

**The Economical Impacts of Free Zones:  
The Estimation in terms of Trade Volume,  
Employment and Foreign Capital of Free Zones in  
Turkey and Bursa Free Zone**

*Serbest Bölgelerin Ekonomik Etkileri:  
Türkiye'deki Serbest Bölgelerin ve Bursa Serbest Bölgesinin  
Ticaret Hacmi, İstihdam ve Yabancı Sermaye Açısından  
Değerlendirilmesi*

Dr. Sema Ay

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**Makale İçin İletişim/Correspondence to:**

Sema Ay, [semay@uludag.edu.tr](mailto:semay@uludag.edu.tr)

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## The Economical Impacts of Free Zones: The Estimation in terms of Trade Volume, Employment and Foreign Capital of Free Zones in Turkey and Bursa Free Zone

*Serbest Bölgelerin Ekonomik Etkileri:  
Türkiye'deki Serbest Bölgelerin ve Bursa Serbest Bölgesinin Ticaret  
Hacmi, İstihdam ve Yabancı Sermaye Açısından Değerlendirilmesi*

Dr. Sema Ay

### Özet:

SB'lerin kurulmasında üç temel amaç önem arz etmektedir. Bunlar; ihracatı artırmak, istihdam yaratmak ve yabancı sermaye çekmektir. Bu çerçevede çalışmada, öncelikle 1988–2007 dönemi için Türkiye'deki SB'ler daha sonra 2001–2007 dönemi için BUSEB, uluslararası mal ticareti, istihdam ve yabancı kullanıcılar açısından değerlendirilmiştir. Türkiye'deki SB'lerde toplam ticaret hacmi ve istihdam edilen kişi sayısı giderek artmıştır. Ancak, yabancı ruhsat sahibi sayısında bir artış yaşanmasına rağmen bu artışın 2004 yılından sonra hızını kaybettiği görülmüştür. Diğer taraftan, 2001 yılında ticari faaliyetlerine başlayan BUSEB'in ise, özellikle uluslararası mal ticareti ve istihdam açısından Türkiye'ye olumlu yansımalarının olduğu ve bölgesel kalkınmaya katkı sağladığı görülmüştür. BUSEB için de yabancı sermaye çekilmesine yönelik çabaların artırılması gerektiği ortaya koyulmuştur.

**Anahtar Kelimeler:** Serbest Bölge, Türkiye'deki Serbest Bölgeler, Bursa Serbest Bölgesi, Serbest Bölgelerin Ekonomik Etkileri, Serbest Bölgelerde Ticaret Hacmi, İstihdam ve Yabancı Sermaye

### Abstract:

Three main aims have been important on establishing FZ. Those are; increasing exportation, creating employment and having foreign capital. In this context of that work, beginning with for the 1988-2007 period, FZs in Turkey, afterwards for the 2001-2007 period, BUSEB, have been evaluated in terms of international trade in goods, employment and foreign users. On the FZs in Turkey, total trade volume and number of employed persons have been increased gradually. However, even though there had been an increase on the number of foreign license holders, this increase had started to slow down after 2004. On the other hand, BUSEB, started to have commercial activities on 2001, had positive reflections to Turkey in terms of international trade in goods and employment, and had contributions to regional development. Also for BUSEB, the needs for increasing the attempt towards having foreign capital have been presented.

**Key Words:** Free Zone, Free Zones in Turkey, Free Zone of Bursa, Economical Impacts of Free Zones, Trading Volume in Free Zones, Employment and Foreign Capital

## 1. Introduction

At the end of the 20th century, the world witnessed a series of changes that would have very rapid and long term impacts on the world economy. Tendencies which have drawn attention amongst these changes that gained momentum in 1980s in particular are elimination of protectionism, expansion of the movement of goods and services among countries and acceleration of capital circulation and expansion in its volume.

However, due to the competitive nature of the globalisation, barriers imposed on the international trade and capital movements have been lifted and international agreements have been concluded to this end on the one hand, on the other hand economic cooperation activities carried out among only certain countries and regional integration movements have accelerated.

Each free zone included in these integration movements is accepted as a foreign country where customs legislation of the country to which it pertains to is not applicable when foreign goods enter the said country. Various intermediate goods and final goods are imported on a duty-free basis to a free zone to be later traded to the host country or other countries.

Generally, every kind of storing, displaying, manufacturing, assembling, disassembling, testing and packaging activities can be conducted in free zones. As they are very different from one another in terms of their structures and functions, it is very difficult to gather free zones under a single definition. 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 or off-shore banking, free insurance zones, free enterprise zones, free gambling zones and free medical zones are free zones which are all products of the same idea and thus very similar to one another; but differ from each other in terms of the

scope of activities carried out within them (Çetiner, 2006: 96).

Though free zones have a long history, it is since 1970s that they have started to play an important role in the world trade and appear in the economy literature. In the literature of economy, it is acknowledged that free zones in developing countries have been established for several motivations such as to increase foreign capital investments and foreign trade, contribute to local producers' international competitive force by helping them obtain input from the price in the world markets, enhancing trade by promoting flourishing of export oriented industries, augment foreign currency inflow, extend support to solve the employment problem by creating new job opportunities, improve economic standards by bringing advanced production and management techniques to the country (Dabaou, 1999: 18).

The main objective of this study based on the significant role that free zones play in their countries' economic structures is to evaluate Bursa Free Zone (BUSEB) in economic terms and identify factors acting on its performance. In this way, this study is thought to provide consistency and efficiency while building up policies concerning Bursa Free Zone. To this end, this study first introduces general information on free zones and their macroeconomic effects, then makes a general assessment of free zones in Turkey and analyzes BUSEB in terms of trade in goods, employment and foreign investments. A similar analysis can not be conducted for trade in services as necessary data regarding free zones in Turkey are not available.

## 2. Evolution of Free Zones in the World Economy

Free zones have emerged after countries started to impose customs tax on commercial goods belonging to foreign countries that is to introduce various restrictions on foreign trade and lift these restrictions for certain countries or people. Practices observed

at busy ports in inland seas such as Mediterranean in the Antiquity in particular are similar to Free Port practices. Excessive restrictions that countries have introduced in foreign trade in the New Era as a result of the dominant economic view –Mercantilism have intensified the significance of Free Ports and Free Trade Zones in order to run commercial relations. For such reasons, various liberties/freedoms have been introduced to Europe at some important ports from the Far East (Thoman, 1956: 14).

Having brought about similar consequences to those of Mercantilism, the Great Depression experienced in 1930s inclined countries to increase foreign trade restrictions once more. As a result, similar to formations in the New Era, the United States started to establish Foreign Trade Zones in 1934 to sustain foreign trade and other developed countries began to come up with similar practices.

Shannon Free Zone founded in Ireland in 1958 with a view to enhancing export brought forth the phenomenon of Free Processing Zone in addition to Free Trade Zone. Innovation that this practice with the main features of Free Trade Zones introduced was freedom's covering the manufacturing process. Together with such practices' being transferred to Free Processing Zones from Free Trade Zones after 1960s, free zones that did not draw economists' attention then started to constitute an important source of attraction. It could be argued that the increase observed in the number and density of Foreign Direct Investments (FDI) from developed countries towards developing countries and economists' discussions regarding developing countries' making choice between import substitution oriented development and export oriented development played a part in emanation of this information (Öztürk, 1998: 41).

In 1980s, one of the changes that attracted the greatest attention among numerous changes having taken place in the world economy was the significant rise recorded in the

number of free zones in developing countries. Free zones' inspiring achievements in the Far East in the first years (Hong Kong, Singapore, Taiwan, South Korea and People's Republic of China) naturally generated other developing countries interest in free zones. This interest translated in the number of free zones established in the course of time. That is, 344 free zone and similar practices in 72 countries in 1980 effectuated approximately 8% of the world trade in these regions. In 1985, on the other hand, about 400 free zone and similar practices mostly in developing countries realized approximately 20% of the world trade (Grubel, 1982: 41). 500 in 1990s and more than 880 nowadays, increase in the number of free zones continues and developing countries are creating or planning to create new free zones (<http://www.ufukcizgisi.org> Date of access: 30.07.2008).

As a result, two important developments have been effective on Free Zones for starting to have a bigger share rapidly on the World economy. First of those developments is that most of the Developing Countries' turning to development strategy towards exportation as a result of failure of the development strategy based on import-replacement, which had been started to be applied after 1930's. Especially on the development struggles on Far East Countries, The Free Zones have been seen as the complementary of this transformation period (Douglas, 1970: 120). The second development is that the entrepreneurs of the Developed Countries had started to look for production places to give permission for cost minimization and high degree entrepreneurship flexibility by distributing their production processes worldwide on the competition increased in the world markets on 1970s and the fast technology change process. In this context, Free Zones have been seen by Multi National Companies (MNCs) as areas connecting the technology creating comparative superiority of Developed Countries and inventions connected with this, and the low incomes constituting compara-



tive superiority of Developing Countries (Ahrens and Meyer-Baudeck, 1995: 89).

Even though the future of Free Zones which are increasing rapidly, depends on lots of determinants, it has been known that it will be depend on commercial deregulations in terms of GATT. In a world where the custom tariffs are being decreased, even lifted, it has been thought that the attractions of the applications like Free Zone can also be decreased, and the future of those regions in terms of countries will be dependent on factors such as the development of the country, removing of wage differentials, removing quotas in one way, the arrival of leaders opposite to foreign capital in homeland countries (Öztürk, 1998: 46).

### **3. Theoretical Framework on Economic Effects of Free Zones**

On the last 30 – 40 years, academic works on economy literature about Free Zones that had started to have an important role in world trade, have been prevailed very little. Due to limited data, the models used in those studies that exist very little, usually discussed Free Zones on the global basis. The Free Zones have been examined in terms of developments towards exportation and the foreign capital which invests on these regions or their impacts on employment, especially with the developmental efforts of Developing Countries. From this point of development in the literature, important models developed by Free Zones have been collected in two titles.

#### **3.1. Probable Prosperity Impacts of Free Zones on Foreign Trade and Foreign Capital**

The first study made with the purpose of analyzing the economical impacts of Free Zones in order to have foreign capital which have an important place among the foundation purposes of Free Zones, belongs to Hamada (1974). Hamada (1974) has been expressed that establishing a Free Zone when there is the protection of the production in the homeland country of the intensive goods with the fares will not effect the

prosperity in case of full employment. As a reason for this, it has been shown that the foreign capital that makes investment on Free Zones will not certainly increase the consumption opportunities of Developing Countries. (Hamada, 1974: 225-241).

After this study based on the assumption of the full employment of work force, Rodriguez (1976) has pointed out that the trade form in the final balance will be the same with the free trade form, when there is the factor mobility between Free Zone and homeland country, and expressed that the biggest part of the trade will be made by Free Zone (Rodriguez, 1976: 385-388).

Hamilton and Svensson (1982), on the other hand, have been analyzed the results of establishing a Free Zone in terms of production, consumption and prosperity, with taking into account the different protection types. According to Hamilton and Svensson (1982), after the foundation of Free Zone as a result of foreign capital preferring Free Zone instead of homeland country, more negative effects can be developed on prosperity (Hamilton and Svensson, 1982: 45-64).

Similar to the studies of Hamilton and Svensson (1982), Hamada (1974) where consider the external effects of change in foreign capitals in Free Zone, Young (1987) has been examined the results of Free Zone applications under the assumption that good and factor prices are stable. In his work, Young (1987) had mentioned that by removing fares on foreign purchase of half products used in the region, the losses of fare earnings from homeland country's imported half products may decrease the country's national income and prosperity (Young, 1987: 369-384).

On the Free Zone model in the study of Miyagiwa (1986), it has been indicated that Free Zone's comparative factor population, economical growth and foreign capital have a critical role on determining the way of prosperity changes on the country where Free Zone had been established. At the same study, Miyagiwa (1986) had developed an alternative Free Zone Model, and remarked

that this kind of regions have been established especially for encouraging exportation (Miyagiwa, 1986: 337-350).

After pointing out to subventions of the government's exportation, Miyagiwa (1986) has seen that for various purposes, lots of privileges have been created in time on Free Zones and that various activities take place more in limited areas, and as a result of this, the notion "free" had started to contain new meanings like making exception from some state interventions other than customs exemption.

These incentive policies implemented besides customs exemption can be listed as tax exemption, subsidies, exclusion from various legal practices and administrative facilities. Free zones' privileged nature furnished with the afore mentioned encouraging policies in developing countries is also pretty attractive for Multi-National Companies investing in those zones (Rondinelli, 1987: 98). In addition to the said incentive policies, a free zone's success in attracting foreign investments depends on the type and duration of the foreign investment, geographical location, market size of the host country and the production type to be applied in a given free zone (Rolfe and others., 1993: 335). However, it is stated that such encouraging elements can be significant factors not in foreign companies' deciding to make FDI in a country (or free zone), but rather in country and location selection of foreign companies that have already decided to make FDI (Öztürk, 1998: 11).

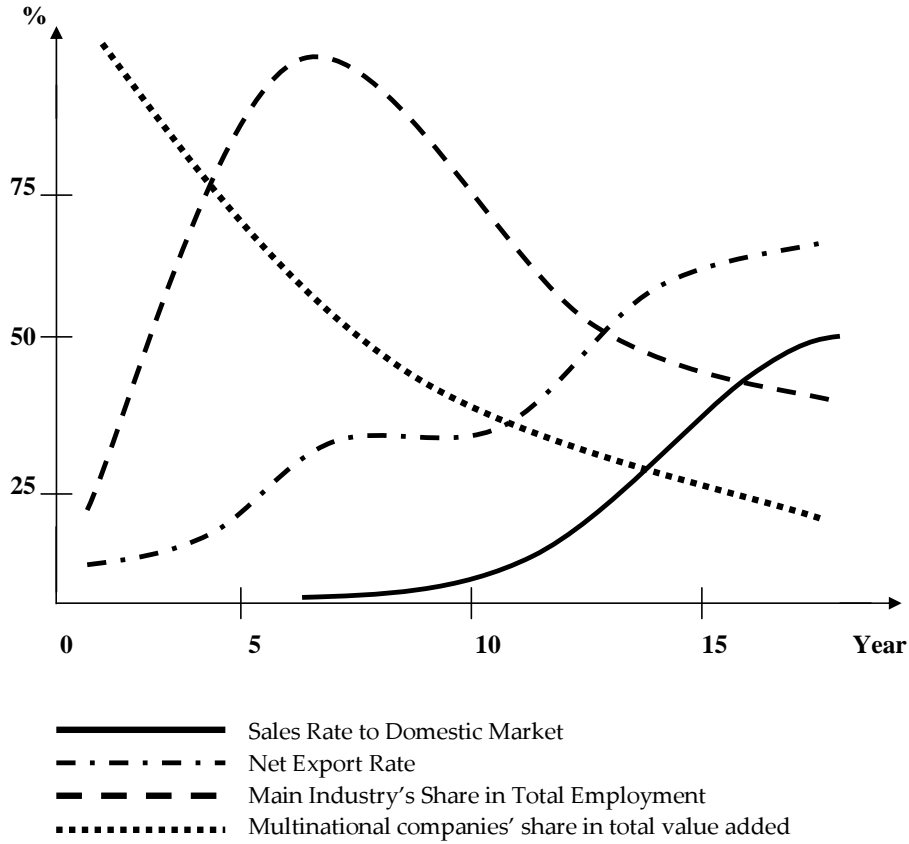
After lots of experimental studies made on Free Zone, A. Basile and D. Germidis have proposed that a successful Free Zone's life period will be of four phases. In the first phase which is called 'Founding Phase', zone's infrastructure and organization are established and a considerable level of foreign capital starts to inflow to the zone. In the "Expansion Phase" –the second phase – while the increase rate of foreign capital investments decreases, the number of foreign companies absolutely increases and the zone reaches the zenith in terms of occupancy

rate. In the third phase which is the "Maturity Phase", the increase rate of foreign investment declines but big companies start to replace smaller ones and the zone's export slowly augments. Following this stage at which the zone's connections with the host country improve, national investors start to take over foreign investors and the zone passes to the domestic capital in the fourth phase – "Localization Phase" (İlkin and Tekeli, 1987: 28).

Apart from those studies that create a basis on Free Zone's probable impacts on prosperity, also studies concerning the success of FZ on increasing the prosperity, the degree of openness of homeland countries, the display of FZ to hidden compared superiority and the probability that it depends on increasing the net currency incomes had been made.

Among those studies, İlkin and Tekeli (1987) had declared that as a result of abolishing the general custom rules completely or partly, those countries which cannot use their secret comparative superiorities due to high protection walls will have opportunities to show their real superiorities (İlkin and Tekeli, 1987: 13–14). Additionally, the host country's export is enhanced by increasing and diversifying production of the manufacturing country and/or export. This revenue that the host country would reap from free zone may vary according to the significance level of the foreign sector within the national economy. Significance of the foreign sector can be measured via the related economy's level of being open to the foreign world where this level is estimated by measuring the share of the trade within its gross domestic product. The higher the proportion of trade to gross domestic product is in a given country, the more the country is open to foreign economies. The higher the level of openness in a country, the higher the revenue to be generated from a free zone (Bhattacharya and B. Bhattacharya, 2007: 519).

On the other hand, the host country can be provided with the opportunity to augment its net foreign exchange income by offering



facilitating opportunities to other countries' companies for their trade with third countries. However, foundation of free zones should be a temporary solution in transition process to export oriented industrialization (Kibritçioğlu, 1997a: 42). Free zones, as they are, can set example to the "infant industry argument".

### 3.2. Probable Prosperity Effects of Free Zones on Employment

Other than increasing foreign sell and having foreign capital, one other purpose of establishing Free Zones is that increasing the employment. From the point of having mostly unemployment on the homeland country, Young and Miyagiwa (1987) have been examined the impacts of Free Zone on employment after it had been established. In this study, the unemployment dimensions have been considered by examining migration from village to city as a result of new job

opportunities that will be created at Free Zone and in its close environment. As a result, in a homeland country where there was Harris-Todaro type unemployment, removing the fares on half products does not certainly make fare earnings from the rest of the products importing to the rest of the country worse, additionally, decreases the natural losses which were originated by unemployment. For this reason, it has been expressed by the researchers that establishing a Free Zone can be a good "second best" policy where there is Harris-Todaro type unemployment (Young and Miyagiwa, 1987: 397-405).

However, in the study where the results of Young and Miyagiwa (1987) model had been extended with the assumptions that the domestic capital is also active among the sectors and the supply curve is with positive grade, Chaudhuri and Adhikari (1993) have been emphasized that establishing Free



Zone may cause a loss on contrast and national prosperity (Chaudhuri and Adhikari, 1993: 157-162).

From this point of discussion, in another study made by Miyagiwa on 1993, whether Free Zone should be established in a rural or in an urban place had been emphasized. Miyagiwa (1993) had a conclusion that in situations where the domestic capital is fully active, rural establishment area should be preferred more than urban area. However, it has also been declared that this result will be changed in case the capital will be a characteristic of the sector (Miyagiwa, 1993: 187-203).

In regards to the employment issue, though free zones do not bring complete solution to the unemployment problem of their host countries, it is possible to consider them successful as they dissolve a certain rate of unemployment with the labour potential they offer. A small-scale free zone may not be providing this solution. However, contribution of a multi-functional free zone to this issue may be irrefutable. To this end, the host country should take preventive measures against labour force transfer out of the country.

Consequently, analysis framework laid in Table 1 is referred to see what all these ef-

**Table 1**

Analysis Framework for a Free Zone's Expected Economic Effects within the Host Country

	Between FZ and HC (A) (A1) Expected to be in a considerable volume.	Between FZ and FC (B) (B1) Expected to be in a considerable volume.	Between HC and FC (C) (C1) Negligible.
Trade in goods (1)	(A2) Expected to be in a considerable volume.	(B2) Expected to be in a considerable volume.	(C2) Negligible.
Trade in services (2)	(A3) Expected to be in a considerable volume.	(B3) Expected to be in a considerable volume.	(C3) Negligible.
Factor income (price, benefit,,) Transfers (3)	(A4) Expected to be in a considerable volume.	(B4) Can be important if foreign companies bring their employees mainly from a FC.	(C4) Negligible.
Labour force (4)	(A5) Expected to be in a considerable volume.	(B5) Expected to be in a considerable volume.	(C5) Negligible.
Direct Investments (5)	(A6) Can be important if the free zone is connected with financial institutions.	(B6) Can be important if the free zone is connected with financial institutions.	(C6) Negligible.
Portfolio investments (6)	(A7) Not important.	(B7) Expected to be in a considerable volume.	(C7) Negligible.
Technology (7)			

Source: Kibritçioğlu, A. (1997b), "Serbest Bölgelerin Olası Makroekonomik Etkileri ve Olası Düşündürdükleri" ("Possible Macroeconomic Effects of a Free Zone and Possible Thoughts"), *Liberal Düşünce Dergisi (Liberal Thought Periodical)*, Spring 1997, No: 6: 82.

fects can be. In this framework where FZ represents free zone, HC host country and FC reciprocal goods, service, capital, labour force, technology and factor income movements among these three regions are analyzed separately. This analysis is thought to be beneficial to see a free zone's effects on the economic level of the host country (Kibritçi-oğlu, 1997b: 81–82–83).

#### 4. Economic Effects of Free Zones in Turkey

Many FZ attempts initiated at the end of 1920s in Turkey failed. The phenomenon of FZ could start to be implemented effectively after decisions dated 24 January 1980 by which Turkey started to pursue export ori-

ented policies. Free zones were established in Turkey's different corners such as Mersin, Antalya, İstanbul and Trabzon. In addition to FZs founded in coastal provinces, together with FZs established in relatively underdeveloped regions such as Erzurum and Mardin, the number of FZs in 1990s rapidly escalated and has amounted to over 20 nowadays (DTM-SBGM, 2007: 1).

As mentioned before, a free zone exerts various effects on its host country's economy whether they are direct or indirect, short or long term, negative or positive. In order to see these effects on a given host country at a macro level, reciprocal goods, service, capital, labour force, technology and factor income movements among these three regions

**Table 2**  
Annual Trade Volumes of FZs in Turkey and Direction of Trade (1000 USD Dollar)

Years	FZ'S import from Turkey (A)	FZ'S export to FC (B)	FZ's export to Turkey (D)	FZ'S import from FCs (E)	Total Trade Volume	(D) / (A)	(B) / (E)	[(D)+(B)] / [(A)+(E)]	[(A)+(B)] / [(D)+(E)]
1988–1990	112.586	71.530	210.252	193.975	588.242	1.87	0.37	0.92	0.46
1991	126.856	60.140	181.847	122.364	491.207	1.43	0.49	0.97	0.61
1992	136.243	94.902	209.906	186.517	627.568	1.54	0.51	0.94	0.58
1993	215.760	177.860	333.914	293.375	1020.910	1.55	0.61	1.01	0.63
1994	492.320	321.685	702.030	442.718	1958.752	1.43	0.73	1.09	0.71
1995	545.439	543.184	968.985	902.017	2959.629	1.78	0.60	1.04	0.58
1996	584.217	576.367	1.243.558	1.230.079	3.634.221	2.13	0.47	1.00	0.47
1997	683.828	761.243	2.088.874	1.973.956	5.507.874	3.05	0.39	1.07	0.36
1998	875.643	1.021.777	3.004.772	2.815.572	7.717.764	3.43	0.36	1.09	0.33
1999	854.466	1.063.809	3.194.413	2.773.872	7.886.560	3.74	0.38	1.17	0.32
2000	982.807	1.173.717	4.748.017	4.396.052	11.300.593	4.83	0.43	1.10	0.24
2001	1.086.187	1.472.186	3.059.660	2.713.213	8.331.246	2.82	0.54	1.19	0.44
2002	1.527.505	2.257.017	3.729.278	3.588.796	11.102.596	2.44	0.63	1.17	0.52
2003	2.118.701	3.445.229	5.406.460	5.637.677	16.608.066	2.55	0.61	1.14	0.50
2004	2.882.293	4.243.193	7.484.590	7.520.326	22.110.402	2.60	0.56	1.13	0.47
2005	3.160.497	4.610.270	7.888.097	7.703.962	23.362.826	2.50	0.60	1.15	0.49
2006	3.071.081	4.862.882	7.939.017	7.951.048	23.824.029	2.59	0.61	1.16	0.50
2007	3.045.262	5.311.371	7.916.873	8.299.939	24.573.445	2.60	0.64	1.17	0.52
<b>TOPLAM</b>	<b>22.501.692</b>	<b>32.068.363</b>	<b>60.290.520</b>	<b>58.745.456</b>	<b>173.606.031</b>	<b>2.68</b>	<b>0.55</b>	<b>1.14</b>	<b>0.46</b>

Source: DTM SBGM, Report on Turkey's Free Zones, 2008, Ankara

should be analyzed separately (Kibritçioğlu, 1997b: 83).

#### **4.1. Assessment of FZs in Turkey in terms of their Trade Volumes**

Table 2 presents goods movements amongst the said three regions between 1988 and 2007. In this period, total trade volume of FZs in Turkey is observed to increase year by year except for 2001 struck by an economic crisis. In trade volume reaching 173.606.031, free zones' export to Turkey was recorded to be higher than import from Turkey  $[(D)/(A)]$  and this gap gradually widened from 1996 in particular when the Customs Union (CU) Agreement was put into effect until 2001. On the other hand, FZs export to FCs realized at a lower level than import from FCs  $[(B)/(E)]$  and this gap widened again between 1996 and 2001. Due to bigger share of EU countries in our foreign trade, these developments make think that the CU Agreement has reducing effect in FZs' attraction in Turkey.

However, according to Kibritçioğlu (1997b), the below stated rate should be employed in order to see whether net values of monetary movements regarding trade in goods are in favour of or against Turkey as a whole.

$$(A + B - C) / (D + E - F)$$

Below are explanations;

A: HC's export to FZ

B: FZ's Export to FC,

C: FZ's Re-export to HC,

D: FZ's Export to HC,

E: FC's Export to FZ,

F: FZ's Re-export to FC.

If the said rate is less than 1 under the assumption of  $C = 0$  and  $F = 0$ , it can be put that FZs have negative effects on a given HC in terms of trade in goods (Kibritçioğlu, 1997b: 84).

According to calculations in Table 2 regarding  $(A + B - C) / (D + E - F)$  rate, total export within the indicated period is higher

than the total import. However, Turkey's share in FZ's export and FCs' share in import are higher  $([(D)+(B)] / [(A)+(E)])$ . Thus, according to the analysis framework in Table 1, between 1988 and 2007, FZs in Turkey are net exporter in trade in goods effected mutually with Turkey (A1) and net importer in trade in goods realized with foreign countries (B1)  $([(A)+(B)] / [(D)+(E)])$ . This situation can be regarded as an indicator of the fact that free zones' main function as foreign Exchange generator is not completely applicable for FZs in Turkey and FZs remain insufficient in export based development efforts.

Finally, it can be said that FZs in Turkey do not re-export to Turkey or Foreign Countries, that is does not provide positive contribution to Turkey in terms of international trade in goods under the assumption  $C = 0$  and  $F = 0$ . However, this assessment in the study could only be realized in term of trade in goods. A similar analysis can not be conducted for trade in services as necessary data regarding free zones in Turkey are not available.

#### **4.2. Assessment of FZs in Turkey in terms of Employment and Foreign Capital**

According to Table 3 displaying employment and foreign user figures in FZs in Turkey, the number of people employed in FZ in our country has gradually augmented. It is also known that employees are rather employed from the HC (DTM SBGM, 1996: 3). Local labour force's employment in a FZ naturally translates into the reduction of the unemployment present in HC at the beginning. However, the higher the number of employees transferred from a FC in a given FZ, the lesser the contribution to the unemployment problem. On the other hand, foreign employees' expenses in the HC have positive outcomes on local economy.

Contrary to what is expected, it is stated that the rural-urban population in the HC where the FZ is located increases and this may further aggravate the unemployment problem in urban areas. For, there sometimes exists a

**Table 3**

Employment and Foreign Users in FZs in Turkey

Years	Employment	Foreign Users
1998	12639	352
1999	15434	406
2000	19830	450
2001	25643	522
2002	28750	542
2003	34402	622
2004	39433	656
2005	39046	645
2006	42048	648
2007	51000	642

Source: DTM SBGM, Report on Turkey's Free Zones, 2008, Ankara

dual structure in some countries that is despite fewer job opportunities in the manufacturing industry, high wages are paid on the one hand, and on the other hand wages in the agricultural sector remain low compared to those of the manufacturing sector. However, establishment of a FZ seems to be "the second best policy" for an economy where unemployment already reigns over (Young and Managua, 1987: 397-405).

Another important objective of the establishment of a FZ is to attract foreign capital to the FZ. Since existing data in Turkey are followed as the number of license holders active in FZs, this study includes the number of license holders of foreign origin and this is expected to give an idea on foreign investments made in FZs in Turkey.

Accordingly, it can be said that there occurred an increase in the number of foreign license holders between 1998 and 2007; however this increase has lost momentum after 2004. It is clearly observed that Articles 8 and 9 attached to the Promotion Law numbered 5084 limiting the tax exception in FZs have resulted in investor loss in FZs after 2004 as a result of limitations it put on both advantages of free zones and agreements of licensed companies in these zones. Further-

more, according to the Under secretariat of Foreign Trade's Report on Turkey's Free Zones, within the above mentioned period, the number of foreign users remained relatively low compared to that of domestic users. In this respect, it is thought that FZs in Turkey are not successful in attracting foreign capital.

As is known, significance of foreign capitals grows stronger together with the transfer of more advanced technologies than those in the HC. Technology transfer is the process of providing the host country with new technologies together with the foreign capital transfer in production oriented free zones. What is important in this point is technology's contribution to progress in knowledge levels of entrepreneurs, engineers and employees. New technologies also prevent the employment of unskilled workers. However, in practice, it is observed that labor-intensive goods production will not generate the expected progress from the technology transfer (Orhan, 2003: 123-124).

### 5. Bursa Free Zone

Bursa Free Zone (BUSEB) was founded in 1998 under the leadership of Chamber of Industry and Commerce of Bursa, with the partnership of Industrialists and Businessmen of Bursa and as Bursa Serbest Bölge Kurucu ve İşletici A.Ş (BUSEB A.Ş.). Starting its commercial activities in May 2001 aims at giving momentum to Bursa's foreign trade and rendering it more competitive. Established completely according to the Industrial Zone plan, BUSEB started to operate with an investment of 25 million dollars and on a land covering 825 thousand metre squares. Factors having been effective in the selection of location were its closeness to ports, the main road and Bursa –an industrial giant (BUSEB A.Ş., 2008: 1).

In this study, economic effects of Bursa Free Zone will be evaluated within the framework of net values of monetary flows regarding trade in goods, employment and foreign investment changes.

**Table 4**  
BUSEB's Annual Trade Volumes and Direction of Trade (1000 USD Dollar)

Years	BUSEB's Import from Turkey (A)	BUSEB's export to FC (B)	BUSEB's Export to Turkey (D)	BUSEB's Import from FCs (E)	Total Trade Volume	(D) / (A)	(B) / (E)	[(D)+(B)] / [(A)+(E)]	[(A)+(B)] / [(D)+(E)]
2001-2003	273.915	321.503	527.594	515.313	1.638.326	1.93	0.62	1.08	0.57
2004	174.418	320.347	851.005	877.610	2.223.382	4.88	0.37	1.11	0.29
2005	263.885	425.886	785.865	786.632	2.262.270	2.98	0.54	1.15	0.44
2006	276.773	486.216	566.743	603.560	1.933.293	2.05	0.81	1.20	0.65
2007	335.004	673.386	230.395	380.338	1.619.125	0.69	1.77	1.26	1.65
2008*	127.355	260.777	87.706	141.326	617.166	0.69	1.86	1.30	1.69
TOTAL	1.451.350	2.488.115	3.049.308	3.304.779	10.293.562	2.10	0.75	1.16	0.62

\*Until the end of April

Source: Bursa Free Zone Directorate, 2008

### 5.1. Assessment of BUSEB in terms of Trade Volumes

It is concluded from Table 4 that while no significant rises have been observed in the total trade volume of BUSEB which started its commercial activities in 2001, in a similar way to other FZs in Turkey, BUSEB's export to Turkey has been at a higher level than its import from Turkey ((D) / (A)) however its export to FCs has been lower than its import from FCs ((B) / (E)).

As is in other FZs in Turkey, total export in BUSEB is higher than total import ( $[(D)+(B)] / [(A)+(E)]$ ). However, according to the analysis framework in Table 1, it is observed that BUSEB, in a different way, has become to be importer (A1) in its trade with the host country Turkey since 2006 in particular and exporter in its trade with foreign countries (B1) ( $[(A)+(B)] / [(D)+(E)]$ ).

Consequently, within the period between 2001 and 2008, BUSEB has augmented its import share in its trade with Turkey and decreased its import share from foreign countries. In fact, under the assumption of  $C = 0$  and  $F=0$ , calculations belonging to 2007 and 2008 in the last column of Table 4 regarding  $(A + B - C) / (D + E - F)$  rate equal to higher than 1. Considering the issue from the perspective of Turkey, it can be put that

monetary movements regarding trade in goods have started to provide positive contributions to Turkey in terms of international trade in goods and support regional development.

### 5.2. Assessment of BUSEB in terms of Employment and Foreign Capital

Considering that BUSEB started to operate in 2001, statistics regarding employments have started to be kept since 2004 as the relevant employment rate was low before. Within the same period, the number of foreign users in the zone amounted to 20 from 13; however this increase was regarded to be

**Table 5**  
Employment and Foreign Users in BUSEB

Years	Employment	Foreign Users
2002	*	13
2003	*	18
2004	3524	19
2005	5028	20
2006	4871	18
2007	7437	20

\*Not included in statistics.

Source: Bursa Free Zone Directorate, 2008



relatively low in terms of foreign capital attraction to the FZ.

## 6. Conclusion

Free zones have started to play an important role in the world trade since 1970s and appear in the literature of economy. FZ practices are growing more and more in the globalization process and becoming more important as they generate various macroeconomic effects for developing countries in particular.

Though motivations behind FZs vary from one country to another, three points stand out in the establishment of Fzs. These are to enhance export, create employment and attract foreign capital. In this framework, first Turkey's FZs have been analyzed for the period between 1988 and 2007 and then BUSEB for the period between 2001 and 2007 in terms of international trade in goods, employment and foreign users.

Free zones' total trade volumes in Turkey have continuously increased except for 2001 hit by an economic crisis. However, it is observed that Turkey has a greater share in FZs' export while FCs have bigger part in FZs' import. Therefore, Turkey has been net exporter (A1) in its reciprocal trade in goods with Turkey between 1988 and 2007 and net importer (B1) in its trade in goods with foreign countries. This situation has been considered as an indicator of the fact that free zones' functions as foreign currency generator are not very much applicable in Turkey, they remain insufficient in export oriented development efforts and do not provide positive contributions to Turkey in terms of international trade in goods.

On the other hand, the number of people employed in FZs increased in the same period and employees were employed from rather the HC. However, though, there was a rise in the number of foreign license holders, this rise was observed to lose momentum after 2004. In addition, the number of foreign users remained low compared to that of domestic users. It has been noted that

FZs in Turkey can not be regarded successful in attracting foreign capital.

Having started its commercial activities in 2001, BUSEB – in a similar way with other FZs- has been observed to have higher levels in its export to Turkey than its import and lower levels in its export to FCs than import.

However, this structure continued until 2007 and though no significant rises have been recorded in its total trade volume, BUSEB has increased its import share in its trade with Turkey and decreased its import share in its trade with foreign countries. After 2006 in particular, BUSEB has been seen to be importer in its trade with Turkey and importer in its trade with foreign countries. Thus, it can be put that monetary movements regarding trade in goods have started to provide positive contributions to Turkey in terms of international trade in goods and support regional development. There was an increase in BUSEB's employment number as well. However, the rise in the number of foreign users remained relatively low. This situation proved that efforts should be intensified to attract foreign capital both to BUSEB and other FZs in Turkey.

Amendments made to the Promotion Law numbered 5084 played important role in BUSEB's failure to attract foreign investors. Together with this change, the tax legislation started to be implemented in free zones and full and limited taxpayers' revenue and corporate tax exemptions came to an end in FZs. Thus, in addition to political and economic stability in the country, advantages offered to the foreign capital should be satisfactory.

Consequently, it should be kept in mind that successful evolution of a larger-scale FZ depends on its ability and flexibility to react to changing conditions, provide solutions to new problems to arise with the development of the zone, make adjustments to the zone's industrial structure and develop effective assessment in general.

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