Pakistan Journal of Applied Economics, Vol. 16, Nos. 1 & 2, (1 – 23), 2000

THE EXPORT COMPETITIVENESS OF PAKISTAN: A Constant Market Share Analysis, 1973-1995

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Export earnings are of immense importance for a third world country like Pakistan, especially in the given grim economic situation and alarmingly low foreign exchange position. Since the early seventies, Pakistan has been incurring a terms of trade deficit of more than 3 per cent a year. Pakistan's share in world trade has remained under 0.2 per cent throughout the period under consideration. Subsequent governments have placed increased emphasis on the expansion of export earnings. In the light of this growing awareness about the importance of exports in a developing country like Pakistan, an in-depth analysis of the export performance in a historical perspective is essential for any meaningful future planning in this regard. The purpose of this paper is to examine whether and to what extent, low share of Pakistan's export in world trade reflects the lack of its international competitiveness. This is achieved by using Constant Market Share Analysis.

I. Introduction

For a developing country like Pakistan, export is a major source of providing much needed foreign exchange for economic activities in general, and for economic growth, in particular. Export receipts usually cover a considerable part of the needs of developing countries for capital equipment, technical services and other goods essential to economic growth. An increase in exports helps to achieve greater capacity utilisation, permits the exploitation of economies of scale, generates incentives for technological improvements and brings efficient growth due to a competitive advantage. Therefore, long term, sustained, GDP growth requires a strengthening of the competitive foundations of the economy to capture a larger share of the world market.

At a very broad level, Pakistan's export growth performance over the period 1985 to 1995 compares reasonably well with the dynamic East Asian developing countries. Export volume growth rose from 6 per cent a year during the period (1973-1983) to 10.5 per cent during 1984-1995, while East Asian export volumes increased from rates of 8.5 per cent to 11 per cent. The volume of goods exported has risen by almost 6 percentage points as a proportion to GDP. Nonetheless, Pakistan's share in world exports has remained small, as declining prices for its key

exports have eroded dollar earnings. As a result, Pakistan's share of global exports, since 1972-73, has not exceeded 0.2 per cent. Moreover, there has been little diversification of exports both in terms of commodities exported and the regions of destination of exports.

Except for the initial year (1972-73) when a massive devaluation of the Pakistan's rupee took place, Pakistan has been incurring a trade deficit of more than 3 per cent a year. Subsequent governments have placed increased emphasis on the expansion of exports. In the light of this growing awareness about the importance of exports in a developing country like Pakistan, an in-depth analysis of the export performance in a historical perspective is, therefore, essential for any meaningful future planning in this regard.

The purpose of this paper is to examine whether, and to what extent, this low share of Pakistan's exports in world trade reflects a lack of its international competitiveness. The Constant Market Share model has been used to look into this issue. Constant-Market-Share (hereafter CMS) analysis is a popular and simplified method for examining a country's export growth by ascribing favourable or unfavourable export growth either to a country's export structure or to its competitiveness.

However, the CMS model is not a trade model. It does not establish any causal relationship nor does it provide any explanation of the factors that lie behind the behaviour of exports. But the technique helps to identify the areas in which a possible explanation for good or bad export performance of a country could be sought. In this paper we have applied the CMS model to Pakistan's aggregate exports, traditional exports (SITC 0-1), non-traditional export (SITC 2-8), and also to the textile group exports.

The paper is organised as follows: Section II presents an overview of some of the striking trends in Pakistan's exports since 1972-73 (first financial year after the separation of the east wing of combined Pakistan, now Bangladesh). A comparison is also made between Pakistan, developing countries, and the world taken as a whole in respect to the trend in exports. Section III presents the CMS model along with its limitations and a brief review of literature. Section IV analyses Pakistan's export competitiveness and present the CMS model results. Section V summarises the findings and concludes the paper.

II. Trends in Pakistan Exports

Pakistan has had an average export share of GDP (in constant dollar value of 1981) of 6.4 per cent during the period 1972-73 to 1994-95. Export receipts have also increased over this period. The trend growth rates of export receipts in constant dollar values were more than 10 per cent which is more than the trend growth rates of the world (9.61) as a whole (Table 1).

Table 1 also compares traditional, non-traditional and textile exports from Pakistan to that of the world. The trend growth rates of traditional exports for both Pakistan (6.53) and the world (8.6) are less than that of total exports, however, world traditional exports have grown at a faster rate, compared to the rate at which Pakistan's traditional exports have grown.[1] The growth rate of non-traditional (manufactured) exports from Pakistan (10.92) is higher than the growth rate of the world's non-traditional exports (9.34). Similarly, the trend growth rate of textile exports for Pakistan (11.9) is higher than the world's trend growth rate for textile exports (9.44).

Table 2 compares the growth rates of exports of individual commodities from Pakistan vis-a-vis world export of individual commodities. The table reveals that Pakistan's two major exports (raw cotton and cotton yarn) which account for more than a fourth of Pakistan's total exports have had stagnant or falling demand in the world market. Raw cotton has almost zero growth in the world market whereas the demand for cotton yarn in the world market is growing at half the rate by which Pakistan's export for cotton yarn is increasing. The share of these two commodities together in total world exports is a mere 5 per cent. This suggests that to some extent Pakistan has concentrated its exports on commodities, which were 'falling stars' in the world market. Export growth of Pakistan for value-added products, readymade garments, made-up textiles, and synthetic textiles is faster than the world export growth of these commodities. However their respective share in total

TABLE 1

Trend Growth Rate of Exports from Pakistan/World (1973 – 1995)

	Growth Rate (%)		S. E. E.		Adjusted R^2	
	Pakistan	World	Pakistan	World	Pakistan	World
Total Exports	10.22 (15.76)*	9.61 (13.53)	20.63	22.53	0.9183	0.8971
Traditional Exports	6.53 (4.99)	8.60 (11.85)	41.66	23.09	0.5207	0.8638
Non-Traditional Exports	10.92 (14.95)	9.34 (10.71)	23.25	27.75	0.9100	0.8379
Textile Group Exports	11.90 (14.56)	9.44 (12.25)	25.98	24.50	0.9056	0.8715

*t-statistics in the parenthesis.

[1] Trends growth rates are obtained by using OLS techniques.

TABLE 2

Trend Growth Rates of Exports from Pakistan/World by Commodity (1973-1995)

Commodities (SITC)		Growth Rate (%)		S. E. E.		Adjusted R^2		Share in Total Exports	
		Pakistan	World	Pakistan	World	Pakistan	World	Pakistan	World
Raw Cotton	(2631)	4.82	0.30	11.86	17.87	16.6	1.25	12	4
		(2.04)	(0.51)						
Rice	(0421)	6.87	6.61	34.80	27.64	63.6	72.10	5	1
		(6.27)	(7.60)						
Fish	(0341)	8.55	11.30	22.30	27.90	87.0	88.20	4	11
		(12.18)	(12.88)						
Cotton Yarn	(6513)	10.48	5.57	29.65	37.13	85.1	49.70	14	1
		(11.24)	(4.77)						
Cotton Fabric	(6512)	6.31	7.67	22.35	33.69	78.3	70.10	10	9
		(8.98)	(7.45)						
Made-up Textiles	(6584)	22.27	11.79	22.46	19.21	97.8	94.40	12	13
		(31.54)	(19.54)						
Readymade Garments	(8411)	19.43	16.53	25.34	26.86	96.4	94.50	7	16
		(24.38)	(19.57)						
Synthetic Textiles	(6531)	13.92	7.21	79.20	53.02	57.8	45.60	11	27
		(5.58)	(4.41)						
Carpets and Rugs	(6591)	4.17	3.29	18.89	35.88	68.7	25.40	12	4
		(2.07)	(3.20)						
Leather and Products	(6121-6112)	5.29	3.72	49.10	37.02	32.8	29.50	3	3
		(3.42)	(3.20)						
Medical Instruments	(8721)	13.58	13.96	60.98	20.44	96.6	95.50	2	3
		(25.35)	(21.72)						
Sports Goods	(8941)	13.10	13.57	33.57	15.57	87.4	97.20	3	8
		(12.41)	(27.73)						

exports for the country are less than half when compared with the share of these commodities in the total world exports. Synthetic textiles account for 27 per cent of total world exports, while the share of readymade garments and made-up textile is 16 and 13 per cent, respectively. The share of readymade garments in Pakistan's exports is only 7 per cent, whereas for made-up and synthetic textiles, it is around 11 per cent each.

III. The Constant-Market-Share Model and its Limitations

In order to study the underlying issues and examine the impact of price and non-price factors relating to internal supply and external demand of exports, one of the most widely used techniques in the literature is the Constant Market Share (CMS) model. It is not a trade model but it helps to identify the areas where possible reasons for good or bad export performance can be sought. This model examines export growth attributable to:

i) Commodity Composition Effect, (CCE);
ii) Market Distribution Effect, (MDE);
iii) Competitiveness Effect, (CE); and
iv) World Trade Effect, (WTE).

This approach was first applied to export growth by Tysynski (1951), followed by Balassa (1962); Collein (1969); Leamer and Stern (1970); Richardson (1971); Banerji (1974); Bishwas (1982); Tiwari (1985); Agarwal (1988); Roy (1991); and Kapur (1991). In the context of Pakistan; Mahmood [(1981) and (1989)], has done work on this issue.

The basic model initially used by Tyszynski (1951) rests on the assumption that a country's export share in the world market remains constant overtime. Tyszynski used this analysis to study changes in the market share of countries exporting manufacturing goods from 1899 to 1950. The analysis was further developed and extended by Leamer and Stern (1970) and Richardson (1971). As exports from a country can be differentiated by destination as well as by commodity groups,. according to Tyszynski the actual export growth of a country between any two periods can be decomposed into the four above-mentioned effects. Balassa (1978), following Leamer and Stern (1970) has used the Constant Market Share approach to estimate income elasticities of demand for exports for 13 industrial countries.

The basic technique is to treat all exports as a single commodity and describe the share of a country's exports as follows:

$$S = x / X \qquad (1)$$

where S is the share of a country's exports in world exports to a given market. x and X are total exports of the country in question and of the world, respectively, in the given market. Then, symbolically, the CMS model can be expressed as:

$$\Delta x = r\Sigma x^{\circ}_{i} + \Sigma(r_i x^{\circ}_{i} - r x^{\circ}_{i}) + \Sigma\Sigma(r_{ij} x^{\circ}_{ij} - \Sigma r_i x^{\circ}_{i}) + \{\Sigma(x^{1}_{i} - x^{\circ}_{i}) - \Sigma\Sigma r_{ij} x^{\circ}ij\}$$

that is,

Total Change in Exports = World trade effect (1st term) +
Commodity composition effect (2nd term) +
Market distribution effect (3rd term) +
Competitiveness effect (4th term).

The superscript one and zero refer to the terminal and initial years, respectively, while the other notations are defined below:

x_{ij} = Exports earnings from commodity i to country j.
x_i = Total value of exports of commodity i to all the markets.
x = Total exports in value term ($\Sigma\Sigma x_{ij} = \Sigma x_i$).
r = % change in world trade from time zero to one.
r_i = % change in world trade for commodity i.
r_{ij} = % change in world export of commodity i to country j from period zero to one.

a) World Trade Effect; ($r\Sigma X^{\circ}_{i}$):

The magnitude of the world trade effect shows the change in the country's exports if it has maintained its share in world exports.

b) Commodity Composition Effect; ($\Sigma(r_i X^{\circ}_{i} - r X^{\circ}_{i})$):

This is basically the weighted sum of the value of exports of different commodities. The weights are the deviations of the growth rate of the individual commodity exported from the growth rate of world exports in the aggregate. The change in exports due to the Commodity Composition Effect (CCE) mainly depends on the factor endowments of the country and the price and income elasticities for the product it specialises in. This effect would be negative if the country concentrates its exports on commodities for which the world demand expands at a slower pace than the average growth rate of world exports in general.

c) Market Distribution Effect; ($\Sigma\Sigma r_{ij} X^{\circ}_{ij} - \Sigma r_{ij} X^{\circ}_{i}$):

This is the weighted sum of the value of each class of exports going to each market. The weights are the deviations of the growth of a particular market for

a particular commodity from the average growth rate of world exports for that commodity. The change in exports due to the Market Distribution Effect (MDE) depends on trade policies and income growth of foreign countries. A positive sign indicates that exports are concentrated in the relatively growing areas in world trade.

d) Competitiveness Effect; $\{\Sigma(X^1_i - X^o_i) - \Sigma\Sigma r_{ij} X^o_{ij}\}$*:*

This is basically a residual term. A negative sign means that the country fails to maintain its market share because of a lack of competitiveness. This residual term indicates the improvement or deterioration in overall export competitiveness. It is possible that the Competitiveness Effect may provide a biased measure of general competitiveness. For example, in a fast growing export market the country may experience a declining share even with rising exports if it cannot cope with export growth in the market. The net effect will be reflected in the negative sign of the competitiveness effect because of a favourable market and commodity growth.

Taken as a whole, the CMS analysis seems to provide a powerful taxonomic device for grouping the major components of export growth and gives a single aggregate measure to reflect upon the changes occurring at a disaggregated product level. The technique can be used to find the extent to which stagnation in exports of less-developing countries is due to adverse commodity and market effects. Given the structure and direction of exports, it can also be useful for projections of exports in the short-run.

Although the CMS approach has been widely used by the researchers, however, it has some fairly serious shortcomings described by Richardson (1971). He has questioned the very theoretical foundations of the model. However, recognising the limitations, which such research poses due to the paucity of data, he has suggested some improvements in the standard CMS model. In his empirical work, he found that the magnitude of the different components were changed, by:

1. changes in the level of commodity disaggregation,
2. changes in the base year,
3. changes in order in which the commodity composition and market distribution effects were estimated, and
4. choice of world or norm use for comparison.

The first is the well-known aggregation problem, and the second is analogous to the choice of a base year problem in the construction of index numbers. Although, these problems are not unique to the CMS analysis, nonetheless, we have tried to overcome these issues. However the third problem is specific to the CMS

approach, but the sum of commodity composition and market distribution effects, do not change as the order of their calculation is changed. Hence, the competitiveness effect is not sensitive to a reversal of the order of calculation.

In the present study, following the basic framework of the CMS model, we have tried to correct for some of the objections raised by Richardson. First of all, we have analysed the CMS of Pakistan's exports for each year from 1972-73 to 1994-95. This will take care of the problem of time discreteness in the analysis and also the issue of sensitiveness of these shares to any particular year. Secondly, we have used the maximum possible dis-aggregation level of the commodities and the markets. Finally our study is different from all earlier work in that, all previous studies have used value of exports in current prices, whereas we have used real values of export in constant prices. This, to some extent, will make our results more meaningful as compared to the earlier studies. Because the use of current value of export prices would incorporate both price and quantity changes, it is, therefore, possible that changes in a commodity's share could be largely attributed to price changes. Hence the use of current prices could distort findings of the CMS model in favour of price effects and away from real growth in exports.

IV. Analysis of Pakistan's Export Competitiveness

For the purpose of our analysis, we have considered the 12 major exports of Pakistan. These 12 commodities together constitute about 80 per cent of Pakistan's total exports. Out of these commodities, 3 are primary or traditional (SITC 0-1) goods, while the rest are semi-manufactured or manufactured products (SITC 2-8). The regions of destination chosen for the analysis are mainly developed economies. More than 75 per cent of Pakistan's exports are going to 19 selected countries. The period of the study is (1973-1995) which starts right after the war with India and the initial period is the first full financial year after the separation of the eastern wing (now Bangladesh) of the country. Data used in the analysis is obtained from various sources. These include IMF's Direction of Trade Statistics; United Nation's Year Book of International Trade Statistics; various issues of UN's Commodity Trade Statistics; Pakistan Economic Survey; The State of Pakistan's Foreign Trade; and State Bank of Pakistan.

The analysis is carried out on a year-to-year-basis for Pakistan's total exports (all goods), traditional goods, non-traditional goods, and for the textile group. In addition, we have estimated the CMS model for the whole period (1973-1995) as well as for the three sub-periods. The first sub-period (1973-1977) corresponds to massive nationalisation of the industrial and banking sector in Pakistan. The rupee (local currency) was devalued by more than 100 per cent by the socialist democratic government of Z.A. Bhutto's Pakistan People's Party. On the international scene, the fixed exchange rate regime under the Bretton Woods system came to an

end, and the world markets suffered the first oil price shock in 1973-74. The second sub-period (1978-1987) in Pakistan was dominated by General Zia-ul-Haq's Martial Law. During this period denationalisation of the industrial and banking sector was set-off. This period was also marred by the Soviet invasion of neighbouring Afghanistan, which resulted not only in the massive influx of Afghan refugees and with them the smuggling of arms and narcotics, but massive infusion of foreign aid to help refugees and also to help the Afghan resistance against Soviet occupation. Therefore, these 9 years of Soviet occupation of Afghanistan have significant implications on the performance of Pakistan's economy during this and subsequent periods.

The third sub-period (1988-1995) was the most unpredictable and uncertain period as far as the policy issues are concerned. This period corresponds to the end of the 11 year long Martial Law and renewal of elected governments in Pakistan. During this period Pakistan has witnessed three general elections, four elected governments and three caretaker governments. Economic policies were drastically changed by subsequent governments during this period. In addition, the law and order situation, especially in the port city of Karachi was poor during this period.

Results

Results of the yearly CMS analysis of total Pakistan's exports are reported in Appendix-I. The graphical representations are given in Figure 1[(a) to (d)], which show the trend of changes in Pakistan's total exports in constant prices of 1981 vis-a-vis the 4 CMS effects: the World Trade Effects, (WTE); Commodity Composition Effect, (CCE); Market Distribution Effect (MDE); and the Competitiveness Effect (CE); respectively. It is observed that the WTE, barring a few exceptional years, has been positive and favourable [Figure 1(a)] for Pakistan's exports growth. But this positive effect seems to have been totally lost and offset by the unfavourable commodity composition of Pakistan's exports. As can be seen in Figure 1(b), the concentration in Pakistan's commodity composition has pulled down what would have been a much greater positive change in total exports from Pakistan.

The CCE has remained, except for the few years when it was marginally positive or zero, negative, throughout the period 1973-1995. However direction of Pakistan's exports, as depicted by the trend of Market Distribution Effect [Figure 1(c)], has been to the right regions. MDE seems to be balancing the unfavourable Commodity Composition of Pakistan's exports. Although this MDE is not strong enough to change the sign and direction of the over all Competitiveness Effect [Figure 1(d)]. It appears that the loss of Pakistan's export competitiveness in the world market during this period was primarily due to the wrong commodity composition of Pakistan's export basket. Because of this very reason, Pakistan could not reap the full benefits of growth in the world markets and as a result its share in the total world trade is stuck at around 0.16 per cent.

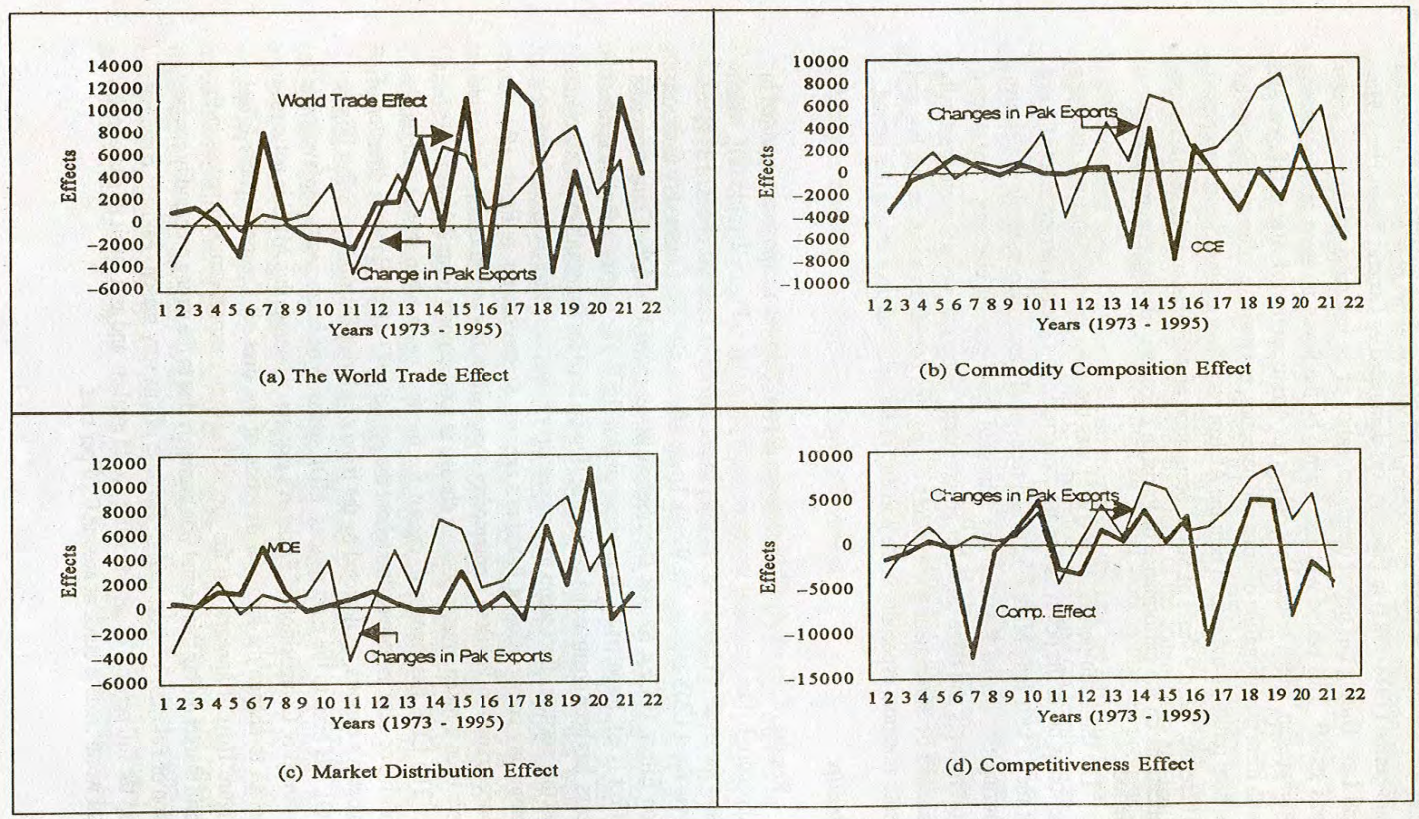

Figure 1
Aggregate Exports

In order to zero down on the causes of stagnation and low share in world markets, we have also calculated these effects for traditional, non-traditional and textile products, separately. Appendix-II and Figure 2[(a) to (d)] compare the trend of the changes in the traditional exports and show the four CMS effect. Figure 2(a) reveals that the world trade effect in case of traditional goods has almost been neutral for the first 15 years of the period under consideration. It was only positive for about 5 years towards the end of the period. As compared to the WTE of total exports, traditional exports WTE is less significant and the growth in world trade of traditional exports has been marginal. However, in case of non-traditional goods export, the WTE seems to follow a similar pattern and it is positive for most of the years [Appendix-III and Figure 3(a)]. Commodity composition of traditional goods too does not have any significant effect in either direction on the export growth at least during the first 15 years and after that it follows a mixed pattern. In case of non-traditional exports, CCE was highly favourable for a couple of years in the beginning, but as shown in Appendix-III (column 3) and in Figure 3(c), the market distribution effect was almost of the same magnitude but of opposite signs. The market distribution effect, in case of both traditional and non-traditional exports, is somewhat neutral throughout the period 1973-1995. It does not seem to contribute to enhancing either type of exports. Pakistan's traditional goods exports seem to be performing better compared to non-traditional exports. However, in general, both types of exports have failed to show any significant competitive power in the world market [Figures 2(d) and 3(d)].

Constant Market Share analysis of the third sub-category, the textile group exports, shows more or less the same pattern. The commodity composition even within the textile group, is not correct and as shown in Figure 4(b), the CCE is either neutral or negative throughout the period. As a result, Pakistan fails to maintain its share in the world trade of textile exports and could not take full benefit of, whenever there was high demand for these products in the world market. As revealed in Figure 4(a), changes in Pakistan's export are greater than what would have been its share otherwise, only in the years when world demand for textile products is down. However, the direction of these exports seems to have had a favourable impact on Pakistan's textile exports. MDE [Figure 4(c)] is positive throughout the period. The competitiveness effect is everywhere below the change in the value of the textile export graph [Figure 4(d)] which implies that the lack of competitiveness, together with wrong commodity composition, are the causes of the low and stagnant share of Pakistan's exports in the world market.

Next, we estimated CMS analysis for the whole period, that is, between 1973 and 1995 and also for the three sub-periods. The idea was to analyse the export performance of various types of regimes that have ruled the country during these sub-periods. Results indicate that during the period 1973-1995 the opportunity to expand Pakistan's exports created by the growth in the world trade, as depicted by

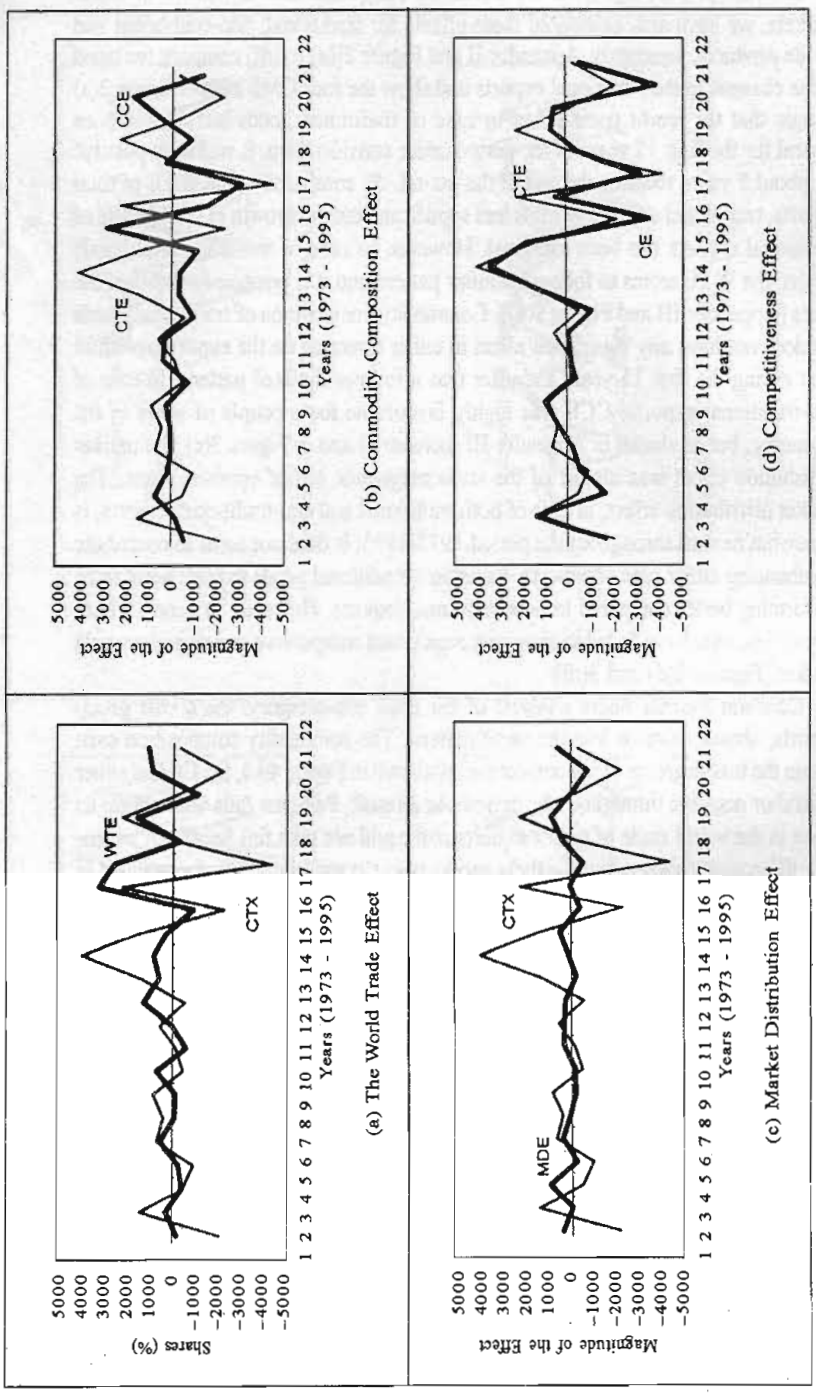

Figure 2
Traditional Exports

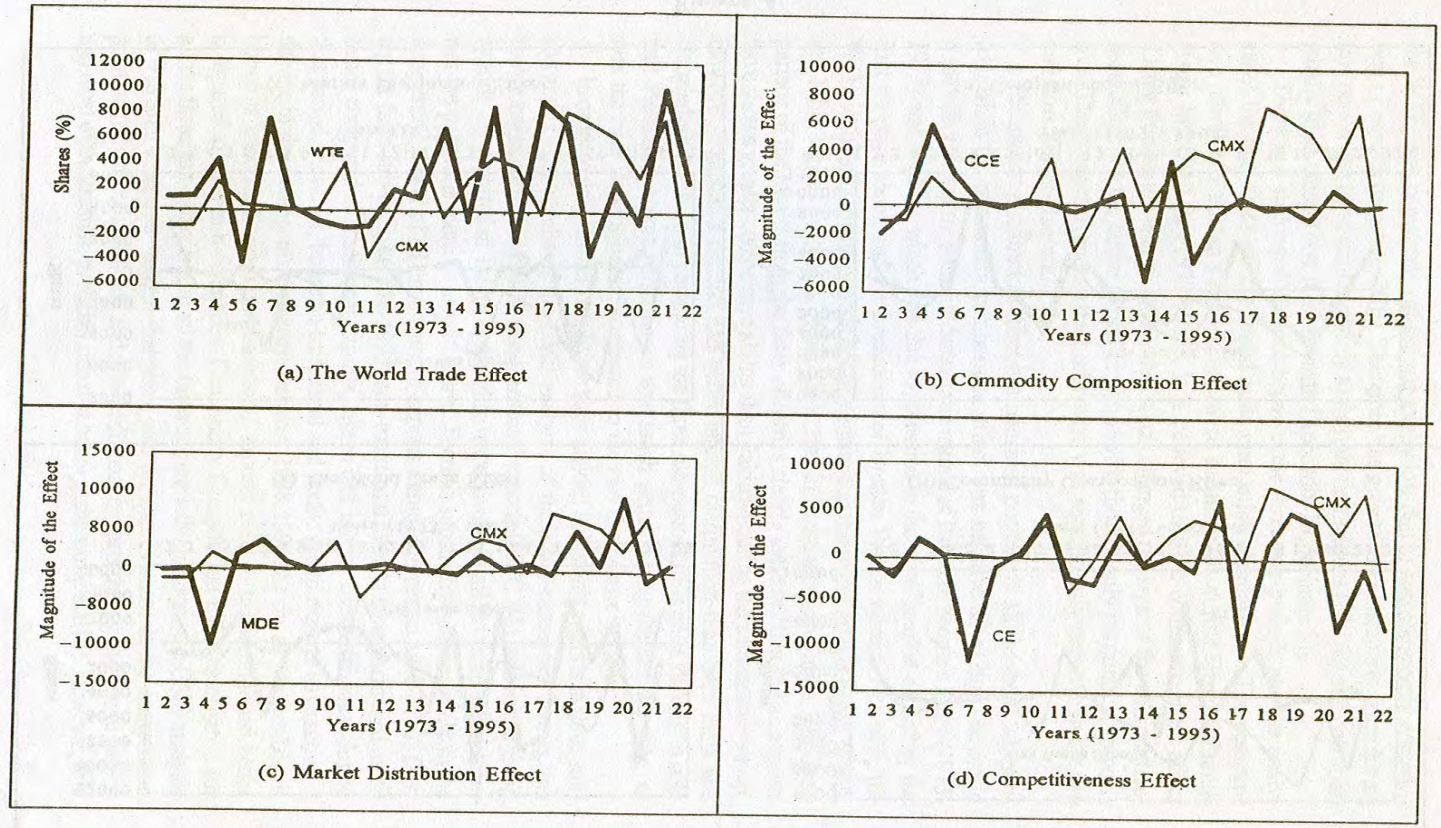

Figure 3
Non-Traditional Exports

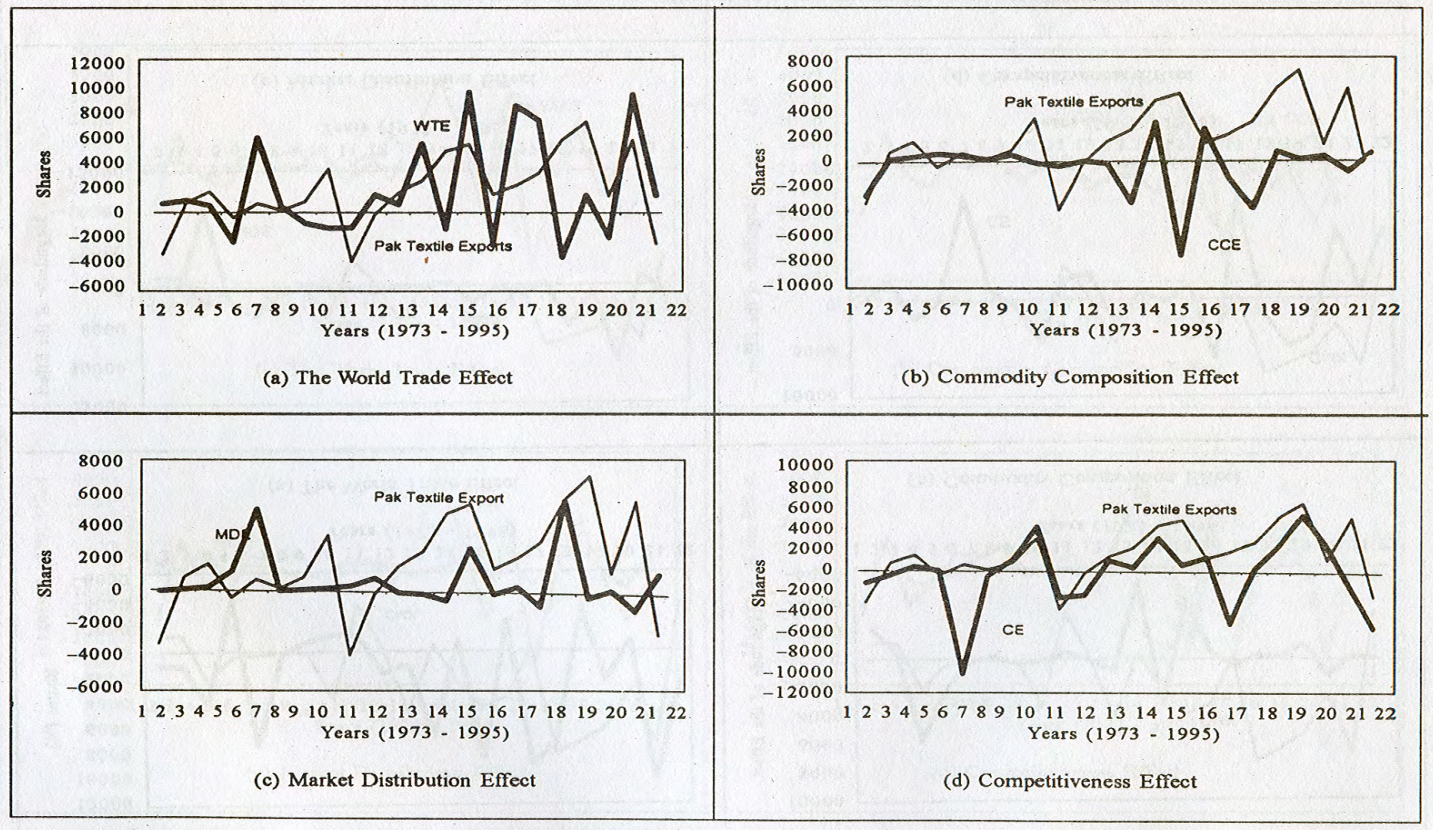

Figure 4
Textile Exports

the WTE, was completely off-set and totally lost due to bad commodity composition of exports (negative CCE). Therefore, the growth in Pakistan's exports during this period can be attributed mainly to its right destinations (MIDE) and only marginally to its competitive (CE) strength [Appendix-III, (column 5)].

There is a striking difference between the three sub-periods and the analysis of the four CMS effects reveal quite interesting comparisons. The competitive power of Pakistan's exports improved substantially during General Zia-ul-Haq's Martial Law (1978-1987). It is believed that the competitiveness effect during this period was so strong that it has changed the sign of the competitiveness effect for the entire period (1973-1995), though only marginally, to positive. The competitiveness effect otherwise was significantly negative in the pre and post Zia-ul-Haq era.

The market distribution effect has remained positive in all the three sub-periods, while the commodity composition effect was negative all along. The world trade effect during the socialist democratic regime of Pakistan People's Party (1973-1977) was negative which was due to recession in the world market caused by the first oil price shock and the breakdown of Bretton Woods system. However, the WTE in the subsequent periods became positive as the world market began to pick up. Table 3 gives the results of the work done in Bangladesh and India. The comparison of the results from the three countries clearly indicates that Indian exports have shown greater competitive ability than Pakistan during the comparable period. However, Pakistan's exports had better market distribution than both India and Bangladesh. In short, in comparing the three sub-periods, it is quite striking to note that Pakistan's export performance was much better during the military rule, as was the case in Bangladesh, compared to the two democratic periods.

In order to gain further insight we have divided Pakistan's exports in three sub-categories. The results of the CMS analysis of these sub-categories, that is, the traditional exports (SITC 0-1), non-traditional exports (SITC 2-8), and textile group exports are reported in Tables 4, 5 and 6, respectively. In all the three sub-categories the pattern is more or less the same. There is substantive improvement in the competitive power of all three types of exports during sub-period 1978-1987. During the third sub-period (1988-1995) non-traditional exports have performed much better compared to traditional exports, which had lost its competitiveness during that period. However, both non-traditional and textile group exports have shown a decline in their competitive strength between 1988-1995. As far as Market Distribution is concerned, again non-traditional exports seem to have performed better compared to other sub-categories. Commodity Composition Effect is negative for all the three sub-categories in all the three sub-periods. In short, the CMS analysis of Pakistan's exports suggest that there was an improvement in the competitive position of both its traditional and non-traditional exports during the late seventies and most of the eighties, probably due to a boom in the world market. However, this

TABLE 3

Constant Market Share Analysis of Pakistan's Exports (1973-1995)

Source of Change in Exports	1972-73 to 1976-77[a]	1977-78 to 1986-87[b]	1987-88 to 1994-95[c]	1972-73 to 1994-95[d]	Bangladesh 1976-77 to 1986-87[e]	India 1970 to 1977[f]
Change in Exports (over the period)	–192.16 (100.00)	1942.67 (100.00)	2597.40 (100.00)	4594.76 (100.00)	657.90 (100.00)	2919.01 (100.00)
World Trade Effect	–33.5 (17.46)	1059.07 (54.52)	3862.51 (148.71)	7021.13 (152.81)	513.70 (78.08)	2425.18 (83.08)
Commodity Composition Effect	–103.55 (53.89)	–357.01 (–18.38)	–997.38 (–38.37)	–6989.25 (–152.11)	–70.81 (–10.76)	484.29 (16.62)
Market Distribution Effect	199.30 (–103.72)	126.02 (6.49)	137.09 (5.28)	4503.31 (98.01)	33.65 (5.11)	–172.79 (–5.91)
Competitiveness Effect	–254.37 (132.37)	1114.58 (57.37)	–404.80 (–15.58)	59.57 (1.30)	181.36 (27.57)	181.33 (6.21)

a Z.A. Bhutto's period; main features of this period are: war with India in 1971, massive nationalisation of industrial and banking sector, a devastating flood in 1974, and political unrest, towards the end of the period.

b This period was dominated by General Zia-ul-Haq's Martial Law, the Iran-Iraq war and the Soviet invasion of Afghanistan.

c During this period the country has witnessed three general elections, four elected governments, and four caretaker governments. Besides the law and order situation especially in the port city of Karachi, was the worst in the history of the country.

d Refers to the whole period 1972-1995.

e Results of Roy (1991).

f Results of Tiwari (1985).

TABLE 4

Constant Market Share Analysis of Pakistan's Exports
Traditional Goods (1973 – 1995)

Sources of Change in Exports	1972-73 to 1976-77	1977-78 to 1986-87	1987-88 to 1994-95	1972-73 to 1994-95
Change in Exports (over the period)	–212.5 (100.0)	748.9 (100.0)	–287.7 (100.0)	85.0 (100.0)
World Trade Effect	–55.0 (26.0)	154.8 (–21.0)	1288.7 (–448.0)	1545.8 (1819.0)
Commodity Composition Effect	–66.9 (31.0)	–105.3 (–14.0)	–1065.2 (370.0)	–1032.8 (–121.5)
Market Distribution Effect	452.5 (–213.0)	23.6 (3.0)	30.9 (–11.0)	499.8 (588.0)
Competitiveness Effect	–543.2 (256.0)	675.8 (90.0)	–542.1 (188.0)	–927.8 (–1092.0)

TABLE 5

Constant Market Share Analysis of Pakistan's Exports
Non-Traditional Goods (1973 – 1995)

Sources of Change in Exports	1972-73 to 1976-77	1977-78 to 1986-87	1987-88 to 1994-95	1972-73 to 1994-95
Change in Exports (over the period)	20.4 (100.0)	1193.7 (100.0)	2885.3 (100.0)	4509.8 (100.0)
World Trade Effect	7.1 (35.0)	895.8 (75.0)	2761.5 (96.0)	5295.8 (117.0)
Commodity Composition Effect	–22.3 (–110.0)	–243.2 (–20.0)	–2494.9 (–86.0)	–2621.4 (–58.0)
Market Distribution Effect	129.8 (638.0)	102.4 (9.0)	2481.4 (86.0)	848.0 (19.0)
Competitiveness Effect	–94.2 (–463.0)	438.7 (37.0)	137.3 (5.0)	987.4 (22.0)

TABLE 6

Constant Market Share Analysis of Pakistan's Exports
Textile Group (1973 – 1995)

Sources of Change in Exports	1972-73 to 1976-77	1977-78 to 1986-87	1987-88 to 1994-95	1972-73 to 1994-95
Change in Exports (over the period)	–129.5 (100.0)	1480.6 (100.0)	2294.5 (100.0)	3860.2 (100.0)
World Trade Effect	–26.8 (21.0)	691.2 (47.0)	2116.7 (92.0)	4214.3 (109.0)
Commodity Composition Effect	–8.1 (6.0)	–122.9 (–8.0)	–523.9 (–23.0)	–2236.0 (–58.0)
Market Distribution Effect	125.7 (–97.0)	–26.8 (–2.0)	28.0 (1.0)	744.1 (19.0)
Competitiveness Effect	–220.3 (–170.0)	939.1 (63.0)	698.9 (30.0)	1137.8 (29.0)

incentive seems to have been lost in the later period (1988-1995) perhaps due to the musical chair kind of frequent changes of government.

V. Summary and Conclusion

Export earnings are of immense importance for a third world country like Pakistan, especially in the given grim economic situation and alarmingly low foreign exchange position. Since the early Seventies, Pakistan has been incurring a terms of trade deficit of more than 3 per cent a year. Pakistan's share in world trade has remained under 0.2 per cent throughout the period under consideration. Subsequent governments have placed increased emphasis on expansion of export earnings. In the light of this growing awareness about the importance of exports in a developing country like Pakistan, an indepth analysis of the export performance in a historical perspective is, therefore, essential for any meaningful future planning in this regard.

The purpose of this paper is to examine whether, and to what extent, the low share of Pakistan's export in world trade reflects the lack of its international competitiveness. This is achieved by applying Constant Market Share Analysis.

It is worth mentioning here that the analysis carried out in this paper, unlike any other earlier studies on the topic, is based on constant export prices. Earlier studies

used current dollar value of exports. The change in export in such a case incorporates both price and quantity changes. It is, therefore, possible that changes in commodity X's share could be attributed mainly to price changes. Therefore the use of current dollar value of exports could distort findings of the CMS analysis. By using a constant dollar value, we have, to some extent, minimised this problem.

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APPENDIX-I

Sources of Change in Exports (Total Exports)

US $ millions

Year	World Trade Effect		Commodity Composition Effect		Market Distribution Effect		Competitiveness Effect		Change in Exports	
1973-74	108.6	(–31.1)	–323.5	(92.7)	23.3	(–6.7)	–157.4	(45.1)	–349.1	(100)
1974-75	148.7	(1307.0)	–58.7	(–516.0)	1.3	(12.0)	–80.0	(–703.0)	11.0	(100)
1975-76	18.5	(9.5)	18.1	(9.3)	117.1	(60.5)	40.1	(20.7)	193.8	(100)
1976-77	–268.4	(557.0)	154.0	(–320.0)	104.4	(–217.0)	–38.3	(80.0)	–48.2	(100)
1977-78	795.0	(816.7)	53.2	(54.7)	462.0	(474.6)	–1213.0	(–1246.0)	97.3	(100)
1978-79	11.4	(25.9)	–24.3	(–55.1)	118.5	(268.4)	–614.2	(–139.0)	44.1	(100)
1979-80	–106.8	(–106.0)	65.5	(65.1)	–30.4	(–30.3)	172.3	(171.4)	100.5	(100)
1980-81	–128.6	(–35.8)	–10.9	(–3.0)	15.6	(4.3)	483.1	(134.5)	359.2	(100)
1981-82	–198.4	(48.2)	–20.5	(5.0)	63.2	(–15.3)	–256.0	(62.2)	–411.8	(100)
1982-83	194.2	(512.6)	31.9	(84.2)	124.0	(327.6)	–312.4	(–824.0)	37.9	(100)
1983-84	204.3	(46.3)	36.2	(8.2)	33.9	(7.7)	166.8	(37.8)	441.1	(100)
1984-85	746.8	(852.7)	–680.1	(–776.0)	–22.2	(–25.4)	43.2	(49.3)	87.6	(100)
1985-86	–37.1	(–5.4)	379.8	(55.8)	–37.5	(–5.5)	375.7	(55.2)	680.9	(100)
1986-87	1091.7	(181.0)	–795.4	(–132.0)	273.3	(45.3)	33.4	(5.5)	603.1	(100)
1987-88	–357.4	(–239.0)	218.6	(146.0)	–24.1	(–16.1)	312.4	(209.0)	149.5	(100)
1988-89	1245.9	(609.0)	–75.3	(–36.8)	108.3	(53.0)	–1074.0	(–525.0)	204.5	(100)
1989-90	1037.4	(253.0)	–362.0	(–88.3)	–97.4	(–23.8)	–167.2	(–40.7)	410.4	(100)
1990-91	–395.9	(–54.4)	17.4	(0.4)	625.0	(85.9)	496.5	(68.3)	727.3	(100)
1991-92	471.9	(55.0)	–269.0	(–31.4)	171.6	(20.0)	482.9	(56.3)	857.5	(100)
1992-93	–246.2	(–88.7)	208.0	(74.9)	1072.0	(386.1)	–756.2	(–272.0)	277.7	(100)
1993-94	1126.4	(193.9)	159.8	(–46.9)	–215.3	(–16.0)	–505.6	(–30.8)	565.5	(100)
1994-95	469.0	(102.4)	–241.6	(141.0)	170.0	(–24.4)	–565.4	(86.1)	445.6	(100)

APPENDIX-II

Sources of Change in Exports (Traditional Exports)

US $ millions

Year	World Trade Effect		Commodity Composition Effect		Market Distribution Effect		Competitiveness Effect		Change in Exports	
1973-74	-20.3	(10)	-57.5	(27)	40.1	(-19)	-174.0	(82)	-211.7	(100)
1974-75	26.8	(18)	-19.8	(-14)	-1.2	(-1)	139.5	(96)	145.3	(100)
1975-76	-43.3	(87)	69.6	(139)	96.8	(-194)	-173.1	(346)	-500.0	(100)
1976-77	-28.5	(30)	13.8	(-14)	-22.3	(23)	-59.0	(61)	-96.0	(100)
1977-78	52.9	(79)	-6.0	(-1)	40.0	(59)	-25.0	(-37)	67.3	(100)
1978-79	-11.0	(-28)	2.6	(7)	5.6	(14)	41.9	(107)	39.0	(100)
1979-80	-16.1	(-19)	22.0	(26)	-19.0	(-22)	98.3	(115)	85.2	(100)
1980-81	70.4	(-144)	-75.9	(156)	-16.1	(33)	-27.2	(56)	-48.8	(100)
1981-82	-61.5	(409)	33.8	(-225)	31.6	(-210)	-19.0	(126)	-15.0	(100)
1982-83	1.3	(2)	29.5	(53)	32.1	(57)	-7.0	(-12)	55.9	(100)
1983-84	130.3	(-227)	-97.6	(170)	25.1	(-44)	-115.2	(201)	-57.4	(100)
1984-85	59.0	(42)	-33.2	(-24)	-23.2	(-17.0)	138.0	(98)	140.6	(100)
1985-86	84.0	(21)	-37.0	(-9)	14.0	(3)	345.0	(85)	407.0	(100)
1986-87	24.5	(17)	-113.2	(-79)	50.4	(35)	180.7	(127)	142.6	(100)
1987-88	-92.6	(40)	282.9	(-122)	-42.1	(18)	-379.2	(164)	-231.1	(100)
1988-89	331.7	(147)	-156.9	(-70)	3.6	(2)	47.1	(21)	225.5	(100)
1989-90	260.3	(-59)	-302.8	(69)	-56.2	(13)	-341.2	(78)	-440.0	(100)
1990-91	-30.6	(130)	25.9	(-118)	36.1	(-164)	-53.4	(243)	-22.0	(100)
1991-92	161.4	(71)	-85.6	(-38)	85.5	(38)	66.5	(29)	227.8	(100)
1992-93	-112.6	(502)	39.5	(-176)	-2.3	(10)	53.0	(-236)	-22.4	(100)
1993-94	92.5	(-41)	169.3	(-75)	-75.8	(34)	-411.0	(183)	-224.9	(100)
1994-95	111.5	(-352)	-135.5	(428)	57.0	(-180)	-64.6	(204)	-31.7	(100)

APPENDIX-III

Sources of Change in Exports (Non-Traditional Exports)

US $ millions

Year	World Trade Effect		Commodity Composition Effect		Market Distribution Effect		Competitiveness Effect		Change in Exports	
1973-74	112.0	(–82.0)	–249.1	(181.0)	–16.8	(12.0)	16.6	(–12)	–137.4	(100)
1974-75	121.0	(–90.0)	–37.9	(28.0)	2.5	(–2.0)	–219.5	(164)	–133.9	(100)
1975-76	430.0	(177.0)	689.9	(283.0)	–1090.0	(–447.0)	213.1	(87.)	243.8	(100)
1976-77	–447.3	(–936.0)	256.9	(537.0)	217.5	(455.0)	20.7	(43)	47.8	(100)
1977-78	773.2	(2571.0)	22.8	(76.0)	421.9	(1403.0)	–1188.0	(–3950)	30.1	(100)
1978-79	19.6	(384.0)	–24.1	(–471.0)	112.9	(2207.0)	–103.0	(–2020)	5.1	(100)
1979-80	–88.0	(–574.0)	40.8	(226.0)	–11.4	(–75.0)	73.9	(482)	15.3	(100)
1980-81	–142.2	(–35.0)	8.2	(2.0)	31.7	(8.0)	510.4	(125)	408.0	(100)
1981-82	–131.6	(33.0)	–59.8	(15.0)	31.6	(–8.0)	–238.4	(60)	–398.1	(100)
1982-83	181.7	(–960.0)	13.2	(–70.0)	91.7	(–484.0)	–305.6	(1614)	–18.9	(100)
1983-84	112.6	(22.0)	95.0	(19.0)	8.4	(2.0)	284.8	(57)	500.9	(100)
1984-85	700.1	(–1324.0)	–659.0	(1247.0)	1.0	(–2.0)	–94.8	(179)	–52.9	(100)
1985-86	–84.3	(–31.0)	380.0	(139.0)	–51.5	(–19.0)	29.8	(11)	273.9	(100)
1986-87	882.6	(192.0)	–497.7	(–108.0)	222.9	(48.0)	–147.3	(–32)	460.5	(100)
1987-88	–251.1	(–66.0)	–78.1	(–21.0)	18.0	(5.0)	691.7	(182)	380.5	(100)
1988-89	936.5	(–4101.0)	57.5	(–252.0)	104.7	(–459.0)	–1122.0	(4912)	–22.8	(100)
1989-90	758.7	(89.0)	–39.1	(–5.0)	–41.1	(–5.0)	174.0	(20)	852.4	(100)
1990-91	–367.2	(–49.0)	–22.6	(–3.0)	589.0	(79.0)	549.0	(73)	749.0	(100)
1991-92	256.6	(41.0)	–129.4	(–21.0)	86.1	(14.0)	416.4	(66)	629.7	(100)
1992-93	–96.8	(–32.0)	131.5	(44.0)	1074.4	(358.0)	–809.2	(–270)	299.9	(100)
1993-94	1050.0	(133.0)	–25.5	(3.0)	–139.5	(–18.0)	–94.5	(–12)	790.4	(100)
1994-95	261.1	(–63.1)	–9.4	(2.3)	113.0	(–27.3)	–778.4	(188)	–413.8	(100)