

Workers' Remittances from the Middle East and their Effect on Pakistan's Economy

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I. INTRODUCTION

In recent years, remittances, especially from the Middle East (ME), have become an important source of foreign exchange earnings for Pakistan. The absolute amount of these remittances, over the last several years, have been so large, that they were bound to have a significant impact on the Pakistani economy, through improving its balance of payments position and reducing its dependence on external financing. For example, in 1982-83 the inflow of remittances from the Middle East to Pakistan, through official channels, was 2.4 billion U.S. dollars which was 70 percent of total exports of goods and non-factor services. The recent decline in oil prices and the slowing down of economic activity in the Middle East, however, has resulted in the reduction of the inflow of remittances. The main concern, now, is what would the level of remittances be in future years and how will the economy readjust itself to the reduced inflow of the remittances.

This paper makes an attempt to analyse the impact of remittances on the Pakistani economy, in particular, on broad economic indicators as GNP growth, saving, and balance of payments (BOP), from 1969-70 to 1985-86. Section II estimates the contribution of the remittances, from the Middle East, to the growth in the Gross National Product (GNP), over different sub-periods. In Section III, an analysis of the relationship between national/domestic savings and remittances is given. Section IV discusses the impact of remittances on the balance of payments position of Pakistan. Finally, the main findings are summarized in Section V.

II. CONTRIBUTION OF REMITTANCES IN GNP GROWTH

There is no doubt about the fact that, during the past ten years, increased inflow of the remittances from the Middle East has helped Pakistan's economy in

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sustaining a reasonable rate of economic growth. Nothing, however, is known about the exact magnitude of its contribution to the growth of GNP. Using the growth accounting framework, GNP growth, over a period, can be expressed as a weighted sum of its components, e.g. consumption, investment, exports, imports and remittances [see Burney (1986) for discussion on the methodology]. It may be mentioned here that this growth accounting framework underestimates the true contribution of remittances to the GNP growth in the sense that it measures only the direct contribution. Since, remittances are a kind of income transfer, used to finance domestic consumption, investment, and import demand, the contribution of these components includes the indirect contribution of the remittances as well. The extent of the underestimation depends on the impact multipliers of the remittances.

Using the growth accounting framework, GNP growth, during 1969-70 to 1985-86, over different sub-periods, has been decomposed into its principal components. Remittances received through the official channels have been considered first, followed by adjusted remittances which takes into account remittances through the unofficial channels.¹ Consumption and investment were further divided into private and public. The results are presented in Tables 1 and 2, respectively.

The estimates indicate that the contribution of remittances from the Middle East to GNP growth was the highest, i.e. 13.6 percent of GNP growth, during the sub-period 1973-74 – 1976-77. When remittances through the unofficial channels are also taken into account, their contribution to the GNP growth was as high as 24 percent of the GNP growth, i.e. almost one-fourth of the total growth in GNP. This is because the remittances grew at a very sharp rate during the specified period. The estimate based on remittances received through official as well as unofficial channels serves as an indicator of upper limit on the contribution of remittances to the GNP growth.

It may be noted that over the period under study, the average annual growth rate of GNP, during 1976-77 to 1979-80, was the highest, i.e. 8.07 percent. During this period, the contribution of remittances from the Middle East, through official channels, was over 10 percent of the GNP growth. As the contribution of the remittances declined and became negative during 1982-83 to 1985-86, the average annual growth rate of the GNP also dropped to 6.05 percent. This suggests that if in future,

¹ Remittances through the unofficial channels are taken into account by adjusting remittances through the official channels using estimates from the ILO/ARTEP survey report. According to one estimate of the ILO/ARTEP survey report, remittances through the official channels are only 57 percent of the total remittances. This method of adjusting official remittances suffers from some problems, e.g. (i) the ILO/ARTEP estimate is based on certain assumptions which may not necessarily be valid for this study and (ii) the estimate, which is based on data for one year only, is highly unlikely to be constant over time as assumed in this paper. However, under the circumstances, there is no better alternative.

Table 1
Demand Decomposition of GNP Growth, 1969-70 - 1985-86
(Constant 1959-60 Prices)

	1969-70 - 1973-74	1973-74 - 1976-77	1976-77 - 1979-80	1979-80 - 1982-83	1982-83 - 1985-86
GNP (Market Prices)	16.13	14.72	26.51	21.38	19.48
Average Annual Growth Rate	3.81	4.63	8.07	6.60	6.05
1. Consumption	16.27	12.02	25.03	13.64	17.26
(i) Private	16.07	7.46	23.38	10.20	14.18
(ii) Public	0.20	4.56	1.65	3.44	3.08
2. Gross Investment	-0.29	5.10	0.21	4.24	2.84
(i) Private	-1.96	1.46	0.40	1.46	1.36
(ii) Public	1.95	4.00	-0.51	1.65	1.31
(iii) Change in Stock	-0.28	-0.36	0.32	1.13	0.17
3. External Trade	-0.40	-4.84	-2.61	1.93	-0.02
(i) Export	0.16	-1.98	2.96	2.40	2.15
(ii) Import	-0.56	-2.86	-5.57	-0.47	-2.17
4. GDP	15.58	12.28	22.63	19.81	20.08
5. Net Factor Income	0.55	2.44	3.88	1.57	-0.60
(i) Remittance	0.41	2.09	3.38	1.37	-0.34
(a) Middle East	0.24	2.00	2.71	1.41	-0.54
(b) Rest of World	0.17	0.09	0.67	-0.04	0.20
(ii) Other Transfers	0.14	0.35	0.50	0.20	-0.26

Continued -

Table 1 — (Continued)

	1969-70 — 1973-74	1973-74 — 1976-77	1976-77 — 1979-80	1979-80 — 1982-83	1982-83 — 1985-86
Percentage of GNP Growth					
1. Consumption	100.87	81.66	94.42	63.80	88.60
(i) Private	99.63	50.68	88.19	47.71	72.79
(ii) Public	1.24	30.98	6.23	16.09	15.81
2. Gross Investment	-1.80	34.65	0.79	19.83	14.58
(i) Private	-12.15	9.92	1.51	6.83	6.98
(ii) Public	12.09	27.17	-1.92	7.72	6.72
(iii) Change in Stock	-1.74	-2.44	1.20	5.28	0.88
3. External Trade	-2.48	-32.88	-9.85	9.03	-0.10
(i) Export	0.99	-13.45	11.16	11.23	11.04
(ii) Import	-3.47	-19.43	-21.01	-2.20	-11.14
4. GDP	96.59	83.43	85.36	92.66	103.08
5. Net Factor Income	3.41	16.57	14.64	7.34	-3.08
(i) Remittances	2.54	14.20	12.75	6.40	-1.75
(a) Middle East	1.49	13.59	10.22	6.59	-2.77
(b) Rest of World	1.05	0.61	2.53	-0.19	1.02
(ii) Other Transfers	0.87	2.37	1.89	0.94	-1.33
Total	100.00	100.00	100.00	100.00	100.00

Table 2
 Demand Decomposition of GNP Growth, 1969-70 - 1985-86
 (Adjusted for Unofficial Remittances using ARTEP Estimates)
 (Constant 1959-60 Prices)

	1969-70 - 1973-74	1973-74 - 1976-77	1976-77 - 1979-80	1979-80 - 1982-83	1982-83 - 1985-86
GNP (Market Prices)	16.27	16.32	28.13	21.80	18.46
Average Annual Growth Rate	3.83	5.12	8.52	6.73	5.75
1. Consumption	16.26	11.99	24.63	13.27	16.71
(i) Private	16.05	7.45	23.01	9.93	13.71
(ii) Public	0.21	4.54	1.62	3.34	3.00
2. Gross Investment	-0.27	5.09	0.21	4.13	2.75
(i) Private	-1.96	1.47	0.40	1.39	1.30
(ii) Public	1.96	4.02	-0.50	1.60	1.28
(iii) Change in Stock	-0.27	-0.40	0.31	1.14	0.17
3. External Trade	-0.38	-5.36	-2.61	1.86	-0.02
(i) Exports	0.16	-1.95	2.87	2.34	2.09
(ii) Imports	-0.54	-3.41	-5.48	-0.48	-2.11
4. GDP	15.61	11.72	22.23	19.26	19.44
5. Net Factor Income	0.66	4.60	5.90	2.54	-0.98
(i) Remittances	0.63	3.93	5.43	2.38	-0.73
(a) Middle East	0.47	3.85	4.77	2.40	-0.93
(b) Rest of World	0.16	0.08	0.66	-0.02	0.20
(ii) Other Income	0.03	0.67	0.47	0.16	-0.25

Continued -

Table 2 - (Continued)

	1969-70 - 1973-74	1973-74 - 1976-77	1976-77 - 1979-80	1979-80 - 1982-83	1982-83 - 1985-86
Percentage of GNP Growth					
1. Consumption	99.94	73.47	87.56	60.87	90.52
(i) Private	98.65	45.65	81.80	45.55	74.27
(ii) Public	1.29	27.82	5.76	15.32	16.25
2. Gross Investment	-1.66	31.19	0.75	18.95	14.90
(i) Private	-12.05	9.01	1.43	6.38	7.05
(ii) Public	12.05	24.63	-1.78	7.34	6.93
(iii) Change in Stock	-1.66	-2.45	1.10	5.23	0.92
3. External Trade	-2.34	-32.84	-9.28	8.53	-0.11
(i) Exports	0.98	-11.95	10.20	10.73	11.32
(ii) Imports	-3.32	-20.89	-19.48	-2.20	-11.43
4. GDP	95.94	71.82	79.03	88.35	105.31
5. Net Factor Income	4.06	28.18	20.97	11.65	-5.31
(i) Remittances	3.87	24.08	19.30	10.92	-3.95
(a) Middle East	2.89	23.59	16.96	11.01	-5.05
(b) Rest of World	0.98	0.49	2.34	-0.09	1.10
(ii) Other Income	0.19	4.10	1.67	0.73	-1.36
Total	100.00	100.00	100.00	100.00	100.00

the amount of the remittances continue to fall, other things remaining the same, the GNP growth will tend to be lower than that of the GDP, as in 1982-83 – 1985-86 period.

III. REMITTANCES AND SAVINGS

For achieving self-sustained growth, the propensity to save must increase over time. Pakistan's economy showed such a trend in the Sixties but could not sustain it in the Seventies and Eighties. Therefore, for the formulation of appropriate policies in order to promote economic growth, it is important that an analysis of the changes in savings over time be undertaken to focus on the main factors affecting savings.

Economy-wide estimates of savings, in Pakistan, are obtained using the indirect method of subtracting net foreign resource inflow from gross domestic investment. The method, based on the *ex post* national income accounts identity, treats national savings as a residual since, both investment and the balance of payments appear on the expenditure side. Gross domestic savings (GDS), on the other hand, is obtained by subtracting net factor income from abroad (NFI)² from the national saving (GNS).³ The saving series, estimated on the basis of the above method, are presented in Table 3.

Till 1973-74, net factor income from abroad, which includes workers' remittances, was not significant and the choice between GNS and GDS was of little relevance. However, because of an increase in workers' remittances, the difference between the two series has become significant and it is now argued that national saving is the appropriate measure of savings for the economy.

As explained earlier, gross domestic savings are the difference between the total consumption and the GDP. Since workers' remittances are used to supplement domestic investment and/or domestic consumption, the total consumption includes consumption financed from the remittances (Amjad 1986). Thus, as the percentage share of the remittances in the GNP increases, the above definition of gross domestic savings tends to, systematically, understate the domestic saving efforts. This is evident from the saving rates reported in Table 3. Whereas, the gross national saving rate remained over 14 percent in the latter half of the Seventies and the Eighties, the gross domestic saving rate declined, almost continuously, from 10.8 percent in 1975-76 to 5.04 percent in 1984-85. During this period, the share of remittances, in GNP, increased from 1.5 percent in 1975-76 to 7.6 percent in 1982-83, but dropped to 6.2 percent in 1984-85.

²Net factor income from abroad includes workers' remittances and is net of other private transfers.

³Alternatively, gross domestic saving can also be obtained by subtracting total consumption from gross domestic product (GDP).

Table 3

Saving Series and Saving Rates

Years	Gross National Saving	Gross Domestic Saving	National Saving Rate ^a	Domestic Saving Rate ^b	Remittances as Percentage of GNP
	(Current Million Rupees)				
1969-70	6239	6236	13.06	13.06	NA
1970-71	6409	6491	12.63	12.78	NA
1971-72	6958	6859	8.49	12.55	NA
1972-73	9472	9009	14.77	13.35	0.4
1973-74	8989	8372	10.13	9.50	0.4
1974-75	9343	8196	8.32	7.37	0.7
1975-76	17076	14084	12.81	10.80	1.5
1976-77	21586	16106	13.91	10.76	2.8
1977-78	27673	15534	14.68	8.81	4.9
1978-79	28409	13876	13.55	7.11	5.2
1979-80	36536	18252	14.45	7.78	5.3
1980-81	43743	21051	14.55	7.57	5.5
1981-82	46913	21564	13.51	6.70	5.6
1982-83	65215	25820	16.25	7.31	7.6
1983-84	66136	26541	14.45	6.35	6.9
1984-85	61997	23686	12.19	5.04	6.2
1985-86	81221	38294	14.24	7.26	5.7

Notes: ^aExpressed as percentage of GNP.

^bExpressed as percentage of GDP.

From the above discussion, one may conclude that the decline in the gross domestic saving rate is because of the accounting procedure and does not, necessarily, reflect a shift in the domestic saving behaviour. If this is true, then a simple solution would be to adjust the domestic saving series, taking into account that part of the consumption which is financed from remittances. This is done by subtracting a fraction of the total remittances, rather than the conventional method of subtracting the whole amount, from the gross national saving series. According to the recent ILO/ARTEP survey report, the remittances receiving households spend about 60 percent of the remittances on recurring consumption, consumer durables, and occasions such as marriages/Haj, and the remaining 40 percent are saved/invested. Using these estimates, gross domestic savings series were adjusted by subtracting 40 percent of the remittances from Gross National Saving. The adjusted domestic saving series and the saving rates are reported in Table 4. The estimates show that the

Table 4
Adjusted and Actual Saving Series and Saving Rates

Years	Adjusted Gross Domestic Saving		Actual Gross Domestic Saving		Adjusted Gross Domestic Saving Rate ^a	Actual Gross National Saving Rate ^b	Actual Gross Domestic Saving Rate ^a
	(Current Million Rupees)						
1969-70	6481.7	6239.0	6236.0	13.6	13.1	13.1	13.1
1970-71	6491.0	4609.0	6491.0	12.8	12.6	12.8	12.8
1971-72	6859.0	6958.0	6859.0	12.6	12.7	12.6	12.6
1972-73	9788.5	9659.6	9270.9	14.5	14.2	13.7	13.7
1973-74	9191.7	9284.6	8784.7	10.4	10.4	10.0	10.0
1974-75	9455.3	9908.1	8984.7	8.5	8.8	8.1	8.1
1975-76	16068.0	18591.3	16199.0	13.3	13.8	12.4	12.4
1976-77	19539.3	24827.9	20630.9	13.1	15.7	13.8	13.8
1977-78	22400.6	34636.7	25253.6	12.7	17.7	14.3	14.3
1978-79	22174.2	36588.0	25291.9	11.4	16.8	13.0	13.0
1979-80	28635.1	46707.3	32448.7	12.2	17.8	13.8	13.8
1980-81	33495.3	56189.5	38423.3	12.1	18.0	13.8	13.8
1981-82	35650.9	61518.2	41949.3	11.1	17.0	13.0	13.0
1982-83	47811.3	88224.7	57935.9	13.2	20.8	16.0	16.0
1983-84	48671.3	89956.2	59788.2	11.6	18.7	14.3	14.3
1984-85	45933.4	85648.9	56698.3	9.8	16.1	12.1	12.1
1985-86	63410.0	105808.1	72611.6	12.0	17.8	13.8	13.8

Notes: ^aExpressed as percentage of GDP.

^bExpressed as percentage of GNP.

adjusted saving rates are not only comparatively higher in relation to the unadjusted ones, but also they do not decline continuously.

The gross national savings, and the adjusted domestic savings take into account remittances received through the official channels only. Thus, it is likely that they may be understating the actual level of savings in the economy. The actual gross national and domestic savings estimates, based on the actual flow of remittances, are reported in Table 4. The estimates show that the actual gross national and domestic saving rates, are much higher than those obtained from the national accounts. They, further, confirm that there has been no significant behavioural shift in the domestic saving efforts.

To further investigate the domestic saving behaviour, simple ordinary least square regressions, both in linear as well as in log-linear forms, were estimated, over three different periods: (i) 1959-60 – 1973-74, a period when the inflow of remittances was not significant, (ii) 1973-74 – 1985-86, a period of increased remittances inflow, and (iii) 1959-60 – 1985-86, using gross domestic product (GDP), remittances, and expected inflation rate as the explanatory variables. If remittances had affected domestic saving behaviour adversely, it is expected that its coefficient will be negative. The expected inflation rate is included as the opportunity cost of saving. If people expect that the inflation rate in the future will be relatively higher, they may or may not save more. A negative coefficient will indicate that people substitute their future consumption for present consumption and save less in response to a higher expected inflation rate. To determine, whether there has been any structural and/or behavioural shift in the domestic saving behaviour between 1959-60 – 1972-73 and 1973-74 – 1985-86, a dummy variable, both in additive as well as in multiplicative form, was used in the regression for the period 1959-60 – 1985-86. The dummy variable takes a zero value when remittances were not important, i.e. 1959-60 – 1972-73, and one for the period which experienced increased remittances inflow, i.e. 1973-74 – 1985-86. The estimated regressions are reported in Table 5.

A comparison of the coefficients of GDP in Equations 1 and 2 indicates that there has been a small decline in the domestic marginal propensity of save out of the GDP from 0.15 to 0.14 between 1959-60 – 1973-74 and 1973-74 – 1985-86. However, when remittances are included in the regression, the coefficient jumps to 0.185, as can be seen from Equation 3. The estimates further show that domestic marginal propensity to save out of remittances is negative. These two results, taken together, suggests that at the aggregate level, remittances are used mainly for consumption and they have helped in freeing domestic resources which are being saved. The estimates of domestic saving elasticities with respect to the GDP and the remittances, as can be seen from Equation 5 through 7, further confirm these results. The additive dummy has a negative sign and is significant, thus suggesting that there has

Table 5
 Ordinary Least Square Estimates of Domestic Saving Function
 (Constant 1959-60 Prices)

Period	Constant	GDP	Remittances (Official)	Inflation Rate	Dummy	\bar{R}^2	D.W.	F
Linear								
1959-60 - 1973-74	-672.52 (-1.34)	0.15 (8.49)	-	-68.04 (-2.74)	-	0.846	1.60	36.61
1973-74 - 1985-86	-4293.34 (-1.75)	0.14 (4.68)	-	107.46 (1.50)	-	0.701	1.68	15.07
1973-74	-3212.58 (-2.46)	0.185 (5.39)	-1.03 (-2.64)	-	-	0.784	1.82	22.75
1959-60 - 1985-86	-20.80 (-0.04)	0.12 (7.97)	-	-	-1709.16 (-2.96)	0.79	0.99	50.0
Log-linear								
1959-60 - 1973-74	-6.62 (-3.48)	1.45 (7.74)	-	-0.035 (-2.28)	-	0.817	1.073	29.99
1973-74 - 1985-86	-8.94 (-1.86)	1.56 (3.67)	-	-0.036 (1.50)	-	0.563	1.57	8.74
1973-74 - 1985-86	-11.43 (-2.95)	2.06 (4.85)	-0.35 (-2.76)	-	-	0.696	1.61	14.73
1959-60 - 1985-86	-4.59 (-2.46)	1.24 (6.80)	-	-	-0.46 (-3.00)	0.734	0.95	35.42

Note: Figures in parenthesis are *t*-ratios.

been a structurally significant decline in domestic saving, because of the remittances. The coefficient of the multiplicative dummy, although negative, was not significant. This supports the argument that remittances have not adversely affected the domestic saving behaviour.

IV. REMITTANCES AND THE BALANCE OF PAYMENTS

As workers' remittances have supplemented foreign exchange availability to Pakistan's economy, it is widely recognized that increased remittances inflow, significantly, improved the balance of payments (BOP) position during the second half of the Seventies and the early Eighties. Table 6 gives the BOP position of the Pakistani economy from 1974-75 through 1985-86. It shows that as the share of remittances from the Middle East in the GNP increased from 0.7 percent in 1974-75 to 7.6 percent in 1982-83, the current account deficit as a percentage of the GNP dropped from 10.3 percent to 1.3 percent. With a decrease in the share of remittances in the GNP to 5.7 percent in 1985-86, the current account deficit has increased to 3.2 percent in the same period. At their peak in 1982-83, remittances from the Middle East were 80 percent of the trade balance.

To what extent, has this improved BOP situation helped the growth performance can be determined from Figure 1. In general, it can be said that as the share of the remittances from the Middle East (RME) in the GNP, increases, the national saving rate (NSR) increases and the current account deficit (CAD), as a percentage of the GNP, decreases. This has accelerated the GNP growth rate. With the decline in the share of RME in the GNP, after 1982-83, the NSR has declined and the share of the CAD, in the GNP, has increased but only till 1984-85. Both have improved appreciably in 1985-86. The GNP growth, however, has slowed down, only, during 1983-84 and has accelerated since then. This improvement in the CAD and the NSR in 1985-86 and acceleration in the GNP growth since 1983-84, can be attributed to some improvement in the international terms of trade (TOT) since 1981-82, see Table 6.

The foreign exchange availability through workers' remittances, from the Middle East, has not only helped the economy in sustaining a reasonably high GNP growth rate, by reducing the current account deficit, it has also reduced its external debt burden and has improved its debt-servicing ability. Table 7 brings this out. While the ratio of external debts (Disbursed and Outstanding) to the GNP has increased from 29 percent in 1969-70 to 49 percent in 1973-74, but has started declining since continuously, coming down to 29.5 percent in 1982-83, a period of increasing share of RME in the GNP. Since then, however, the Debt/GNP ratio has increased to 31.4 percent together with a decline in the share of the RME in the GNP. Debt servicing which was 52 percent of the total exports receipts in 1969-70 was

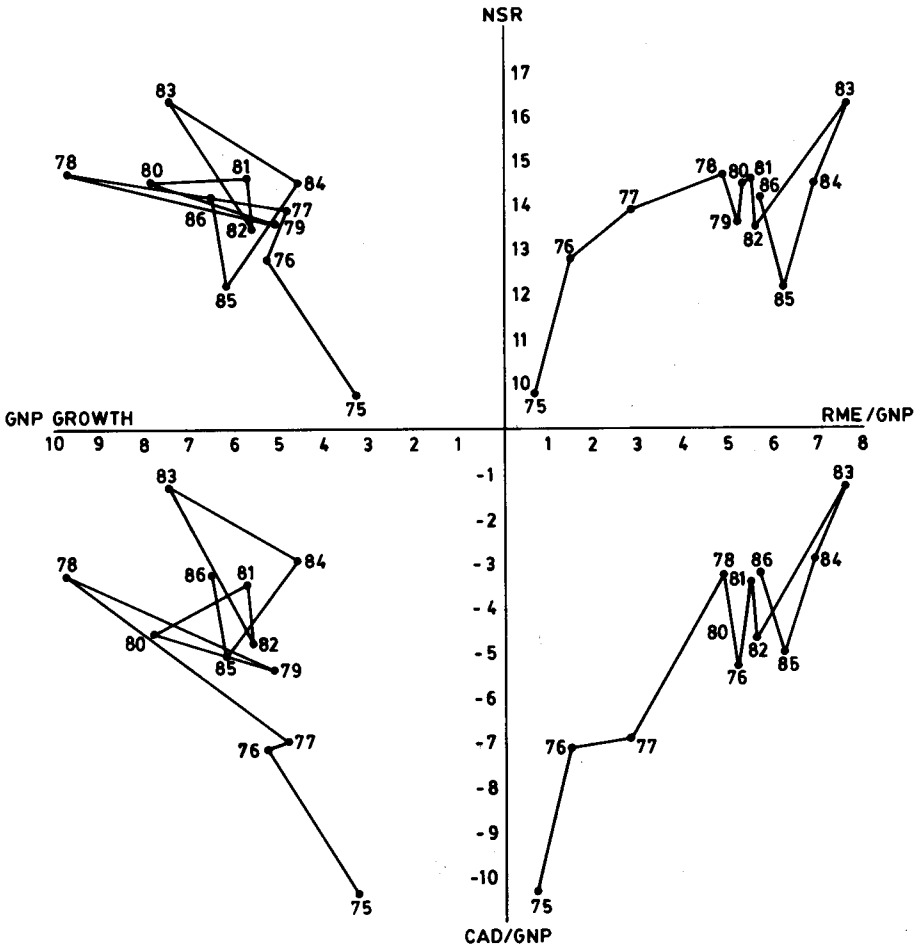


Fig. 1.

Table 6
Balance of Payment

Years	Non Factor Services + Investment		Private Transfers (Net)	Remittances from ME		Current Account		Terms of Trade	
	Trade Balance	Income (Net)		Million US Dollars	Percent of GNP	Million US Dollars	Percent of GNP		Percent of Trade Balance
1974-75	-1137	-261	229	75.7	0.7	-1169	-10.3	6.7	94.6
1975-76	-997	-334	353	203.0	1.5	-958	-7.1	20.8	100.0
1976-77	-1286	-386	590	434.3	2.8	-1082	-6.9	33.8	108.9
1977-78	-1469	-362	1226	932.9	4.9	-605	-3.2	63.5	105.3
1978-79	-2172	-438	1496	1095.7	5.2	-1114	-5.3	50.5	126.2
1979-80	-2516	-519	1895	1362.6	5.3	-1140	-4.5	54.2	111.4
1980-81	-2764	-515	2242	1667.4	5.5	-1037	-3.4	60.3	97.0
1981-82	-3450	-496	2412	1835.7	5.6	-1534	-4.7	53.2	89.2
1982-83	-2989	-509	3081	2402.9	7.6	-417	-1.3	80.4	89.2
1983-84	-3324	-717	3044	2344.3	6.9	-997	-2.9	70.5	93.1
1984-85	-3552	-815	2687	2069.3	6.2	-1680	-5.0	58.3	92.0
1985-86	-2990	-963	2808	2021.5	5.7	-1145	-3.2	67.6	92.3

Source: *Pakistan Economic Survey, 1985-86*, Statistical Supplement.

Table 7
External Debts, Debt Servicing and Foreign Borrowings

Years	Total External Debts Disbursed & Outstanding			Debt Servicing			Total Loans and Credit Contracted		
	Million US Dollars	Percent of GNP	Million US Dollars	Percent of RME	Percent of Export Receipt	Percent of Foreign Exchange Earning	Million US Dollars	Average Annual Growth Rate	Million US Dollars
1969-70	2917.9	29.1	—	—	—	—	480.9	25.67	—
1973-74	4395.2	49.0	—	—	—	—	1199.5	—	—
1974-75	—	—	248	327.6	23.9	16.3	—	—	-8.14
1975-76	—	—	250	123.2	22.0	13.8	—	—	—
1976-77	6341.5	40.4	12	71.8	27.3	15.4	927.4	—	—
1977-78	—	—	332	35.6	25.3	11.4	—	—	14.63
1978-79	—	—	436	39.8	25.5	11.9	—	—	—
1979-80	6857.5	33.9	584	42.9	24.7	11.9	1402.8	—	-4.36
1980-81	—	—	602	32.8	20.4	10.4	—	—	—
1981-82	—	—	492	26.8	20.0	8.8	—	—	—
1982-83	9312.4	29.5	634	26.4	23.5	9.6	1225.7	—	—
1983-84	—	—	727	31.0	26.3	10.9	—	—	11.87
1984-85	—	—	788	38.1	31.6	12.8	—	—	—
1985-86	11118.9	31.4	906	44.8	29.5	12.6	1721.7	—	—

only 8.8 percent of the total foreign exchange earnings in 1981-82. Later, it has increased to 12.6 percent of the total foreign exchange earnings due to the decline in the share of RME in the GNP during this period.

The increased inflow of remittances had also greatly decreased the need for additional foreign loans to finance the development expenditure. This is evident from Table 7. Between 1969-70 and 1973-74, new foreign loans and credit contracts had increased at an average annual rate of 25.67 percent. The sharpest increase came between 1972-73 and 1973-74, i.e. after the first oil price increase. Between 1973-74 and 1976-77, the new foreign loans contracted had decreased at an average rate of 8.14 percent. These loans again had increased sharply between 1978-79 and 1979-80, i.e. after the second oil price increase. This had resulted in an average annual growth rate of 14.63 percent, for the period 1976-77 to 1979-80. Between 1979-80 and 1982-83, a period of increased inflow of remittances, new foreign loans contracted decreased at an average rate of 4.36 percent. As remittances decreased after 1982-83, new foreign loans contracted increased at an average rate of 11.87 percent between 1982-83 and 1985-86.

With the sharp increase in the price of oil over time and the resulting increase in the level of economic activity in the Middle East, much focus had been laid on the analysis of (i) the flow of migration and its effects on the labour markets of the labour-exporting countries, and (ii) workers' remittances and their effects on the labour-exporting economies. Surprisingly, nothing had been said about the effects which the increased level of economic activity, in the Middle East, may have on the demand for the exports of the labour-exporting countries. Table 8 gives changes in the share of Pakistan's exports to the Middle East in its total exports. The evidence indicates that during 1973-74 to 1982-83, when, due to increase in the oil price, economic activity in the Middle East was booming, the share of Pakistan's exports to the Middle East, in its total exports, had increased from 16.3 to 34.3 percent. As oil

Table 8

Changes in Export Share

Years	Total Exports		Exports to Middle East (% of Total Exports)
	Million US \$	% of GNP	
1969-70	338	3.4	11.6
1973-74	1026	11.5	16.3
1976-77	1141	7.3	27.3
1979-80	2365	9.3	20.1
1982-83	2694	8.5	34.3
1985-86	3070	8.7	16.9

prices decreased and economic activity in the Middle East slowed down, demand for the Pakistani exports, also, dropped and its share of exports to the Middle East declined to 17 percent. The share of total exports in the GNP, on the other hand, had changed only marginally. This suggests that, with the slowing down of economic activity in the Middle East, the labour-exporting economies, like Pakistan, are likely to face BOP problems, not only because of the reduced amount of remittances, a source of foreign exchange earnings, but also, because of the decline in the demand for their exports in the Middle East.

V. CONCLUSION

In this paper, we have analysed the impact of remittances from the Middle East on Pakistan's GNP growth, domestic savings and the balance of payments. It had been shown that: (i) If, in future, the amount of remittances continue to fall, other things remaining the same, not only will the GNP growth be lower than that of the GDP but it will also be difficult to maintain a high rate of growth. (ii) The decline in the domestic saving rate is due to the accounting procedure and does not necessarily reflect a shift in the domestic saving behaviour. (iii) The foreign exchange which has been made available because of the workers' remittances from the Middle East has not only helped in reducing the current account deficit, but has also reduced the external debt burden, has improved debt-servicing ability, and has decreased the need for additional foreign loans. (iv) With the slowing down of economic activity in the Middle East, Pakistan is likely to face balance of payments problems not only because of the reduced amount of remittances but also because of the decline in the demand for its exports in the Middle East.

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Comments on “Workers’ Remittances from the Middle East and their Effect on Pakistan’s Economy”

This paper deals with an important subject. But, it fails to come to grips with the real issues at hand. The analysis is trivial and cavalier and the results of various econometric applications misleading. The paper starts out with a growth-accounting framework, aimed at assessing the contribution of remittances to economic growth. Using five arbitrary sub-periods, various ratios are calculated. The profound conclusion derived from this analysis is that when remittances rose, so did GNP and vice-versa. This discovery is followed by an assessment of the impact of remittances on domestic demand and output across various sectors. Here, the author’s conclusions are contradicted by the data he presents himself in Table 3. The reasons for this slip is that his analysis is based on the uncritical application of Amjad’s (1986) data and paper and an insufficient understanding of how the national accounts are compiled. The author, evidently, did not see nor read my published (and hence readily accessible) comments on Amjad’s work.

The paper then moves on to examine the link between remittances and savings. This could have been an interesting exercise. Instead, with no theoretical framework we are confronted with a number of regressions between domestic savings, remittances, GDP and the expected rate of inflation. The results are most unsatisfactory. Looking at the unadjusted savings series first, it is claimed that a comparison of the results in Equations 1 and 2 (the linear relationship) show a decline in the domestic marginal propensity to save without even applying the most basic tests for statistical differences in estimated coefficients derived from different sub-periods. It is further argued that the coefficient on GDP ‘jumps to 0.185’ following the inclusion of official remittance inflows (not surprisingly if GDP and remittances are highly co-linear in the observations) and the domestic marginal propensity to save out of remittances is negative at -1.03 , whatever that number is supposed to mean. In any event, gross disposable income not gross domestic product is the more appropriate variable to use in the savings function and I suspect that the results would be quite different if this adjustment were to be made. The elasticity of savings with respect to GDP in the log-linear formulation is as high as 2 (which is splendid news for planners and policy-makers struggling with Pakistan’s vexing low domestic savings problem) and bounces around from 1.45 to 2.06 with small changes in specification.

But these bizarre numbers and the instability of the estimates do not deter the author. Nor does the stark evidence on severe auto-correlation in some of the results. The 'adjusted' domestic savings function estimated for the full period FY 74-86 (results reported in Table 2) produces even more odd results with remittances now being *positively* (if insignificantly) correlated with savings rates! The author also confuses the reader further by claiming in one breath that 'there has been a structurally significant decline in domestic savings because of remittances' while subsequently arguing that 'remittances have not caused any behavioural decline in domestic savings efforts'. Presumably the key word here is 'behavioural' as opposed to 'structural' as represented by the statistical significance (or lack of it) of the multiplicative and additive dummies, respectively. I am afraid the importance of this distinction, either as a historical fact (which needs an explanation) or for policy-making purposes, eludes me. In none of the regressions is the macro-economic setting (both domestic and external) or the policy stance of the government discussed or related to the choice of sub-periods or the econometric results. One wonders what on earth to make of all this.

The final section of the paper deals with the impact of remittances on the balance of payments. Here there are further profundities such as the view that the rise in remittances reduced the current account deficit and the extraordinarily naive claim that remittances have not led to an increase in consumer goods' imports so that all is well. Apparently, the author has not heard of the phenomenon of smuggling, variously estimated at 40 percent or more of recorded imports into Pakistan, and which is obviously *not* included in official trade statistics.

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