

MEASURING EXPORT DIVERSIFICATION BETWEEN TURKEY
AND MIDDLE EAST COUNTRIES OVER TIME

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MURAT GÖKALP

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T.C. YÜKSEKÖĞRETİM KURULU
DOKÜMANTASYON MERKEZİ

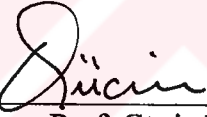
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Prof. Dr. Bahattin Akşit
Director

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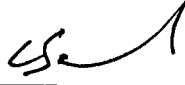

Prof. Dr. Zehra Kasnakoğlu
Head of Department

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Science in Economics


Assoc. Prof. Güzin Erlat
Supervisor

Examining Committee Members

Assoc. Prof. Cem Somel



Assist. Prof. Nuray Güner



ABSTRACT

MEASURING EXPORT DIVERSIFICATION BETWEEN
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OVER TIME

GÖKALP, MURAT

M.S. , Department of Economics

Supervisor: Assoc. Prof. Dr. Güzin Erlat

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This thesis attempts to measure the export diversification that Turkey has experienced in its exports to the Middle East Countries for the period 1969-1996. Measurement was performed by using the four indexes: CEEF, TRAD7, CSX, and SPECL. These indexes are constructed by using data in the form of Standard International Trade Classification, Revision 3 (SITC). In this study, the traditional and non-traditional export sectors are distinguished by using the CEEF measure. Also, the periods of medium-term structural change and export diversification are obtained. Regarding this information, a general trend for Turkish exports to these countries is outlined. Finally, results are compared with previous studies

Key Words: Export Diversification, Trade, Turkish Economy, Middle East Countries.

ÖZ

TÜRKİYE’NİN ORTA DOĞU ÜLKELERİNE YAPTIĞI İHRACATIN
ZAMAN İÇİNDE ÇEŞİTLENMESİNİN ÖLÇÜLMESİ

GÖKALP, MURAT

Yüksek Lisans, İktisat Bölümü

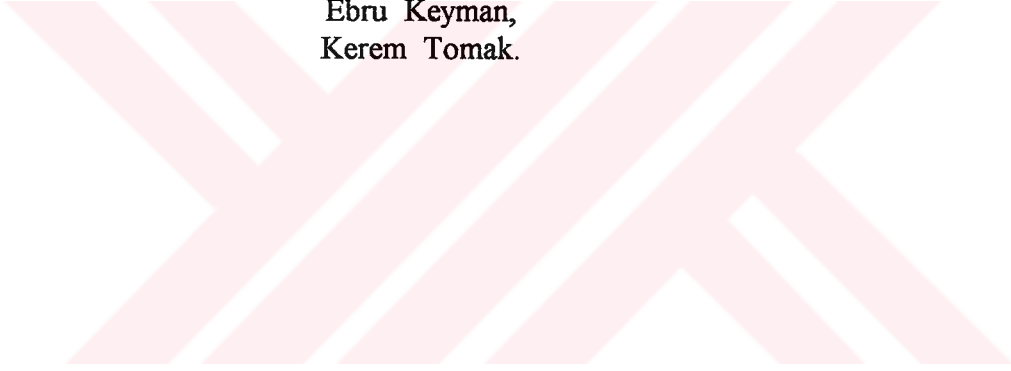
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Bu tez, Türkiye’nin 1969-1996 yılları arasında Orta Doğu Ülkelerine yaptığı ihracatın çeşitlenmesini ölçmeye çalışmaktadır. Ölçme, dört çeşit indeks oluşturarak yapılmıştır: CEEF, TRAD7, CSX ve SPECL. Bu indeksler Standard Uluslararası Ticaret Sınıflandırması, Revizyon 3 verileri kullanılarak oluşturulmuştur. Bu çalışmada, geleneksel ve geleneksel olmayan ihracat sektörleri CEEF kullanılarak ayrıştırılmıştır. Ayrıca, orta vade yapısal değişiklikleri ve ihracat çeşitlenmesi dönemleri ortaya çıkarılmıştır. Bu bilgiler ışığında, Türkiye’nin bu ülkelere yaptığı ihracatın genel bir eğilimi açıklanmaya çalışılmıştır. Son olarak, elde edilen sonuçlar daha önceki çalışmalarla karşılaştırılmıştır.

Anahtar Kelimeler: İhracat çeşitlenmesi, Ticaret, Türkiye Ekonomisi, Orta Doğu Ülkeleri

To My Family,
Ebru Keyman,
Kerem Tomak.



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¹ Stands for Middle East Countries as a whole

CHAPTER I

INTRODUCTION

Turkey has experienced an important policy change through the eighties. Before 1980s, Turkey's main aim was to maintain her growth by import-substituting policies. As a consequence of this, Turkey had not much incentive to promote exports. She had a fixed nominal exchange rate system, which discouraged the exporters of Turkey because of high inflation. [Krueger and Aktan (1992)]. These policies showed its effect in the export composition. Primary commodity exports had a share of 89.95% in 1970-1971, but share of manufactured commodity exports was only 10.06% in the same period [Togan (1994)]. Clearly, Turkish exports depended heavily on primary commodities.

Now, what is this important policy change in 1980s? Turkey has changed her main objective in industrialisation. Her aim was to maintain her growth by exporting commodities so, exports were promoted. Also, the barriers were removed to permit imports. As a consequence of these policies, the Turkish government took other measures to liberalize the economy. The result was significant. Togan (1994) stated that the share of manufactured commodities in total exports has risen to 30.75% in 1980-1981 and 55.59% in 1989-1990.

Not only the composition of exports but also their destination has changed after 1980s [Erlat (1991)]. In the first half of 1980s, while the exports to Middle East Countries were increasing sharply, exports to Europe fell. This trend continued until 1986. Then, since the purchasing power declined because of the low oil prices; exports to Middle East Countries dropped [Krueger and Aktan (1992)]. This phenomenon is also observed in Table 1. The percentage share of Middle East Countries rose to its peak value of 38.3% in 1983. It was only about 10% in 1970s.

TABLE 1*
TURKEY'S TOTAL EXPORTS AND DISTRIBUTION OF EXPORTS
ACCORDING TO COUNTRY GROUPS

YEARS	TOTAL EXPORT	EC C.	%	MIDDLE EAST C.	%	USA	%	JAPAN	%
1970	588	376	63.9	46	7.8	107	18.2	20	3.4
1971	677	267	39.4	70	10.3	68	10.0	11	1.6
1972	885	405	45.8	93	10.5	104	11.8	15	1.7
1973	1317	612	46.5	168	12.8	131	9.9	17	1.3
1974	1532	717	46.8	203	13.3	144	9.4	18	1.2
1975	1401	615	43.9	190	13.6	147	10.5	19	1.4
1976	1960	1017	51.9	212	10.8	191	9.7	36	1.8
1977	1753	897	51.2	190	10.8	122	7.0	37	2.1
1978	2288	1127	49.3	255	11.1	153	6.7	36	1.6
1979	2261	1132	50.1	293	13.0	105	4.6	22	1.0
1980	2910	1300	44.7	549	18.9	127	4.4	37	1.3
1981	4703	1564	33.3	1382	29.4	268	5.7	35	0.7
1982	5746	802	14.0	2164	37.7	252	4.4	43	0.7
1983	5728	2066	36.1	2191	38.3	232	4.1	37	0.6
1984	7134	2781	39.0	2486	34.8	368	5.2	37	0.5
1985	7958	3204	40.3	2986	37.5	506	6.4	43	0.5
1986	7457	3263	43.8	2044	27.4	549	7.4	99	1.3
1987	10190	4868	47.8	2501	24.5	714	7.0	156	1.5
1988	11662	5098	43.7	2598	22.3	761	6.5	209	1.8
1989	11625	5408	46.5	1983	17.1	971	8.4	233	2.0
1990	12959	6893	53.2	1630	12.6	968	7.5	239	1.8
1991	7276	3852	52.9	947	13.0	406	5.6	132	1.8

* Table 1 is taken from Erlat, G. 1991.

So, it might be interesting to investigate the behaviour of Turkish exports in relation to its trading partners. In this study, there are two main concepts: “export diversification” and “Middle East Countries”. These concepts coincide with the events that were mentioned earlier. Therefore, two questions are important to understand the basic features that form the base of the study:

- 1) Why Middle East Countries are chosen as the base set of the study?
- 2) What is export diversification?

As we stated earlier, Turkey has experienced diversification not only in the commodity compositions, but also in the destination of exports. While the share of Eastern Europe were declining, the exports to OECD and Middle East Countries expanded in the first half of 1980s [Krueger and Aktan 1992]. Also, there exists a remarkable change in the share of Turkish exports to Middle East Countries in the total exports. Also, Erlat and Akyüz (1998) have already investigated the country concentration of Turkish exports and imports. Therefore, not all the trading partners are taken, but instead, a geographically homogeneous group is chosen, namely Middle East Countries.

As stated in Erlat and Şahin (1997), export diversification was defined by Bond and Milne (1987) as:

“ An increase in the number of distinct products in the export base, combined with a reduction in

dependence on any one product as a source of foreign exchange earnings.”

Notice that, Turkey experienced a fall in the dependence of exports for certain commodities by shifting her exports from primary commodities to manufactured products. Clearly, this is a sign of export diversification as mentioned in the definition. So, the problem is to quantify this diversification. In fact, measuring the diversification toward a certain area is the aim of this thesis. Hence, the next step is to find ways to fulfil the estimations for export diversification. There are many ways to perform the measurement process but, in our study, we shall follow Erlat and Şahin (1997) and ask the following questions:

1) Can we distinguish a variation in the composition of exports to Middle East Countries from traditional to non-traditional sectors of Turkey? To do this, a “Traditionality index”, which is proposed by Amin Guitierrez de Pineres and Ferrantino (1997) and used by Erlat and Şahin (1997), was calculated for Turkey. Then, by using this indicator, it is possible to classify the ‘traditional’ and ‘non-traditional’ sectors of the Turkish economy in relation to exports to Middle East Countries.

2) Can we discriminate whether there exists a structural change caused by the export diversification in the composition of exports? For this purpose, the measures, suggested and performed in the studies mentioned above, are used.

Following Chapter I, a literature survey and the methodology of this study are presented in Chapter II. Also, the details about the data are given in this section. In Chapter III, the results are presented and the comparisons of the results among the Middle East Countries have been done. Moreover, we have also compared the results of our study and the previous studies. Finally, the conclusions are presented in Chapter IV.



CHAPTER II

EARLIER STUDIES AND METHODOLOGY

2.1 LITERATURE SURVEY

The question of export diversification has been investigated extensively by considering different aspects of it or by taking into consideration the special conditions involved in related countries.

In the first group of papers, export diversification in those countries, which are primary commodity exporters like Mexico, Egypt etc, is analysed. These countries depend on a single commodity in their exports like oil, cotton etc. and they devise policies to diversify their exports.[Mayer (1983); Wilson (1984); Szekely (1989)]

For instance, Szekely (1989) stated that most of the Mexican oil has been exported to United States; because of this reason the Mexican government restricted oil exports to a country above a

certain percentage share in oil exports of Mexico and promoted oil exports to the countries which have a lower percentage share. Since Mexico depends on oil exports to earn foreign exchange, fluctuations in oil prices cause instability in export earnings. So, export instability is the second aspect which was investigated in the literature.

The instability problem is tried to be explained by models of various kinds. A few of them are: Percentage deviation model [Macbean and Nguyen (1980); Love (1983); Das and Pant (1989)], Market model [Love (1981)]. These models offer a mathematical basis for the relation between the instability problem and export diversification.

Although they are not related with instability of exports, the papers of portfolio optimisation theory and export diversification can also be mentioned in this section since, this time another mathematical theory is used to explain the theoretical basis of export diversification. [Love (1979, 1982); Lalbys and Lord (1990)]

Till now, these papers are not related with our subject directly. So, when we investigate the measurement of export diversification between Turkey and Middle East Countries over time, we shall follow the works of Amin Gutierrez de Pineres and Ferrantino (1997) and Erlat and Şahin (1997). The first study concerns Chile and the second one considers the overall export performance of Turkey using ISIC, Revision 2 classification by taking into account 39 manufacturing sectors at the 3-digit level for the period 1969-1993.

In this study, we shall consider the Turkish export performance **only** in relation to Middle East Countries for the period 1969-1996. So, we shall compare our results with those of Erlat and Şahin (1997) and Togan (1994).

2.2 THE DATA

The data used in this study were obtained from the Undersecretariat of Foreign Trade. They are export figures in terms of current US Dollars and are classified according to the Standard International Trade Classification (SITC), Revision 3 and cover in general 67 sectors at the 2-digit level for the period 1969-1996. The Middle East Countries are considered as, IRAN, IRAQ, ISRAEL, JORDAN, KUWAIT, LEBANON, QATAR, SAUDI ARABIA, SYRIA, UNITED ARABIC EMIRATES and YEMEN¹.

¹ When the data were taken from the Undersecretariat of Foreign Trade Of Turkey, there were three separate files for Yemen. The files are: Democratic Yemen, Yemen Arab Republic and Yemen. In the first and second files, there was export data between the years 1969-1995. But in the years 1994, 1995, there was no Turkish exports to either Democratic Yemen or Yemen Arab Republic. But, in Yemen file, there were export values only for the years 1994, 1995.

In the Encyclopedia of Anabritanica, it is informed that there were two separate Yemen, in 1990, these two countries were united to form the unique Republic of Yemen. Also, Mr. Nagi Hassan Abdo Alawadhi who is the counsellor of the Embassy of the Republic of Yemen in Ankara, was interviewed. He confirmed that in 1990, Yemen was united. But he also mentioned that the uniting process took almost three years. In 1993, the process was completed. This explains the peculiarity of the data concerning Yemen.

So, we decided to combine the data by adding the exports of Democratic Yemen and Yemen Arab Republic, sector by sector, up to 1994. Then, for the remaining years, the data for Yemen that was taken from the Undersecretariat of Foreign Trade would be used to form the unique data for the Republic of Yemen.

2.3 METHODOLOGY

The aim of this study is to identify the traditional and non-traditional sectors of Turkish exports to Middle East Countries and check whether a structural change occurred in the export sectors or not. To distinguish these sectors, some indexes must be formed from the raw export data. In forming these indexes, we shall follow Erlat and Şahin (1997) and summarize the measures by using this source.

2.3.1 TRADITIONALITY MEASURES :

The main purpose of the traditionality index is to find out which sector is traditional and which one is non-traditional among the export sectors. To distinguish these sectors, the Cumulative Export Experience Function (CEEF) of each sector is calculated.

If e_{it} denotes the exports of i^{th} industry in year t expressed in US Dollars, then the Cumulative Export Experience Function (CEEF) for the i^{th} industry is calculated by using the following formula:

$$c_{i\tau} = \frac{\sum_{t=1}^{\tau} e_{it}}{\sum_{t=1}^T e_{it}} \quad \tau = 1, \dots, T$$

where T is the size of the sample period. $c_{i\tau}$ values closer to zero at the beginning of the sample and becomes unity at the end. As stated in Erlat and Şahin (1997:3), "As a measure of traditionality one may

use it against τ . In such a case, given two industries, we would expect the more “traditional” industry to have higher c_{it} values, at least in the early part of the sample period. Further, they stated that such comparisons are tedious, so they suggested to use the means of the c_{it} . So, after the means of CEEF values are calculated using the following formula:

$$\bar{C}_i = \frac{\sum_{t=1}^T c_{it}}{T} \quad i = 1, \dots, T$$

where N is the number of industries [Erlat and Şahin (1997)]. The sectors that have \bar{C}_i values approaching one are the traditional sectors. The \bar{C}_i values approaching zero indicate the non-traditional sectors. When the \bar{C}_i values are sorted in ascending order, the traditionality ranking of the export sectors is obtained.

2.3.2 MEASURES OF STRUCTURAL CHANGE :

i. TRAD7

This is a medium term measure used for structural change. It consists of seven yearly moving averages of export data. If the export data of a country is denoted by a years versus sectors matrix, the first seven years of the first sector will be taken to calculate the average

of the export values. This operation is also carried out for the following years and the other sectors. [Erlat and Şahin (1997:4)]

The average of first seven years can be calculated by using the formula:

$$\bar{C}_{i,7}^1 = \frac{\sum_{\tau=1}^7 e_{i\tau}}{7} \quad i = 1, \dots, N$$

where N is the number of industries. Then the variance of the averages will be calculated **across the industries** by using the formula:

$$\hat{\sigma}_{7,1}^2 = \frac{\sum_{i=1}^N \left(\bar{C}_{i,7}^1 - \text{mean}(\bar{C}_{i,7}^1) \right)^2}{N}$$

Also, note that the mean of $\bar{C}_{i,7}^{-1}$ values are computed **across the industries**. Then drop the first observation and take the eighth observation and repeat the calculations to find $\bar{C}_{i,7}^{-2}$ by using the formula:

$$\bar{C}_{i,7}^2 = \frac{\sum_{\tau=2}^8 e_{i\tau}}{7} \quad i = 1, \dots, N$$

and the variance by:

$$\hat{\sigma}_{7,2}^2 = \frac{\sum_{i=1}^N (\bar{c}_{i,7}^2 - \text{mean}(\bar{C}_{i,7}^2))^2}{N}$$

The higher values of the variance can be interpreted as a divergent growth pattern for the seven years and lower variances implies a stable pattern for the exports during the seven years. So, higher variances are considered as an indicator of structural change for that period.

ii. CSX

The short-term measure for the structural change is denoted by CSX. It measures the yearly changes in export composition. If s_{it} denotes the share of i^{th} sector in total exports of the country in year t , then s_{it} is calculated as:

$$s_{it} = \frac{e_{it}}{\sum_{i=1}^N e_{it}} \quad i = 1, \dots, N \quad t = 1, \dots, T$$

Then CSX is equal to:

$$CSX_t = \sum_{i=1}^N \min(S_{it}, S_{i,t-1}) \quad t = 2, \dots, T$$

for the year t . If CSX values are close to unity, then export composition is stable in the short-term. In other words, the country has exported the same commodities as in the previous year, so there is no

export diversification. On the other hand, CSX values close to zero indicate a short-term change in the composition of exports. The country is trading with the commodities that have not been exported before. This implies a diversification in the composition of exports.

The CSX values can be generalised to measure the changes for the periods that are more than one year. The generalised CSX formulation is:

$$CSX(m)_t = \sum_{i=1}^N \min(S_{it}, S_{i,t-m}) \quad t = m+1, \dots, T; \quad m > 1$$

In this study, CSX(1), CSX(2), CSX(3) are calculated [Erlat and Şahin (1997:5)].

iii. SPECL

This is a static measure of specialization. This index is an application of Herfindahl-Hirschman index which is used to compute industrial concentration [Erlat and Şahin (1997:5)]. SPECL equals:

$$SPECL_t = \sum_{i=1}^N (S_{it})^2 \quad t = 1, \dots, T$$

where s_{it} denotes the share of the i^{th} sector in total exports of the country in year t .

A value approaching unity suggests a high degree of specialization. A value approaching zero is an indicator of export diversification.

CHAPTER III

EMPIRICAL RESULTS

When we present the empirical results, we shall take each country separately first and then treat them all as one group. In each step, we shall try to distinguish between traditional versus non-traditional sectors and whether there is a structural change or not. So, we shall consider Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Qatar, Saudi Arabia, Syria, United Arab Emirates, Yemen separately in turn then the Middle East Countries as a whole.

3.1 INDIVIDUAL COUNTRY CASES

3.1.a IRAN :

In Table 2, the means of CEEF values are ranked in ascending order. This gives the traditionality ranking of the Turkish export industries. Therefore, the lowest mean of CEEF gives the non-traditional sector. The higher one gives the traditional sector. So, our traditional export sectors to Iran are as follows:

Live Animals (00); Travel Goods, Handbags And Similar Containers (83); Meat And Meat Preparations(01); Oil Seeds And Oleaginous Fruits (22); Fruit And Vegetables (05); Footwear (85).

And the non-traditional export sectors are as follows:

Tabacco And Tabacco Manufactures (12); Coffea, Tea, Cocoa, Spices (07); Beverages (11); Office Machines And Automatic Data Processing Machines (75).

FIGURE 1-1
IRAN-TRAD7

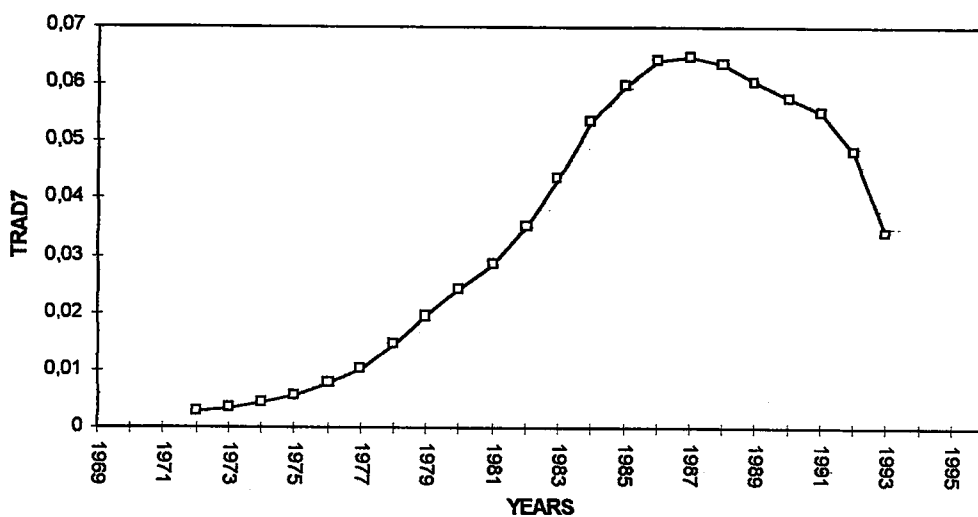


TABLE 2

MEANS OF CEEF VALUES FOR IRAN

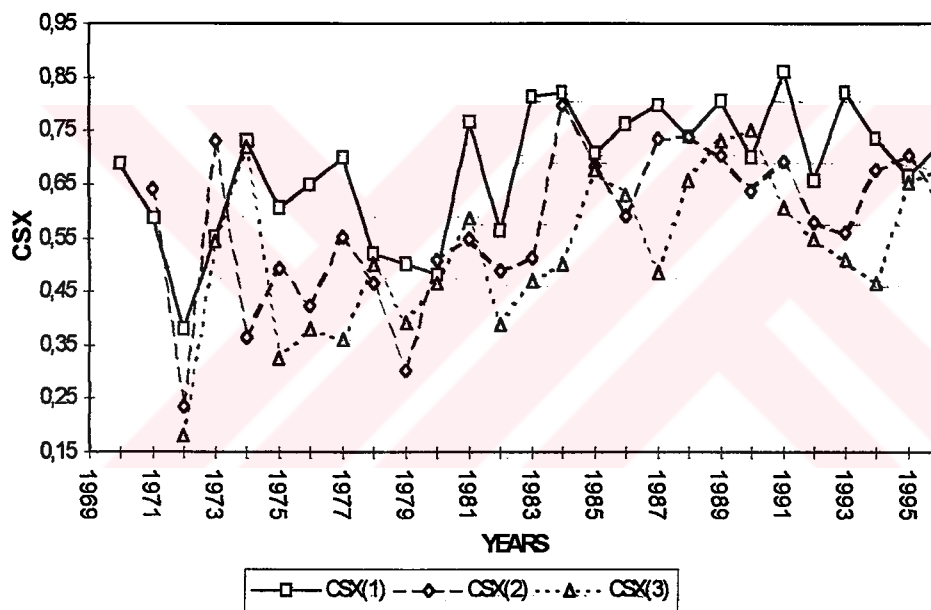
SITC	NAME OF THE SECTOR FOR ITS SITC CODE (REVISION 3)	CEEf:
12	TOBACCO AND TOBACCO MANUFACTURES	0.04116
07	COFFEE,TEA,COCOA,SPICES	0.07818
11	BEVERAGES	0.09332
75	OFFICE MACH. & AUTOMATIC DATA PROCESSING MACH	0.14985
58	PLASTICS IN NON-PRIMARY FORMS	0.17114
82	FURNITURE AND PARTS THEREOF	0.17720
09	MISCELLANEOUS EDIBLE PRODUCTS AND PREPA.	0.18395
42	FIXED VEGETABLE FATS & OILS...	0.20118
43	ANIMAL OR VEGETABLE FATS & OILS, PROCESSED...	0.21864
41	ANIMAL OILS AND FATS	0.23617
57	PLASTICS IN PRIMARY FORMS	0.25763
03	FISH (NOT MARINE MAMMALS)	0.26666
53	DRYING,TANKING & COLOURING MATERIALS	0.26896
64	PAPER, PAPER BOARD, ARTICLES OF PAPER PULP	0.27997
28	METALLIFEROUS ORES AND METAL SCRAP	0.28002
29	CRUDE ANIMAL AND VEGETABLE MATERAILS	0.28641
87	PROFESSIONAL, SCIENTIFIC, CONTROLLING INSTRUMENTS AND APPARATUS	0.28982
08	FEEDING STUFF FOR ANIMALS	0.29709
02	DAIRY PRODUCTS AND BIRDS' EGGS	0.30943
84	ARTICLES OF APPAREL & CLOTHING ACCESSORIES	0.31041
54	MEDICAL AND PHARMACEUTICAL PRODUCTS	0.31190
76	TELECOMMUNICATIONS & SOUND RECORDING & REPRODUCING EQUIPMENT	0.31197
52	INORGANIC CHEMICALS	0.31971
79	OTHER TRANSPORT EQUIPMENT	0.32143
51	ORGANIC CHEMICALS	0.32944
56	FERTILIZERS	0.33254
23	CRUDE RUBBER	0.34068
26	TEXTILE FIBRES AND THEIR WASTES	0.34252
65	TEXTILE YARN, FABRICS, MADE-UP ARTICLES	0.34717
62	RUBBER MANUFACTURES,N.E.S	0.35027
77	ELECTRICAL MACHINERY	0.35533
78	ROAD VEHICLES	0.36191
88	PHOTOGRAPHIC GOODS, OPTICAL GOODS, WATCHES & CLOCKS	0.36212
71	POWER GENERATING MACHINERY & EQUIPMENT	0.36214
67	IRON AND STEEL	0.37241
61	LEATHER, LEATHER MANU. & DRESSED FURSKINS	0.37592
59	CHEMICAL MATERIALS & PRODUCTS, N.E.S.	0.37811
74	GENERAL INDUSTRIAL MACHINERY & EQUIPMENT	0.38700
69	MANUFACTURES OF METALS	0.39005
66	NON-METALLIC MINERAL MANUFACTURES	0.39109
33	PETROLEUM, PETROLEUM PROD. & RELATED MATER.	0.39270

89	MISCELLANEOUS MANUFACTURED ARTICLES	0.39476
06	SUGAR, SUGAR PREPARATIONS AND HONEY	0.39813
55	ESSENTIAL OILS & RESINOIDS, PERFUME MATERIALS	0.40689
27	CRUDE FERTILIZERS AND CRUDE MINERALS	0.41007
81	PREFABRICATED BUILDINGS	0.41060
73	METALWORKING MACHINERY	0.42295
24	CORK AND WOOD	0.42442
21	HIDES,SKINS AND FURSKINS, RAW	0.42556
68	NON-FERROUS METALS	0.43525
72	MACHINERY SPECIALIZED FOR PARTICULAR INDUST.	0.47449
63	CORK AND WOOD MANUFACTURES	0.48107
04	CEREALS AND CEREALS PREPARATIONS	0.49495
85	FOOTWEAR	0.50326
05	VEGETABLES AND FRUIT (FRESH,CHILLED..).	0.50330
22	OIL SEEDS AND OLEAGINOUS FRUITS	0.51822
01	MEAT AND MEAT PREPARATIONS	0.53734
83	TRAVEL GOODS,HANDBAGS AND SIMILAR CONTAINERS	0.67356
00	LIVE ANIMALS (OTHER THAN ANIMALS OF 03)	0.76273



The results of TRAD7 values are plotted against years shown in Figure 1-1. In the figure, the growth pattern is rising up to the year 1987. Roughly, the growth pattern can be considered as stable up to the year 1976. After 1976, it starts to gain pace for the period between 1976-1987. Main changes have occurred in the structure of exports in this period.

FIGURE 1-2
IRAN-CSX VALUES



In Figure 1-2, the short-term measure for structural change, CSX, is plotted. Three types of CSX values are sketched on the same diagram to view the periods of diversification. In the figure, the CSX values show a remarkable approach to zero in the periods 1971-1972, 1973-1975 and 1990-1994. However, the sharp change in export

composition occurs in the first period. Although there is a change in export composition for the last period, it is not as significant as expected.

**FIGURE 1-3
IRAN-SPECL**

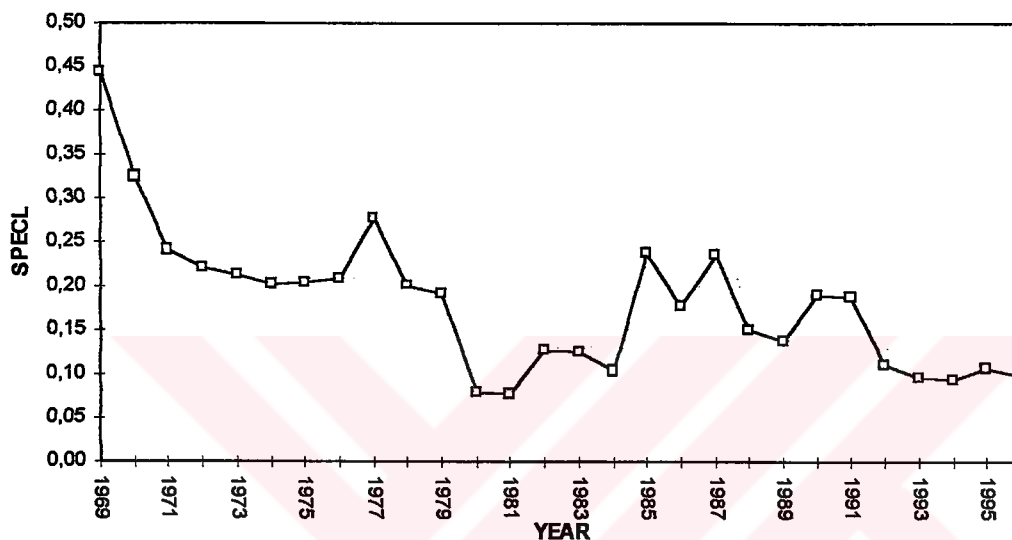


Figure 1-3 shows the graph of SPECL estimations plotted versus years. A declining trend towards zero is regarded as a sign of diversification. In Figure 1-3, there is a long period of diversification, beginning from 1969 and continuing up to the end of 1981. Only, the term between 1976-1978 illustrates a sharp increase in SPECL values. This change agrees with the findings of CSX values. Also, there is another diversification period starting from 1991 up to 1996. Slowly, SPECL values decline to zero which is a sign of export diversification.

3.1.b IRAQ :

In Table 3, traditional export industries of Turkey to Iraq are as follows :

Other Transport Equipment (79); Tabacco And Tabacco Manufactures (12); Live Animals (00); Petroleum, Petroleum Products And Related Matter (33); Road Vehicles (78).

Also, the non-traditional industries may be declared as :

Electric Current (35); Beverages (11); Essential Oils And Resinoids, Perfume Materials (55); Miscellaneous Edible Products And Preparations (09).

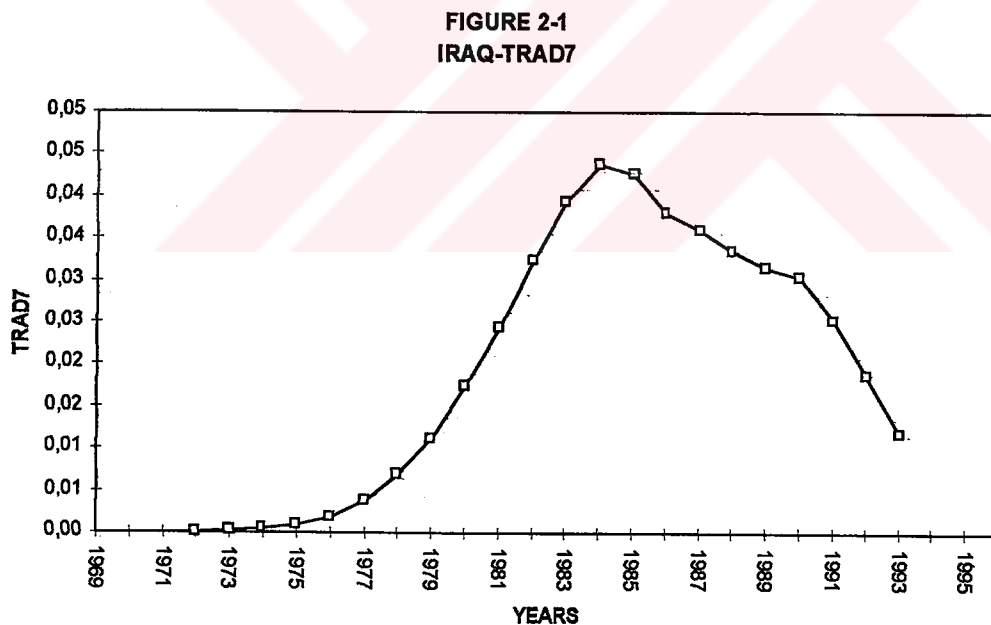
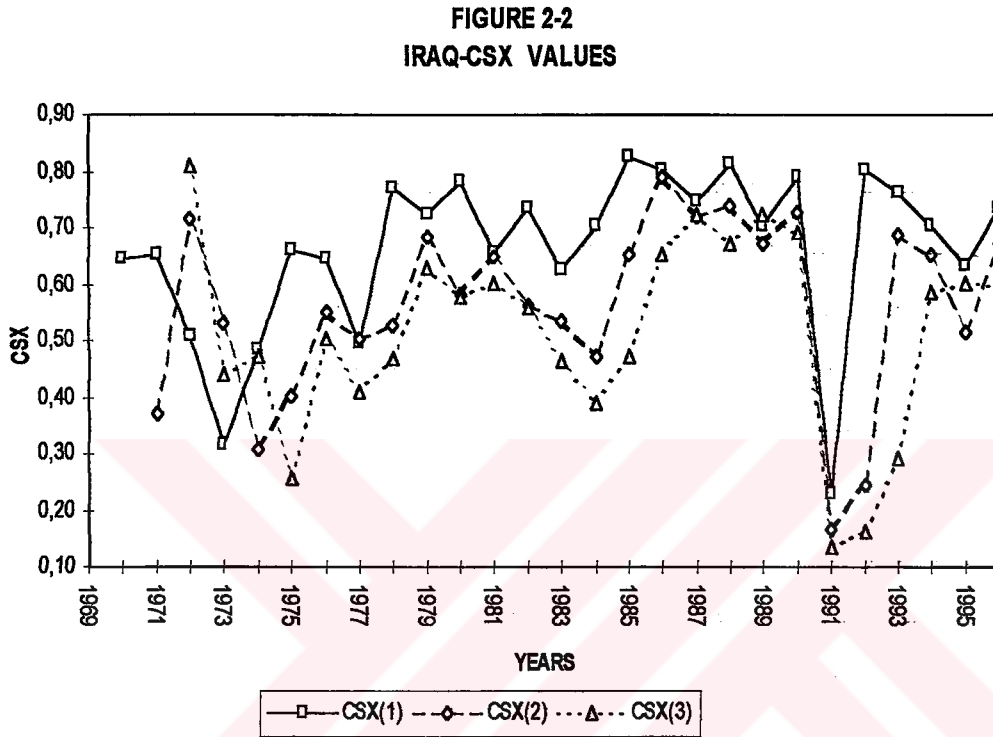


TABLE 3
MEANS OF CEEF VALUES FOR IRAQ

SITC	NAME OF THE SECTOR FOR ITS SITC CODE (REVISION 3)	CEEF
35	ELECTRIC CURRENT	0.10714
11	BEVERAGES	0.21672
55	ESSENTIAL OILS & RESINOIDS, PERFUME MATERIALS	0.23492
09	MISCELLANEOUS EDIBLE PRODUCTS AND PREPA.	0.24847
43	ANIMAL OR VEGETABLE FATS & OILS, PROCESSED...	0.26040
04	CEREALS AND CEREALS PREPARATIONS	0.29613
56	FERTILIZERS	0.31154
76	TELECOMMUNICATIONS & SOUND RECORDING & REPRODUCING EQUIPMENT	0.31299
25	PULP AND WASTE PAPER	0.32143
75	OFFICE MACH. & AUTOMATIC DATA PROCESSING MACH	0.33476
06	SUGAR, SUGAR PREPARATIONS AND HONEY	0.33514
71	POWER GENERATING MACHINERY & EQUIPMENT	0.33911
88	PHOTOGRAPHIC GOODS, OPTICAL GOODS, WATCHES & CLOCKS	0.34587
57	PLASTICS IN PRIMARY FORMS	0.35235
51	ORGANIC CHEMICALS	0.35896
52	INORGANIC CHEMICALS	0.35951
28	METALLIFEROUS ORES AND METAL SCRAP	0.36214
53	DRYING, TANKING & COLOURING MATERIALS	0.36414
54	MEDICAL AND PHARMACEUTICAL PRODUCTS	0.36446
82	FURNITURE AND PARTS THEREOF	0.36461
42	FIXED VEGETABLE FATS & OILS...	0.37403
61	LEATHER, LEATHER MANU. & DRESSED FURSKINS	0.37641
59	CHEMICAL MATERIALS & PRODUCTS, N.E.S.	0.37771
77	ELECTRICAL MACHINERY	0.37845
64	PAPER, PAPER BOARD, ARTICLES OF PAPER PULP	0.38095
23	CRUDE RUBBER	0.38240
58	PLASTICS IN NON-PRIMARY FORMS	0.38306
21	HIDES, SKINS AND FURSKINS, RAW	0.38318
67	IRON AND STEEL	0.38420
74	GENERAL INDUSTRIAL MACHINERY & EQUIPMENT	0.38468
85	FOOTWEAR	0.38847
73	METALWORKING MACHINERY	0.39156
87	PROFESSIONAL, SCIENTIFIC, CONTROLLING INSTRUMENTS AND APPARATUS	0.39354
89	MISCELLANEOUS MANUFACTURED ARTICLES	0.39420
07	COFFEE, TEA, COCOA, SPICES	0.39465
29	CRUDE ANIMAL AND VEGETABLE MATERIALS	0.39646
68	NON-FERROUS METALS	0.40515
05	VEGETABLES AND FRUIT (FRESH, CHILLED..)	0.40594
69	MANUFACTURES OF METALS	0.40832
62	RUBBER MANUFACTURES, N.E.S	0.40841
63	CORK AND WOOD MANUFACTURES	0.41085

72	MACHINERY SPECIALIZED FOR PARTICULAR INDUST.	0.41146
01	MEAT AND MEAT PREPARATIONS	0.41783
22	OIL SEEDS AND OLEAGINOUS FRUITS	0.42139
08	FEEDING STUFF FOR ANIMALS	0.42381
41	ANIMAL OILS AND FATS	0.42401
81	PREFABRICATED BUILDINGS	0.42423
84	ARTICLES OF APPAREL & CLOTHING ACCESSORIES	0.42628
02	DAIRY PRODUCTS AND BIRDS' EGGS	0.42664
65	TEXTILE YARN, FABRICS, MADE-UP ARTICLES	0.42913
24	CORK AND WOOD	0.44389
03	FISH (NOT MARINE MAMMALS)	0.44805
32	COAL, COKE AND BRIQUETTES	0.45758
27	CRUDE FERTILIZERS AND CRUDE MINERALS	0.45917
34	GAS, NATUREL AND MANUFACTURED	0.46429
83	TRAVEL GOODS, HANDBAGS AND SIMILAR CONTAINERS	0.46670
26	TEXTILE FIBRES AND THEIR WASTES	0.48328
66	NON-METALLIC MINERAL MANUFACTURES	0.49608
78	ROAD VEHICLES	0.50157
33	PETROLEUM, PETROLEUM PROD. & RELATED MATER.	0.52454
00	LIVE ANIMALS (OTHER THAN ANIMALS OF 03)	0.53370
12	TOBACCO AND TOBACCO MANUFACTURES	0.59694
79	OTHER TRANSPORT EQUIPMENT	0.64224

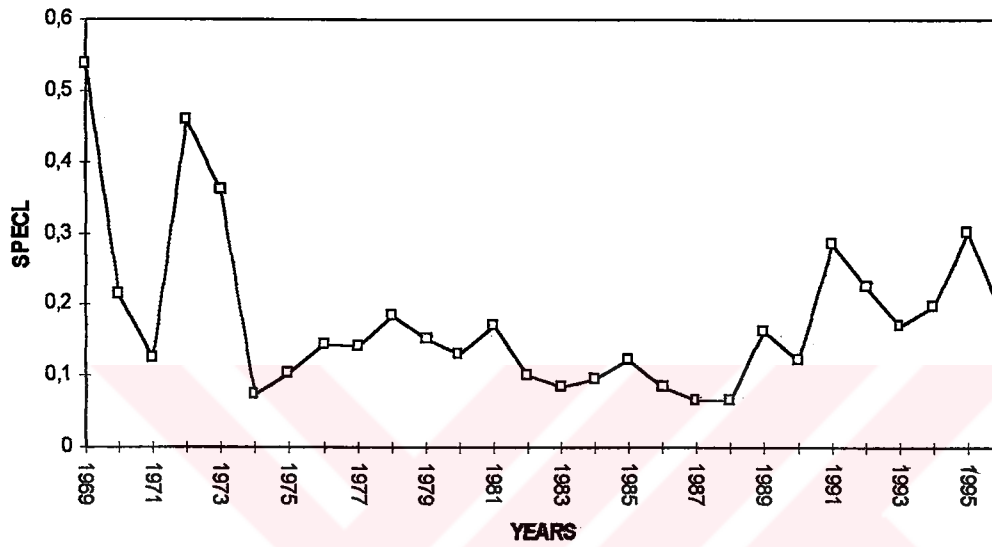
In Figure 2-1, it is obvious that there is an increase up to 1984. The variances grow at an increasing rate in the period of 1978-1983 which is a sign of structural change.



In Figure 2-2, there are three terms when the CSX values are close to zero: years between 1971-1975, 1981-1985 and 1992-1995. Turkey experienced the export diversification in these periods. However, the most remarkable diversification seems to occur in the third period. The reason for this short-term structural change may be the war between Iran and Iraq. This war ended in 1988. The beginning of the diversification period is after 1990. After the long years of war, maybe Iraq experienced a boom in demand for Turkish exports. This boom

may have expanded the number of products that Turkey was exporting. Therefore, there seems to be a significant diversification from 1992 up to 1995.

FIGURE 2-3
IRAQ-SPECL



In Figure 2-3, there are roughly similar periods of diversification as in CSX values. The diversification increases in the periods: 1972-1974, 1981-1988 and 1991-1993. Also, the 1969-1971 term may be considered as a period of export diversification.

3.1.c ISRAEL:

In Table 4, our traditional export sectors to Israel can be enumerated as:

Gas, Natural And Manufactured (34); Hides, Skins And Furskins, Raw (21); Metalliferous Ores And Metal Scrap (28); Live Animals (00); Fish (03); Photographic Goods, Optical Goods, Watches And Clocks (88).

Also, the non-traditional sectors are:

Coin (96); Non-Ferrous Metals (68); Iron And Steel (67); Furniture (82); Telecommunications And Sound Recording Equipment (76); Crude Rubber (23); Office Machines And Automatic Data Processing Machines (75); Plastics In Primary Forms (57); Animal Or Vegetable Fats (43).

In the Figure 3-1, the growth pattern continues up to the year 1991, but the period between 1973-1977 is the interval when the growth accelerates. Then the growth trend slows down during the periods between 1977-1980 and 1985-1987. Clearly, there is a relatively stable growth pattern in these episodes. During the period between 1988-1991, the variances start to rise again until the peak year 1991, but it is not a very significant rise. Note that the structural change in exports occurs in these two periods that show increases in variances, namely, intervals of 1973-77 and 1988-91.

TABLE 4
MEANS OF CEEF VALUES FOR ISRAEL

SITC	NAME OF THE SECTOR FOR ITS SITC CODE (REVISION 3)	CEEF:
96	COIN(OTHER THAN GOLD)	0.03571
68	NON-FERROUS METALS	0.05646
67	IRON AND STEEL	0.06291
82	FURNITURE AND PARTS THEREOF	0.06693
76	TELECOMMUNICATIONS & SOUND RECORDING EQUIPMENT	0.07661
23	CRUDE RUBBER	0.07887
75	OFFICE MACH. & AUTOMATIC DATA PROCESSING MACH	0.08837
57	PLASTICS IN PRIMARY FORMS	0.09462
43	ANIMAL OR VEGETABLE FATS & OILS, PROCESSED...	0.09554
81	PREFABRICATED BUILDINGS	0.10248
72	MACHINERY SPECIALIZED FOR PARTICULAR INDUST.	0.10954
74	GENERAL INDUSTRIAL MACHINERY & EQUIPMENT	0.11176
73	METALWORKING MACHINERY	0.11555
71	POWER GENERATING MACHINERY & EQUIPMENT	0.11574
53	DRYING, TANKING & COLOURING MATERIALS	0.11602
77	ELECTRICAL MACHINERY	0.11704
65	TEXTILE YARN, FABRICS, MADE-UP ARTICLES	0.12278
62	RUBBER MANUFACTURES, N.E.S	0.13156
83	TRAVEL GOODS, HANDBAGS AND SIMILAR CONTAINERS	0.13253
85	FOOTWEAR	0.13618
64	PAPER, PAPER BOARD, ARTICLES OF PAPER PULP	0.14707
78	ROAD VEHICLES	0.15120
51	ORGANIC CHEMICALS	0.15134
42	FIXED VEGETABLE FATS & OILS...	0.15156
69	MANUFACTURES OF METALS	0.15646
24	CORK AND WOOD	0.15896
33	PETROLEUM, PETROLEUM PROD. & RELATED MATER.	0.16499
66	NON-METALLIC MINERAL MANUFACTURES	0.16910
11	BEVERAGES	0.17403
58	PLASTICS IN NON-PRIMARY FORMS	0.17514
56	FERTILIZERS	0.17857
97	GOLD, NON-MONETARY	0.17857
52	INORGANIC CHEMICALS	0.17948
04	CEREALS AND CEREALS PREPARATIONS	0.18305

89	MISCELLANEOUS MANUFACTURED ARTICLES	0.18519
27	CRUDE FERTILIZERS AND CRUDE MINERALS	0.18978
59	CHEMICAL MATERIALS & PRODUCTS, N.E.S.	0.19850
55	ESSENTIAL OILS & RESINOIDS, PERFUME MATERIALS	0.20389
79	OTHER TRANSPORT EQUIPMENT	0.20619
07	COFFEE,TEA,COCOA,SPICES	0.22063
54	MEDICAL AND PHARMACEUTICAL PRODUCTS	0.22986
26	TEXTILE FIBRES AND THEIR WASTES	0.25617
12	TOBACCO AND TOBACCO MANUFACTURES	0.26720
08	FEEDING STUFF FOR ANIMALS	0.27382
25	PULP AND WASTE PAPER	0.28571
63	CORK AND WOOD MANUFACTURES	0.28680
87	PROFESSIONAL, SCIENTIFIC, CONTROLLING INSTRUMENTS	0.29171
01	MEAT AND MEAT PREPARATIONS	0.32143
05	VEGETABLES AND FRUIT (FRESH,CHILLED..).	0.32430
29	CRUDE ANIMAL AND VEGETABLE MATERAILS	0.33434
09	MISCELLANEOUS EDIBLE PRODUCTS AND PREPA.	0.33590
22	OIL SEEDS AND OLEAGINOUS FRUITS	0.34083
84	ARTICLES OF APPAREL & CLOTHING ACCESSORIES	0.34813
06	SUGAR, SUGAR PREPARATIONS AND HONEY	0.34883
02	DAIRY PRODUCTS AND BIRDS' EGGS	0.43894
61	LEATHER, LEATHER MANU. & DRESSED FURSKINS	0.46602
88	PHOTOGRAPHIC GOODS, OPTICAL GOODS, WATCHES & CLOCKS	0.54187
03	FISH (NOT MARINE MAMMALS)	0.56391
00	LIVE ANIMALS (OTHER THAN ANIMALS OF 03)	0.57229
28	METALLIFEROUS ORES AND METAL SCRAP	0.63203
21	HIDES,SKINS AND FURSKINS, RAW	0.78133
34	GAS, NATUREL AND MANUFACTURED	0.85714

FIGURE 3-1
ISRAEL-TRAD7

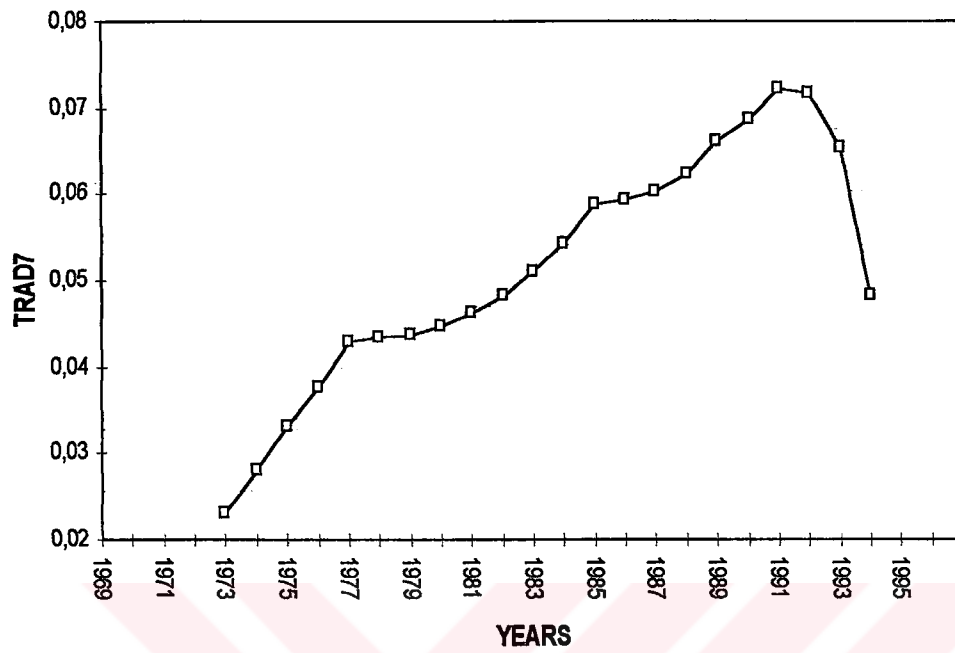
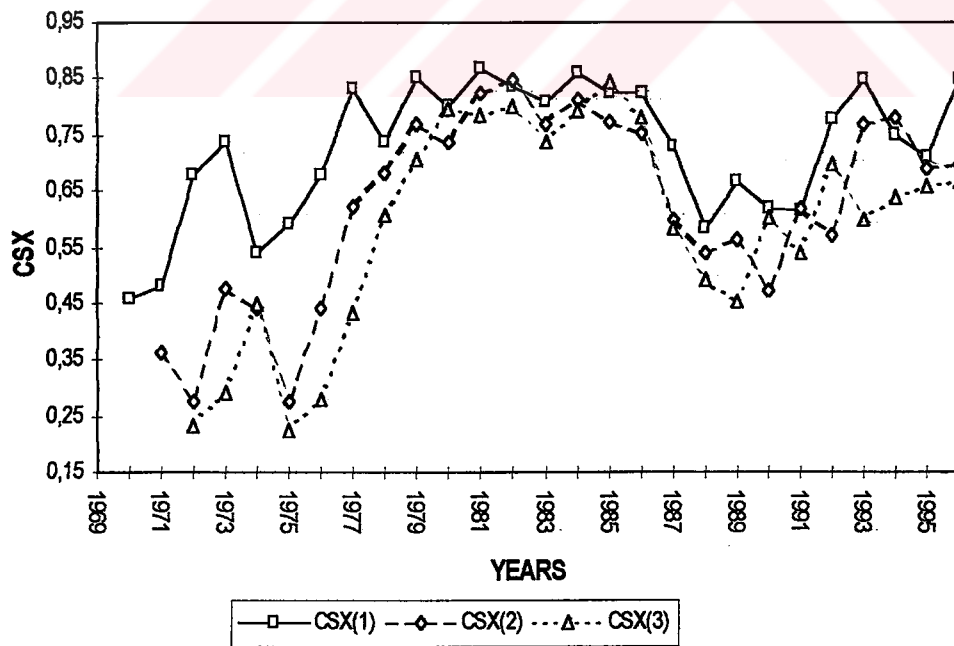
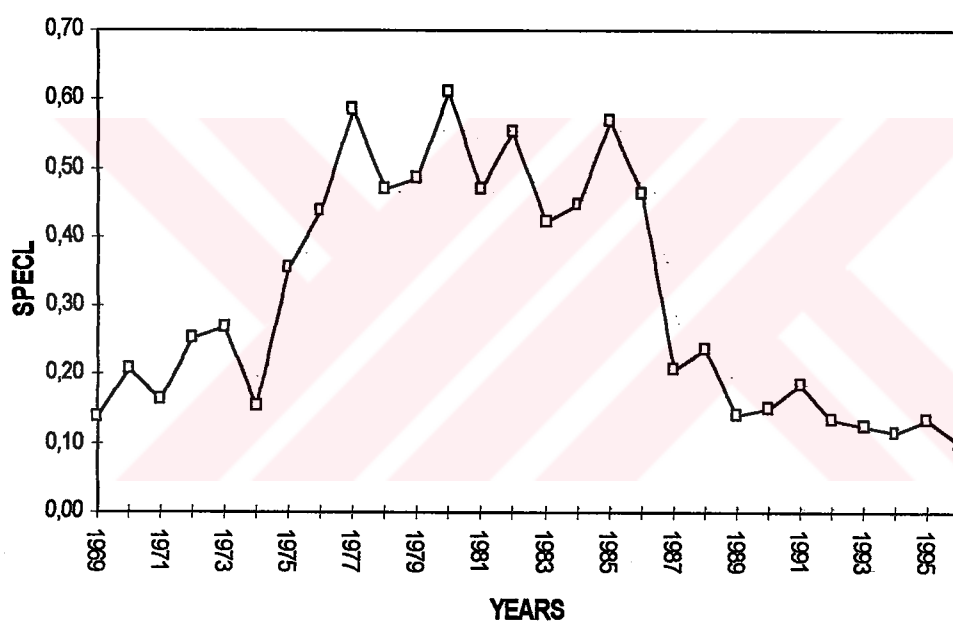


FIGURE 3-2
ISRAEL-CSX VALUES



In Figure 3-2, there are two main periods where CSX values are closer to zero. These are the 1973-1975 and 1986-1990 periods when the short-term diversifications occur. The 1973-75 period also coincides with the results of TRAD7 that strengthens the evidence for export diversification, but for the second period, although the 1988-91 period coincides, the short-term diversification occurs in a broader interval.

FIGURE 3-3
ISRAEL-SPECL VALUES



In Figure 3-3, from 1985 to 1996 SPECL values decrease continuously, it is an indication of diversification.

3.1.d JORDAN :

In Table 5; the traditional sectors of Turkish exports to Jordan are:

Tobacco And Tobacco Manufactures (12); Live Animals (00); Crude Animal And Vegetable Materails (29); Fish (Not Marine Mammals) (03); Vegetables And Fruit (05); Furniture And Parts Thereof (82).

And the non-traditional sectors are:

Hides,Skins And Furskins, Raw (21); Coal; Coke And Briquettes (32); Office Machines And Automatic Data Processing Machines (75); Crude Rubber (23); Fertilizers (56); Road Vehicles (78); Other Transport Equipment (79); Miscellaneous Edible Products And Preparations (09); Petroleum, Petroleum Products And Related Materials (33).

In Figure 4-1, the variances of Jordan grow until 1989. Nevertheless, the 7-yearly patterns are relatively stable during the 1972-1982 period. In 1983, there is a remarkable jump in the variances and thereafter, the variances increase rapidly. The 7-yearly growth pattern is not stable in this time interval. Therefore, the structural change in the export composition took place after 1983.

TABLE 5
MEANS OF CEEF VALUES FOR JORDAN

SITC	NAME OF THE SECTOR FOR ITS SITC CODE (REVISION 3)	CEEF
21	HIDES,SKINS AND FURSKINS, RAW	0.03571
32	COAL, COKE AND BRIQUETTES	0.07143
75	OFFICE MACH. & AUTOMATIC DATA PROCESSING MACH	0.08404
23	CRUDE RUBBER	0.10861
56	FERTILIZERS	0.13839
78	ROAD VEHICLES	0.15549
79	OTHER TRANSPORT EQUIPMENT	0.16390
09	MISCELLANEOUS EDIBLE PRODUCTS AND PREPA.	0.16681
33	PETROLEUM, PETROLEUM PROD. & RELATED MATER.	0.16719
41	ANIMAL OILS AND FATS	0.17102
59	CHEMICAL MATERIALS & PRODUCTS, N.E.S.	0.17769
73	METALWORKING MACHINERY	0.17980
57	PLASTICS IN PRIMARY FORMS	0.19061
26	TEXTILE FIBRES AND THEIR WASTES	0.19965
53	DRYING, TANKING & COLOURING MATERIALS	0.20020
62	RUBBER MANUFACTURES,N.E.S	0.20400
07	COFFEE,TEA,COCOA,SPICES	0.20545
67	IRON AND STEEL	0.20784
58	PLASTICS IN NON-PRIMARY FORMS	0.20931
11	BEVERAGES	0.21735
85	FOOTWEAR	0.21752
65	TEXTILE YARN, FABRICS, MADE-UP ARTICLES	0.21980
81	PREFABRICATED BUILDINGS	0.22058
54	MEDICAL AND PHARMACEUTICAL PRODUCTS	0.22780
71	POWER GENERATING MACHINERY & EQUIPMENT	0.23963
55	ESSENTIAL OILS & RESINOIDS, PERFUME MATERIALS	0.24069
52	INORGANIC CHEMICALS	0.24271
76	TELECOMMUNICATIONS & SOUND RECORDING & REPRODUCING APPARATUS AND EQUIPMENT	0.24376
06	SUGAR, SUGAR PREPARATIONS AND HONEY	0.25392
87	PROFESSIONAL, SCIENTIFIC, CONTROLLING INSTRUMENTS AND APPARATUS	0.25849
64	PAPER, PAPER BOARD, ARTICLES OF PAPER PULP	0.25953
04	CEREALS AND CEREALS PREPARATIONS	0.26716
72	MACHINERY SPECIALIZED FOR PARTICULAR INDUST.	0.26944
69	MANUFACTURES OF METALS	0.26959
74	GENERAL INDUSTRIAL MACHINERY & EQUIPMENT	0.27388
24	CORK AND WOOD	0.27608
51	ORGANIC CHEMICALS	0.27703
68	NON-FERROUS METALS	0.28863
27	CRUDE FERTILIZERS AND CRUDE MINERALS	0.29368
77	ELECTRICAL MACHINERY	0.29423
84	ARTICLES OF APPAREL & CLOTHING ACCESSORIES	0.29461

63	CORK AND WOOD MANUFACTURES	0.29898
88	PHOTOGRAPHIC GOODS, OPTICAL GOODS, WATCHES & CLOCKS	0.30087
42	FIXED VEGETABLE FATS & OILS...	0.30342
43	ANIMAL OR VEGETABLE FATS & OILS, PROCESSED...	0.30461
89	MISCELLANEOUS MANUFACTURED ARTICLES	0.32835
66	NON-METALLIC MINERAL MANUFACTURES	0.33661
22	OIL SEEDS AND OLEAGINOUS FRUITS	0.34448
83	TRAVEL GOODS, HANDBAGS AND SIMILAR CONTAINERS	0.35481
61	LEATHER, LEATHER MANU. & DRESSED FURSKINS	0.36629
28	METALLIFEROUS ORES AND METAL SCRAP	0.38624
01	MEAT AND MEAT PREPARATIONS	0.40778
02	DAIRY PRODUCTS AND BIRDS' EGGS	0.41251
08	FEEDING STUFF FOR ANIMALS	0.41656
82	FURNITURE AND PARTS THEREOF	0.42433
05	VEGETABLES AND FRUIT (FRESH, CHILLED..)	0.43351
03	FISH (NOT MARINE MAMMALS)	0.48422
29	CRUDE ANIMAL AND VEGETABLE MATERIALS	0.54644
00	LIVE ANIMALS (OTHER THAN ANIMALS OF 03)	0.55924
12	TOBACCO AND TOBACCO MANUFACTURES	0.74473



FIGURE 4-1
JORDAN-TRAD7 VALUES

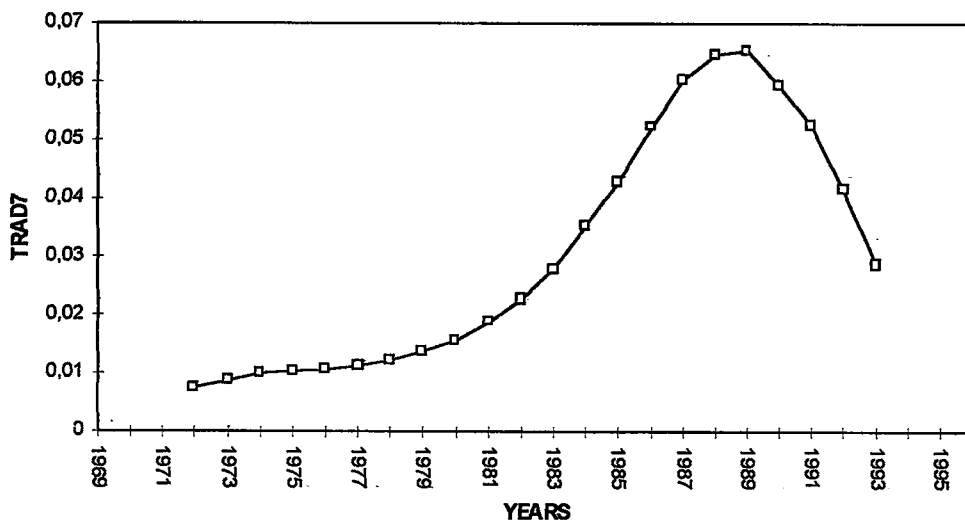
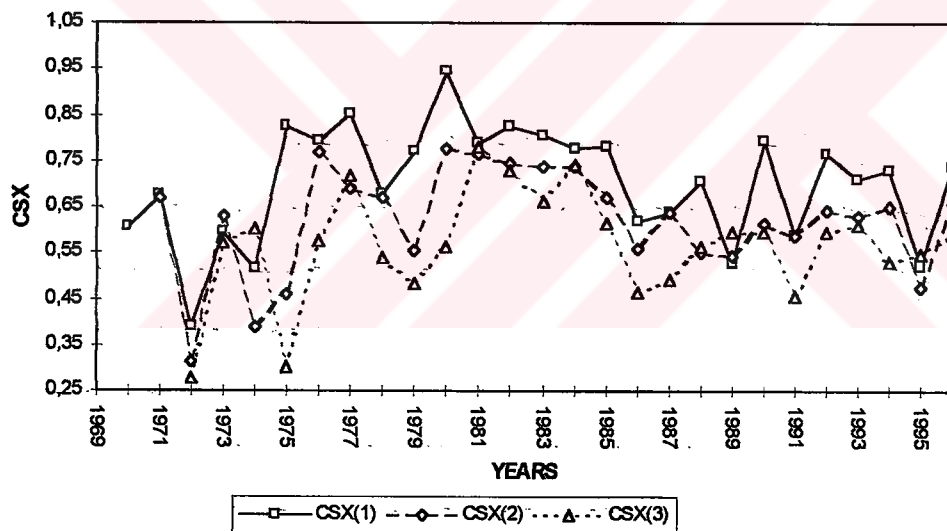
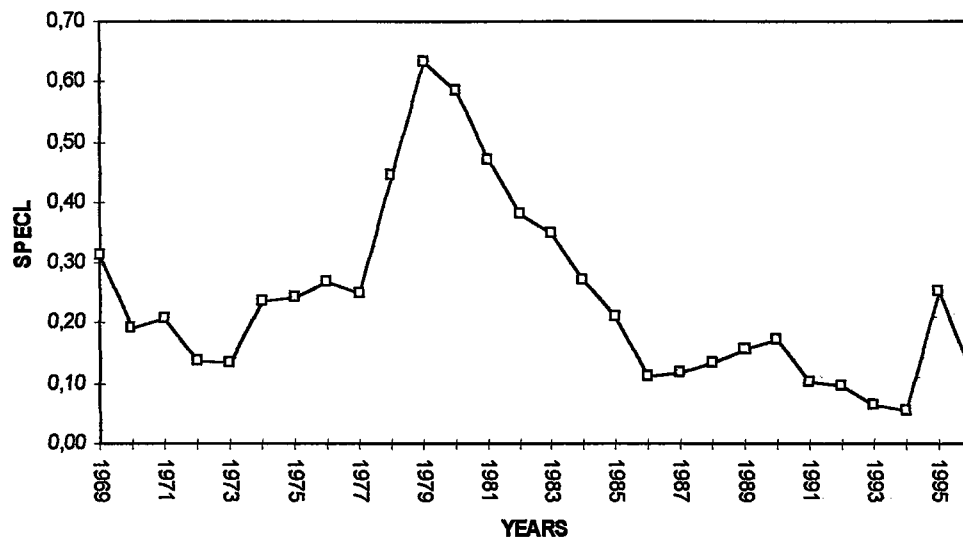


FIGURE 4-2
JORDAN-CSX VALUES



In Figure 4-2, there are many time intervals of export diversification such as: 1971-1972, 1973-1975, 1977-1979, 1984-1986, 1990-1991, 1994-1995. With some exceptions, these intervals may be roughly gathered into broader ones and the three intervals can be observed again.

FIGURE 4-3
JORDAN-SPECL VALUES



In Figure 4-3, the change in export concentration starts with the period between 1969-1973. A sharp rise occurs until the end of 1979. Thereafter, the concentration decreases again between 1979 and 1986. The main shifts in export composition have been accomplished in this period. Finally, after a small rise, SPECL values approach zero in the 1990-1994 period. Although there is the 1973-1977 period which is contradictory with the CSX values, other periods are supported with the results of CSX values.

3.1.e. KUWAIT :

In Table 6, our traditional export sectors to Kuwait are the following:

Crude Animal And Vegetable Materails (29); Metalliferous Ores And Metal Scrap (28); Meat And Meat Preparations (01); Non-Ferrous Metals (68); Oil Seeds And Oleaginous Fruits (22); Inorganic Chemicals (52); Tobacco And Tobacco Manufactures (12).

And the non-traditional sectors are the following:

Other Transport Equipment (79); Animal Or Vegetable Fats And Oils, Processed (43); Iron And Steel (67); Office Machines And Automatic Data Processing Machines (75); Petroleum, Petroleum Products And Related Materials (33); Metalworking Machinery (73); Chemical Materials And Products (59).

In Figure 5-1, the variances are growing up to the peak year 1990. Therefore, there is a medium-term structural change up to this peak year. However, the growth pattern of exports seems to be steady in the first sub-period, which starts in 1972 and ends in 1980. Thereafter, the stability in growth pattern loses its pace and begins to speed up its deviation up to the peak year, 1990. Since the variances decline after 1990, the structural change has ended in the second sub-period.

TABLE 6

MEANS OF CEEF VALUES FOR KUWAIT

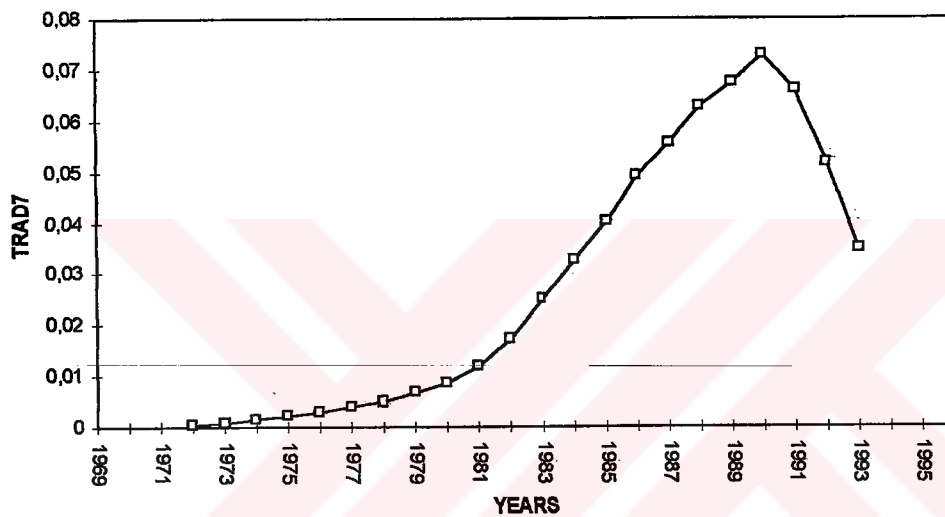
SITC	NAME OF THE SECTOR FOR ITS SITC CODE (REVISION 3)	CEEFF:
79	OTHER TRANSPORT EQUIPMENT	0.07755
43	ANIMAL OR VEGETABLE FATS & OILS, PROCESSED...	0.09757
67	IRON AND STEEL	0.10275
75	OFFICE MACH. & AUTOMATIC DATA PROCESSING MACH	0.10892
33	PETROLEUM, PETROLEUM PROD. & RELATED MATER.	0.12157
73	METALWORKING MACHINERY	0.12436
59	CHEMICAL MATERIALS & PRODUCTS, N.E.S.	0.15927
09	MISCELLANEOUS EDIBLE PRODUCTS AND PREPA.	0.19738
58	PLASTICS IN NON-PRIMARY FORMS	0.23088
02	DAIRY PRODUCTS AND BIRDS' EGGS	0.23413
57	PLASTICS IN PRIMARY FORMS	0.24440
06	SUGAR, SUGAR PREPARATIONS AND HONEY	0.24698
84	ARTICLES OF APPAREL & CLOTHING ACCESSORIES	0.24790
65	TEXTILE YARN, FABRICS, MADE-UP ARTICLES	0.24952
07	COFFEE, TEA, COCOA, SPICES	0.25735
55	ESSENTIAL OILS & RESINOIDS, PERFUME MATERIALS	0.26621
62	RUBBER MANUFACTURES, N.E.S	0.27012
81	PREFABRICATED BUILDINGS	0.27570
04	CEREALS AND CEREALS PREPARATIONS	0.28237
21	HIDES, SKINS AND FURSKINS, RAW	0.28571
27	CRUDE FERTILIZERS AND CRUDE MINERALS	0.28982
61	LEATHER, LEATHER MANU. & DRESSED FURSKINS	0.29514
89	MISCELLANEOUS MANUFACTURED ARTICLES	0.29971
51	ORGANIC CHEMICALS	0.30122
69	MANUFACTURES OF METALS	0.30989
53	DRYING, TANKING & COLOURING MATERIALS	0.31715
23	CRUDE RUBBER	0.32090
82	FURNITURE AND PARTS THEREOF	0.32233
85	FOOTWEAR	0.32234
76	TELECOMMUNICATIONS & SOUND RECORDING & REPRODUCING EQUIPMENT	0.32765
66	NON-METALLIC MINERAL MANUFACTURES	0.34203
88	PHOTOGRAPHIC GOODS, OPTICAL GOODS, WATCHES & CLOCKS	0.34383
42	FIXED VEGETABLE FATS & OILS...	0.34635
74	GENERAL INDUSTRIAL MACHINERY & EQUIPMENT	0.34647
83	TRAVEL GOODS, HANDBAGS AND SIMILAR CONTAINERS	0.34726
26	TEXTILE FIBRES AND THEIR WASTES	0.35036
71	POWER GENERATING MACHINERY & EQUIPMENT	0.35240
87	PROFESSIONAL, SCIENTIFIC, CONTROLLING INSTRUMENTS AND APPARATUS	0.35499
64	PAPER, PAPER BOARD, ARTICLES OF PAPER PULP	0.35726
78	ROAD VEHICLES	0.35855
72	MACHINERY SPECIALIZED FOR PARTICULAR INDUST.	0.36513

77	ELECTRICAL MACHINERY	0.36749
54	MEDICAL AND PHARMACEUTICAL PRODUCTS	0.37838
11	BEVERAGES	0.38095
00	LIVE ANIMALS (OTHER THAN ANIMALS OF 03)	0.38230
05	VEGETABLES AND FRUIT (FRESH, CHILLED..).	0.38318
24	CORK AND WOOD	0.40671
63	CORK AND WOOD MANUFACTURES	0.41096
08	FEEDING STUFF FOR ANIMALS	0.41817
03	FISH (NOT MARINE MAMMALS)	0.43432
12	TOBACCO AND TOBACCO MANUFACTURES	0.44283
52	INORGANIC CHEMICALS	0.44607
22	OIL SEEDS AND OLEAGINOUS FRUITS	0.46514
68	NON-FERROUS METALS	0.48204
01	MEAT AND MEAT PREPARATIONS	0.48783
28	METALLIFEROUS ORES AND METAL SCRAP	0.50000
29	CRUDE ANIMAL AND VEGETABLE MATERIALS	0.52736



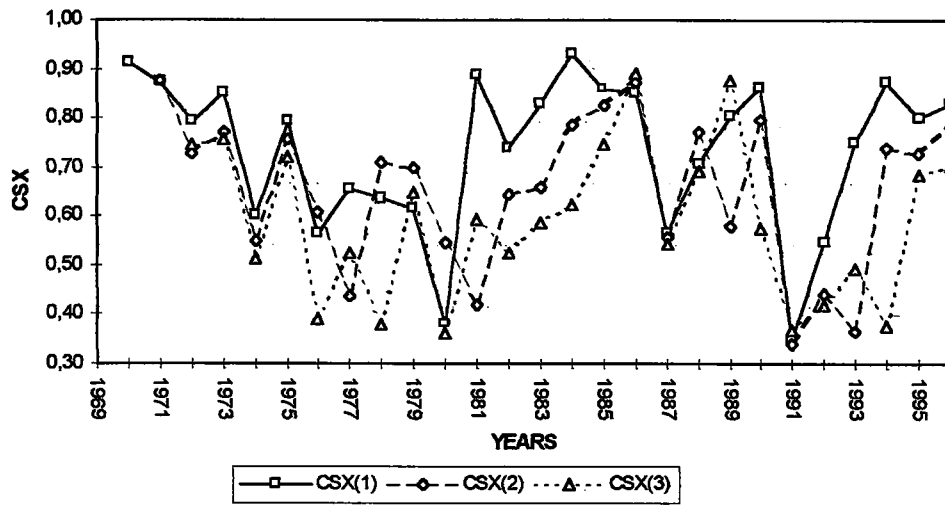
In Figure 5-2, there are many time intervals which have shown signs of a change in export composition of Turkey; but, those periods are shorter time intervals like 1971-1974, 1975-1976, 1979-1981, 1986-1987, 1989-1991. The most significant export diversification occurs in the period of 1989-1991.

**FIGURE 5-1
KUWAIT-TRAD7**

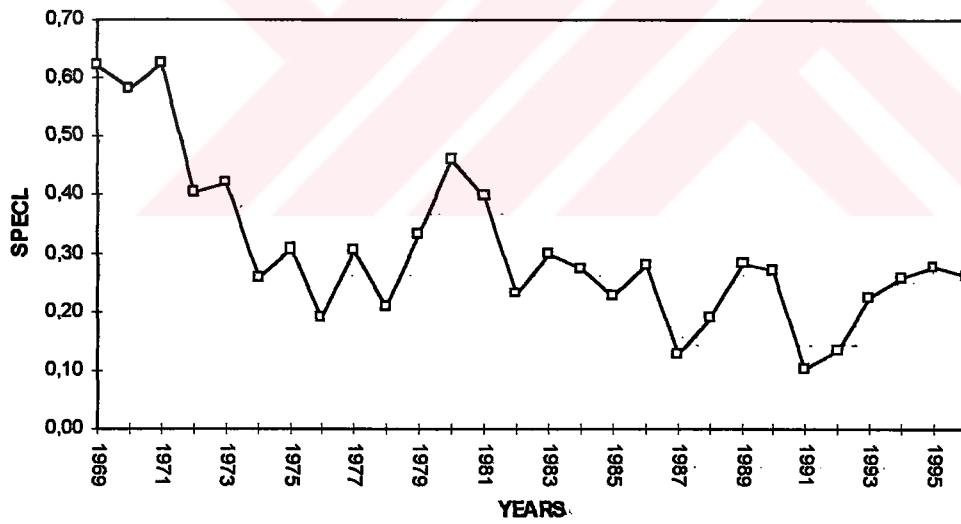


In Figure 5-3, the scene is approximately the same as the previous graph, 5-2. There are many intervals in which SPECL estimations go down to smaller values such as 1971-1976, 1980-1982, 1986-1987, 1989-1991. Although there are some exceptional years when the SPECL values make some small jumps in the first duration, the general trend for export diversification is not affected. Also, these diversification terms are almost the same time periods as mentioned in the previous analysis.

**FIGURE 5-2
KUWAIT-CSX VALUES**



**FIGURE 5-3
KUWAIT-SPECL**



3.1.f LEBANON :

In Table 7, the traditional export industries of Turkey for Lebanon are:

Hides, Skins And Furskins, Raw (21); Textile Fibres And Their Wastes (26); Crude Animal And Vegetable Materials (29); Oil Seeds And Oleaginous Fruits (22); Organic Chemicals (51); Leather, Leather Manufactures And Dressed Furskins (61); Meat And Meat Preparations (01).

And the non-traditional export industries are:

Tobacco And Tobacco Manufactures (12); Coal, Coke And Briquettes (32); Chemical Materials And Products (59); Other Transport Equipment (79); Non-Ferrous Metals (68); Animal Or Vegetable Fats And Oils, Processed (43); Beverages (11).

FIGURE 6-1
LEBANON-TRAD7 VALUES

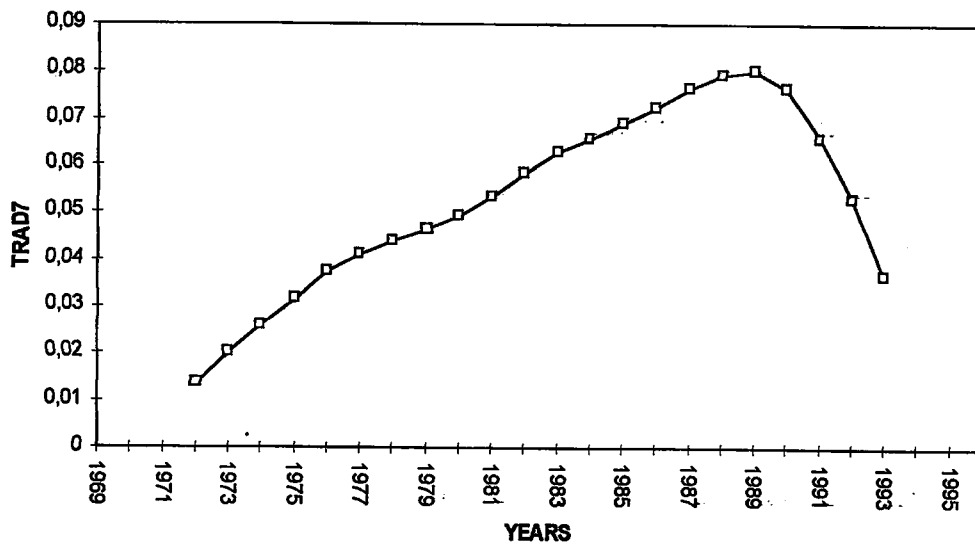


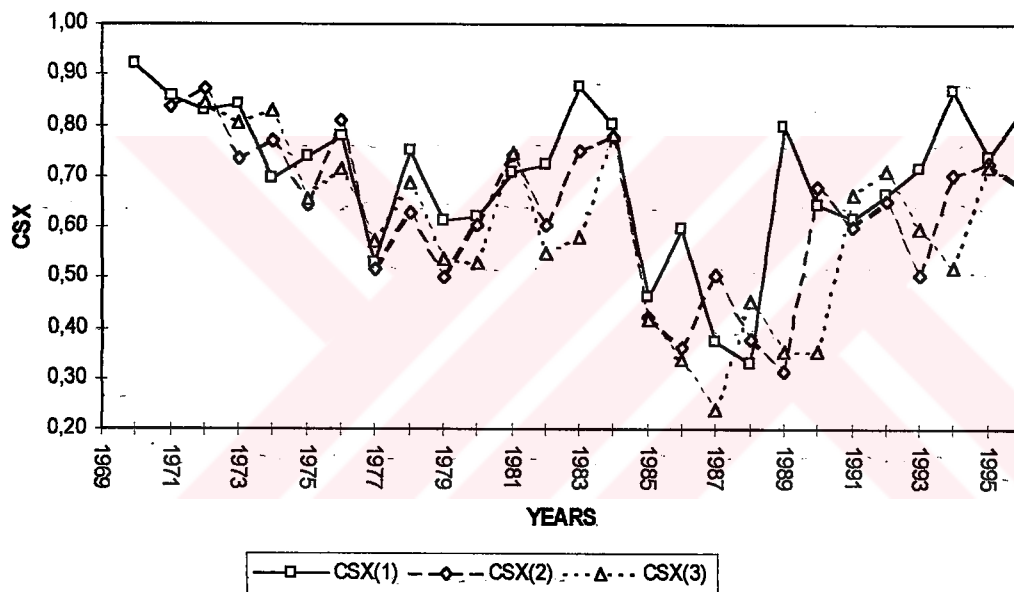
TABLE 7
MEANS OF CEEF VALUES FOR LEBANON

SITC	NAME OF THE SECTOR FOR ITS SITC CODE (REVISION 3)	CEEF
12	TOBACCO AND TOBACCO MANUFACTURES	0.03589
32	COAL, COKE AND BRIQUETTES	0.09226
59	CHEMICAL MATERIALS & PRODUCTS, N.E.S.	0.11328
79	OTHER TRANSPORT EQUIPMENT	0.11890
68	NON-FERROUS METALS	0.12051
43	ANIMAL OR VEGETABLE FATS & OILS, PROCESSED...	0.12235
11	BEVERAGES	0.13237
76	TELECOMMUNICATIONS & SOUND RECORDING & REPRODUCING EQUIPMENT	0.16622
57	PLASTICS IN PRIMARY FORMS	0.16932
41	ANIMAL OILS AND FATS	0.17897
85	FOOTWEAR	0.18888
09	MISCELLANEOUS EDIBLE PRODUCTS AND PREPA.	0.19865
62	RUBBER MANUFACTURES,N.E.S	0.20584
78	ROAD VEHICLES	0.21600
55	ESSENTIAL OILS & RESINOIDS, PERFUME MATERIALS	0.22435
56	FERTILIZERS	0.23287
06	SUGAR, SUGAR PREPARATIONS AND HONEY	0.24136
66	NON-METALLIC MINERAL MANUFACTURES	0.24430
52	INORGANIC CHEMICALS	0.25505
75	OFFICE MACH. & AUTOMATIC DATA PROCESSING MACH	0.25616
69	MANUFACTURES OF METALS	0.25729
67	IRON AND STEEL	0.26457
04	CEREALS AND CEREALS PREPARATIONS	0.27422
64	PAPER, PAPER BOARD, ARTICLES OF PAPER PULP	0.27673
84	ARTICLES OF APPAREL & CLOTHING ACCESSORIES	0.28342
77	ELECTRICAL MACHINERY	0.29086
27	CRUDE FERTILIZERS AND CRUDE MINERALS	0.29541
87	PROFESSIONAL, SCIENTIFIC, CONTROLLING INSTRUMENTS AND APPARATUS	0.29815
89	MISCELLANEOUS MANUFACTURED ARTICLES	0.31148
07	COFFEE,TEA,COCOA,SPICES	0.31323
73	METALWORKING MACHINERY	0.31540
53	DRYING,TANKING & COLOURING MATERIALS	0.32511
58	PLASTICS IN NON-PRIMARY FORMS	0.32693
65	TEXTILE YARN, FABRICS, MADE-UP ARTICLES	0.32945
72	MACHINERY SPECIALIZED FOR PARTICULAR INDUST.	0.33621
71	POWER GENERATING MACHINERY & EQUIPMENT	0.34369
74	GENERAL INDUSTRIAL MACHINERY & EQUIPMENT	0.34628
83	TRAVEL GOODS,HANDBAGS AND SIMILAR CONTAINERS	0.35294

81	PREFABRICATED BUILDINGS	0.35786
54	MEDICAL AND PHARMACEUTICAL PRODUCTS	0.36098
82	FURNITURE AND PARTS THEREOF	0.37246
33	PETROLEUM, PETROLEUM PROD. & RELATED MATER.	0.40127
63	CORK AND WOOD MANUFACTURES	0.40687
02	DAIRY PRODUCTS AND BIRDS' EGGS	0.42996
42	FIXED VEGETABLE FATS & OILS...	0.43667
00	LIVE ANIMALS (OTHER THAN ANIMALS OF 03)	0.43817
03	FISH (NOT MARINE MAMMALS)	0.44551
08	FEEDING STUFF FOR ANIMALS	0.47310
05	VEGETABLES AND FRUIT (FRESH, CHILLED..).	0.49812
88	PHOTOGRAPHIC GOODS, OPTICAL GOODS, WATCHES & CLOCKS	0.51580
28	METALIFEROUS ORES AND METAL SCRAP	0.52809
24	CORK AND WOOD	0.52828
01	MEAT AND MEAT PREPARATIONS	0.56593
61	LEATHER, LEATHER MANU. & DRESSED FURSKINS	0.57736
51	ORGANIC CHEMICALS	0.58017
22	OIL SEEDS AND OLEAGINOUS FRUITS	0.59618
29	CRUDE ANIMAL AND VEGETABLE MATERIALS	0.70012
26	TEXTILE FIBRES AND THEIR WASTES	0.84537
21	HIDES, SKINS AND FURSKINS, RAW	0.89710

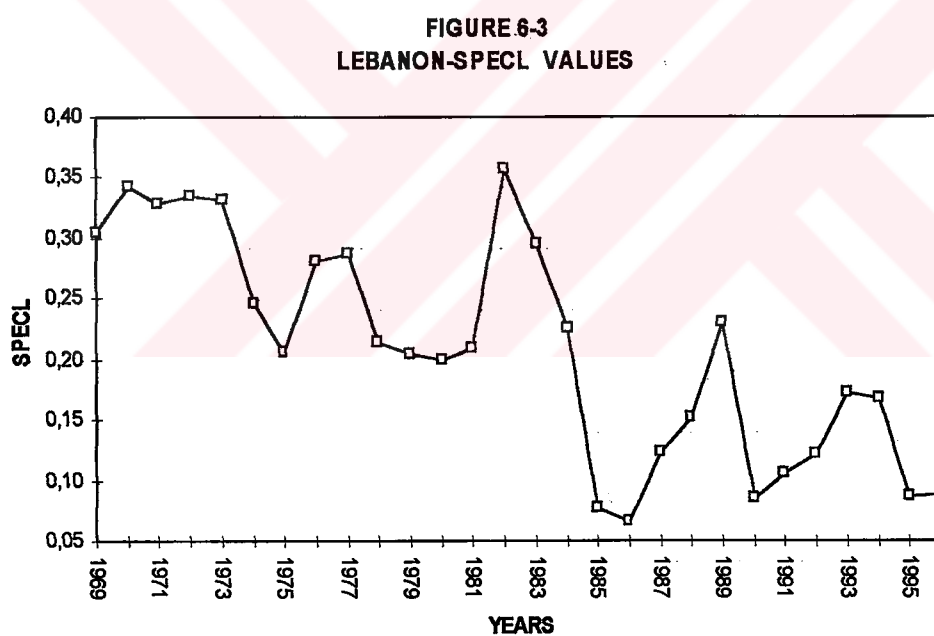
In Figure 6-1, the variances are rising up to 1989 so, there is a shift in the export composition. There are three important time intervals: 1972-1976, 1976-1980, 1981-1989. However, this time growth pattern diverges in the first period. Then, in the second term, the growth pattern becomes relatively stable. Finally, in the last period, it speeds up again.

FIGURE 6-2
LEBANON-CSX VALUES



In Figure 6-2, two time intervals attract attention. Namely, they are the time intervals 1976-1977 and 1983-1989. In the first interval, the export diversification is not very sharp, but all the CSX estimations show signs of the change in export composition. The second interval has apparently signs of diversification, however, there are some zigzags in the estimated CSX values.

The zigzags mentioned in the previous paragraph also appear in Figure 6-3. The same intervals attract attention in this figure also. These periods are 1973-1975 and 1982-1986. The first period has a small change in export concentration. The second period has a significant export diversification as seen from the figure. Therefore, in general, the two analyses coincide. There are some declines in the SPECL values for shorter periods. Namely, they are 1977-1978, 1989-1990, 1994-1995. However, these periods do not show a continuity for longer periods.



3.1.g QATAR :

In Table 8, our traditional export industries to Qatar are:

Metalliferous Ores And Metal Scrap (28); Tobacco And Tobacco Manufactures (12); Plastics In Primary Forms (57); Feeding Stuff For Animals (08); Oil Seeds And Oleaginous Fruits (22); Meat And Meat Preparations (01); Non-Ferrous Metals (68).

And the non-traditional sectors are:

Fertilizers (56); Other Transport Equipment (79); Animal Or Vegetable Fats And Oils (43); Electrical Machinery (77); Professional, Scientific, Controlling Instruments And Apparatus (87); Photographic Goods, Optical Goods, Watches And Clocks (88).

FIGURE 7-1.
QATAR-TRAD7

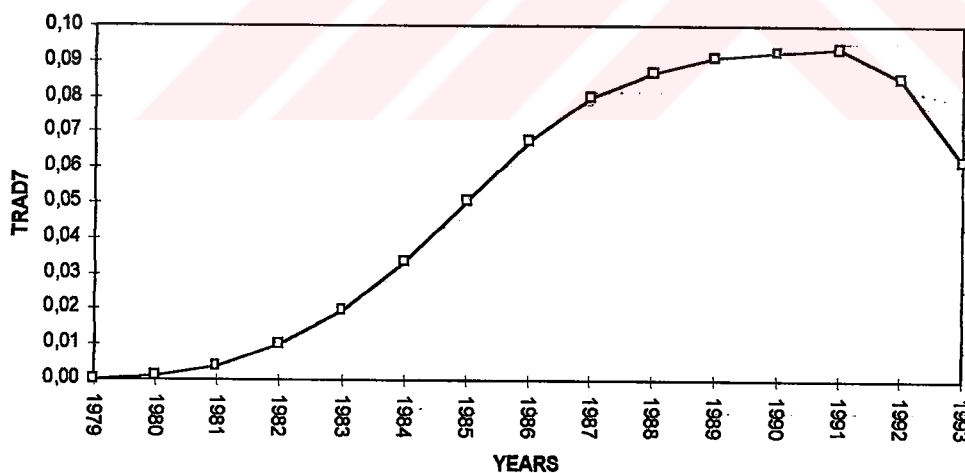


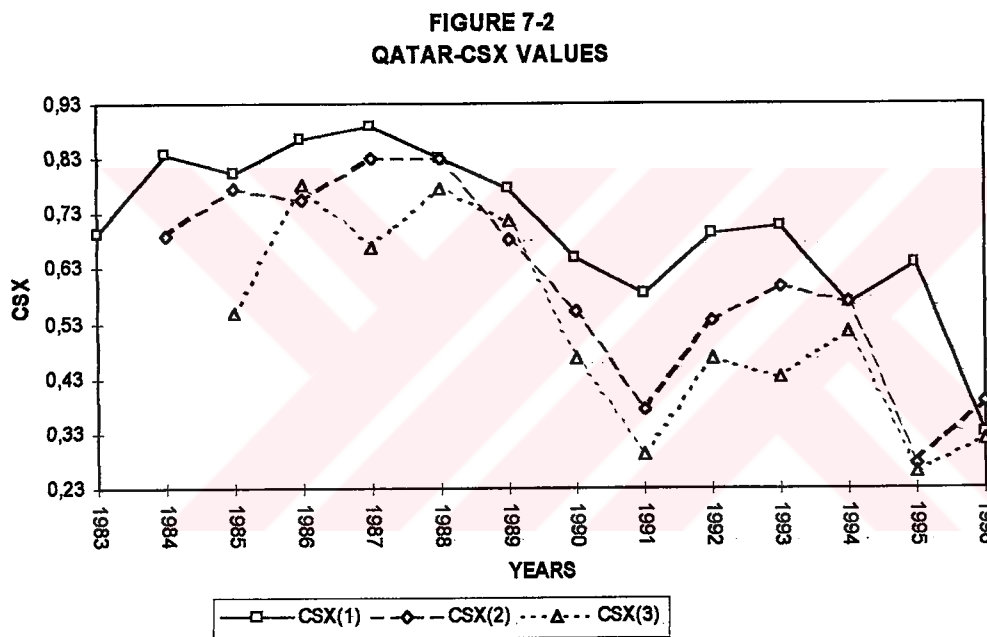
TABLE 8
MEANS OF CEEF VALUES FOR QATAR

SITC	NAME OF THE SECTOR FOR ITS SITC CODE (REVISION 3)	CEEF
56	FERTILIZERS	0.03571
79	OTHER TRANSPORT EQUIPMENT	0.03571
43	ANIMAL OR VEGETABLE FATS & OILS, PROCESSED...	0.03597
77	ELECTRICAL MACHINERY	0.07621
87	PROFESSIONAL, SCIENTIFIC, CONTROLLING INSTRUMENTS AND APPARATUS	0.08553
88	PHOTOGRAPHIC GOODS, OPTICAL GOODS, WATCHES & CLOCKS	0.08621
24	CORK AND WOOD	0.10664
53	DRYING, TANKING & COLOURING MATERIALS	0.11897
69	MANUFACTURES OF METALS	0.12528
05	VEGETABLES AND FRUIT (FRESH, CHILLED..)	0.13121
09	MISCELLANEOUS EDIBLE PRODUCTS AND PREPA.	0.15531
67	IRON AND STEEL	0.16759
71	POWER GENERATING MACHINERY & EQUIPMENT	0.17049
78	ROAD VEHICLES	0.17751
62	RUBBER MANUFACTURES, N.E.S	0.17802
66	NON-METALLIC MINERAL MANUFACTURES	0.19436
73	METALWORKING MACHINERY	0.20361
64	PAPER, PAPER BOARD, ARTICLES OF PAPER PULP	0.20665
02	DAIRY PRODUCTS AND BIRDS' EGGS	0.20702
42	FIXED VEGETABLE FATS & OILS...	0.21526
65	TEXTILE YARN, FABRICS, MADE-UP ARTICLES	0.21550
84	ARTICLES OF APPAREL & CLOTHING ACCESSORIES	0.22098
81	PREFABRICATED BUILDINGS	0.22643
07	COFFEE, TEA, COCOA, SPICES	0.24053
85	FOOTWEAR	0.25179
58	PLASTICS IN NON-PRIMARY FORMS	0.25635
61	LEATHER, LEATHER MANU. & DRESSED FURSKINS	0.26062
06	SUGAR, SUGAR PREPARATIONS AND HONEY	0.26356
55	ESSENTIAL OILS & RESINOIDS, PERFUME MATERIALS	0.26372
52	INORGANIC CHEMICALS	0.26638
04	CEREALS AND CEREALS PREPARATIONS	0.26661
82	FURNITURE AND PARTS THEREOF	0.27582
51	ORGANIC CHEMICALS	0.27784
75	OFFICE MACH. & AUTOMATIC DATA PROCESSING MACH	0.28571
97	GOLD, NON-MONETARY	0.28571
83	TRAVEL GOODS, HANDBAGS AND SIMILAR CONTAINERS	0.29291
63	CORK AND WOOD MANUFACTURES	0.31623
59	CHEMICAL MATERIALS & PRODUCTS, N.E.S.	0.31643
89	MISCELLANEOUS MANUFACTURED ARTICLES	0.31755
76	TELECOMMUNICATIONS & SOUND RECORDING & REPRODUCING EQUIPMENT	0.32070
74	GENERAL INDUSTRIAL MACHINERY & EQUIPMENT	0.32581

54	MEDICAL AND PHARMACEUTICAL PRODUCTS	0.33527
27	CRUDE FERTILIZERS AND CRUDE MINERALS	0.33695
72	MACHINERY SPECIALIZED FOR PARTICULAR INDUST.	0.34853
29	CRUDE ANIMAL AND VEGETABLE MATERIALS	0.36448
26	TEXTILE FIBRES AND THEIR WASTES	0.37877
11	BEVERAGES	0.38151
00	LIVE ANIMALS (OTHER THAN ANIMALS OF 03)	0.38190
33	PETROLEUM, PETROLEUM PROD. & RELATED MATER.	0.39286
68	NON-FERROUS METALS	0.41016
01	MEAT AND MEAT PREPARATIONS	0.43617
22	OIL SEEDS AND OLEAGINOUS FRUITS	0.44262
08	FEEDING STUFF FOR ANIMALS	0.45357
57	PLASTICS IN PRIMARY FORMS	0.46781
12	TOBACCO AND TOBACCO MANUFACTURES	0.46877
28	METALLIFEROUS ORES AND METAL SCRAP	0.50000



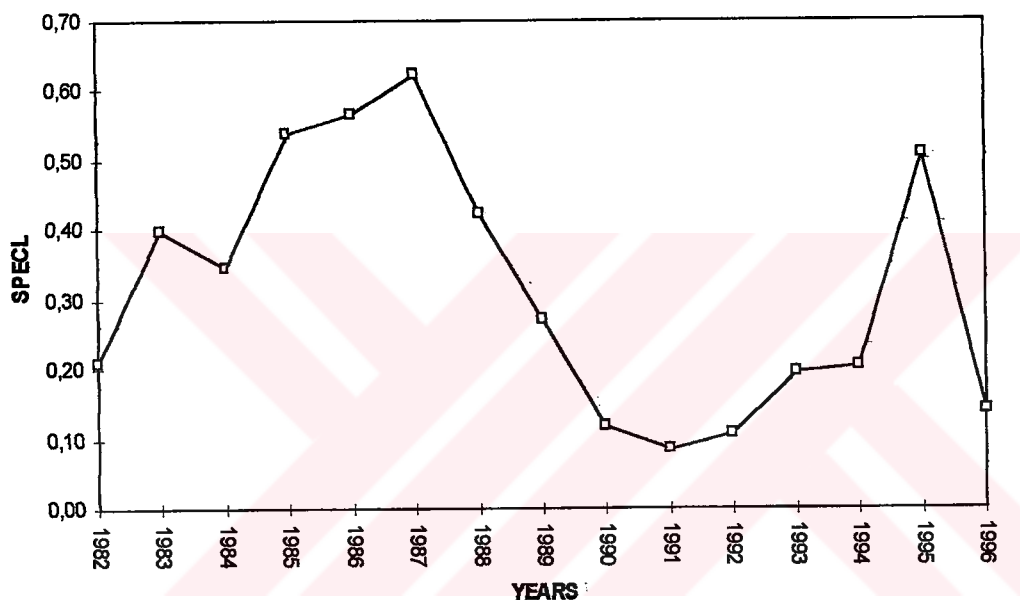
In Figure 7-1, since the variances are increasing up to 1991, there is a medium-term structural change in this time interval. However, this growth pattern is relatively stable in the sub-interval of 1979-1982. Thereafter, the growth pattern speeds up to the peak year 1989. The structural change in exports has ended in this sub-interval. Moreover, the increase in variances slows down until 1991, and the adjustment period is completed after 1991.



In Figure 7-2, obviously, there are two periods in which a change has occurred in export composition of Turkey. The first sub-period starts from the year 1988, and continues up to the year 1991. In this term, the diversification in exports is significant and distinct. The second sub-period begins in 1993 and ends in 1995. The second sub-period is narrower, and it is not as significant as the first one.

However, after 1995, there is a sharp jump in the CSX(1) estimation. In the previous analysis, the structural change started in 1984. Since the diversification starts in 1988, the outcomes of first analysis support the diversification period. Unfortunately, the same explanations can not be given for the second diversification period.

FIGURE 7-3
QATAR-SPECL VALUES



In Figure 7-3, high concentration of exports deteriorates from 1987 to the end of 1991. It is an evidence for export diversification in this period and, this interval coincides with the diversification period of CSX values. Also, the 1995-1996 period has signs for export diversification since there is a decreasing trend in SPECL estimations.

3.1.h SAUDI ARABIA :

In Table 9, the traditional export industries of Turkey to Saudi Arabia are the following:

Petroleum, Petroleum Products And Related Materials (33); Fertilizers (56); Oil Seeds And Oleaginous Fruits (22); Cork And Wood (24); Plastics In Non-Primary Forms (58); Feeding Stuff For Animals (08); Cork And Wood Manufactures (63); Tobacco And Tobacco Manufactures (12); Animal Oils And Fats (41).

And, the non-traditional sectors are:

Coin(Other Than Gold) (96); Gold, Non-Monetary (97); Leather, Leather Manufactures And Dressed Furskins (61); Other Transport Equipment (79); Iron And Steel (67); Chemical Materials And Products (59); Rubber Manufactures (62); Coal, Coke And Briquettes (32).

In Figure 8-1, the first four years have very insignificant $TRAD7$ values. Moreover, until 1981, the variances recover very slowly so structure of exports are relatively stable. After 1981, there is a notable jump and the 7-yearly growth pattern accelerates until the peak of 1988. The structural change has transpired in this second period.

TABLE 9
MEANS OF CEEF VALUES FOR SAUDI ARABIA

SITC	NAME OF THE SECTOR FOR ITS SITC CODE (REVISION 3)	CEEF
96	COIN(OTHER THAN GOLD)	0.03571
97	GOLD, NON-MONETARY	0.03571
61	LEATHER, LEATHER MANU. & DRESSED FURSKINS	0.12755
79	OTHER TRANSPORT EQUIPMENT	0.14326
67	IRON AND STEEL	0.14478
59	CHEMICAL MATERIALS & PRODUCTS, N.E.S.	0.14650
62	RUBBER MANUFACTURES,N.E.S	0.16584
32	COAL, COKE AND BRIQUETTES	0.16955
53	DRYING,TANKING & COLOURING MATERIALS	0.17612
64	PAPER, PAPER BOARD, ARTICLES OF PAPER PULP	0.18860
85	FOOTWEAR	0.19022
28	METALLIFEROUS ORES AND METAL SCRAP	0.20435
02	DAIRY PRODUCTS AND BIRDS' EGGS	0.20778
23	CRUDE RUBBER	0.21044
52	INORGANIC CHEMICALS	0.21670
84	ARTICLES OF APPAREL & CLOTHING ACCESSORIES	0.21753
42	FIXED VEGETABLE FATS & OILS...	0.22399
43	ANIMAL OR VEGETABLE FATS & OILS, PROCESSED...	0.22991
73	METALWORKING MACHINERY	0.23496
11	BEVERAGES	0.23703
34	GAS, NATUREL AND MANUFACTURED	0.23762
55	ESSENTIAL OILS & RESINOIDS, PERFUME MATERIALS	0.23840
77	ELECTRICAL MACHINERY	0.24004
66	NON-METALLIC MINERAL MANUFACTURES	0.24236
05	VEGETABLES AND FRUIT (FRESH,CHILLED..)	0.24394
75	OFFICE MACH. & AUTOMATIC DATA PROCESSING MACH	0.24555
78	ROAD VEHICLES	0.25411
65	TEXTILE YARN, FABRICS, MADE-UP ARTICLES	0.25423
09	MISCELLANEOUS EDIBLE PRODUCTS AND PREPA.	0.25724
87	PROFESSIONAL, SCIENTIFIC, CONTROLLING INSTRUMENTS AND APPARATUS	0.25754
51	ORGANIC CHEMICALS	0.26103
06	SUGAR, SUGAR PREPARATIONS AND HONEY	0.27439
03	FISH (NOT MARINE MAMMALS)	0.27912
04	CEREALS AND CEREALS PREPARATIONS	0.28339
88	PHOTOGRAPHIC GOODS, OPTICAL GOODS, WATCHES & CLOCKS	0.29115
01	MEAT AND MEAT PREPARATIONS	0.30997
57	PLASTICS IN PRIMARY FORMS	0.31946
76	TELECOMMUNICATIONS & SOUND RECORDING & REPRODUCING APPARATUS AND EQUIPMENT	0.32327
00	LIVE ANIMALS (OTHER THAN ANIMALS OF 03)	0.32662
54	MEDICAL AND PHARMACEUTICAL PRODUCTS	0.32857
69	MANUFACTURES OF METALS	0.33161

72	MACHINERY SPECIALIZED FOR PARTICULAR INDUST.	0.33516
89	MISCELLANEOUS MANUFACTURED ARTICLES	0.34007
26	TEXTILE FIBRES AND THEIR WASTES	0.34530
74	GENERAL INDUSTRIAL MACHINERY & EQUIPMENT	0.35014
68	NON-FERROUS METALS	0.35022
07	COFFEE, TEA, COCOA, SPICES	0.35448
27	CRUDE FERTILIZERS AND CRUDE MINERALS	0.35561
81	PREFABRICATED BUILDINGS	0.35562
83	TRAVEL GOODS, HANDBAGS AND SIMILAR CONTAINERS	0.36537
29	CRUDE ANIMAL AND VEGETABLE MATERIALS	0.37470
21	HIDES, SKINS AND FURSKINS, RAW	0.39155
82	FURNITURE AND PARTS THEREOF	0.39398
71	POWER GENERATING MACHINERY & EQUIPMENT	0.39528
41	ANIMAL OILS AND FATS	0.40609
12	TOBACCO AND TOBACCO MANUFACTURES	0.42059
63	CORK AND WOOD MANUFACTURES	0.42454
08	FEEDING STUFF FOR ANIMALS	0.43452
58	PLASTICS IN NON-PRIMARY FORMS	0.44132
24	CORK AND WOOD	0.46483
22	OIL SEEDS AND OLEAGINOUS FRUITS	0.47788
56	FERTILIZERS	0.49323
33	PETROLEUM, PETROLEUM PROD. & RELATED MATER.	0.50424

FIGURE 8-1
SAUDI ARABIA-TRAD7 VALUES

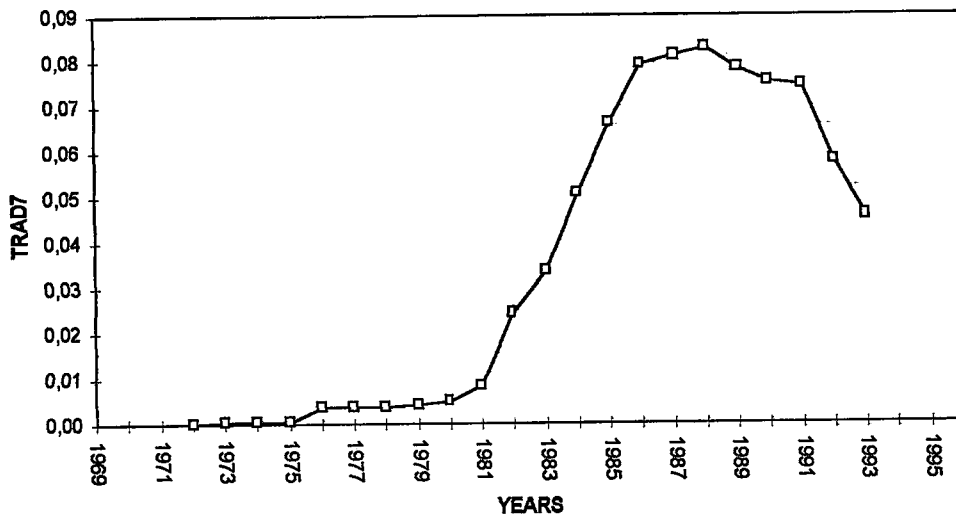
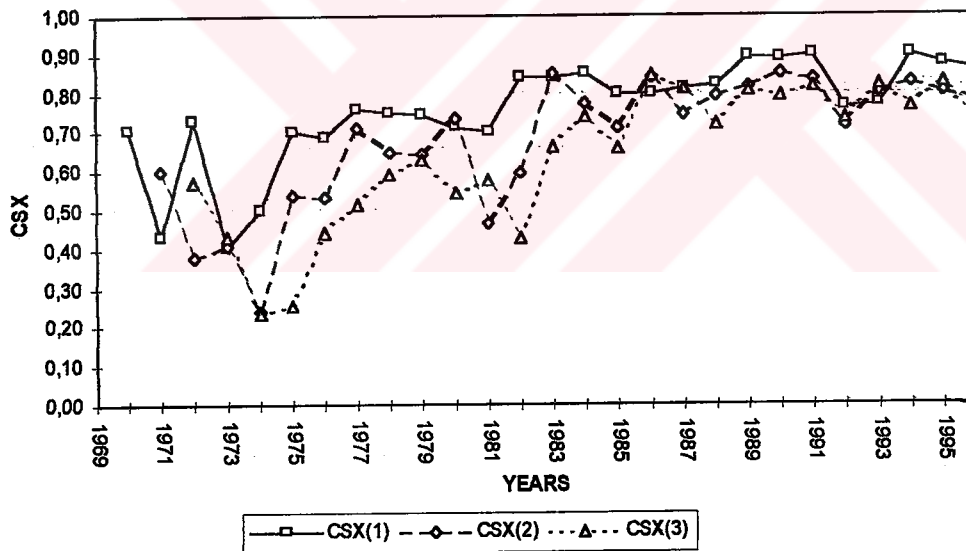


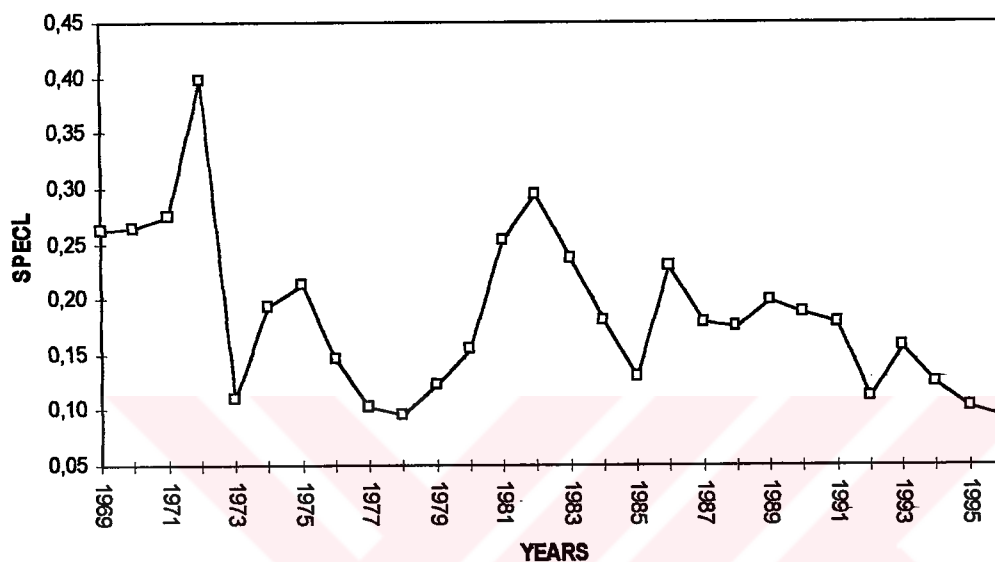
FIGURE 8-2
SAUDI ARABIA-CSX VALUES



In Figure 8-2, as in the most of the previous analyses, there are three periods as: 1972-1974, 1980-1982, 1991-1992. The first period is very distinct in export diversification. Slowly, this distinction reduces in

the second and third. However, yearly, bi-yearly, tri-yearly CSX estimations show export diversification for all of the terms

FIGURE 8-3
SAUDI ARABIA-SPECL



In Figure 8-3, roughly, similar results appear again. The periods of variation in export concentration are: 1972-1973, 1975-1978, 1982-1985, 1990-1992, 1993-1996. Except the last interval, others approximately fit the results of CSX values in the previous analysis. However, there is a significant export diversification in the last period, which is not observed in the CSX estimations.

3.1.i SYRIA :

In Table 10, the traditional export sectors of Turkey to Syria are the following:

Hides, Skins And Furskins, Raw (21); Crude Animal And Vegetable Materials (29); Feeding Stuff For Animals (08); Cork And Wood (24); Vegetables And Fruit (05); Medical And Pharmaceutical Products (54); Beverages (11); Meat And Meat Preparations (01).

And, the non-traditional export sectors of Turkey to Syria are:

Electrical Machinery (77); Metalliferous Ores And Metal Scrap (28); Other Transport Equipment (29); Professional, Scientific, Controlling Instruments And Apparatus (87); Crude Rubber (23); Animal Or Vegetable Fats And Oils, Processed (43); Sugar, Sugar Preparations And Honey (06); Plastics In Primary Forms (57); Tobacco And Tobacco Manufactures (12); Coal, Coke And Briquettes (32).

In Figure 9-1, the variances extend very smoothly up to 1988. However, the years up to 1974 are relatively stable. Then, growth accelerates till the end of 1988. The structural change ends in this second period.

TABLE 10
MEANS OF CEEF VALUES FOR SYRIA

SITC	NAME OF THE SECTOR FOR ITS SITC CODE (REVISION 3)	CEEF
77	ELECTRICAL MACHINERY	0.07947
28	METALLIFEROUS ORES AND METAL SCRAP	0.09774
79	OTHER TRANSPORT EQUIPMENT	0.09815
87	PROFESSIONAL, SCIENTIFIC, CONTROLLING INSTRUMENTS AND APPARATUS	0.11969
23	CRUDE RUBBER	0.12247
43	ANIMAL OR VEGETABLE FATS & OILS, PROCESSED...	0.13158
06	SUGAR, SUGAR PREPARATIONS AND HONEY	0.13665
57	PLASTICS IN PRIMARY FORMS	0.13703
12	TOBACCO AND TOBACCO MANUFACTURES	0.13713
32	COAL, COKE AND BRIQUETTES	0.14787
62	RUBBER MANUFACTURES, N.E.S	0.15286
76	TELECOMMUNICATIONS & SOUND RECORDING & REPRODUCING APPARATUS AND EQUIPMENT	0.16445
61	LEATHER, LEATHER MANU. & DRESSED FURSKINS	0.16474
78	ROAD VEHICLES	0.16939
71	POWER GENERATING MACHINERY & EQUIPMENT	0.17502
53	DRYING, TANKING & COLOURING MATERIALS	0.17502
09	MISCELLANEOUS EDIBLE PRODUCTS AND PREPA.	0.17923
65	TEXTILE YARN, FABRICS, MADE-UP ARTICLES	0.18108
75	OFFICE MACH. & AUTOMATIC DATA PROCESSING MACH	0.18108
73	METALWORKING MACHINERY	0.19277
88	PHOTOGRAPHIC GOODS, OPTICAL GOODS, WATCHES & CLOCKS	0.19519
59	CHEMICAL MATERIALS & PRODUCTS, N.E.S.	0.20616
64	PAPER, PAPER BOARD, ARTICLES OF PAPER PULP	0.20972
42	FIXED VEGETABLE FATS & OILS...	0.21763
34	GAS, NATUREL AND MANUFACTURED	0.23005
67	IRON AND STEEL	0.23424
72	MACHINERY SPECIALIZED FOR PARTICULAR INDUST.	0.23793
74	GENERAL INDUSTRIAL MACHINERY & EQUIPMENT	0.24398
56	FERTILIZERS	0.26463
69	MANUFACTURES OF METALS	0.26517
55	ESSENTIAL OILS & RESINOIDS, PERFUME MATERIALS	0.27606
25	PULP AND WASTE PAPER	0.28571
85	FOOTWEAR	0.28653
82	FURNITURE AND PARTS THEREOF	0.28839
03	FISH (NOT MARINE MAMMALS)	0.29441
51	ORGANIC CHEMICALS	0.29547
41	ANIMAL OILS AND FATS	0.29683
27	CRUDE FERTILIZERS AND CRUDE MINERALS	0.31389
68	NON-FERROUS METALS	0.32191
84	ARTICLES OF APPAREL & CLOTHING ACCESSORIES	0.32247
63	CORK AND WOOD MANUFACTURES	0.32551

58	PLASTICS IN NON-PRIMARY FORMS	0.33449
02	DAIRY PRODUCTS AND BIRDS' EGGS	0.33884
33	PETROLEUM, PETROLEUM PROD. & RELATED MATER.	0.34917
26	TEXTILE FIBRES AND THEIR WASTES	0.34939
52	INORGANIC CHEMICALS	0.34985
04	CEREALS AND CEREALS PREPARATIONS	0.35830
89	MISCELLANEOUS MANUFACTURED ARTICLES	0.37477
81	PREFABRICATED BUILDINGS	0.38334
07	COFFEE, TEA, COCOA, SPICES	0.38658
83	TRAVEL GOODS, HANDBAGS AND SIMILAR CONTAINERS	0.46331
66	NON-METALLIC MINERAL MANUFACTURES	0.48904
22	OIL SEEDS AND OLEAGINOUS FRUITS	0.49485
00	LIVE ANIMALS (OTHER THAN ANIMALS OF 03)	0.49779
01	MEAT AND MEAT PREPARATIONS	0.50685
11	BEVERAGES	0.52380
54	MEDICAL AND PHARMACEUTICAL PRODUCTS	0.53553
05	VEGETABLES AND FRUIT (FRESH, CHILLED..)	0.54165
24	CORK AND WOOD	0.54825
08	FEEDING STUFF FOR ANIMALS	0.54825
29	CRUDE ANIMAL AND VEGETABLE MATERIALS	0.57256
21	HIDES, SKINS AND FURSKINS, RAW	0.84481

FIGURE 9-1
SYRIA-TRAD7 VALUES

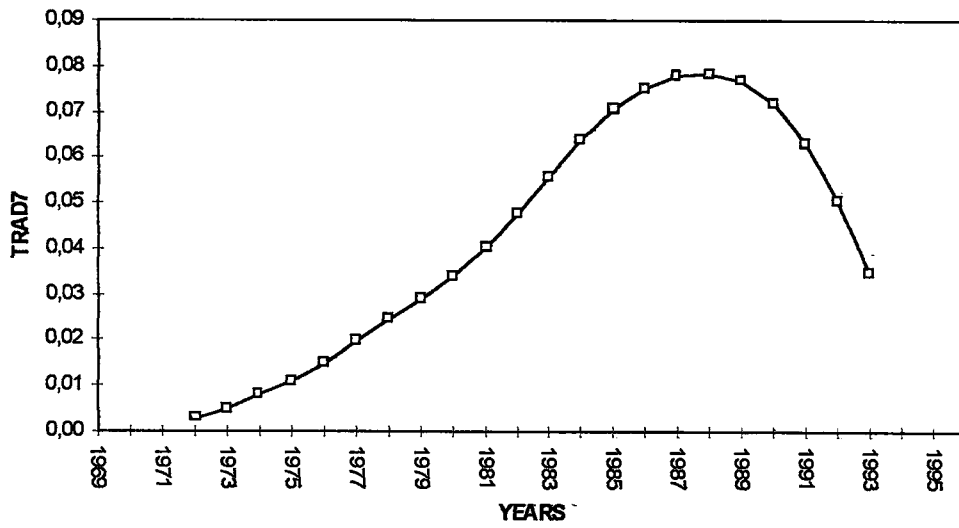
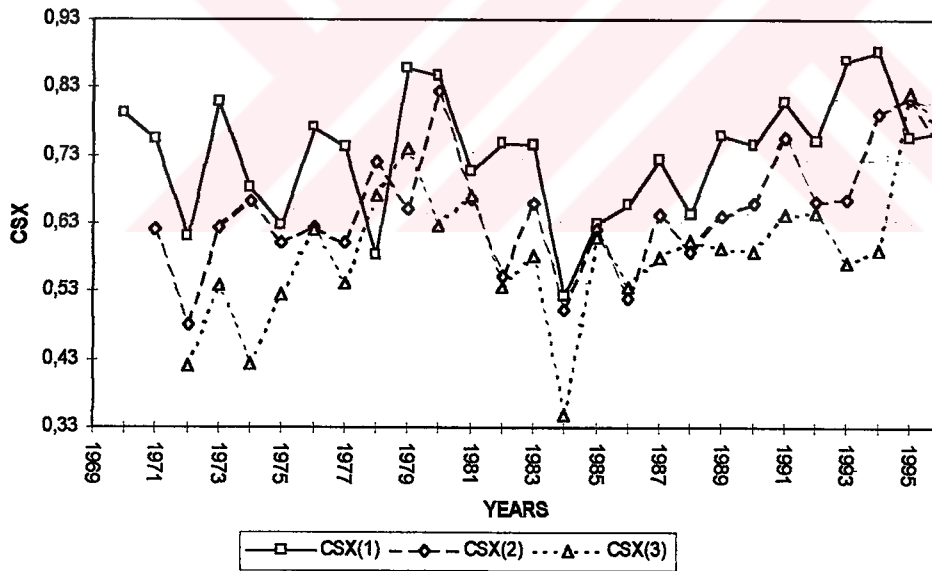
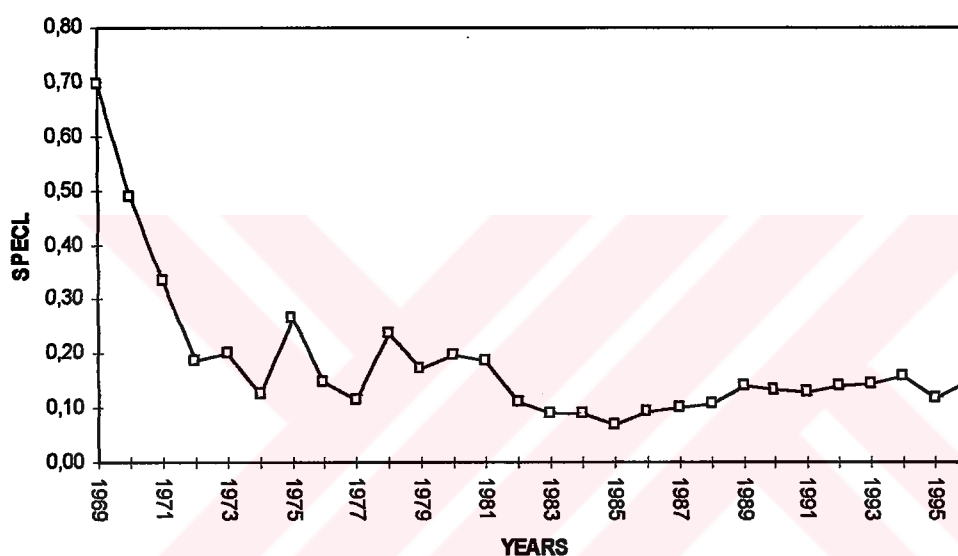


FIGURE 9-2
SYRIA-CSX VALUES



In Figure 9-2, three periods are remarkable for export diversification. They are 1971-1972, 1973-1975, 1980-1984, 1991-1993. In these periods, there are changes in the export composition, but the most significant diversification takes place in the second period. In the second sub-period, there is a minor rise in CSX(2) values.

FIGURE 9-3
SYRIA-SPECL VALUES



In Figure 9-3, the export concentration of Turkey declines in the first few years, so a major amount of diversification has been achieved in these years. The terms of diversification are the followings: 1969-1974, 1981-1985. There are some shorter intervals, but they are not significant.

3.1.j UNITED ARABIC EMIRATES :

In Table 11, our traditional export sectors to United Arabic Emirates are:

Oil Seeds And Oleaginous Fruits (22); Meat And Meat Preparations (01); Live Animals (00); Crude Rubber (23); Feeding Stuff For Animals (08); Travel Goods, Handbags And Similar Containers (83).

And the non-traditional sectors are:

Hides, Skins And Furskins, Raw (21); Medical And Pharmaceutical Products (54); Chemical Materials And Products (59); Cork And Wood Manufactures (63); Non-Metallic Mineral Manufactures (66); Furniture And Parts Thereof (82); Machinery Specialized For Particular Industry (72); Footwear (85); Gold, Non-Monetary (97); Textile Fibres And Their Wastes (26); Leather, Leather Manufactures And Dressed Furskins (61); Cereals And Cereals Preparations (04); Organic Chemicals (51); Professional, Scientific, Controlling Instruments (87); Office And Automatic Data Processing Machinery (75); Fixed Vegetable Fats And Oils (42); Metal Working Machinery (73); Beverages (11); Telecommunications And Sound Recording Equipment (76).

In Figure 10-1, during the years between 1972 and 1976, there is no export to United Arabic Emirates so, these years are excluded from Figure 10-1 and the TRAD7 values are not significant in 1977, 1978, 1979. The growth pattern is maintained from 1979 to its peak

TABLE 11

MEANS OF CEEF VALUES FOR UNITED ARABIC EMIRATES

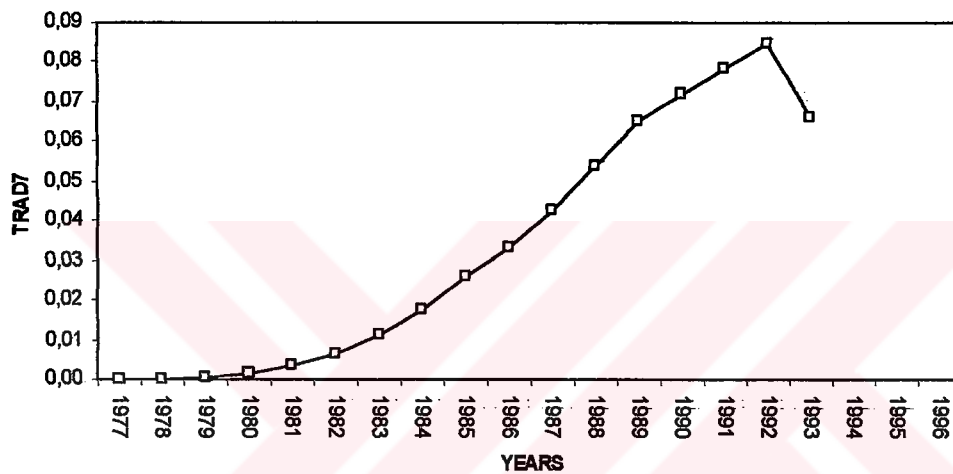
SITC	NAME OF THE SECTOR FOR ITS SITC CODE (REVISION 3)	CEEF
21	HIDES,SKINS AND FURSKINS, RAW	0.03571
54	MEDICAL AND PHARMACEUTICAL PRODUCTS	0.03571
59	CHEMICAL MATERIALS & PRODUCTS, N.E.S.	0.03571
63	CORK AND WOOD MANUFACTURES	0.03571
66	NON-METALLIC MINERAL MANUFACTURES	0.03571
72	MACHINERY SPECIALIZED FOR PARTICULAR INDUST.	0.03571
76	TELECOMMUNICATIONS & SOUND RECORDING EQUIPMENT	0.03571
82	FURNITURE AND PARTS THEREOF	0.03571
85	FOOTWEAR	0.03571
97	GOLD, NON-MONETARY	0.03571
26	TEXTILE FIBRES AND THEIR WASTES	0.05633
61	LEATHER, LEATHER MANU. & DRESSED FURSKINS	0.06595
04	CEREALS AND CEREALS PREPARATIONS	0.06803
51	ORGANIC CHEMICALS	0.07361
87	PROFESSIONAL, SCIENTIFIC, CONTROLLING INSTRUMENTS	0.07744
75	OFFICE MACH. & AUTOMATIC DATA PROCESSING MACH	0.08499
42	FIXED VEGETABLE FATS & OILS...	0.09069
73	METALWORKING MACHINERY	0.09570
11	BEVERAGES	0.09741
89	MISCELLANEOUS MANUFACTURED ARTICLES	0.10231
71	POWER GENERATING MACHINERY & EQUIPMENT	0.10270
67	IRON AND STEEL	0.10639
78	ROAD VEHICLES	0.11802
84	ARTICLES OF APPAREL & CLOTHING ACCESSORIES	0.11878
52	INORGANIC CHEMICALS	0.11937
12	TOBACCO AND TOBACCO MANUFACTURES	0.12761
74	GENERAL INDUSTRIAL MACHINERY & EQUIPMENT	0.12903
06	SUGAR, SUGAR PREPARATIONS AND HONEY	0.13102
77	ELECTRICAL MACHINERY	0.13130
88	PHOTOGRAPHIC GOODS, OPTICAL GOODS, WATCHES & CLOCKS	0.13177
55	ESSENTIAL OILS & RESINOIDS, PERFUME MATERIALS	0.14105
64	PAPER, PAPER BOARD, ARTICLES OF PAPER PULP	0.14483
24	CORK AND WOOD	0.14561
62	RUBBER MANUFACTURES,N.E.S	0.14578
07	COFFEE,TEA,COCOA,SPICES	0.15722
57	PLASTICS IN PRIMARY FORMS	0.15959
09	MISCELLANEOUS EDIBLE PRODUCTS AND PREPA.	0.16148
02	DAIRY PRODUCTS AND BIRDS' EGGS	0.16299
68	NON-FERROUS METALS	0.16406
05	VEGETABLES AND FRUIT (FRESH,CHILLED..)	0.16643
65	TEXTILE YARN, FABRICS, MADE-UP ARTICLES	0.16738
03	FISH (NOT MARINE MAMMALS)	0.18274

53	DRYING,TANKING & COLOURING MATERIALS	0.18843
69	MANUFACTURES OF METALS	0.19039
27	CRUDE FERTILIZERS AND CRUDE MINERALS	0.20209
81	PREFABRICATED BUILDINGS	0.20753
33	PETROLEUM, PETROLEUM PROD. & RELATED MATER.	0.21913
28	METALIFEROUS ORES AND METAL SCRAP	0.22858
58	PLASTICS IN NON-PRIMARY FORMS	0.23237
25	PULP AND WASTE PAPER	0.28571
83	TRAVEL GOODS,HANDBAGS AND SIMILAR CONTAINERS	0.30926
08	FEEDING STUFF FOR ANIMALS	0.35629
23	CRUDE RUBBER	0.39286
00	LIVE ANIMALS (OTHER THAN ANIMALS OF 03)	0.39309
01	MEAT AND MEAT PREPARATIONS	0.44351
22	OIL SEEDS AND OLEAGINOUS FRUITS	0.48548



year 1992. It increases slowly during 1979-1981 period. After 1986, this trend persists until the peak year 1993. In the first period, there is a relatively stable growth pattern, but in the second period there is a divergent growth pattern. The structural change has transpired in the second period.

FIGURE 10-1
UAE-TRAD7 VALUES



In Figure 10-2, three main intervals are observed where CSX values approach zero. The first interval is 1981-1982. The second one is 1983-1988 and the last one is 1993-1994. In the second period, there exists an exception. The CSX value between the years 1986-87 reveals a little rise both in CSX(2) and CSX(3). The indirect reason for this sudden jump may be the general elections in Turkey. Turkey's monetary policy is eased whenever there is an election. Loose monetary policy creates a tendency to high inflation. Prices go up so

the demand for Turkish exports decrease with the assumption that there is no change in the exchange rate. If this exception is ignored, the period coincides the findings of TRAD7. Therefore, it is clear that a short-term export diversification occurs through the years between 1981-1982, 1983-1988 and 1993-1994.

FIGURE 10-2
UAE-CSX VALUES

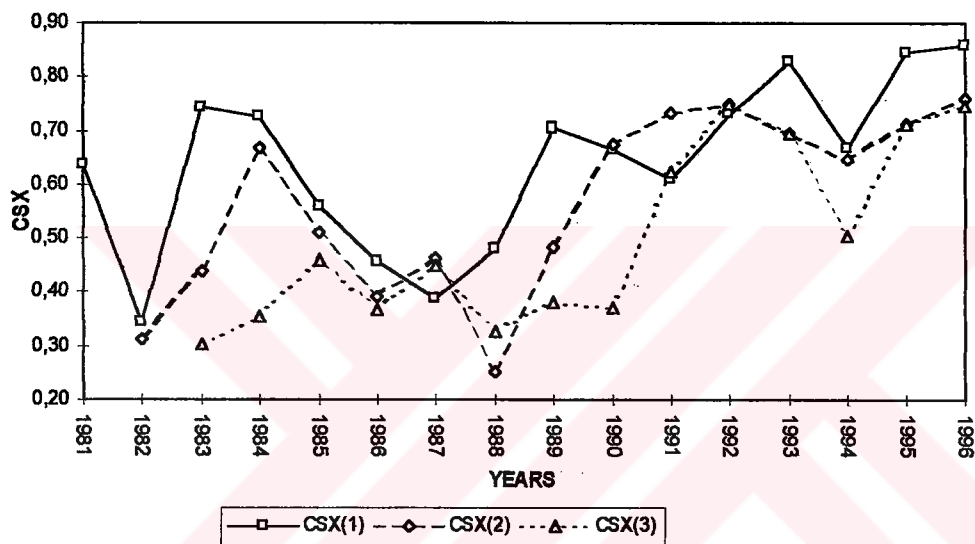
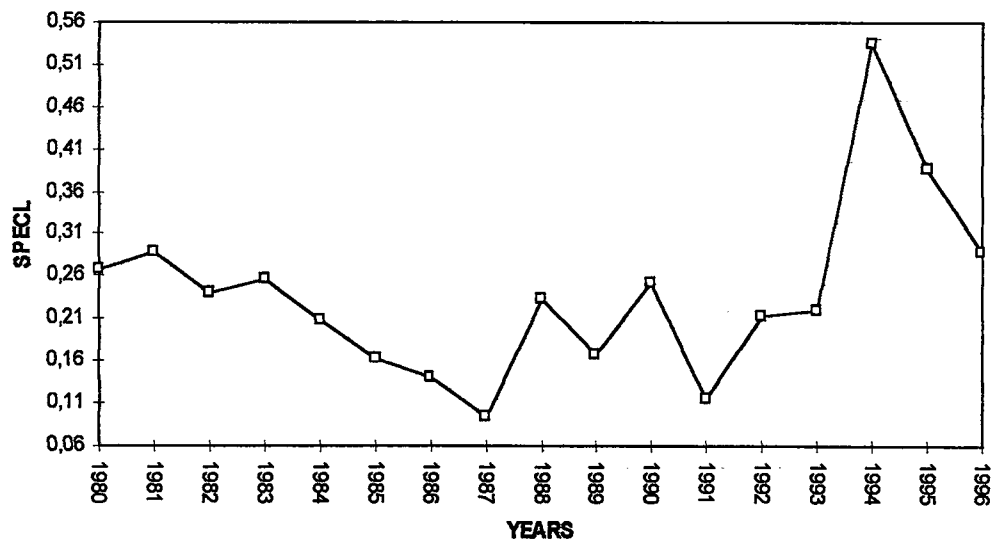


FIGURE 10-3
UAE-SPECL VALUES



In Figure 10-3, the two periods are encountered again. From 1981 to 1987, the SPECL values are declining to zero which indicate a diversification in this period. Also, another sign of diversification is noticed in a smaller interval between 1994-1996.



3.1.k YEMEN :

In Table 12, the traditional export sectors of Turkey to Yemen are the following:

Beverages (11); Telecommunications And Sound Recording; And Reproducing Apparatus And Equipment (76); Textile Fibres And Their Wastes (26); Crude Animal And Vegetable Materails (29); Photographic Goods, Optical Goods, Watches And Clocks (88); Cork And Wood Manufactures (63); Prefabricated Buildings (81).

And the non-traditional sectors are:

Leather, Leather Manufactures And Dressed Furskins (61); Essential Oils And Resinoids, Perfume Materials (55); Hides, Skins And Furskins, Raw (21); Dairy Products And Birds' Eggs (02); Cork And Wood (24)...

In Figure 11-1, the variances increase slowly till 1975. The 7-yearly growth pattern is relatively stable over the period. After 1980, little jumps are observed and this time increases take place at an increasing rate. For this period, a medium-term structural change exist until the peak year 1988. Also, the export diversification took place in this period.

TABLE 12
MEANS OF CEEF VALUES FOR YEMEN

SITC	NAME OF THE SECTOR FOR ITS SITC CODE (REVISION 3)	CEEFF:
61	LEATHER, LEATHER MANU. & DRESSED FURSKINS	0.07301
55	ESSENTIAL OILS & RESINOIDS, PERFUME MATERIALS	0.07375
21	HIDES,SKINS AND FURSKINS, RAW	0.14286
02	DAIRY PRODUCTS AND BIRDS' EGGS	0.14495
24	CORK AND WOOD	0.14838
67	IRON AND STEEL	0.15038
09	MISCELLANEOUS EDIBLE PRODUCTS AND PREPA.	0.15244
56	FERTILIZERS	0.15959
71	POWER GENERATING MACHINERY & EQUIPMENT	0.16244
62	RUBBER MANUFACTURES,N.E.S	0.16353
43	ANIMAL OR VEGETABLE FATS & OILS, PROCESSED...	0.16995
65	TEXTILE YARN, FABRICS, MADE-UP ARTICLES	0.18472
52	INORGANIC CHEMICALS	0.20205
53	DRYING,TANKING & COLOURING MATERIALS	0.20238
75	OFFICE MACH. & AUTOMATIC DATA PROCESSING MACH	0.21429
72	MACHINERY SPECIALIZED FOR PARTICULAR INDUST.	0.21707
42	FIXED VEGETABLE FATS & OILS...	0.21849
04	CEREALS AND CEREALS PREPARATIONS	0.21921
57	PLASTICS IN PRIMARY FORMS	0.22131
73	METALWORKING MACHINERY	0.22610
07	COFFEE,TEA,COCOA,SPICES	0.23984
32	COAL, COKE AND BRIQUETTES	0.25000
74	GENERAL INDUSTRIAL MACHINERY & EQUIPMENT	0.25268
27	CRUDE FERTILIZERS AND CRUDE MINERALS	0.25282
66	NON-METALLIC MINERAL MANUFACTURES	0.25371
68	NON-FERROUS METALS	0.26155
51	ORGANIC CHEMICALS	0.26574
87	PROFESSIONAL, SCIENTIFIC, CONTROLLING INSTRUMENTS AND APPARATUS	0.26673
84	ARTICLES OF APPAREL & CLOTHING ACCESSORIES	0.26890
54	MEDICAL AND PHARMACEUTICAL PRODUCTS	0.27997
69	MANUFACTURES OF METALS	0.28200
78	ROAD VEHICLES	0.28685
77	ELECTRICAL MACHINERY	0.29674
58	PLASTICS IN NON-PRIMARY FORMS	0.30596
23	CRUDE RUBBER	0.31132
59	CHEMICAL MATERIALS & PRODUCTS, N.E.S.	0.31543
89	MISCELLANEOUS MANUFACTURED ARTICLES	0.35627
64	PAPER, PAPER BOARD, ARTICLES OF PAPER PULP	0.35634
85	FOOTWEAR	0.35856
06	SUGAR, SUGAR PREPARATIONS AND HONEY	0.36798
05	VEGETABLES AND FRUIT (FRESH,CHILLED..)	0.38131
33	PETROLEUM, PETROLEUM PROD. & RELATED MATER.	0.38284
83	TRAVEL GOODS,HANDBAGS AND SIMILAR CONTAINERS	0.38613

01	MEAT AND MEAT PREPARATIONS	0.39286
82	FURNITURE AND PARTS THEREOF	0.39498
81	PREFABRICATED BUILDINGS	0.46999
63	CORK AND WOOD MANUFACTURES	0.48747
88	PHOTOGRAPHIC GOODS, OPTICAL GOODS, WATCHES & CLOCKS	0.55645
29	CRUDE ANIMAL AND VEGETABLE MATERIALS	0.59283
26	TEXTILE FIBRES AND THEIR WASTES	0.59805
76	TELECOMMUNICATIONS & SOUND RECORDING & REPRODUCING APPARATUS AND EQUIPMENT	0.72135
11	BEVERAGES	1.00000



FIGURE 11-1
YEMEN-TRAD7 VALUES

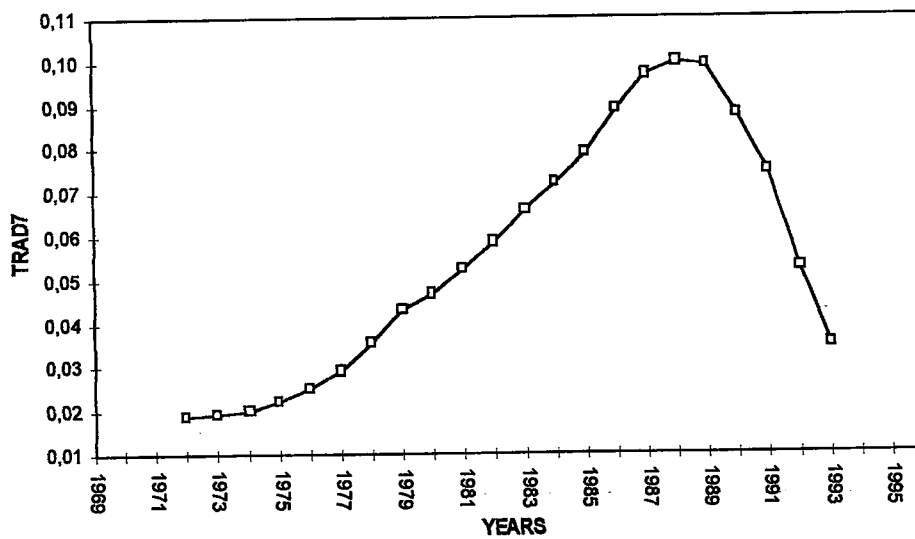
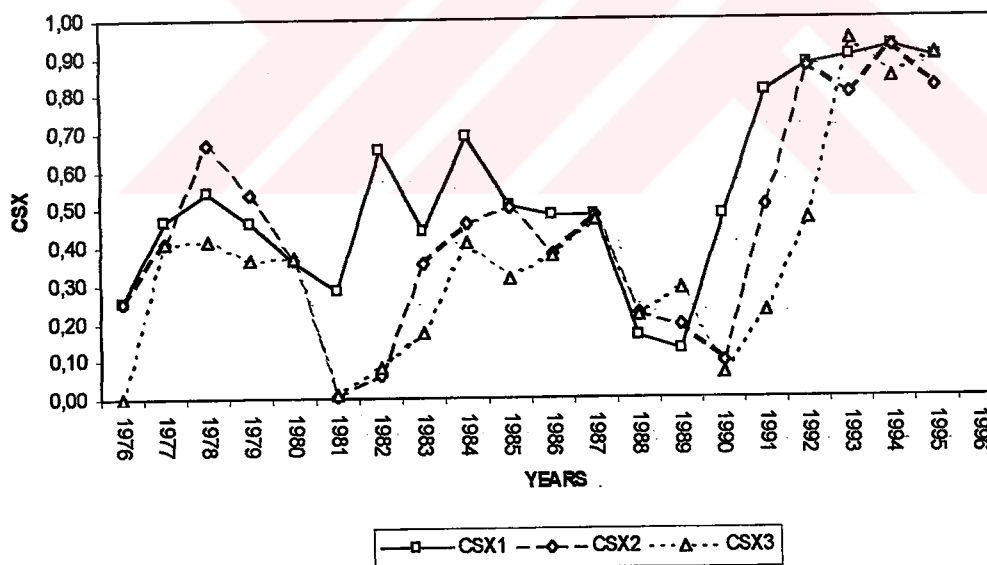
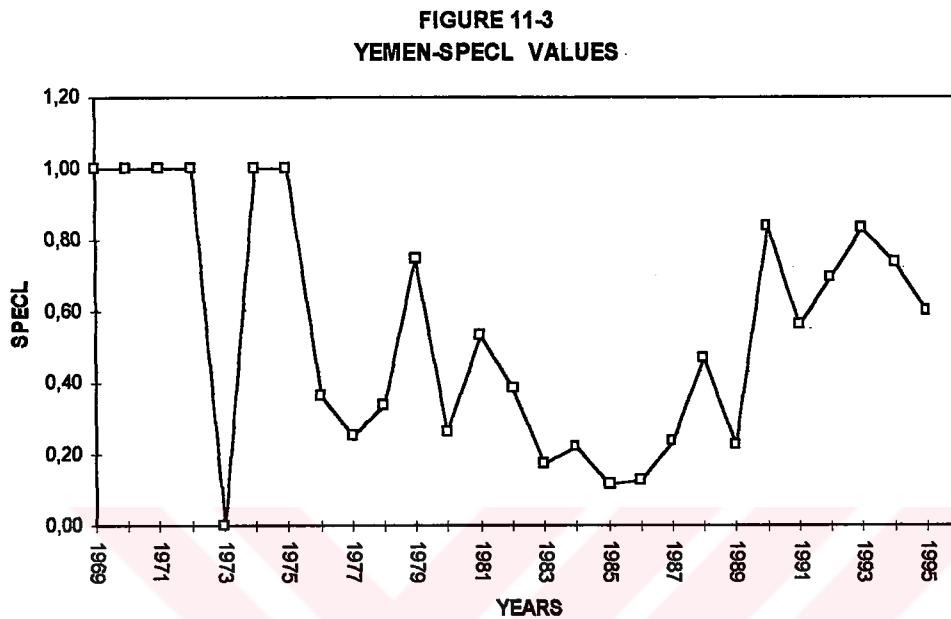


FIGURE 11-2
YEMEN-CSX VALUES



In Figure 11-2, the first few years are disregarded, since there are some missing data for the CSX values in 1973. This absence may be misleading. However, two periods attract attention. They are 1978-1981

and 1984-1990. Clearly, these time intervals exhibit the signs of export diversification distinctly in the short-run.



The problem in Figure 11-2 is also present in Figure 11-3. Again, the first observations are ignored. The variations in export concentration take place in the periods between: 1975-1977, 1979-1980, 1981-1985, 1990-1991, 1993-1995. Those tiny intervals are almost in the two broader intervals of CSX values.

3.2 MIDDLE EAST COUNTRIES AS A WHOLE :

The data of the Middle East Countries are added sector by sector to form a database. Using this data, overall results concerning Middle East Countries are presented below. Therefore, there is a chance to find out the general trends of Turkish exports to Middle East Countries.

In Table 13, the traditional industries of Turkish exports to Middle East Countries are the following:

Hides, Skins And Furskins, Raw (21); Textile Fibres And Their Wastes (26); Crude Animal And Vegetable Materials (29); Meat And Meat Preparations (01); Fish (Not Marine Mammals) (03); Feeding Stuff For Animals (08); Cork And Wood (24); Oil Seeds And Oleaginous Fruits (22); Petroleum, Petroleum Products And Related Materials (33).

And the non-traditional sectors are :

Coin (Other Than Gold) (96); Gold, Non-Monetary (97); Other Transport Equipment (79); Electric Current (35); Office Machines And Automatic Data Processing Machines (75); Miscellaneous Edible Products And Preparations (09); Animal Or Vegetable Fats And Oils, Processed (43); Beverages (11).

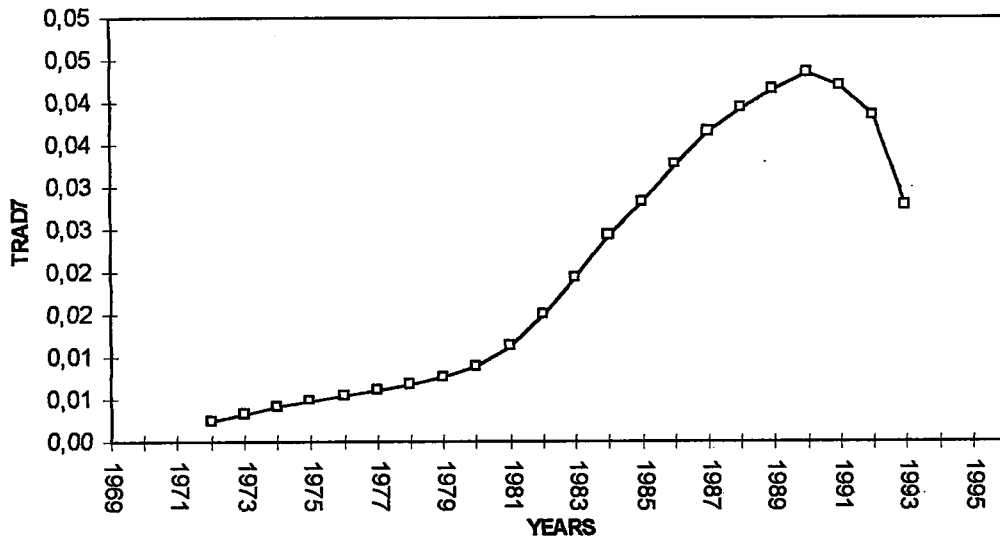
The traditional industries mostly consist of primary products, while non-traditional sectors mostly consist of manufactured products. This gives a clue about the direction of Turkish exports.

TABLE 13
MEANS OF CEEF VALUES FOR AGGREGATE OF MIDDLE
EAST COUNTRIES

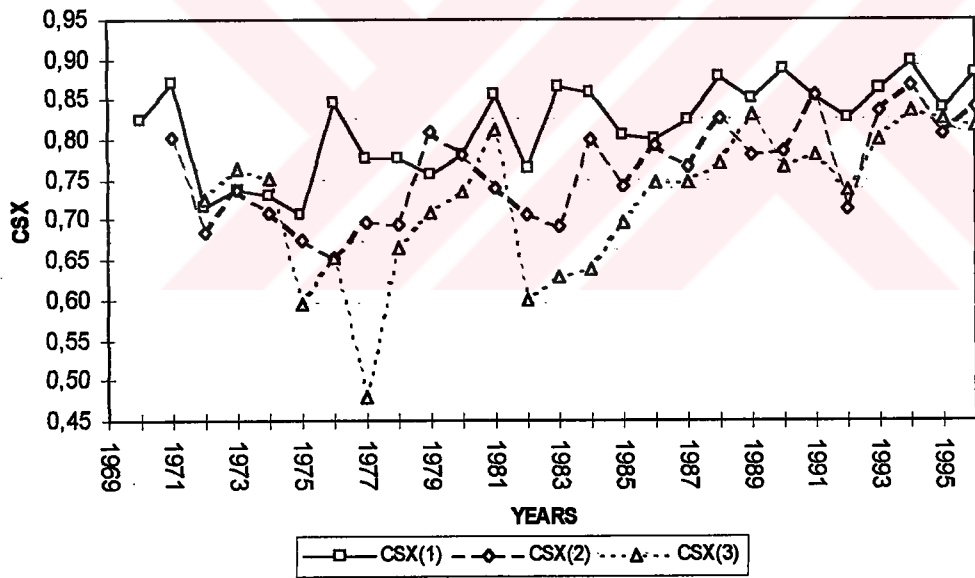
SITC	NAME OF THE SECTOR FOR ITS SITC CODE (REVISION 3)	CEEF:
96	COIN(OTHER THAN GOLD)	0.03571
97	GOLD, NON-MONETARY	0.03949
79	OTHER TRANSPORT EQUIPMENT	0.10099
35	ELECTRIC CURRENT	0.10714
75	OFFICE MACH. & AUTOMATIC DATA PROCESSING MACH	0.18451
09	MISCELLANEOUS EDIBLE PRODUCTS AND PREPA.	0.20115
43	ANIMAL OR VEGETABLE FATS & OILS, PROCESSED...	0.20132
11	BEVERAGES	0.21933
12	TOBACCO AND TOBACCO MANUFACTURES	0.24044
34	GAS, NATUREL AND MANUFACTURED	0.24201
41	ANIMAL OILS AND FATS	0.24523
85	FOOTWEAR	0.24760
42	FIXED VEGETABLE FATS & OILS...	0.25665
53	DRYING, TANKING & COLOURING MATERIALS	0.26144
57	PLASTICS IN PRIMARY FORMS	0.26852
84	ARTICLES OF APPAREL & CLOTHING ACCESSORIES	0.26943
55	ESSENTIAL OILS & RESINOIDS, PERFUME MATERIALS	0.27578
62	RUBBER MANUFACTURES, N.E.S	0.27734
76	TELECOMMUNICATIONS & SOUND RECORDING & REPRODUCING EQUIPMENT	0.28814
58	PLASTICS IN NON-PRIMARY FORMS	0.29331
67	IRON AND STEEL	0.29375
87	PROFESSIONAL, SCIENTIFIC, CONTROLLING INSTRUMENTS AND APPARATUS	0.29508
77	ELECTRICAL MACHINERY	0.29828
65	TEXTILE YARN, FABRICS, MADE-UP ARTICLES	0.30168
23	CRUDE RUBBER	0.30244
59	CHEMICAL MATERIALS & PRODUCTS, N.E.S.	0.30365
64	PAPER, PAPER BOARD, ARTICLES OF PAPER PULP	0.30935
28	METALLIFEROUS ORES AND METAL SCRAP	0.31062
07	COFFEE, TEA, COCOA, SPICES	0.31525
25	PULP AND WASTE PAPER	0.31614
52	INORGANIC CHEMICALS	0.31955
04	CEREALS AND CEREALS PREPARATIONS	0.32166
81	PREFABRICATED BUILDINGS	0.32185
73	METALWORKING MACHINERY	0.32368
54	MEDICAL AND PHARMACEUTICAL PRODUCTS	0.32409
56	FERTILIZERS	0.32692
51	ORGANIC CHEMICALS	0.32704
71	POWER GENERATING MACHINERY & EQUIPMENT	0.33027

61	LEATHER, LEATHER MANU. & DRESSED FURSKINS	0.33119
27	CRUDE FERTILIZERS AND CRUDE MINERALS	0.33125
83	TRAVEL GOODS, HANDBAGS AND SIMILAR CONTAINERS	0.33233
89	MISCELLANEOUS MANUFACTURED ARTICLES	0.33488
69	MANUFACTURES OF METALS	0.33787
74	GENERAL INDUSTRIAL MACHINERY & EQUIPMENT	0.34098
88	PHOTOGRAPHIC GOODS, OPTICAL GOODS, WATCHES & CLOCKS	0.34349
32	COAL, COKE AND BRIQUETTES	0.34494
06	SUGAR, SUGAR PREPARATIONS AND HONEY	0.34957
68	NON-FERROUS METALS	0.36067
66	NON-METALLIC MINERAL MANUFACTURES	0.36242
00	LIVE ANIMALS (OTHER THAN ANIMALS OF 03)	0.37352
82	FURNITURE AND PARTS THEREOF	0.37572
63	CORK AND WOOD MANUFACTURES	0.37698
05	VEGETABLES AND FRUIT (FRESH, CHILLED..)	0.37764
72	MACHINERY SPECIALIZED FOR PARTICULAR INDUST.	0.37899
02	DAIRY PRODUCTS AND BIRDS' EGGS	0.38640
78	ROAD VEHICLES	0.38830
33	PETROLEUM, PETROLEUM PROD. & RELATED MATER.	0.41207
22	OIL SEEDS AND OLEAGINOUS FRUITS	0.41241
24	CORK AND WOOD	0.41362
08	FEEDING STUFF FOR ANIMALS	0.43092
03	FISH (NOT MARINE MAMMALS)	0.43916
01	MEAT AND MEAT PREPARATIONS	0.45707
29	CRUDE ANIMAL AND VEGETABLE MATERIALS	0.50228
26	TEXTILE FIBRES AND THEIR WASTES	0.51574
21	HIDES, SKINS AND FURSKINS, RAW	0.68016

**FIGURE 12-1
MIDDLE EAST COUNTRIES-TRAD7 VALUES**

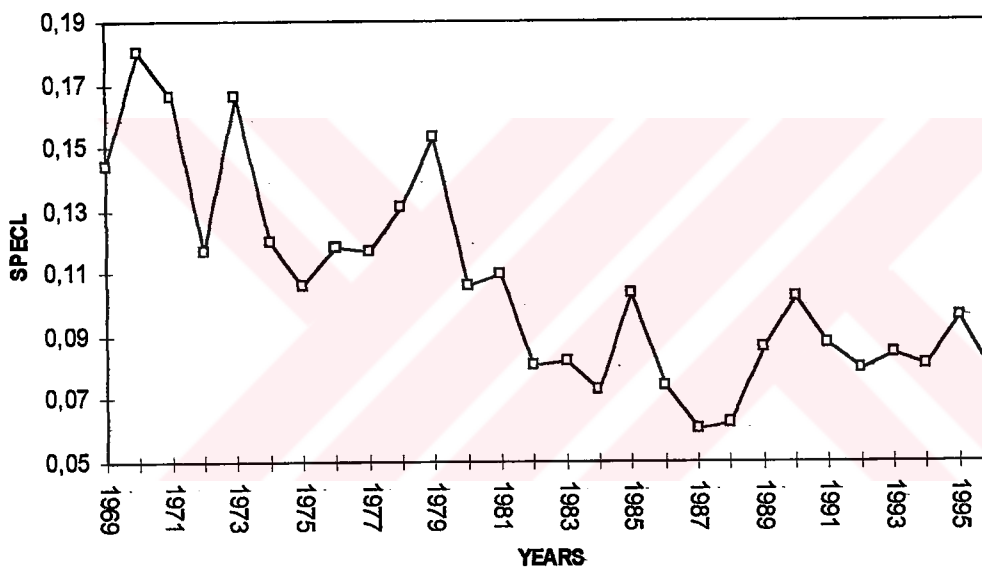


**FIGURE 12-2
MIDDLE EAST COUNTRIES-CSX VALUES**



In Figure 12-1, although the variances are increasing up to 1990, two sub-periods can be observed: 1972-1978, 1980-1990. In the first period, the variances are increasing slowly. Therefore, the growth pattern is relatively stable. In 1980, the variance shows a small jump, and then the variances grow until the end of 1990. The structural change has occurred in the second period.

FIGURE 12-3
MIDDLE EAST COUNTRIES-SPECL VALUES



As in the analysis of countries done one by one, a similar situation takes place in Figure 12-2. There are three intervals of export diversification again: 1971-1977, 1981-1982, 1991-1992. Roughly, the same periods can be observed in country examinations.

In Figure 12-3, if the sudden rises are ignored, the diversification periods are the following time intervals: 1970-1975 (except 1973), 1979-1987 (except 1985), 1990-1992.



3.3 COMPARISONS WITH EARLIER STUDIES :

In the previous section, specific investigations were carried out for each country. The characteristics and the behaviour of Turkey's exports to Middle East Countries are tried to be shown. Now, our main objective in this section is to find out some common features among the countries so that, a general trend for Turkish exports for this specific area may be distinguishable. Also, some comparisons will be presented with the previous studies on this subject.

For Standard International Trade Classification (SITC), the primary commodities are defined a priori as the sectors, having SITC number: 0+1+2+3+4+67+68, and the manufactured commodities as 5+6+7+8 except the sectors 67+68 [Togan (1994:162)]. When the means of CEEF values are calculated for the Middle East Countries as a whole, all of the traditional sectors are in the category of primary commodities. However, the same can not be said for the non-traditional sectors. Although there are some exceptional sectors in this trend, clearly there is a plain shift from primary commodities to manufactured commodities for the exports of Turkey .

In Table 14, some of the traditional and non-traditional sectors of Chile are taken from the study of Pineres and Ferrantino (1997). These sectors are checked whether they are traditional or non-traditional sectors of Turkey for Middle Eastern Countries. First, there are some differences among the results of each country as expected. For

instance, Non-ferrous metals (68) is both a traditional and a non-traditional sector of Turkey for the countries: Qatar, Kuwait, Israel and Lebanon, but it is non-traditional to Chile. Second, in the Table 14, it is obviously seen that, most of the traditional industries of Chile are the non-traditional industries of Turkey and vice versa as in the case of Hides, Skins and Furs, Undressed (21) and Oil Seeds, Nuts, Kernels (22).

The traditional sectors of Turkey and Chile are: Tobacco Manufactures (12), Wood, Cork Manufactures (63). Also, the non-traditional sectors are: War-Fire-Arms (95); Coin-Gold, Non-Monetary (96); Fertilizers (56). There are very few sectors which are common to both of the countries. Therefore, the export structures of the two countries are dissimilar as seen in the results above.

TABLE 14

TURKEY

CHILE

TRADITIONAL SECTORS		TRADITIONAL	NON-TRADITIONAL
12	TOBACCO MANUFACTURES	IRAQ, QATAR, KUWAIT, SAUDI ARABIA, JORDAN	IRAN, LEBONAN, SYRIA
7	COFFEE, TEA, COCOA		IRAN
94	ZOO ANIMALS, PETS		
42	VEGETABLE OIL, FAT		U.A.E
9	MISCELLANEOUS FOOD PREPARATIONS		IRAQ, M.E.C ² , JORDAN
84	CLOTHING		
2	DAIRY PRODUCTS AND EGGS		YEMEN
23	RUBBER	U.A.E	ISRAEL, SYRIA, JORDAN
63	WOOD, CORK MANUFACTURES	SUUDI ARABIA, YEMEN	U.A.E
82	FURNITURE	JORDAN	ISRAEL, U.A.E
54	MEDICINAL PRODUCTS		U.A.E
NON-TRADITIONAL SECTORS			
95	WAR-FIREARMS		ISRAEL
21	HIDES, SKINS AND FURS, UNDRRESSED	ISRAEL, LEBONAN, SYRIA, M.E.C	U.A.E, JORDAN, YEMEN
27	CRUDE FERTILIZERS, MINERALS		
68	NON-FERROUS METALS	QATAR, KUWAIT	ISRAEL, LEBONAN
58	PLASTIC MATERIALS	SUUDI ARABIA	
96	COIN-GOLD, NONCURRENT		SUUDI ARABIA, M.E.C
56	FERTILIZERS, MANUFACTURED	SUUDI ARABIA	QATAR, JORDAN
22	OIL SEEDS, NUTS, KERNELS	U.A.E, IRAN, QATAR, KUWAIT, LEBONAN, SAUDI ARABIA, M.E.C	

² M.E.C. denotes the calculations for Middle East Countries as a whole.

In Erlat and Şahin (1997), the same estimations are calculated for data classified according to International Standard Industrial Classification (ISIC, Revision 2). When the two studies are compared, it is noticed that very few sectors are common. Among these sectors, Forestry is traditional and Rubber Products is non-traditional in both of the studies. However, there is a difference for Tobacco Products. This industry is non-traditional for Turkey in Erlat and Şahin (1997), but it is traditional for the exports to Iraq, Qatar, Kuwait, Saudi Arabia, Jordan. Another interesting result is observed for Clothing (84) in Table 14. According to Erlat and Şahin (1997), this sector is found as non-traditional. However, our study shows clothing (84) is neither traditional nor non-traditional staying at borderline between these two groups for Middle East Countries.

For the TRAD7 estimations, the variances are increasing till the end of 1980s and early in 1990s. The medium-term structural change in export composition continues until the peak. This observation holds for each country except Iraq. In Erlat and Şahin (1997), the peak year is 1987 for Turkish exports. For the country specific exports in this study, the same period was observed.

In this study, the approximations of TRAD7 show that almost every country experienced a period of medium-term structural change in 1980s, especially around 1983. This is quite understandable since Turkey started to make remarkable changes in her economy after

1980s. Therefore, it is quite normal to observe structural changes after 1980. In Erlat and Şahin (1997), the structural change was observed during the years between 1980-1986 which coincides with the results of this study.

In Table 15, the CSX estimations show a period of diversification in each decade. Although there is no period of diversification for some of the countries in 1970s and 1990s, there always exists a period of diversification in 1980s. This supports the findings of TRAD7 estimations. In Erlat and Şahin (1997), there are two periods of diversification: 1971-1975 and 1980-1985. This outcome coincides with the diversification periods in 1970s and 1980s which are observed in our study also. Togan (1994), calculated a commodity concentration index for a sample of countries to discover diversification episodes. For Turkey, this index decrease continuously from 1980 up to 1986 which is an implication of diversification in this period which was already observed in Erlat and Şahin (1997). Therefore, the interval 1980-1986 is justified in the three of the studies. However, in Erlat and Şahin (1997), and Togan (1994), there is not much sign of export diversification in 1990s, although there are some signs for each of Middle East Countries in our study but the time period is shorter in Erlat and Şahin (1997), therefore this might be the reason why the diversification was not captured in that study. Our study shows, there

exists a period of diversification for almost every country in the vicinity of 1994 when Turkey experienced a deep economic crisis.

When SPECL estimations are reviewed in Table 15, a similar bias can be observed as in CSX estimations. The concentration of country specific exports declines for a term in each decade. This decline shows a contraction on the dependency of exports to a group of commodities. In other words, specialization of the country diminishes which is an implication of diversification. Therefore, Turkey experienced a period of diversification in each decade. This fact fits the results of CSX estimations. The two estimations are roughly parallel in the diversification periods.

In Table 15, only for Israel, Kuwait and Lebanon have significantly different periods of diversification, obtained from CSX and SPECL predictions. Other countries' CSX and SPECL predictions for the terms of export diversification are approximately the same. This strengthens the idea that Turkey confronted three main episodes of export diversification all through the years between 1969 and 1996.

In Erlat and Şahin (1997), SPECL estimations also show two periods of diversification in 1970s and 1980s. Specifically, these periods are 1970-1974 and 1978-1985 intervals. In Figure 15, Iraq, Iran, Kuwait, Lebanon, Syria, Saudi Arabia, Jordan have the same periods of diversification as in Erlat and Şahin (1997). Also, when SPECL

TABLE 15

PEAK YEARS	<u>TRADZ</u>		<u>CSX</u>		<u>PERIODS OF</u>		<u>SPECL</u>	
	STRUCTURAL CHANGE 1970s	1980s	DIVERSIFICATION 1970s	1980s	1990s	DIVERSIFICATION 1970s	1980s	1990s
U.A.E.		1986-1993		1981-1982 1983-1988	1993-1994		1981-1987	1994-1996
IRAQ		1978-1983	1971-1975	1981-1985	1992-1995	1972-1974	1981-1988	1991-1993
IRAN		1976-1987	1971-1972 1973-1975		1990-1994	1969-1976	1977-1981	1991-1996
ISRAEL	1991	1973-1977	1973-1975	1986-1990				1985-1996
QATAR	1991	1983-1989		1988-1991	1993-1995		1987-1991	1995-1996
KUWAIT	1990	1980-1990	1971-74, 1975-76 1979-1981	1986-1987	1989-1991	1971-1976	1980-1982 1986-1987	1989-1991
LEBANON	1989	1972-1976	1976-1977	1983-1989		1973-1975, 1977-1978	1982-1986 1989-1990	1994-1995
SYRIA	1988	1974-1988	1971-1972, 1973-1975	1980-1984	1991-1993	1969-1974	1981-1985	
S. ARABIA	1988	1981-1988	1972-1974	1980-1982	1991-1992	1972-73, 1975-78	1982-1985	1990-92, 1993-96
JORDAN	1989	1983-1989	1971-72, 1973-75 1977-1979	1984-1986	1990-1991, 1994-1995	1969-1973	1979-1986	1990-1994
YEMEN	1988	1980-1988	1978-1981	1984-1990		1975-77, 1979-80	1981-1985	1990-91, 1993-95
M.E.C. ³	1990	1980-1990	1971-1977	1981-1982	1991-1992	1970-1975	1979-1987	1990-1992

³ M.E.C. denotes the calculations for Middle East Countries as a whole.

estimations are calculated for the Middle East Countries as a whole, the intervals 1970-1975 and 1979-1987 are obtained. In both of the studies, these periods are exactly the same. However, in Erlat and Şahin (1997), there is no sign of change in export concentration for 1990s which might be due to shorter time period as explained above, although according to our study, export concentration approaches zero for the country specific exports in 1990s. So, our study mainly supports the findings of Erlat and Şahin (1997).

In Pineres and Ferrantino (1996), five countries (ignoring Venezuela) have experienced diversification in 1980s. However, for Mexico and Argentina, the specialization index is very stable and close to zero in 1963-1976 interval, so there is no evidence of diversification [Pineres and Ferrantino (1996: Figure II)]. Other countries have the signs of diversification, but Chile attracts attention since the results are matching to our study. Chile has three periods of diversification: 1968-1972, 1974-1979 and 1980-1985 (Figure II). For Middle East Countries as a whole, the periods are 1970-1975, 1979-1987. Moreover, diversification periods of Chile intersects with the periods of the six countries of this study. Therefore, it can be concluded that Chile and Turkey have some similar trends in export diversification

CHAPTER IV

CONCLUSIONS

There are some previous studies concerning the diversification of Turkish exports such as Togan (1994), Erlat and Şahin (1997). However, those studies use the total exports of Turkey. In this study, only a part of Turkish export data were taken into consideration by choosing a geographically homogeneous group. Therefore, the consequences obtained are specific to Middle East Countries. If the whole export data were considered for Middle East Countries, the amount of exports was about 1.3 billion dollars per year on the average. Although the amount of exports attained its peak as 2.9 billion dollars in 1985, it went down to 947 million dollars in 1991 [Erlat (1991)].

After the selection of the country group, two critical questions, which form the basic aim of the study, are asked. First, the traditional and non-traditional sectors of Turkey are attempted to be distinguished.

Second, whether a structural change in exports has been experienced in Turkey or not is questioned. For this purpose, formulations referred to in Erlat and Şahin (1997), are utilised to obtain four different indexes. These indexes are the mean of CEEF and TRAD7, CSX, SPECL. Then the two questions are investigated by interpreting the outcomes of the indexes. Also, a general trend for diversification is tried to be discovered by finding the common points among the results of estimations for the country specific export data.

Those interpretations are given in detail in the previous chapter. Moreover, some comparisons with the previous studies are also made. As a consequence, the following points may be made: First, export industries of Turkey have experienced a shift from primary commodities to manufactured commodities since half of the non-traditional sectors are manufacturing industries. In other words, Turkey has begun to export these commodities recently. Second, Turkey has undergone a medium-term structural change after 1980s, around the vicinity of 1982. Also, Turkey had structural reforms in the same period, which caused important changes in the structure of the economy. Therefore, the effects of these reforms could be seen from the medium-term structural change results. Third, Turkey has a period of export diversification in the 1969-1996 period. Although there are some exceptional cases, there exist signs of diversification for the

exports of Turkey to Middle East Countries especially in the 1980s.

This fact may be observed both in the CSX and SPECL results.



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