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CHANGES IN EXPORT SHARES AND COMPETITIVE STRENGTH

Zafar Mahmood
Research Economist

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PAKISTAN INSTITUTE OF DEVELOPMENT ECONOMICS
POST BOX 1091, ISLAMABAD
(Pakistan)

Most of the developing countries including Pakistan face serious balance of payment problems. These problems arise mainly due to the fact that exports of these countries have failed to grow rapidly to meet their growing import requirements. During the Seventies, exports of Pakistan at constant prices of 1970 have grown only at one per cent per annum. The export performance during 1972-1976 period was even more disappointing when they declined from Rs. 29.4 million in 1972 to Rs. 25.97 million in 1976. This is a cause for concern and we must study closely the main factors responsible for the decline in exports so that the government formulate policies to expand exports.

The importance of different factors in the growth of exports may be ascertained either by estimating the export demand and supply functions, or conducting the Constant-Market-Share (CMS) analysis. The latter approach essentially consists of decomposing the actual export growth into four parts, viz. world trade effect and a 'residual' reflecting effects of other variables such as changes in the competitiveness; domestic supply situation, etc. The main advantage of the CMS analysis is that it enables us to differentiate the effects of world trade, commodity composition and market distribution from other factors which are directly under the purview of an exporting country.

The CMS analysis focuses on a comparison of the actual growth of exports with the expected level of exports if a country's share in world market remains constant over time. It highlights the importance of the growth in the world trade, the nature of commodities exported and the growth of exports of a country. Accounting for these three

factors, we can then assess the importance of other factors in the growth of exports. Therefore, in the present study we shall use CMS anlaysis and shall not only decompose exports growth into its four components, but shall also extend the analysis to explore the factors giving rise to the 'residual'.

The constant market share analysis was first used by Tyszinsky {19} to study changes in the market shares of exports of West European Countries for the period 1899-1950. However, his analysis was limited to decomposing the growth of exports into only two components viz., changes in world trade and the 'residual'. Richardson {14} pointed out that for a comprehensive analysis of exports growth one should also net out the commodity composition and market distribution effects to compute the 'residual'.

Most of the CMS studies are limited just to the decomposition of export growth into its four parts and leave the 'residual' unexplained. However, there are two exceptions to that. Balassa {2}, and Fleming and Tsiang {3} have gone further and analysed the relationship of changes in market shares with export prices and alternatively with domestic costs of production in manufacturing sector.

Little, Scitovsky and Scott {11} and Hussain {7} have used the CMS analysis to evaluate the export performance of manufactured goods in Pakistan. The former study covers the two time periods i.e. 1950-53 to 1960-63 & 1964-65 and the latter covers the period from 1960-61 to 1967-68. However, both the authors have ignored the impact of market distribution on the growth of exports and have come to the conclusion that increase in West Pakistan's exports is mainly due to an increase in her relative share in the world market. In the present

study, we not only decompose the growth of exports into its four components but also anlayse the factors giving rise to the residual.[1]

Plan of the paper is as follows. Section-II deals with methodological issues and data problems. Section-III comprises of an empirical analysis of market shares and competitive strength. In Section-IV, we have presented policy implications and finally conclusions are listed in Section-V.

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1. It may be noted that since the CMS analysis is a comparative statis and the analysis of 'residual' is essentially dynamic as it requires time series data to run the regression between residual and its explanatory variables, the two studies are not quite comparable, though they are interrelated.

SECTION - II

METHODOLOGICAL ISSUES AND DATA PROBLEMS

Following Richardson {14}, we decompose growth of exports into four components viz. world trade effect, commodity composition effect, market distribution effect and a 'residual'. The identity(I) shows the relationship between the growth of exports and the four components, i.e.

$$V'_{oo} - V_{oo} = gV_{oo} + \sum_i (g_i - g)V_{io} + \sum\sum_{ij} (g_{ij} - g_i)V_{ij} + \sum\sum_{ij} (V'_{ij} - V_{ij} - g_{ij} V_{ij}) \ldots . \quad (I)$$

where

V'_{oo} = value of the country's exports in terminal year

V_{oo} = value of the country's exports in base year

g = Percentage change in world's exports from base to terminal year.

g_{ij} = Percentage change in world's exports of the ith commodity in the jth country from base to terminal year.

(subscripts i and j refer to commodity and market area respectively)

Left hand side of the identity (I) shows the actual export growth during the period under study. The first part of the right hand side of the identity (I) shows the expected level of exports of Pakistan corresponding to the growth rate of total world trade. The second part measures the effect of the differentials in the growth rates of world trade in the ith commodity and that of the world trade as a whole - known as 'commodity composition' effect. The sign of this effect indicates whether the commodity composition of a country's export is favourable or unfavourable for the growth of her exports. The third

part, measures the effect of differences in the growth rates of the exports of the ith commodity to the jth market and to the world market known as 'market distribution'. It reflects the effect of the growth in demand in the trade partner countries compared to the growth in demand for the commodity in the world. The last component is known as 'residual' which shows the difference between the actual expansion of country's export trade and that which would have been obtained had the country kept a constant share of each importing market in each commodity.

The 'residual' is a reflection of various influences such as relative prices, changes in exchange rate, differential rates of quality improvements, development of new exports, subsidies granted to exports and the differential changes in the ability for prompt fulfilment of export orders etc. It may be noted that we can study the impact of subsidies, changes in exchange rate and relative prices by changes in the real effective exchange rates. Moreover, some of the other variables are not quantifiable while on the others data are not available. Furthermore, since changes in supply situation also affect the exports, we have used real effective exchange rate and changes in exportable surplus[2] to explain the 'residual' part, i.e.

$$U_i = \alpha_0 + \alpha_1 EE_{xi} + \alpha_2 S_{xi} \qquad \ldots\ldots \qquad (ii)$$

where

U_i = Residual component of the ith commodity

EE_{xi} = Real effective exchange rate of the ith commodity

S_{xi} = Exportable surplus of the ith commodity

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2. Data on exportable surplus are available only for cotton yarn and thread; for rice, raw cotton and cotton fabrics, we have used production of these commodities as a proxy for exportable surplus.

The real effective exchange rates incorporate changes in the weighted exchange rates, relative price changes and changes in the subsidies.

Trade weighted index (E_x) may be estimated by the following formula:

$$E_x = \frac{\Sigma R_j \, X_j}{\Sigma X_j}$$

where

X_j = Exports to the jth country.

R_j = Exchange rate of Pak. rupee with the jth importing country.

Adjusting for the changes in the relative prices, we get real trade weighted index E'_x as:

$$E'_{xi} = \frac{P_{wi}}{P_{ci}} E_x \qquad \ldots\ldots\ldots \qquad (iii)$$

where

P_{wi} = price of the ith exported good in the world market

P_{ci} = Price of the ith exported good in the exporting country.

E'_{xi} do not take into consideration the subsidies or export taxes. In order to incorporate their effect, (iii) may be written as:

$$EE_{xi} = (1 + Pbi) E'_{xi}$$

where

P = Average premium on bonus vouchers

bi = Export bonus rate for the ith commodity

If there is export duty 'di' on the ith commodity, then

$$EE_{xi} = (1-di)E'_{xi}$$

We have broken down the export performance into its three components for all the commodities exported from Pakistan. The analysis was limited to the world growth of exports, commodity composition, and a 'residual' because the effect of market distribution on export could not be analysed due to non-availability of data for broken down by destination for a number of products. These data were available only for rice, raw cotton, cotton yarn and thread, cotton fabrics, wearing apparel, carpets, other textiles, sports goods, and leather and leather products. Therefore, for these products we were able to decompose growth of exports into its four components. Furthermore, we had to limit the detailed analysis of the 'residual' further to rice, raw cotton, cotton yarn and thread and cotton fabrics, because price data for the world market due to lack of product identification were not available for the rest of the commodities[3].

In order to measure properly the competitiveness, we require delivered prices by market, but they are not available. As a proxy for, therefore, we have used unit export value of these commodities.

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3. The validity of the conclusions will obviously depend on the coverage of commodities and countries, The coverage of commodities and countries is mainly dictated by the availability of data, which has restricted the analysis of 'residual' to just four commodities. Countries with negligible imports of a product (countries importing less than Rs.10,000 are taken to be negligible importers) from Pakistan are lumped together as the other countries Cross country data for most of the Socialist countries and for some of the middle east countries are not available, and, therefore we had to lump them with the other countries.

In order to analyse changes In the composition of trade, we have selected 1972-76 period. A year earlier than 1972 wilt have affected the results as there had been a structural change in inter-national trade due to break away of East Pakistan because with that the inter-regional trade became an international trade. On the other hand, we could not extend analysis beyond 1976 due to non-availability of cross-country data. In the case of raw cotton we had to restrict our analysis to 1975 because production of cotton In 1976 was very poor.

The analysis of residual in order to determine the factors giving rise to it, we require a time series of the residuals and its regressors. Therefore., we had to go back as far allowed by the data availability. We have used 1964-76 period, because data are not available for the years before 1964.

SECTION - III

EMPIRICAL RESULTS

The results of the decomposition of export performance into its various components, are shown in Table I. The first column shows changes in the exports over 1972 to 1976 period. The second column shows expected increase in the exports of Pakistan had they increased at the growth rate of the world trade. The effect of concentration of trade in specific products on the exports is shown in the third column. In the fourth column, 'residual' is shown. The last column shows the difference between the trend world growth rates of a specific product and total trade.

Table I shows that the decline in exports from 1972 to 1976 is mainly due to concentration of Pakistan's trade in the products for which growth in the world demand was very sluggish and a number of factors giving rise to a negative 'residual'. It may be noted that during 1972-76 period, exports of cotton yarn and thread, cotton fabrics, leather and leather products, toys, games and sporting goods, fish and meat, non-metallic minerals, hides and skins, wool and animal hairs, and crude animal material declined significantly. Demand for most of the commodities exported by Pakistan has grown at a relatively slower rate compared to the growth rate of world trade though in case of rice, raw cotton, petroleum products, oils and animal fats, plastic and rubber products, demand did grow quite rapidly. However, it may be noted that even in the case of these latter commodities prospects of future growth in demand are not very bright because of their nature.

Table I: EXPORT GROWTH FROM 1972-1976

Commodity	Actual Change Exports (Rs. in '000)	World trade Effect (Rs. in '000)	Commodity composition Effect (Rs. in '000)	Residual (Rs. in '000)	$(g_i^* - g^*)$
Rice	2446.25	379.81	542.88	1523.56	0.013
Raw cotton (1972-75)	3208.60	608.48	1162.74	1437.38	0.017
Raw cotton (1972-76)	-5665.98	1363.68	191.33	-7220.99	0.017
Cotton yarn & thread	-2261.54	1022.74	-1631.22	-1653.07	-0.013
Cotton Fabrics	-67.21	589.54	-764.92	108.16	-0.078
Leathers products	-622.95	433.90	-605.00	-450.85	0.161
Toys games & sporting goods	-473.64	95.53	-147.63	-421.54	-0.085
Carpets & Tapestries	680.42	201.67	-221.67	700.42	-0.524
Fish and Meat	-205.96	177.56	-325.01	-58.51	-0.111
Other Foods	32.14	45.05	-13.63	0.71	-0.013
Tobacco and Products	27.08	46.04	-62.41	43.45	-0.058
Non-metalic minerals	-27.62	44.56	-128.00	55.82	-0.104
Hides and Skins	-110.72	50.10	-52.31	-108.51	-0.096
Petroleum and Products	186.95	52.01	316.14	181.19	-0.490
Oils and Animal fats	154.93	2.99	5.86	149.07	0.027
Wool and Animal hairs	-117.58	52.64	-92.92	-77.31	-0.155
Crude animal material	-45.36	29.54	-51.18	-23.72	-0.105
Crude vegetable material	172.78	38.19	-42.33	176.93	-0.056
Chemicals	19.36	23.04	-21.04	17.36	0.001
Plastic & rubber material	16.51	2.36	0.26	13.89	-0.008
Paper and board	5.31	6.96	-5.77	4.11	-0.045
Metal and Products	6.79	5.77	-2.86	3.88	-0.015
Electrical Machinery	2.58	4.23	-0.02	-1.62	-0.005
Non-Electrical Machinery	1.81	8.60	-4.21	-2.58	-0.013
Wearning apparel	643.96	43.65	-25.54	625.84	-0.032
Printed matter	8.62	3.41	-4.49	9.70	-0.056
Other textile	373.22	177.22	-309.01	505.01	-0.092
Total Change	-1611.21	5509.22	-2291.96	-4824.6	

g^* and g_i^* are trend growth rates for the total world export and of export of ith commodity.

This clearly suggests that Pakistan should diversify her exports in such a way that those products for which the demand is growing rapidly should constitute a larger proportion of the total exports. Since due to non-availability of data, we could not incorporate market distribution in our anlaysis, the 'residual' shows the impact of domestic policies as well as of the market distribution. The fact that the 'residual' is negative signifies that country has lost its due share. Consequently, it follows that unless Pakistan pursues vigorous policies to boost and divert her exports to rapidly growing markets it would be very difficult for Pakistan even to increase or even to maintain her share. These measures include market surveys, credit assistance for adjustment to structural changes, and more favourable exchange rate for exports etc.

Since the CMS analysis takes into consideration only the base and terminal years, the results can be sensitive to the choice of period. Therefore, we have conducted a sensitivity analysis by changing the base year to 1973. The results show that although the magnitude of change is affected a little, the direction of change is unaffected. Therefore,the results obtained by 1972 as base years are not biased by the choice of base.

CHANGES IN PAKISTAN'S SHARE OF EXPORTS OF SELECTED COMMODITIES IN DOMINANT MARKETS

Because for a number of products necessary data were not available, we had to restrict the CMS anlaysis including 'market distribution' to rice, raw cotton, cotton yarn and thread, cotton fabrics, other textiles, wearing apparel, leather and leather products, carpets and tapestries, and toys, games and sporting goods. Results

of this exercise are reported in Appendix table I to 9.

During the period 1972 to 1976 the exports of rice, other textiles, wearing apparel, and carpets and tapestries increased significantly. The increase in exports of these products are mainly due to an increase in demand for these commodities in the importing countries. However, this is only a partial explanation as the residual is positive In all of the cases, which signify that various measures taken by the government to improve competitiveness has played a major role.

The exports of raw cotton, cotton yarn and thread, leather and leather products, and toys, games and sporting goods decreased largely due to the decline in world demand. However, there have been other factors giving rise to a decline in the exports. In the case

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of raw cotton the domestic supply bottlenecks have caused the decline In exports. Though in the case of cotton yarn and thread, leather and leather products, and toys,, games and sporting goods world demand has been gorwing very slowly, yet the growth in demand for the products in the countries importing from Pakistan has not been all that small. Pakistan has been unable to increase its share due to bias against these exports in the government policies that drove them out of competition in the world markets.

The exports of cotton fabrics Is almost stagnant, despite the fact that in the world market demand has decI ined. This may be to the reduction in the export duties during this period, which gradually improved its competitive position in the world markets.

4. However, exports of raw cotton have increased over the period 1972 to 1975.

A FURTHER ANALYSIS OF THE RESIDUAL

As said earlier the growth of exports can be decomposed into four components viz. world trade effect, commodity composition effect, market distribution effect and a 'residual'. Accounting for the effect of first three components we are left with the 'residual' i.e. unexplained part of the export performance. The 'residual'reflects the effects of policies an exporting country pursues to improve its competitiveness in world market and the supply situation in the country. In this section, we analyse the factors determining the 'residual'. The analysis is limited to rice, raw cotton, cotton yarn and thread, and cotton fabrics because required data for other products are not available.

We have regressed 'residual' against effective exchange rate and exportable surplus. Ordinary Least Square (OLS) method is used to estimate the relation but where the serial correlation exists, Generalised Least Square (GLS) method has been used. Cotton yarn and thread, and cotton fabrics were estimated by OLS method, while in case of rice and raw cotton we had to use GLS.

It is clear from table 2 that in case of rice, cotton yarn and thread, and cotton fabrics, is explained largely by the changes in effective exchange rate. These results suggest that subsidies provided to the exporters of rice made them more competitive in the world market and thus resulting in the rapid export growth while the duties on cotton yarn and thread and cotton fabrics has made them incompetitive in the world market and consequently their exports have fallen, on the other hand exportable surplus has turned out to be statistically insignificant,

which implies that there was sufficient exp-ortable surplus to meet the demand at the going price. Exportable surplus turns out to be the most significant and dominant variable In explaining the 'residual' in the case of raw cotton. Real effective exchange rate turns out to be an insignificant variable in explaining the growth of exports of raw cotton. This is mainly a reflection of the fact that when the cotton crop was poor, by administrative decisions, the cotton exports were banned. Moreover, domestic production is insulated from the international market prices by fixing the domestic prices by the government.

Table 2: REGRESSION RESULTS

Commodity	Sample size	Dependent variable	Coefficient of EE_{xi}	Coefficient of S_{xi}	Constant	R^2	F	D.W	ρ	Method
Rice	12	U_i	9.15 (2.41)	0.168 (0.69)	-0.023	0.436	3.476	2.67	-0.122	GLS
Raw cotton	9	U^*_i	-0.0516 (-1.35)	3.76 (6.15)	-4.119	0.872	20.353	1.853	0.471	GLS
Cotton yarn and thread	12	U^*_i	2.85 (2.23)	-0.047 (-0.076)	0.845	0.373	3.678	2.312	-	OLS
Cotton fabrics	12	U_i	5.14 (2.755)	2.72 (0.181)	9.93	0.240	1.411	2.335	-	OLS

Note: The figures in parenthesis underneath coefficients are t statistics
The equation with star are estimated in log linear form.

SECTION - IV

POLICY IMPLICATIONS

Pakistan's balance of payment has always been in deficit except for the years 1955-56 and 1972-73. In order to industrialise the country, Pakistan had to import capital goods and intermediate goods as the capacity to produce these two types of commodities in the country is extremely limited. However, the exports have not grown that rapidly to finance the increasing import bill.

The scope of reduction in imports in Pakistan is quite limited because of the characteristics of imports which are either imports of food-grains or they are such imports that their reduction would lead to a decline in the growth rate of Gross National Product. There can be a significant decline in imports only if vigorous import substitution activity takes place in intermediate and capital goods industry. Therefore, it follows that in order to narrow the differential between imports and exports, we hve to rely largely on increasing the exports.

Virtual stagnation in exports during the period from 1972-76 has been due to a number of factors of which the main factor is the concentration of trade in few products most of which the main factor is the concentration of trade in few products most of which are traditional and for which the demand has not been growing fast in the world market. Not only that, demand for these products has been growing even more sluggishly inthose countries which have been importing from Pakistan. It is, therefore, inevitable that unless we shift our reliance from these traditional to non-traditional products and from sluggishly growing markets to rapidly growing markets there is not

much scope of the export expansion. A switch over to commodities showing favourable trends in the world market and from old markets growing sluggishly to new markets growing rapidly is a must.

In order to boost exports, the Government of Pakistan will have to take measures both to enable the exporters to break into new markets and to bring about a switch over from traditional to non-traditional commodities via a change in the structure of incentives.

As regards the measures which the Government can take to capture new markets and strengthen the existing markets, the Government may enforce very strict equality control because, they are a must to win over the importers. Similarly, efforts will have to be made to fulfil export orders promptly because non-fulfilment of the orders in time amounts to an increase in the cost to importers. Government can set up information agencies to gather data on export possibilities and then propagate it to the domestic producers. This would lead to an increase in information regarding the existance of international markets for the products produced in Pakistan. Similarly, propagation is essential in the importing countries to introduce Pakistani products to generate demand. Moreover, the foreign import regulations, market surveys, studies of consumption trends and elaboration of the products and certain other measures can help in exploration of new markets.

As regards enabling the producers to be competitive in the world market, the Government will have to provide subsidies to overcome the over-valuation of exchange rate, which is around ten percent at present {10}. It may be noted that net protective margin on import substitution is about 30 per cent which shows a bias against exports and leads to the flow of resources away from export oriented industries{10}

Similarly, the incentive to traditional exports are significantly large compared to those given to non-traditional exports. Which should be reversed.

It must be mentioned here that all the measures suggested above would lead to an increase in the exports if and only if there is a sufficient exportable surplus because these measures can only divert supplies from domestic to the world market.

SECTION - V

CONCLUSION

In this study we have analysed the main forces behined the decline in exports over the period 1972-76, and have came to the conclusion that the decline in exports can be attributed to two main factors, viz. unfavourable commodity composition effect and the bias against exports in the government policies. In the case of most of Pakistani exports, it is observed that the export demand for them is not increasing that fastly as the total world exports are growing; rice and raw cotton are the two exceptions. However, even in the case of rice and raw cotton the demand is growing sluggishly in the countries importing these products from Pakistan. Therefore, Pakistan will have to explore new markets which can absorb increased exports. On the other hand exports of cotton yarn and thread, cotton fabrics, other textiles, carpets, leather and leather products, toys, games and sporting goods, and wearing apparel, are going to the markets where demand for these commodities is growing rapidly.

A further analysis of the export performance, by studying more intensively the 'residual' shows that the improved competitiveness in the world market helped by the incentives provided to the exporters led to an increase in export of rice and duties on cotton yarn and thread, and cotton fabrics has led to a decline in exports. However, exportable surplus has turned out to be statistically insignificant variable implying that there was sufficient exportable surplus to meet the world demand at going price. On the other hand, in case of raw cotton exportable surplus turn out to be most significant determinant of exports, while, real

effective exchange rate turns out to be an insignificant variable.

Finally, it may be noted that the conclusions reached in this study are based on the analysis of 1972-76 period. Due to non-availability of data for the other countries, it was not possible to extend the analysis. Since in the period under consideration, the exports fell, while the exports have grown at an annual compound rate of 1.72 per cent since 1976, one may wonder about the ability of the study. However, it should be noted that the analysis remains unaffected, because even now the Pakistan is concentrating on traditional goods. Therefore, the conclusions reached earlier remain valued.

APPENDIX TABLE I: EXPORT GROWTH OF RICE IN DOMINANT MARKET AREAS
1972 - 76"

(Rs. in 000)

Country	Actual change in Exports	World Trade Effect	Commodity composition Effect	Market distribution Effect	Residual
Far East					
Hong kong	0.21	0.02	0.03	1.37	-1.22
Singapore	-0.86	3.14	4.48	-12.75	4 27
Indonesia	110.29	28.57	40.84	-97.74	138.62
Sri-Lanka	447.48	20.57	29.40	110.12	287.40
North America					
Canada	3.16	0.03	0.04	-0.03	3.12
U.S.A.	4.44	6.09	0.12	-0.58	4.18
EEC					
W. Germany	13.06	0.01	0.02	0.0005	13.03
U.K.	-11.85	6.68	9.54	-17.21	-10.86
OCEANIA					
Australia	2.14	0.24	0.35	0.28	1.27
Middle East					
U.A.E.	157.48	4.04	5.78	3.11	144.55
Kuwait	-497.81	169.02	241.60	-602.12	-306.31
Yemen	-30.57	9.89	14.14	5.88	-60.48
Saudi Arabia	341.05	39.72	56.77	-153.59	398.15
Other countries	1926.03	91.79	131.20	473.28	1229.75
Total change	2474.25	379.81	534.31	-289.98	1846.1

APPENDIX TABLE 2: EXPORT GROWTH OF RAW COTTON IN DOMINANT MARKET AREAS 1972 - 75

(Rs. in 000)

Country	Actual change in Export	World Trade Effect	Commodity composition Effect	Market distribution Effect	Residual
Middle East					
Saudi-Arabia	2.24	0.1503	0.28	0.24	1.56
Far East					
Hongkong	-770.86	139.58	266.74	361.38	-1538.53
Japan	-1735.81	205.79	393.28	-1714.89	-619.99
Singapore	-14.43	7.77	14.85	-12.26	-54.79
Indonesia	149.26	0.32	0.60	-3.43	151.76
Srilanka	-14.82	1.87	3.53	-15.63	-4.63
Thailand	-108.13	12.04	23.01	-13.38	-129.80
North America					
U.S.A.	-115.97	10.71	20.45	-76.37	-70.77
E.E.C					
Belgium	-34.34	4.07	7.78	-34.62	-11.57
Denmark	0.54	0.02	0.05	-0.24	0.70
France	-123.08	11.78	22.51	-80.87	-76.49
W.Germany	-64.90	6.38	12.19	-38.69	-44.77
Italy	-52.43	5.33	10.18	-35.03	-32.90
Netherlands	-148.01	14.05	26.84	-115.79	-73.10
U.K.	-233.92	23.48	44.87	-172.44	-129.83
E F T A					
Switzerland	-50.94	4.74	9.05	-28.15	-36.57
Other Europe					
Czechoslovakia	-1.88	2.01	3.84	3.33	-11.06
Yugoslavia	-288.39	29.79	56.94	-129.44	-245.68
OCEANIA					
Australia	-13.07	1.60	3.06	-14.08	-3.65
Other countries	6857.54	127.00	242.68	-559.29	7047.14
Total Change	3208.6	608.48	1162.73	-2679.65	4117.03

APPENDIX TABLE 2(a): EXPORT GROWTH OF RAW COTTON IN DOMINANT MARKET AREAS 1972 - 76

(Rs. in '000)

Country	Actual Change in Exports	World Trade Effect	Commodity composition Effect	Market distribution Effect	Residual
Middle East					
Saudi-Arabia	4.62	0.34	0.05	-1.17	5.40
Far East					
Japan	-25628.68	461.19	64.71	-11798.44	-14356.14
Hongkong	-1305.40	312.80	43.89	-1085.59	-576.51
Singpore	-74.03	17.41	2.59	95.82	-189.70
Indonesia	17.41	0.71	0.11	-0.04	16.63
Thailand	-123.87	26.99	4.01	61.54	-215.19
North America					
Canada	-10.67	2.21	0.33	-4.50	-8.70
U.S.A.	-116.86	23.99	3.57	7.14	-151.36
EEC					
Belgium	-31.96	9.13	1.36	-14.48	-27.89
Denmark	0.38	0.06	0.01	-0.12	0.44
France	-114.15	26.39	3.93	-29.60	-114.63
W.Germany	-69.26	14.29	2.13	14.88	-100.44
Italy	-47.87	11.94	1.67	-32.55	-28.93
Netherlands	-155.56	31.48	4.68	-42.14	-149.32
U.K.	-248.57	52.62	7.83	-146.09	-162.48
E F T A					
Switzerland	-52.08	10.61	1.58	43.15	-107.33
Other Europe					
Yugoslavia	-329.97	66.77	9.93	-69.52	-336.59
OCEANIA					
Australia	-13.50	3.59	0.53	-13.69	-3.90
OTHER COUNTRIES	-962.83	291.16	40.85	153.01	-1447.85
Total change	-2926.84	1363.68	193.76	-127788.11	-17914.49

APPENDIX TABLE 3: EXPORT GROWTH OF COTTON YARNS AND THREAD IN DOMINANT MARKET AREAS 1972 - 76

(Rs. in 000)

Country	Actual Change in Exports	World Trade Effect	Commodity composition Effect	Market distribution Effect	Residual
Middle East					
Saudi-Arabia	4.78	2.19	-3.47	N.A.	N.A
Far East					
Hongkong	-388.29	386.42	-613.07	1072.87	-1234.51
Japan	-683.96	243.00	-385.52	843.32	-1384.76
Singapore	-79.41	24.57	-38.98	14.78	-79.78
Sri Lanka	-6.16	3.74	-5.93	N.A.	NA.
North America					
Canada	-2.88	0.75	-1.19	0.19	-2.62
U.S.A	-4.44	2.93	-4.66	-8.15	5.45
E E C					
Belgium	-43.87	13.83	-21.95	796.21	-831.96
Denmark	-1.22	0.29	-0.46	0.28	-1.32
France	-47.62	11.66	-18.50	21.37	-62.07
W.Germany	-127.89	28.88	-45.81	45.81	-156.52
Italy	-117.10	28.52	-45.25	22.63	-122.76
Netherlands	-8.43	2.55	-4.05	1.01	-7.92
U.K.	-45.50	14.91	-23.65	-9.61	-27.02
E F T A					
Sweden	-3.63	0.79	-1.25	0.08	-3.24
Switzerland	-9.08	2.12	-3.36	4.62	-12.44
Other Europe					
Czechoslovakia	13.17	2.17	-3.29	N.A	NA.
Hungary	-43.30	9.86	-15.65	44.99	-82.42
Yugoslavia					
OCEANIA					
Australia	4.96	0.60	-0.91	1.03	4.28
OTHER COUNTRIES	-471.54	424.96	-387.51	-674.55	165.56
Total change	-2061.41	1204.74	-6124.46	2176.88	-3834.05

APPENDIX TABLE 4: EXPORT GROWTH OF COTTON FABRICS IN DOMINANT MARKET AREAS
1972 - 76

(Rs. in 000)

Country	Actual Change in Exports	World Trade Effect	Commodity composition Effect	Market distribution Effect	Residual
Middle East					
Saudi-Arabia	39.72	17.22	-22.20	39.28	5.56
Far East					
Hongkong	79.37	12.03	-15.51	35.19	47.76
Japan	58.57	14.02	-18.20	-6.95	-47.45
Singapore	-3.45	13.30	- 17.15	-0.66	1.14
North America					
Canada	-46.59	33.57	-43.27	-1.66	-34.94
U.S.A.	38.81	93.76	-121.65	-79.02	145.72
E E C					
Belgium	11.27	0.82	-1.06	1.67	9.85
Denmark	-23.15	5.77	-7.44	13.46	-34.89
France	28.64	7.44	-9.60	26.94	3.91
W.Germany	33.70	9.46	-12.19	36.11	0.41
Italy	13.63	11.72	-15.11	34.28	-17.17
Netherlands	8.94	7.08	-9.12	11.23	-0.18
U.K.	-66.00	96.79	-124.76	-115.17	77.97
E F T A					
Sweden	3.45	3.16	-4.08	0.00	4.39
Switzerland	36.84	10.14	13.07	29.66	-63.48
Other Europe					
Yugoslavia	-7.27	5.33	-6.92	5.55	-11.23
Czechoslavakia	57.74	12.42	-27.59	N.A.	N.A.
Hungary	-64.04	21.40	-27.77	72.16	-129.83
OCEANIA					
Australia	-3.60	10.77	-13.89	0.53	-0.93
Other countries	42.51	203.34	-263. 83	-171.39	274.38
Total Change	-67.21	589.536	-774.41	-68.79	230.99

APPENDIX TABLE 5: EXPORT GROWTH OF OTHER TEXTILE IN DOMINANT MARKET AREAS 1972 - 76

(Rs. in, 000)

Country	Actual Change in Exports	World Trade Effect	Commodity composition Effect	Market distribution Effect	Residual
Middle East					
Saudi-Arabia	184.62	13.27	-23.03	-42.76	237.25
Far East					
Hongkong	-31.29	6.72	-11.66	10.99	-37.29
Japan	17.37	8.36	-14.51	2.07	21.52
Singapore	1.41	1.29	-2.24	-0.32	-0.13
Srilanka	-2.08	0.46	-0.81	NA.	N.A
Thailand	0.03	0.01	-0.02	-.0015	0.04
North America					
Canada	3.25	3.50	-6.07	-0.35	16.20
U.S.A	16.83	22.32	-38.73	-35.41	68.84
E E C					
Belgium	11.15	0.92	-1.59	4.82	6.74
Denmark	-2.67	1.00	-1.74	-0.35	-1.57
France	4.08	1 51	-2.63	-0.08	5.28
West Germany	11.58	5.94	-10.30	13.24	2.75
Italy	4.11	1.09	-1.90	-2.76	7.69
Netherlands	12.56	0.77	-1.33	0.27	12.86
U. K.	-0.14	5.51	-9.56	-12.84	16.79
E F T A					
Sweden	17.69	1.14	-1.98	-2.43	20.97
Switzerland	1.22	0.55	-0.96	0.35	1.27
Other Europe					
Czechoslovakia	-7.13	3.17	-5.51	N A	N. A.
Yugoslavia	-0.11	0.81	-1.41	-0.28	0.78
OCEANIA					
Australia	1.84	0.40	-0.69	0.24	1.94
Other countries	121.72	98.48	-171.70	-9.76	204.72
Total Change	373.25	177.22	-308.37	-75.36	586.66

APPENDIX TABLE 6: EXPORT GROWTH OF WEARING APPAREL IN DOMINANT MARKET AREAS 1972 - 76

(Rs. in, 000)

Country	Actual Change in Exports	World Trade Effect	Commodity composition	Market distribution Effect	Residual
Middle East					
Saudi-Arabia	50.99	0.48	-0.28	0.66	50.09
Far East					
Japan	12.72	0.83	-0.49	4.41	7.90
Singapore	-0.05	0.23	-0.14	0.64	-0.80
North America					
Canada	34.08	2.07	-1.23	6.15	26.90
U.S.A.	145.55	8.18	-4.87	-5.28	146.77
EEC					
Belgium	14.82	0.46	-0.27	1.05	13.54
Denmark	8.75	0.68	-0.40	2.38	6.04
Frances	42.78	1.77	-1.05	2.64	39.26
W.Germany	69.14	2.96	-1.45	6.28	61.35
Italy	37.20	0.66	-0.32	1.27	38.15
Netherlands	35.69	0.96	-0.57	1.29	33.93
U.K.	53.31	5.93	-2.90	-7.44	57.72
E F T A					
Sweden	30.78	1.11	-0.66	1.42	28.86
Switzerland	8.11	0.34	-0.20	0.75	7.19
OCEANIA					
Australia	10.87	2.00	-1.19	11.43	-1.57
Other countries	89.18	14.45	-14.18	-32.50	121.42
Total change	644.37	43.11	-30.2	-4.85	636.75

APPENDIX TABLE 7: EXPORT GROWTH OF LEATHER AND LEATHER PRODUCTS AREAS 1972 - 76

(Rs. in, 000)

Country	Actual Change in Exports	World Trade Effect	Commodity composition	Market distribution effect	Residual
Middle East					
Saudi Arabia	0.031	0.78	-1.08	-2.23	2.64
Far East					
Hongkong	0.29	0.07	-0.10	0.07	0.21
Japan	-91.30	55.29	-77.23	145.29	-214.66
Singapore	-0.23	0.06	-0.08	0.25	-0.45
North America					
Canada	1.28	0.01	-0.02	0.03	1.26
U.S.A.	-23.07	5.46	-7.63	-3.25	-17.65
E E C					
Belgium	-5.75	1.78	-2.48	1.06	-5.87
Denmark	3.84	0.55	-0.76	0.98	3.03
France	-97.29	34.68	-48.43	128.94	-212.48
Germany	21.81	10.76	-15.03	18.68	7.40
Italy	-77.21	102.10	-142.59	-15.19	-21.53
Netherlands	-5.47	2.06	-2.85	-0.20	-5.00
U.K.	-82.2	20.77	-29.01	-20.59	-53.37
E F T A					
Sweden	-29.43	18.16	-25.36	17.11	-39.33
Switzerland	0.03	0.44	-0.62	0.40	-0.18
Other Europe					
Czechoslovakia	-0.57	0.33	-0.46	N.A	N.A.
OCEANIA					
Australia	-10.54	2.87	-4.00	3.69	13.10
Other countries	-248.22	177.63	-248.08	-75.74	-102.03
Total Change	-643.99	433.00	-605.81	199.3	-671.11

APPENDIX TABLE 8: EXPORTS GROWTH OF CARPETS AND TAPESTRIES IN DOMINANT AREAS 1972 - 76

(Rs. in, 000)

Country	Actual Change in Exports	World Trade Effect	Commodity composition effect	Market distribution effect	Residual
Middle East					
Saudi Arabia	10.56	0.42	-0.45	2.18	8.42
Far East					
Hongkong	-4.82	2.16	-2.36	4.82	-9.44
Japan	1.92	0.16	-0.18	-0.03	1.97
Singapore	-6.75	2.46	-2.68	1.10	-7.63
Thailand	-0.11	0.10	-0.11	N.A.	NA.
North America					
Canada	-8.58	2.54	-2.77	3.40	-11.73
U.S.A.	-44.89	22.14	-24.15	-18.66	-24.22
E E C					
Belgium	44.97	2.02	-2.20	3.90	41.27
Denmark	30.04	3.04	-3.31	14.30	16.01
France	103.44	1.72	-1.88	4.27	99.33
West Germany	332.23	62.28	-67.93	58.67	279.28
Italy	21.03	5.08	-5.55	-5.80	27.30
Netherlands	31.77	1.58	-1.73	1.41	30.51
U.K.	-67.93	28.12	-30.67	-44.62	-20.76
E F T A					
Sweden	29.27	0.98	-1.07	0.78	28.58
Switzerland	98.49	18.82	-20.53	32.67	67.52
Other Europe.					
Yugoslavia	1.16	0.36	-0.39	N .A	N.A.
Oceania					
Australia	19.19	3.00	-3.27	6.10	13.36
Other countries	116.35	44.69	-49.12	-48.74	169.53
Total Change	705.02	201.67	220.05	15.75	709.30

APPENDIX TABLE 9: EXPORTS GROWTH OF TOYS GAMES AND SPORTING GOODS IN DOMINANT MARKET AREAS 1972 - 76

(Rs. in, 000)

Country	Actual Change in Exports	World Trade Effect	Commodity composition effect	Market distribution effect	Residual
Middle East					
Saudi Arabia	1.57	0.71	-1.09	0.71	1.24
Far East					
Hongkong	-0.07	0.04	-0.07	0.14	-0.18
Janan	0.05	0.21	-0.33	-0.71	0.88
Singapore	0.49	0.16	-0.24	0.50	0.08
North America					
Canada	1.08	1.80	-2.76	4.98	-2.93
U.S.A.	-12.88	10.50	-16 .14	-4.17	-3.00
E E C					
Belgium	-2.55	1.91	-2.93	5.01	-6.47
Denmark	0.75	1.11	-1.71	4.69	-3.33
France	7.87	6.32	-9.71	17.85	-6.53
W.Germany	-22.81	14.36	-22.07	41.28	-56.26
Italy	-21.01	7.36	-11.32	-3.65	-13.34
Netherlands	-1.55	3.44	-5.29	6.49	-6.14
U.K.	-16.12	11.96	-18.38	-5.93	-3.67
E F T A					
Sweden	-3.86	3.57	-5.49	6.02	-7.93
Switzerland	-3.98	1.46	-2.24	5.29	-8.47
OCEANIA					
Australia	-7.22	3.42	-5.26	15.11	-20.46
Other countries	391.98	26.70	-41.26	-11.52	q 418.06
Total Change	321.38	95.03	-146.29	82.09	281.55

APPENDIX TABLE 10

Year	Exchange Rate	Export Bonus (in percentage)				Export Duty (in percentage)				Average Bonus Premium (Rs.)
			Cotton				Cotton			
		Rice	Raw	Yarn	Fabrics	Rice	Raw	Yarn	Fabrics	
1964-65	1.0133	20		20	30					150
1965-66	0.9580			20	30					150
1966-67	0.9584			15	30					159
1967-68	1.0098			30	40					170
1968-69	1.0398			30	40					187
1969-70	1.0049	10.0	10.0	30	40					188
1970-71	0.9727	11.8	10.5	35	45					188
1971-72	0.9670			35	45	40.5	-	11		193
1972-73	0.4406					19.0	35	20	8.43	
1973-74	0.4651					13.9	45	44	7.402	
1974-75	0.4550					21.1	35		5.43	
1975-76	0.4850					25.5	35			
1976-77	0.4828						25	67.67		

Source: i) Kemal, Nishat and Faiz Bilquees "Effective Exchange Rate and Growth of Exports" an Unpublished paper, Pakistan Institute of Development Economics, 1980.

ii) Ishrat Hussain, "Industrial Growth and Export Expansion: The case of West Pakistan", Pakistan Development Review, Vol. xiii, Autumn 1974.

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