100.0

Source: UFT GIDIZ, *Free Zones Monthly Report*, July 1995, Ankara.

**Table 5.7: Country Breakdown of Trade Volume of the Turkish FZs
(1995.01-07, 1000 US\$ and percentage)**

	Mersin FZ		Antalya FZ		Aegean FZ	
	1000 US \$	%	1000 US \$	%	1000 US \$	%
Turkey	307 582	45	33 826	38	204 468	60
EU Countries	70 353	10	33 885	38	49 021	14
Other OECD Countries	43 762	6	3 953	4	28 508	9
Other European Countries	21 546	3	3 840	4	2 429	1
Commonwealth of Ind. St.	149 221	21	0	0	11 338	3
Middle East Countries	28 888	4	576	1	21 028	6
North African Countries	6 543	1	0	0	1 532	0
Rest of the World	68 219	10	13 778	15	22 243	7
Total	696 114	100	89 859	100	340 566	100

	Istanbul (Airport)		Trabzon FZ		Istanbul (Leather)	
	1000 US \$	%	1000 US \$	%	1000 US \$	%
Turkey	178 091	74	3 933	7	22 350	83
EU Countries	20 613	9	12 883	23	943	4
Other OECD Countries	6 280	2	581	1	273	1
Other European Countries	8 781	4	1 185	2	777	3
Commonwealth of Ind. St.	4 083	2	34 510	63	1 533	6
Middle East Countries	321	0	1 589	3	0	0
North African Countries	85	0	0	0	0	0
Rest of the World	22 823	9	368	1	794	3
Total	241 077	100	55 049	100	26 671	100

	All FZs	
	1000 US \$	%
Turkey	750 250	50
EU Countries	187 698	13
Other OECD Countries	83 357	6
Other European Countries	37 780	3
Commonwealth of Ind. St.	199 152	14
Middle East Countries	52 403	4
North African Countries	8 161	1
Rest of the World	127 432	9
Total	1 449 337	100

Source: UFT GDFZ, *Free Zones Monthly Report*, July 1995, Ankara.

6. Conclusions

Economic free zones are regions located inside the political boundaries of a consist of limited areas of land and they are separated from the surrounding host country's territory by fences and other barriers. The growing tendency to establish FZs during the 1960s and 1970s also have been observed in Turkey since the outward orientation of the Turkish economy after 1980.

FZs are established mainly for the purpose of some of the following objectives:

- * to diversify export base by promoting manufactured exports,
- * to increase (net) foreign exchange earnings,
- * to attract foreign capital and advanced technology,
- * to create employment and/or reduce unemployment, and
- * to upgrade labour and management skills.

In this paper, I have tried to develop an analysis framework for the effects of the FZs for the host country. But the limited statistical information on the FZs all around the world makes an comprehensive empirical evaluation of the experiences of host countries impossible.

However, by the Turkish case, one can say that, the FZs in Turkey have weak employment and limited foreign-capital-attraction effects. But they have a prominent role for trade in goods since 1991. In spite of the fact that, the data on FZs are unreliable, it is useful to analyse the increasing importance and macroeconomic effects of the FZs in Turkey and in the whole world.

Appendix 1 : Free Zone Incentives and Advantages in Turkey¹²

1. Free Zones are deemed to be outside of the customs borders. Legislative provisions to taxes, levies and to customs and foreign exchange obligations are not applicable in these zones. Within the free

¹² See UFT GDFZ, *Free Zones Monthly Report*, July 1995.

zone boundaries the goods and services are exempt from value added tax (VAT).

2. During the investment and production phases Free Zone users and operators can benefit from the incentives determined by the Council of Ministers. These incentives and advantages are applied equally to foreign and local firms.

3. Income and revenues generated in the free zones through activities of real persons and legal entities with full or limited tax liability in Turkey, are exempt from income and corporate taxes, provided that the transfer of such income and revenues to Turkey is documented pursuant to foreign exchange regulations.

4. Trade conducted between the free zone and other region of Turkey is subject to the foreign trade regime. The foreign trade regime is not applicable for trade conducted between the free zones and other countries or free zones.

5. There is no procedural restrictions regarding price, standards or quality of goods in the Turkish Free Zones.

6. During the application and operation phases, bureaucracy and red tape are minimised. Operation of the free zones is performed by private companies.

7. In contrast to most free zones in the world, sales into the domestic market and barter trade are allowed in the Turkish Free Zones.

8. Strikes and lock-outs are prohibited for a period of ten years from the beginning date of operation for each zone.

9. The maximum period for an operating licence is 99 years.

10. Free Zones earnings and revenues can be transferred to any country, including Turkey, freely without any prior permission and are not subject to any kind of taxes, duties and fees.

11. The fund payment of 0.5 % on the FOB value of the goods brought into the free zone from Turkey and goods used at the investment and construction stages is not applicable. This exemption also applies for equipment brought into the zone for repair and maintenance purposes.

12. Turkish Free Zones are adjacent to the European Union and Middle East markets and also major Turkish Ports on the Mediterranean, Aegean and Black Seas. In addition they were established within easy access to

international airports, highways and attractive cultural, tourism, recreation and entertainment centres.

13. Infrastructure of the Turkish Free Zones is comparable with the international standards.

14. In the Turkish Free Zones, Municipality Law, Passport Law, Foreign Investment and Encouragement Law, General Accounting Law, Supreme Court of Finance Law, and all other articles of laws contrary to the provisions of the Free Zones Law, shall not be applicable.

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