External Determinants of Growth and Growth Projections: SAARC and Pakistan

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INTRODUCTION

The world is increasingly being divided into regions. The regional trading blocs are becoming more and more deepened and widened around the globe. The European Union (EU) has already reached a stage approximating to the trading relations usually found within a country rather than between the countries. The existence of regional economic groups, particularly in European and American continents, pose a range of theoretical, empirical and organisational questions for developing countries like Pakistan who depend on the countries of these regions for a significantly high share of their international trade. This paper focuses on the prospects of extended economic cooperation of Pakistan with the member countries of the South Asian Association for Regional Cooperation (SAARC).[1] The argument is structured around three parts. Part I reviews the theoretical rationale of regional economic cooperation and the recent developments shaping the trading relations within the cooperating blocs. Part II critically evaluates the relative size and significance of the external sector of the SAARC region countries, along with presenting statistical estimates of the major external determinants of the region's economic growth. Finally, Part III estimates the relationship of major directions of Pakistan's exports with the economic growth of the country and presents the growth projections by increasing and diverting the exports to the SAARC and ASEAN region countries.

I.

A region combines internal liberalisation and external defining or strengthening of a unit within the multilateral system, and is therefore very different from either single-country or multilateral liberalisation [Page (2000)]. The benefits of multilateral trade under a regulatory system, which ensure that liberalisation is implemented and maintained, are well supported in economic theory. During the Uruguay Round, however, the question was raised of whether

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[1]The SAARC countries include Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.

rationalisation was or should be an alternative to global free trade and the concern continues to develop ever after the Round's successful conclusion.[2]

The basic analysis of the effects of regional cooperation on the member countries and the rest of the world dates from Viner (1950). By liberalising trade among themselves, countries are able to substitute for home production by importing goods produced at lower cost in other members. This increases both production and consumption and creates trade. Income is increased by the availability of the lower cost goods, and production is shifted from the less to the more efficient location. If, however, one country imported previously from a non-member country, but the removal of tariffs on imports from fellow members means that imports from them are now cheaper to the purchaser, then trade will be diverted from the more efficient outside supplier to the less efficient one within the group. The country looses: although there is a consumption gain from the cheaper imports, it does not receive the tariff revenue, while the production is shifted from a more efficient to a less efficient location. The trade-creating or diverting effects may appear instead as investment-creating or diverting, if investment moves to take account of new market and cost structures. However, a variety of non-economic motives are also behind the regional integration agreements.[3] Indeed, the argument that trading binds countries together and therefore increases security dates at least from Adam Smith's view that commerce promoted peace. Therefore, if along with improving welfare through trade, the objectives of the region also include other development or strategic purposes, and if other countries/regions also have non-trade objectives, then diversion and creation must be extended to non-economic results.[4] Finally, for countries to join together to form a region, it is normally assumed that all must gain relative to not joining.

Although the traditional analysis of trade creation and diversion is based on a view of the world in which inter-country trade is driven entirely by differences in productivity and in factor endowments, trade can also arise from product differentiation and economies of scale, which reduce costs as production grows. Then import barriers become even more costly because competition between firms is weakened and consumers lose from the resulting decreases in output and increases in price. International trade offers an important means of increasing competition by allowing new suppliers to enter markets. The regional blocs, by fostering trade between members, can generate such benefits because of the combination of larger firm size (which increases economies of scale) and a larger number of firms (which increases competition). When several national markets are merged, the number of producers in each country may fall, while the number

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[2]It may also be argued that the initial failures and subsequent difficulties which lengthened the Uruguay Round of trade talks itself encouraged regions as alternative approaches to lowering trade barriers. Furthermore, the countries in the effectively operational regional groups are better able to secure their objectives at WTO forums.

[3]These are witnessed by the agreements where gain from trade seem very small, or where some countries actually receive payments to compensate for trade losses. If trade were the sole motive, the only reason for compensating payments to be made would be if some countries actually lost, or gained much less, but needed to be included to provide gains to others. Formal compensation payments are included in very few regional agreements, but they are rarely based on trade [see, Page (2000)].

[4]Measuring the quantifiable trade and investment effects nevertheless remains a useful check on the economic costs of other objectives to members and gives part of the effects of regions on third parties.

of sellers with reasonable access to each market rises because producers from partner countries now have access. These so-called pro-competitive effects appear to have operated strongly during the last quarter of the 20th century, resulting in an unprecedented move toward regionalism. These developments have occurred against the backdrop of globalisation: new technologies and more liberal trading regimes have led to higher trade volumes, larger investment flows, and increasingly *footloose* production. Presently, almost all countries are members of a bloc, and many belong to more than one. More recently, there has been a surge of Regional Trade Agreements (RTAs): about 162 RTAs are in force as of 2002 with over half of those coming into existence after 1995. The World Trade Organisation (WTO) estimates that over 300 will be in effect by 2007.[5] At their simplest, these agreements merely remove tariffs on intra-bloc trade in goods, but many go beyond that to cover non-tariff barriers and to extend liberalisation to investment and other policies. At their deepest, the regional blocs have the goal of economic union and involve the construction of shared executive, judicial, and legislative institutions. Such "deep integration" was first actively pursued in the Single Market Programme of EU, but its elements are now finding their way into the debate on other regional agreements.[6]

Finally, there are no rules for policy toward regionalism that are both universal and operational—the universal rules are so broad as to be non-operational, and the operational rules are too specific to be universal. Regionalism still remains a very fertile area for research. Although the existing literature is huge, there is no consistency in the methodologies and intellectual bases of the research or in its conclusions. Indeed, the world of multiple trading blocs is still too new to permit a definitive empirical answer. The authors' approach in the following is also a very limited one. The major concern is the importance of the external sector in the economic growth of the SAARC region countries and the significance of intra-region trade in the economic growth of Pakistan.

II.

The SAARC region, home to nearly a fifth of humanity, is endowed with vast natural and human resources. It has the potential of becoming a vibrant region in the world, given its enormous resources in manpower, technology, agricultural and mineral assets, its history and civilisation, arts and culture.[7] The authors believe that extended economic and cultural intra-regional exchanges

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[5]See, "Proliferation of regional trade agreements—Implications for multilateral regime", WTO Website: http://www.wto.org/english/tratop_e/region_e/regfac_e.htm.

[6]For example, in the Americas the Canada-United States Free Trade Agreement of 1988 was extended to Mexico in 1994 through North American Free Trade Area (NAFTA); Common Market of the South (Mercado Común del Sur–MERCOSUR) was formed in 1991 and the Group of Three (G3) in 1995; and the Andean Pact and the Central American Common Market (CACM) were resurrected in 1991 and 1993, respectively. In 1992 the countries of the Association of Southeast Asian Nations (ASEAN), after 25 years of political cooperation with limited trade cooperation, formed a meaningful FTA, the ASEAN Free Trade Area (AFTA). Since then, additional countries have joined AFTA, which has also started talks with China.

[7]The SAARC region's promise is supported by a historical finding which shows that in AD 1000, Asia, except Japan, accounted for more than two thirds of the world GDP based on the strength of the Chinese and Indian civilisations [see, Madison (2000)].

within the framework of SAARC can realise much of this potential. But, unfortunately, not only that the member countries have so far failed to make a concrete move toward that end, the region's share in international trade as a whole is also not commensurate with its *headcount* size in the world market. Furthermore, the relative share of the intra-region trade of the SAARC countries remains regrettably low in their total international merchandise exchange. The figures listed in Table 1 provide a vivid picture of the region's relative share in international trade, from 1990 to 2002, and the relative size of its foreign direct investment flows (FDI), from 1991 to 2002. Table 1 also lists the share of intra-region trade in SAARC countries' total exports and imports. The figures show that the region as a whole could only manage below one percent share in world exports in eleven years to 2000, except for the marginal increase over one percent listed for the last two years of the period. The region's share in world imports also shows a consistent trend of a little over one percent throughout the period reported in Table 1. The relative size of region's exports and imports share in world trade provides the estimate of its share in the world trade gap which shows a persistent deficit ranging between 18–33 percent, with most of the figures falling in the upper range.

The SAARC region is a global partner in merchandise transactions as well as in the flows of foreign investment, and the global trends and prospects affect its member countries also through growing integration of capital markets.[8] The figures listed in Table 1 show that the relative size of FDI flows to the SARRC region is much smaller compared to Asia and developing countries where these flows contributed 10 to 15 of total gross fixed investment. Moreover, the quality of FDI inflows is more important than their magnitude because all kind of FDI flows do not benefit the host country in a similar manner [Kumar (2002)]. Export orientation of the FDI inflows could be in particular an indicator of the quality, especially for developing parts of the world. In the SAARC region, FDI plays a marginal role in the countries' export sector [RIS (2004)].

[8]See, RIS (2001-02) for evidence on growing synchronisation of the region's stock markets with the global financial centres.

Table 1

International Trade and Investment Flows: SAARC (1990-2002)

Category	Year												
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
1. International Trade													
(% of the Value of World Trade)													
1a. Share in Exports	0.79	0.78	0.82	0.89	0.90	0.90	0.94	0.95	0.94	0.95	0.99	1.03	1.08
1b. Share in Imports	1.12	1.03	1.09	1.09	1.08	1.15	1.19	1.18	1.21	1.21	1.26	1.22	1.28
1c. Share in Trade Gap (Deficit)	0. 33	0.25	0.27	0.20	0.18	0.25	0.25	0.23	0.27	0.26	0.27	0.19	0.20
2. Share of Intra-region Trade													
(% Share in 1a. and 1b.)													
2a. Intra-region Exports	3.13	3.59	3.88	3.54	3.71	4.38	4.30	4.10	4.80	4.10	4.20	4.50	4.30
2b. Intra-region Imports	1.91	2.48	2.99	3.07	3.25	3.82	4.40	3.70	4.60	3.60	3.40	4.00	3.90

	Year						
	1991-1996	1997	1998	1999	2000	2001	2002
3. Foreign Direct Investment (FDI)							
(% of Gross Fixed Capital Formation)							
3a. World	4.4	7.5	10.9	16.5	20.8	12.8	12.2
3b. Developing Countries	C	11.4	12	14.3	14.6	12.7	10.5
3c. Asia	6.1	9.7	10.2	10.7	13.1	9.8	7.2
3d. SAARC*	2.1	4.4	2.7	2.6	2.3	2.3	3.7

Source: (Category 1 & 2) IMF, Direction of Trade Statistics Yearbook; (category 3), RIS (2004), Table 5.2, p. 40.

*Average FDI flows in SARRC region countries, excluding Maldives.

At the outset, the trade share figures listed in Table 1 appear to suggest that the SAARC region may not be excessively dependent on international trade. Unfortunately, such a suggestion is contradicted by the figures listed in Table 2, which show that the share of trade in the GDP of the seven member countries ranged between 14-169 percent at different times in 17 years to 2001. India's share is relatively the lowest throughout the period, but still ranges between 14–30 percent of GDP. The smaller countries, particularly Bhutan and Maldives, are the most vulnerable since they appear to have unsustainably higher share of trade in the GDP.[9]

Furthermore, and perhaps most importantly, the SAARC region's exports are widely perceived to lack dynamism in terms of their skill and technological content [Mayer and Wood (2000); Lall (2000)]. The low skill and technology intensive goods are not only low value adding compared to knowledge intensive goods but are also slow moving because of increasing price competition [Lall (1999); Sinha (2001)]. The figures listed in Table 2 also provide the evidence that, though excessively dependent on the external sector, the SAARC region countries have not performed very well even in terms of their global market share in basic manufactures. Except India, who ranks 34, other countries' rank falls in the range of 83–121. However, almost all countries, except Bhutan, perform relatively better in terms of market diversification, while product diversification rank is generally quite low. Indeed, product diversification and differences in product quality are very often associated with differences in workers' skill. In this context, the model developed by Kremer (1993) has very important implications for both economic development and labour markets.[10]

Finally, given the generally very high share of trade in their GDP, the member countries of SAARC are already excessively vulnerable to external shocks. The situation warrants that the region's countries pay greater attention to increasing the size of their economies, rather than simply emphasising the sheer increase in exports. A reasonably high and sustainable rate of growth of the member countries will not only provide the resilience for absorbing the external shocks, it will also help increase their share in international trade and investment flows. This argument is carried into the Part III of the study, through some findings made in this part on the major external sources of growth in the SAARC region countries. These findings are discussed below.

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[9]The substantial fall in the share of Maldives' exports, as a result of graduation of the country from Least Developed Countries (LDC) status, to the preferential EU market, from 21 percent in 1997 to 12 percent in 2001, is a case in point. The Maldives would lose the entire margin on fish exports following graduation [see, WTO (2003)].

[10] In this model, Kremer applies O-ring metaphor to his development theory which explains the differences in income between developed and developing countries. An O-ring is a donut shaped rubber seal. The implications of this theory are very important since they seem to contradict a great deal of conventional wisdom, especially the assertions of the theory of comparative advantage [see, Kremer (1993)].

Table 2

Proportion of Trade in GDP and Trade Performance Index: SAARC Countries

Category	Country						
	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
1. Proportion of Trade (% of GDP)							
1985-87	24.26	61.52	14.08	60.26	31.91	34.01	61.87
1990-92	19.83	75.05	18.78	88.51*	36.28	37.45	68.42
1996-98	30.47	76.15	25.45	167.08	59.59	36.40	79.17
2000-01	35.50	89.47*	29.79	168.94	55.06	35.84	85.42
2. Trade Performance Index (Basic Manufactures)							
Relative Ranking among 184 Countries	122	124	129	–	–	124	129
Trend of Exports	18	123	53	–	70	26	105
Average Annual Change in Per Capita Exports	105	121	80	–	25	54	99
Share in World Market	83	119	34	–	121	95	93
Product Diversification	81	123	24	–	90	81	94
Product Spread (Concentration)	71	124	19	–	103	86	81
Market Diversification	53	122	32	–	44	62	71
Market Spread (Concentration	62	122	14	–	88	45	74

Source: *RIS (2004), (category 1), Table 2.1, p.19; (category 2) Table 4.6, p. 33. In (category 2), data year for Bangladesh, India and Sri Lanka is 1997-2001, while the data year for Bhutan, Nepal and Pakistan 1995-1999.*

*Refers to the year 2000 and year 1990 figure for Bhutan and Maldives respectively.

Table 3 lists the coefficients of relationships estimated within a system of two simultaneous equations,[11] utilising the pooled data for the period from 1972-2001. The initial formulation of the system included a much larger number of instruments, many of which had to be dropped due to the inaccessibility of sufficient data for the countries included in the model. The estimated model takes the following specific form in its analytical formulation:

$$EG_{it} = \beta_0 + \beta_1 DI_{it} + \beta_2 XE_{it} + \beta_3 PL_{it} + \beta_4 ER_{it} + \beta_5 TB_{it} + u_{it} \quad \ldots \quad \ldots \quad (1)$$

$$DI_{it} = \beta_0 + \beta_1 EG_{it} + \beta_2 XE_{it} + \beta_3 PL_{it} + \beta_4 ER_{it} + \beta_5 TB_{it} + \beta_6 DC_{it} + u_{it} \quad \ldots \quad (2)$$

Where,

EG = Economic growth (growth rate of GDP).
DI = Domestic investment (growth rate of gross capital formation).
XE = Export earnings (growth rate).
PL = Price level (growth rate of Consumer Price Index [CPI]).
ER = Exchange rate (growth rate of domestic currency's price in terms of US$).
TB = Trade balance (ratio to the GDP).
DC = Domestic credit (growth rate).
U = Stochastic error term.

The values for all variables have been taken from International Financial Statistics (IFS), published by the International Monetary Fund (IMF). All values have been transformed into constant terms for calculating the real growth rate of the variables. Two Stage Least Square (2SLS) technique is applied on E-view package for statistical estimation of the model.

The results reported in Table 3 show that two of the three external sector variables, XE_{it} and TB_{it}, turn out to be significant in Equation 1, indicating that external sector is having important influences on growth in the SAARC region countries. The coefficient of export earnings, XE_{it}, is significant at 10 percent level and shows that one percent increase in export earnings increases the growth rate of GDP by .04 percent, meaning that a doubling of the current export earnings in the countries of the region will increase, on average, the GDP growth rate of the countries by 4 percent. Given the large share of international trade in the SAARC countries' GDP, this result is quite expected. The other significant external sector variable is trade balance, TB_{it}, and it carries a large coefficient which is significant at 5 percent level. It shows that one percent decrease in trade imbalance increases the GDP by 4.85 percent. All countries in the SAARC region have been experiencing persistent trade balance deficits and the result provides sufficient g r o u n d   t o   w o r k   o n

Table 3

External Determinants of Growth: SAARC (1972–2001) Estimated Coefficients

Equation 1			Equation 2		
Dependent variable= EG_{it}		*Observations*= 112	*Dependent variable=DI_{it}*		*Observations*= 112
Variable	Coefficient	*t*-Statistics	Variable	Coefficient	*t*-Statistics

[11]The authors could not access the data for Bhutan and Maldives on the variables included in the model.

Constant	3.166***	2.805	Constant	−5.553	−1.517
DI_{it}	0.368***	4.308	EG_{it}	1.959***	4.377
XE_{it}	0.042*	1.699	PL_{it}	0.080	0.415
PL_{it}	−0.026	−0.336	ER_{it}	−0.103	−0.731
ER_{it}	−0.008	−0.124	TB_{it}	9.669*	1.779
TB_{it}	−4.848**	−2.231	DC_{it}	0.153	1.356
$AR(I)$	−0.394***	−3.884	$AR(I)$	−0.387***	−4.349
R^2= 0.286	Adjusted R^2= 0.245		R^2= 0.363	Adjusted R^2= 0.326	
D.W.= 1.964	D.H.= 0.496		D.W.= 1.968	D.H.= 0.496	

***Significant at 1 percent level. **Significant at 5 percent level. *Significant at 10 percent level.

reducing the gap between export receipts and import payments. The coefficient of the third external sector variable, exchange rate, ER_{it}, carries a negative sign, implying that appreciation of the domestic currency is not conducive for the economic growth of the SAARC region countries. However, this result is not valid because the estimated coefficient is insignificant. Of the two internal sector variables, domestic investment and price level, the former, DI_{it}, turns out to be significant at one percent. It is a theoretically valid result. The negative sign of the estimated coefficient of price level, PL_{it}, implies that inflation hurts the growth of GDP, but the result is not significant, hence again invalid. Finally, the size of the adjusted R square for estimated Equation 1 is only 0.25, showing that 25 percent of the variation in the GDP growth rate of SAARC region countries is explained by the explanatory variables included in the model. Although this appears to be a weak fit, it is usually accepted within a system.

The results reported for estimated Equation 2 again endorse the theoretically valid positive relationship between economic growth and investment. The coefficient of the growth variable, EG_{it}, is significant at one percent level, showing that one percent increase in growth rate increases domestic investment by about 2 percent. A positive and significant relationship is also observed between the domestic investment and the deficit in the balance of payments. The coefficient of the trade balance variable, TB_{it}, is significant at 5 percent level and shows that one percent increase in balance of trade deficit increases the domestic investment by about 10 percent. Apparently, this result is not compatible with the findings in Equation 1 which show that deficit in trade balance decreases growth, while the latter is positively and significantly related with domestic investment. However, the overall inference is theoretically valid, particularly in the context of the dependency created by the persistent deficit in the trade balance which may negatively affect the investment efficiency. The other variables, PL_{it}, ER_{it} and DC_{it}, included in Equation 2 turn out to be insignificant.

The size of the adjusted R square for estimated Equation 2 is greater than the growth equation, showing that 33 percent of the variation in the growth rate of the domestic investment of SAARC region countries is explained by the right hand side variables in the analytical formulation. Finally, the estimated model was checked for misspecifications, autocorrelation was detected and removed by applying autoregressive scheme one to the both equations in the system.

III.

Pakistan after India is the second largest country in the SAARC region and it is constantly making progress in unilaterally liberalising her trade regime. The external sector reform measures of the 1990s are also continuing in the new millennium [see, RIS (2002)]. However, it is important to note that majority of the liberalisation measures of Pakistan are part of the IMF/World Bank Policy framework paper of December 1998.[12] The country, for example, is currently required to implement key sector reforms as part of the conditionality of Poverty Reduction and Growth Facility (PRGF).[13] Indeed, since 1988, Pakistan has been required to correct her macroeconomic imbalances under the terms imposed by the Structural Adjustment Programmes (SAPs) of the international funding agencies. Findings made by a number of studies suggest that SAPs were accompanied with rising income inequality and poverty in the country [see, Kemal (1994); Jaffery and Khattak (1995) and Anwar (1996)].

The analysis presented below is based on the premise that Pakistan needs to adopt alternative growth strategies which ought to help improve the welfare of the masses. Any such strategy requires both higher growth rate, which is sustainable in the long-run, and the freedom to manoeuvre the public policy toward optimal targets. The authors believe that for Pakistan, extended economic cooperation with the SAARC region is the most viable strategy compared to many other alternatives. In this case, the region might even tend to be trade creating, through increased production competition between the members, not diverting, because the countries will not be significantly changing the import direction, at least in the early stages of integration. However, an analysis of the trade effects would require data on:

- each country's imports and exports from the region and from the rest of the world;
- the composition and direction of each country's unrecorded border trade; [14]
- actual cost estimates   for present and potential production   of different   product categories in each country; and
- Information on each country's demand and supply elasticities of major tradable.

Unfortunately, except for the direction of trade, hardly any effort has been made so far to generate the data for the SARRC region on the variables listed above. Therefore, it is not possible to formulate the trade and production models providing the estimates of even immediate static effects. The authors have made a limited effort in the following by estimating and projecting the growth impact of the major destinations of Pakistan's exports. The analysis is carried out with the help of three single equation growth models which take following specific forms in analytical formulation:

$$GP_t = \beta_0 + \beta_1 SX_t + \beta_2 AX_t + \beta_3 OX_t + \beta_4 DX_t + \beta_5 RX_t + \beta_6 FR_t + \beta_7 FL_t +$$

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[12]See, http:/www.ustr.gov/reports/nte/2003/Pakistan.pdf.

[13]In December 2001, IMF approved a three year agreement of about $1.32 million for Pakistan, under the PRGF [see, RIS (2004)].

[14]For example, Due to the lack of formalised trade structure between India and Pakistan, unofficial trade between these countries is estimated between 8 billion to 16 billion rupees a year, many time more than the regular and official trade [see, Wadhva (1997)].

$$+\beta_8 RI_t + \beta_9 MS_t + \beta_{10} D_t + u_t \qquad \ldots \qquad \ldots \qquad \ldots \qquad \ldots \qquad (3)$$

$$GP_t = \beta_0 + \beta_1 SX_t + \beta_2 EX_t + \beta_3 FR_t + \beta_4 FL_t + \beta_5 RI_t + \beta_6 MS_t + \beta_7 D_t + u_t \qquad \ldots \qquad (4)$$

$$GP_t = \beta_0 + \beta_1 XS_t + \beta_2 DX_t + \beta_3 XR_t + \beta_4 FR_t + \beta_5 FL_t + \beta_6 RI_t + \beta_7 MS_t + \\ + \beta_8 D_t + u_t \qquad \ldots \qquad \ldots \qquad \ldots \qquad \ldots \qquad \ldots \qquad \ldots \qquad (5)$$

Where,

GP = Growth of Pakistan's economy (growth rate of GDP).

SX = Growth rate of exports to the SAARC region countries.

AX = Growth rate of exports to the ASEAN region countries.

OX = Growth rate of the exports to the countries of the Organisation of Islamic Conference [OIC].

DX = Growth rate of exports to the developed countries of the Organisation for Economic Cooperation and Development [OECD].

RX = Growth rate of the exports to the rest of the world.

FR = Growth rate of the net foreign workers' remittances.

FL = Growth rate of the net disbursement of foreign loans.

RI = Growth rate of real interest rate.

Ms = Growth rate of money supply.

D = Dummy variable for type of government (military= 1).

EX = Growth rate of exports to the entire world excluding SAARC region.

XS = Growth rate of exports to the South (includes only the countries of the SAARC and ASEAN regions).

XR = Growth rate of the exports to the rest of the world (generated by adding exports to the OIC countries in the RX of Equation 3).

The source of all data, except real interest rate, is *Economic Survey of Pakistan*. The data on real interest rate has been taken from the *Annual Report of State Bank*, published by the State Bank of Pakistan. The growth rates have been calculated by converting all values into constant market prices with 1980-81 as the base year. All three models are estimated by applying Ordinary Least Square (OLS) technique on the E-view package. The results are reported in Table 4.

Table 4

External Determinants of Growth: Pakistan (1977–2002)Estimated Coefficients

	Dependent Variable= GP					Observations= 26	
Equation 3			Equation 4			Equation 5		
Variable	Coefficient	*t*-Statistics	Variable	Coefficient	*t*-Statistics	Variable	Coefficient	*t*-Statistics
Constant	1.423	1.249	Constant	2.918***	2.737	Constant	2.223**	2.390
SX_t	0.017*	1.875	SX_t	0.030***	2.810	XS_t	0.047***	4.473
AX_t	0.019**	2.269	EX_t	−0.005	−0.183	DX_t	−0.010	−0.667
OX_t	−0.012	−0.880	FR_t	−0.011	−1.376	XR_t	−0.013	−0.815
DX_t	−0.012	−0.724	FL_t	0.002	1.520	FR_t	−0.011*	−1.737

RX_t	0.012	1.040	RI_t	-0.169^{**}	-2.325	FL_t	0.001^*	1.642
FR_t	-0.013^*	-1.679	MS_t	0.101	1.608	RI_t	-0.154^{***}	-2.549
FL_t	0.001	0.955	D_t	2.410^{***}	4.506	MS_t	0.139^{***}	2.519
RI_t	-0.096	-1.244	$AR(1)$	-0.429	-1.608	D_t	2.573^{***}	5.688
MS_t	0.171^{***}	2.647	Adjusted R^2=0.541			$AR(1)$	-0.462^*	-1.773
			D.W.= 1.943					
D_t	2.591^{***}	4.537	D.H.= 0.070			Adjusted R^2= 0.0674		
			F= 4.679			D.W.= 2.012		
Adjusted R^2= 0.639						D.H.= 0.070		
D.W.= 2.263						F= 6.740		
F= 5.615								

***Significant at 1 percent level. **Significant at 5 percent level.   *Significant at 10 percent level.

In Equation 3, the direction of Pakistan's exports has been divided into five broad categories including four county groups, SAARC, ASEAN, OIC, OECD, while the fifth category takes into account the country's exports to the rest of the world. Foreign loans and foreign workers' remittances, another two important sources of foreign exchange for the country, have also been included in the model. In order to improve the goodness of the fit, the model additionally incorporates three exogenously determined internal sector variables, namely, real interest rate, money supply and type of the government.

The coefficients of five variables turn out to be significant in estimated Equation 3. They include three external sector variables, SX_t, AX_t and FR_t, and two internal sector variables, MS_t and D_t. Of the former, the exports to SAARC and ASEAN countries, SX_t, AX_t, are positively related with the economic growth of Pakistan and the estimated coefficients are significant at ten percent and five percent level respectively. The coefficient of the variable representing the trade with SAARC countries, SX_t, is 0.017. Given a very low share of exports to SAARC region in Pakistan's total exports, the apparently small size of the coefficient of SX_t happens to have huge significance, implying that doubling of Pakistan's exports to the SAARC region is going to increase her growth rate by about 1.8 percent. The estimated coefficients of the variables OX_t and DX_t representing the OIC and OECD countries respectively show that exports to these country groups are negatively related with Pakistan's economic growth. However important in its implications, this result is not valid since the coefficients of OX_t and DX_t are statistically insignificant. The variable representing exports to the rest of the world, RX_t is not significant either, but its sign is positive. The foreign workers remittances appear to be negatively related with the economic growth of Pakistan, because the sign of the estimated coefficient of FR_t is negative and statistically significant at ten percent level. The estimated coefficient of foreign loans, FL_t, on the other hand, shows a positive, though statistically insignificant, relationship with the economic growth of the country. Finally, two of the three internal sector variables, MS_t and D_t, turn out to have a positive and highly significant relationship with economic growth. The large estimated coefficient of the dummy variable shows that growth demonstratively increases during the military regime compared to the period when the country is *democratically* governed.

The results of the estimated Equation 4 and Equation 5 are also reported in Table 4. It is observed that a consistency exists between the estimated coefficients of Equation 3, Equation 4

and Equation 5, since signs of the estimated variables remain unchanged. Some change, however, is observed in the significance level of the variables because of the change in formulation of the export variables. Autocorrelation was detected in the estimated Equation 4 and Equation 5 and it was removed in both cases by applying autoregressive scheme 1.

Table 5 lists the alternative scenarios of growth projections for Pakistan's economy between 2003-04 and 2020-21. These projections are based on the estimated Equation 4 and Equation 5. The former splits Pakistan's export destination in two categories, namely, the SAARC region (SX_t) and the entire world (EX_t) excluding the SAARC region countries. The latter on the other hand, splits Pakistan's export destination in three broad categories, namely, the South (XS_t), represented only by the member countries of the SAARC and ASEAN regions; the developed countries (DX_t), represented by the member countries of the OECD; and the rest of the world (XR_t), represented by all remaining trading partners of Pakistan including the member countries of the OIC.

The first three scenarios are generated by alternatively introducing in estimated Equation 4 an increase in exports to the SAARC region, a diversion of exports to the SAARC region, and part increase and part diversion of exports to the SAARC region. The projected growth estimates are quite realistic since increase and diversion of exports when introduced separately are only of the proportion of half a percent during the first six years, 2004-2009, one percent during the next six years,

Table 5

Growth Impact of Increasing and Diverting Exports to SAARC and ASEAN
(Pakistan: 2004-2021)

	Growth Projections			
	SAARC			SAARC and ASEAN
Year	Increase	Diversion	Increase + Diversion	Diversion
2004	5.12	5.08	5.07	5.26
2005	5.14	5.10	5.09	5.29
2006	5.15	5.11	5.11	5.31
2007	5.17	5.13	5.12	5.34
2008	5.18	5.15	5.14	5.37
2009	5.20	5.17	5.16	5.40
2010	5.21	5.18	5.17	5.43
2011	5.24	5.22	5.20	5.48
2012	5.27	5.25	5.24	5.54
2013	5.30	5.29	5.27	5.60
2014	5.33	5.32	5.30	5.66
2015	5.36	5.36	5.33	5.72
2016	5.39	5.39	5.37	5.77
2017	5.41	5.41	5.38	5.80
2018	5.42	5.42	5.40	5.83
2019	5.44	5.44	5.41	5.86
2020	5.45	5.46	5.43	5.89

| 2021 | 5.47 | 5.48 | 5.45 | 5.92 |

2010-2015, and half a percent in the remaining five years, 2016-2020. Similarly, while introducing increase and diversion together the same proportions are maintained in the same order for the increase, while the respective diverted proportions are 0.25 percent, 0.50 percent and 0.25 percent. The rationale of simulating with relatively low proportions is that, in the short-run at least, neither the economy can manage to increase the exports spectacularly and indefinitely, nor the existing structures have the ability to sustain the risk of significantly diverting the exports from the traditional markets.

It is observed in Table 5 that pure increase in exports provides slightly better results than pure diversion till the year 2016. Thereafter, the pure diversion fares slightly better than the pure increase. Although apparently the difference is negligibly minor, its implications cannot be ignored for a strategic approach to extended economic cooperation of Pakistan with the SAARC region. The argument is further supported by the projected growth rates of the scenario which introduces part increase and part diversion of Pakistan's exports to the SAARC region. It is observed that the impact of such a policy is not as much favourable as is the impact with pure increase and pure diversion, though the relative difference again appears negligible. Finally, the projected growth rate in 2021 is maximally higher than the actual growth rate in 2003 only by half a percent. It appears to be a small difference in absolute terms, but its relative significance is indisputable in terms of the optimality of the target and the promise which it holds out in other spheres of economic activity for extended cooperation of Pakistan and the SAARC region countries.

Table 5 also lists another scenario providing useful policy guidelines in the short-run. The results reported in Table 4 for estimated Equation 3 suggest that the exports to both the ASEAN and SAARC countries are positively related with the economic growth of Pakistan. The authors have projected the growth rates of Pakistan's economy based on the estimated Equation 5 which uses the combined exports to the SAARC and ASEAN region countries as one of the explanatory variables, along with separating the variation in growth caused by the exports to the OECD countries. This scenario introduces pure diversion of exports to the SAARC and ASEAN region countries from the OECD countries. The successively proportionate size of diversion over the years remains same as before. It is observed that the growth impact of exports in this scenario is about 0.16 percent higher than that of the scenario where the diversion is introduced only to the SAARC region countries from the rest of the world. Such an alternative is reckoned to anchor Pakistan's gradual move toward greater integration within the SAARC region.

CONCLUSION

There is increasingly widening and deepening international policy integration among the developed countries of the world. Regional organisations of developing countries on the other hand, have a history of enthusiastic formation followed by dissent, resulting in either dissolution or a lapse into purely formal existence.

The promise that SAARC holds out is enormous for the countries of the region. The initiative itself is now 20 years old. The organisation should be in the full maturity of its youth, ready to take on new challenges and directions. But, unfortunately, SAARC carries the image of high profile and low performance, lacking concrete objectives, commitment, and even a sense of regional identity. For example, The problems of finding continuing advantages in joint development, the reconcilable and irreconcilable differences over the direction and rate of development, and the allocation of benefits among the members have not been addressed by any of the SAARC forums. Furthermore, and perhaps most importantly, while the world has entered the 21st century, the two *biggest* member countries of SAARC have frequently demonstrated their will to revisit and rewrite the history of the past millennium.[15]

It is high time that SAARC departs from its endless round of meetings, seminars, and conferences, and moves to collaborative projects that bring tangible results in terms of growth and development of the member countries. A range of clearly defined optimal objectives may add both viability and stability to SAARC. The initial advantages may be less important, but the long-term advantages are certainly overriding.

Finally, the authors suggest that serious efforts should be made to generate the relevant data and formulate the trade and production models to make firm calculations at least for the immediate static effects of a custom union in the SAARC region. The *ex ante* calculation of these effects will certainly help move toward the target by providing pragmatic guidelines for determining the readjustment period. A workable plan essentially requires that the calculation of the static effects encompasses the effects on each member country, including each interest within a country.

REFERENCES

Anwar, T. (1996) Structural Adjustment and Poverty: The Case of Pakistan. *The Pakistan Development Review* 35:4, 911–26.

Beg, A. (1997) Options for Peace in the South Asian Region. *Strategic Studies* 19:2&3, Summer-Autumn.

International Monetary Fund (1976, 1990, 2003) *International Financial Statistics (Year Book).* Washington, D.C.

Jaffery, S. M. Younas, and A. Khattak (1995) Income Inequality and Poverty in Pakistan. *Pakistan Economic and Social Review* 33: 1&2, 37–58.

Kemal, A. R. (1994) Structural Adjustment, Employment, Income Distribution and Poverty. *The Pakistan Development Review* 33: 4, 901–11.

Kremer, M. (1993) The O-Ring Theory of Economic Development. *The Quarterly Journal of Economics* 108:3.

Kumar, N. (2002) *Globalisation and Quality of FDI: A Quantitative Analysis of the Role of Host Country Characteristics and WTO Regime.* Delhi: Oxford University Press.

[15]According to Beg (1997), South Asia could be pictured as a large ground containing a number of open air theatres where ancient scenes are being continually re-enacted, not, sadly, to learn from the past but in order to avenge it.

Lall, S. (1999) India's Manufactured Exports: Comparative Structure and Prospects. *World Development* 27: 10, 1769–86.

Lall, S. (2000) The Technological Structure and Performance of Developing Country Manufactured Exports, 1985–1998. Oxford: International Development Centre, University of Oxford. (Mimeographed).

Madison, A. (2000) *The World Economy: A Millennial Perspective.* Paris: OECD.

Mayer, J. R., and A. Wood (2000) South Asia's Export Structure in a Comparative Perspective. Institute for Development Studies, Sussex. (IDS Working Paper 91).

Pakistan, Government of (1981, 1989, 1994, 1998, 2002, 2003) *Economic Survey.* Islamabad: Finance Division, Economic Advisor's Wing.

Page, S. (2000) *Regionalism Among Developing Countries.* London: Macmillan Press Ltd.

RIS (2002) Research and Information System for the Non-Aligned and Other Development Countries (RIS). *South Asia Development and Cooperation Report 2002.* New Delhi, India.

RIS (2004) *South Asia Development and Cooperation Report 2004.* New Delhi, India.

Sinha, R. S. (2001) Post-reforms Export Growth in India: An Exploratory Analysis. Research and Information System for the Non-Aligned and Other Developing Countries. New Delhi (RIS Discussion Paper No. 13).

Viner, Jacob (1950) *The Custom Union Issue.* New York: Carnegie Endowment for International Peace.

Wadhva, C. D. (1997) Economic Cooperation within Asia and with Special Reference to South Asia. *Strategic Studies* 19:2&3 Summer-Autumn.

World Trade Organisation (WTO) Secretariat (2003) *Trade Policy Review 2003.* Vol. 1. Bernan Press.