Impact of Workers' Remittances from the Middle East on Pakistan's Economy: Some Selected Issues

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Over the last decade, the phenomenon of overseas migration from Pakistan to the countries of the Middle East and North Africa¹ has had a far reaching impact on the domestic economy. Indeed, no factor has more dramatically affected the domestic employment situation and the balance-of-payments position as the outflow of contract workers and inflow of workers' remittances from those countries. According to the Sixth Plan, as much as one-third of the increase in the labour force during the years 1978-83, i.e. the Fifth Plan period, was absorbed by migration to the Middle East [14, p. 499]. At its peak in 1982-83, official flow of remittances from the Middle-East was equivalent to 70 percent of the country's total exports of goods and non-factor services (Table 1). More recently, the slowing down in economic activity in the major labour-receiving countries together with increased competition from other labour-exporting countries has led to a decline in the outflow of migrant workers, and, with the quickening pace of return migration, there is a decline in the stock of Pakistani workers in these countries.² This has put considerable pressure on the domestic employment situation. While remittances from the Middle East countries have also declined after reaching a peak in 1982-83, the absolute decline has not been substantial, although there is still considerable apprehension about the volume of the remittances in future years.

While there is considerable uncertainty as to what the future trends may be, there is a broad consensus that the peak of the Middle East 'boom' is over and that the migration which started in 1976 will never reach the same intensity as it did during the 'decade of migration', especially between 1976-77 and 1982-83. Given the fact that this migration had such a far-reaching effect on the entire socio-economic

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¹ Hereafter referred to only as the Middle East.

² According to official estimates of out migration the total number of workers (with over 90 percent for the Middle East) declined from 168,403, in 1981 to 88,461, in 1985. There are no official estimates of return migration. However, two one-month surveys, covering all international airports, carried out in the ARTEP Phase II Migration Project in May and October 1985, showed the number of return migrants to be, on the average, 11,608 per month. For a discussion on the factors leading to a decline in Pakistan's share in the stock of workers in the Middle East, see [8]. The results of the ARTEP Phase II Migration Project are to be published shortly.

Table 1

Workers' Remittances from Middle East and Balance of Payments

(Percentages)

Year	Workers' Remittances as % of Exports + Non-factor Services	Workers' Remittances as % of Imports + Non-factor Services	Workers' Remittances as % of Trade Balance + net Non-factor Services	Debt Service Payments as % of Workers' Remittances
1976-77	30.91	15.09	29.46	71.89
1977-78	56.61	28.30	56.58	35.58
1978-79	52.02	24.44	46.09	39.78
1979-80	46.13	23.87	49.47	42.85
1980-81	48.33	25.78	55.25	86.11
1981-82	60.62	27.70	51.01	26.54
1982-83	70.47	36.48	75.61	26.38
1983-84	68.14	33.25	64.95	31.02
1984-85	63.84	29.14	53.62	38.09
1985-86	—	—	—	39.49

Source: Table 4.

structure of the country, its slowing down, too, is bound to have important repercussions. The impact of this slowing down on the domestic employment situation and on the functioning of the domestic labour market has been the subject of a number of recent studies, and a broad consensus, at least as regards the latter, seems to be now emerging. During the initial spurt in migration, the concentration of demand for particular skills, especially in the construction sector, led to severe shortages in the domestic economy, and real wages of workers in construction and specific skills in manufacturing increased substantially. However, over the last few years, as a result of both the increase in domestic supply (including public-sector investment in skill-development programmes) and the slowing down of overseas demand, these shortages have been satisfactorily met, and the results of two recent surveys clearly show that firms in manufacturing and construction do not find capacity utilization constrained as a result of skill shortages caused by migration to the Middle East.³

³ The three earlier studies which analysed the impact of migration on domestic wage rates and skill shortages in the manufacturing and construction sector were Gilani *et al.* [3], Irfan [10] and Akmal Hussain [5], the results of which were included in ILO/ARTEP [7]. The results of a recent field survey on labour market adjustment to immigration in Pakistan, conducted in 1985, are published in [13]. A survey of firms in the manufacturing and construction sectors, conducted under the ARTEP Phase II Migration Project at the end of 1985 and early 1986, also broadly confirms the results of the Manpower Division [13]. As mentioned earlier, the results of ARTEP Phase II are to be published shortly.

As to the impact of remittances on the domestic economy, this has been limited either to its overall balance-of-payments effect or to studies based on field surveys which have analysed the use of remittances by households of migrant workers. There is little work on Pakistan at least as far as the author is aware, on trying to combine the overall macro implications of these micro studies and to evaluate and analyse the impact of the use of workers' remittances on the overall growth of the economy as well as on its important sectors.⁴ Similarly, one finds that the development planning process in the country has rarely taken into account workers' remittances when analysing overall investment, domestic savings and sectoral investment and growth.⁵

This paper makes a very preliminary attempt to fill in this gap. Its main purpose is to clarify concepts, identify issues and point out the glaring data gaps which exist. However, on the basis of available macro data as well as the result of previous and some very recent micro studies, this paper does try to relate the use of remittances by the migrant household with the overall development of the economy. In the course of the analysis, certain policy issues also emerge and these are suggested as possible areas of government intervention.

I. WORKERS' REMITTANCES AND NATIONAL INCOME ACCOUNTS

Pakistan is amongst the few countries which include workers' remittances separately in their gross national-income estimates [19]. A convenient starting point is, therefore, to examine the basic national-income-accounting identities; for, as we shall see, this provides important insights into how workers' remittances affect the overall economy and, especially, such key variables as the saving rate.

$$\begin{aligned} \text{Net Factor Income from Abroad} &= (\text{Investment Income} + \text{Workers' Remittances} + \text{Other Private Transfers received by residents from abroad}) - (\text{Investment Income} + \text{Private Transfers made to non-residents}). \dots\dots\dots (i) \end{aligned}$$

⁴ There are, of course, a large number of studies which have tried to evaluate the effect of migration on the development process including a number of country-specific case-studies, of which Paine's study [16] on the Turkish migrant workers is well known. For an excellent review of the development literature on the subject, see Irfan [10] and Azfar Khan [11]. For a study on the political economy of manpower exports from Pakistan, see Jamil Rashid [18].

⁵ This is, far example, most glaringly true of Pakistan's Sixth Five Year Plan, as well as of most official analysis of Pakistan's economic performance published by the Planning Commission or the Ministry of Finance.

Gross National Product (at market prices)	≡ Gross Domestic Product + Net Factor In- come from Ab- road (ii)
Gross Domestic Product	≡ Total Consumption + Total Investment + Exports (G&NFS)* – Imports (G&NFS) . . (iii)
External-resource Balance	≡ Imports (G&NFS) – Exports (G&NFS) . . . (iv)
Total Investment**	≡ Gross Domestic Savings plus External Re- source Balance (v)
Gross Domestic Savings (taken as percent of GDP)	≡ Total Investment – External Resource Balance (as percent of GDP) (vi)
Gross National Savings (taken as percent of GNP)	≡ Gross Domestic Savings plus Net Factor Income from Abroad (as percent of GNP) . . (vii)
Total Investment	≡ Gross National Savings plus External Re- source Minus Net Factor Income from Abroad (viii)

*G&NFS = Goods and Non-factor Services

**Y=C+I+X–M

I=(Y–C)+(M–X)

or
=S+(M–X)

In the above identities, the important distinction is between national and domestic savings and the financing of investment. As Equation (v) shows, total investment in the economy may be financed through domestic savings or through external resources. The external resources available are represented by the external-resource balance, i.e. Equation (iv), which shows the physical resources made available by foreign loans and grants, net factor income from abroad and other financial transactions including the use of reserves. Gross domestic savings is therefore total investment minus the external-resource balance, Equation (vi), and is normally calculated as a residual and expressed as a percentage of GDP.

Now, during a time period when net factor income from abroad is not significant (as in Pakistan during the Fifties and Sixties), the external-resource balance can be taken as a fairly good indicator of the foreign loans and grants available to finance the excess imports over exports and this, together with domestic savings, finances total investment in the economy. However, during a time period when net factor

income from abroad (including workers' remittances) is significant, the external-resource balance reflects, in terms of financing the deficit, both foreign loans and grants and workers' remittances which are available in foreign exchange. To take into account these foreign-exchange resources which are now made available to the domestic economy, the identity used is that of gross national savings, to calculate which we add gross domestic savings to net factor income (including workers' remittances) from abroad [Equation (vii)]. In terms of the identities defined earlier, this basically means that to the extent the external-resource balance is being financed by net factor income from abroad (including workers' remittances), the reliance on sources like foreign loans and grants to finance total investment is decreased and there is consequently an increase in gross national savings by this amount.

As regards the level of consumption and savings, the gross domestic saving rate basically reflects the difference between *total* consumption in the domestic economy (including that financed by workers' remittances) and domestic income, i.e. excluding workers' remittances. A decline in the gross domestic savings therefore implies that the reliance on outside resources (in this case, workers' remittances) to finance domestic consumption has increased. However, by including workers' remittances in GNP and, hence, national savings, we have a measure of total consumption and total income with the difference reflecting national savings.

The important point to emphasize is that workers' remittances from overseas as part of the net factor income from abroad basically serves two primary purposes. Firstly, it supplements the foreign-exchange resources available to the economy and to that extent it reduces the balance-of-payments constraint. Secondly, the corresponding domestic resources which are generated (i.e. the Rupee resources) can then be used to supplement domestic investment or domestic consumption. However, the overall effect of the total resources available through workers' remittances will be finally reflected as an increase in total imports, equivalent to this amount. It is for this reason that the basic identity used for total resources available to the economy is shown as

$$\text{Total Resources} \equiv \text{GNP (at market prices)} + \text{Imports (G\&NFS)} - \text{Exports (G\&NFS)} - \text{Net Factor Income from Abroad} = \text{Total Investment (Gross Fixed Capital Formation + Changes in Stocks)} + \text{Total Consumption (Private + Public)}^6$$

While some of the above relationships may not be intuitively obvious, their significance will become clearer in the analysis that follows.

⁶These identities are used to estimate total resources in Pakistan national income accounts, see *Economic Survey 1985-86* [12], Statistical Annexure, Table 2.2 and Table 2.4.

II. WORKERS' REMITTANCES FROM THE MIDDLE-EAST AND THE NATIONAL ECONOMY

We now examine in some detail the period after 1976-77 when workers' remittances from Middle East countries began to have a significant impact on the domestic economy. These countries include U.A.E., Libya, Bahrain, Kuwait, Qatar, Muscat, Oman, Iran and Saudi Arabia.

Tables 1 to 7 bring out both the impact of remittances in terms of balance-of-payments support and the behaviour of the overall economy and its major sectors during this period. We may summarize the main features that clearly emerge as follows.

(i) First and foremost is the dramatic sixfold increase in remittances from the Middle East, from US \$434 million in 1976-77 to a peak of US \$2344 million in 1982-83, after which it declined although there was a very slight increase between 1984-85 and 1985-86 (Table 2).

(ii) As a percentage of GDP, workers' remittances from the Middle East increased from 3.16 percent in 1976-77 to a peak of 9.39 percent in 1982-83. After this, they declined, but in 1985-86 their contribution (7.01 percent of GDP) was still extremely significant.

It is important to note that in our estimate we are only including workers' remittances in cash and not in kind (i.e. consumer durables brought along by the worker on his final return or visits home). The national-income-accounting estimates of net factor-income from abroad for the period from 1976-77 to 1982-83 do include remittances both in cash and in kind. Separate estimates of the amounts shown for remittances in kind are not available. However, a comparison of the estimates of total workers' remittances and net factor income from abroad during these years shows the difference to be marginal. The general impression, as well as some of the evidence we shall present later, will show that the amount brought by workers in the form of consumer durables in kind was quite substantial. A case for including this item in net factor income from abroad may be justified. However, the difficulty involved in obtaining or forming some reliable estimate of these flows may be a major reason of its discontinuation after 1982-83. However, to make the series consistent, at least the amount attributed to remittances in kind should be separately available.

(iii) Tables 1 and 4 bring out the contribution of remittances from the Middle East to the balance of payments including debt service repayments. At its peak in 1982-83 remittances from the Middle East contributed as much as 75 percent to the overall balance of trade (including non-factor services) and financed 36 percent of the merchandise imports and non-factor services. In 1982-83, debt service payments were only 26 percent of workers remittances from the Middle East as compared with almost 72 percent in 1976-77.

Table 2

Broad Macro Indicators

(Million US dollars)

Year	GDP (at factor cost)	Total Workers' Remittances	Workers' Remittances from Middle East ¹	Net Factor Income from Abroad ²	Per Capita Income ³
1976-77	13736	578	434	554	211
1977-78	16154	1156	933	1226	249
1978-79	17984	1397	1096	1468	268
1979-80	21273	1748	1363	1847	314
1980-81	25010	2117	1667	2292	362
1981-82	27472	2225	1850	2403	381
1982-83	25584	2886	2403	3090	353
1983-84	27611	2731	2344	2933	369
1984-85	27769	2446	2069	2504	351
1985-86	29941	2665	2099 ⁴	2683	365

Source: [12, Statistical Annexure]. Figures for GDP, Net Factor Income from Abroad and per Capita Income were converted to US dollars at the official exchange rate as given in the same source (p. 141). Exchange rate for 1985-86 is for July 1985-March 1986. Figures for remittances from the Middle East for earlier years are from the Government of Pakistan's *Pakistan Economic Survey* (various issues).

Notes: ¹ Includes U.A.E., Libya, Bahrain, Kuwait, Qatar, Muscat, Oman, Iran and Saudi Arabia.

² The estimates of Net Factor Income from Abroad for the years from 1976-77 to 1982-83 include remittances both in cash and in kind.

³ GNP (at market prices) divided by population.

⁴ Extrapolated on the basis of July-March figures.

Table 3

Broad Macro Indicators

Year	Remittances from the Middle East as % of GDP	Per Capita Remittances from the Middle East as % of GNP per Capita ¹
1976-77	3.16	2.77
1977-78	5.78	4.9
1978-79	6.09	5.19
1979-80	6.41	5.32
1980-81	6.67	5.58
1981-82	6.73	5.62
1982-83	9.39	7.65
1983-84	8.49	6.91
1984-85	7.45	6.21
1985-86	7.01	5.89

Source: Table 2.

Note: ¹ Total remittances from M.E. divided by total population. Latest GNP per capita from [12].

Table 4

Workers Remittances from Middle East and B.O.P.

(Million US dollars)

Year	Workers' Remittances from Middle East	Merchandise Exports	N.F.S. ¹ Exports	Merchandise Imports	N.F.S. ¹ Imports	Debt Service Repayment ²
1976-77	434	1132	272	2418	459	312
1977-78	933	1283	365	2751	546	332
1978-79	1096	1644	463	3816	669	436
1979-80	1363	2341	614	4857	853	584
1980-81	1667	2799	650	5563	903	602
1981-82	1850	2319	733	5769	910	491
1982-83	2403	2627	783	5616	972	634
1983-84	2344	2669	771	5993	1056	727
1984-85	2069	2475	766	6009	1091	788
1985-86	2099	2702 ³	(n.a.)	5830 ³	(n.a.)	829

Sources: (i) [12]. Merchandise imports and exports from Annexure Table 10.1 and Debt service repayments from Table 11.3, p. 148.

(ii) For Non-Factor Service exports and imports, World Bank. *Pakistan Economic and Social Development Prospects Volume 1*. (Report No. 5962-PAK) Washington, D.C. February 1986. p. 133.

Notes: ¹ Non-factor Services.

² Debt service payments are exclusive of charges on I.M.F. facilities and short-term borrowing.

³ Extrapolated on the basis of July-March figures.

n.a. = not available.

(iv) Despite the substantial increase in the level of imports made possible by remittances, there is no significant change in the level of investment as a percentage of GNP (at market prices) during this period. As Table 5 shows, the levels of total investment in the economy increased very little compared with those in the earlier period from 1970-71 to 1976-77 and were substantially lower as compared with those in the first half of the Sixties. This would be suggestive of the fact that the proportion of income from abroad, including workers' remittances, that went into investment was not much different from that which went in investment from domestic income in this or the earlier period.

(v) As regards the level of savings, as Table 5 shows, whereas gross domestic savings declined sharply during the period from 1977-78 to 1985-86 as compared

Table 5

Investment and Saving Rates

Years	Total Investment as Percent of GNP (market prices)	GDS as Percent of GDP (market prices)	GNS as Percent of GNP (market prices)
1960-61 to 1964-65	18.04	10.02	10.06
1965-66 to 1969-70	16.09	12.42	12.38
1970-71 to 1976-77	15.05	11.04	12.04
1977-78 to 1985-86	16.03	7.09	14.26

Source: Computed from [12, Statistical Annexure Table 2.3 (p. 21)].

with those in the earlier periods, the level of gross national savings increased significantly and was double the domestic saving rate during this period. What this clearly shows (as we have seen in Part I) is that the increase in workers' remittances decreased substantially the dependence on foreign borrowings to finance total investment. This happened to an extent that dependence on external borrowing declined to 12.5 percent during this period as compared with 45.3 percent in the first half of the Sixties and 22.3 percent during the period from 1970-71 to 1976-77.

It is also important in the light of our discussion in Part I to interpret the decline in gross domestic savings during this period, which fell from 11 percent in 1970-71 to only 7 percent in the subsequent period. What the fall in domestic saving rates basically shows is the proportion of domestic consumption that is now being financed through workers' remittances and *not* a sharp shift upward of the level of consumption as a proportion of gross national income. If, for example, we calculate the average propensity to consume (apc) between 1970-71 and 1985-86, there is hardly any change over the period. In fact, taking the average for the years between 1976-77 and 1985-86, the apc is 0.86 compared with 0.88 between 1970-71 and 1975-76.⁷

(vi) Given that the level of investment did not increase during this period, the high rate of growth (6.8 percent) of GDP during the period from 1976-77 to 1985-86 as compared with 3.8 percent in the earlier period of the Seventies (Table 6) reflected itself in a drastic decline in the incremental capital output ratio (Table 7). The decline in the capital output ratio after 1976-77 is indeed so steep, from 3.5 between 1970-71 and 1975-76 to 2.5 between 1976-77 and 1985-86, that it may cause

⁷ Estimates of gross national income and total consumption are from [12, Statistical Annexure Tables 2.2 and 2.3].

Table 6
Growth Rates

Years	GDP at Factor Cost	Agricul- ture	Large-scale Mfg.	Small-scale Mfg.	Construc- tion	Transport, Storage & Communi- cation	Wholesale & Retail Trade	Services
1959-60 to 1964-65	6.8	3.8	16.8	2.9	19.2	10.8	8.5	4.2
1964-65 to 1969-70	6.7	6.3	9.9	2.9	5.7	5.0	7.1	4.6
1969-70 to 1976-77	3.9	1.6	2.6	7.3	6.3	3.9	4.0	7.1
1976-77 to 1985-86	6.8	3.91	9.59	9.4	8.2	8.4	7.8	6.0
1976-77 to 1982-83	6.8	3.92	10.23	9.4	7.3	8.6	8.0	6.2
1982-83 to 1985-86	6.9	3.88	8.32	9.4	9.8	8.0	7.4	5.7

Source: Computed from [12, Statistical Annexure Table 2.2 (p. 19)].

Table 7
Incremental Capital - Output Ratio¹

1960-61 to 1964-65	3.04
1964-65 to 1969-70	2.64
1970-71 to 1975-76	3.57
1976-77 to 1985-86	2.50

Source: Computed from [12, Statistical Annexure Table 2.4 (pp. 23-24)].

Note: ¹Increase in GDP (at constant factor cost) divided by Total Investment (Gross fixed Capital Formation plus changes in stocks).

doubt on the estimates of either investment or of output growth in the last period. However, it is interesting to find that the low capital-output ratio during this period is about the same as in the second half of the Sixties which also followed a period of a high capital-output ratio in the first half of the Sixties, although this was not as high as for the period from 1970-71 to 1976-77.

As to the very high rate of growth of domestic output in this period, a number of factors certainly contributed. Firstly, the decline in the capital-output ratio reflects the coming on stream of a number of long-gestation projects (e.g. steel mill) which started in the years before 1976-77. It also reflects better capacity-utilization, especially of the manufacturing sector, made possible by a more liberal import policy and better access to imported raw materials. This would certainly not have been possible without the substantial support to the balance of payments by workers' remittances, which made it possible to finance a significant part of the trade deficit. In agriculture, a combination of good weather, timely availability of inputs, price incentives and, very recently, in the case of cotton, a major breakthrough in productivity as a result of pesticide use, all contributed to a high rate of growth of output during the overall period, despite individual years of bad harvests. This was a major change relative to the earlier period of the Seventies.⁸

III. USE OF REMITTANCES BY HOUSEHOLDS AND IMPACT ON DOMESTIC ECONOMIC DEVELOPMENT

While the contribution of remittances to the balance of payment and gross national savings clearly emerges from the foregoing analysis, what has not been specifically investigated is its impact on sectoral growth rate of output and investment. A major hurdle in undertaking such an exercise is the lack of reliable data. For a comparison of overall economic management during the two periods, see Amjad and Amjad [2].

There are basically three kinds of problems. Firstly, reliable data as regards growth of output and investment are not available for the sectors which are most affected by remittances (e.g. small-scale manufacturing, construction, ownership of dwellings and retail trade). Secondly, very few studies exist on the pattern of use of remittances by migrant households. Also, the few studies that do exist were carried out in the very early years of migration. Thirdly, it is generally acknowledged that a significant proportion of remittances come to the country through illegal channels, mainly the *hundi* system.⁹ Therefore, while workers' remittances officially recorded reflect the foreign exchange available to the country, these may not be a good indicator of the total amount of domestic (i.e. rupee) resources available to migrant households.

Within these extreme data constraints, what follows is a rather simple attempt to relate the macro with the micro studies in order to get some feel of the issues involved, mainly to place us in a position to make suggestions as regards both further investigative work and data needs for making a meaningful exercise possible. For the present analysis, for estimates of sectoral growth of output and investment we use the official statistics available and these are shown in Tables 6 and 8. Since the flow of remittances slowed down after 1982-83, we have separately shown the growth rate of output for major sectors for the periods from 1976-77 to 1982-83 and from 1982-83 to 1985-86. The impact of the slowing down of remittances would, of course, be with a lag. It is, therefore, too early to expect a significant change. However, the period of the last three years may give some indication of this. As regards the use of remittances, we have relied primarily on the results obtained by Gilani *et al.* [3] based on the field survey of migrant households carried out in 1979. These findings have been supplemented with some very preliminary results from the ARTEP Phase II Migration study based on a sample of 1360 households covering both rural and urban areas in the country excluding Baluchistan province.¹⁰ As regards the third problem mentioned earlier, the divergence between 'actual' and 'official' estimates of remittances is extremely difficult to measure. Again, some preliminary results of ARTEP Phase II Migration Project provide us with an estimate. Based on the stock of workers abroad, their skill composition, average earnings and remittances, the total remittances that would have been sent back by workers to their families, including cash on visits, is estimated. This exercise, which was carried out for 1980 and

⁹ The *hundi* is an informal bill of exchange by which the migrant receives the equivalent of rupee resources in lieu of his foreign earnings by an individual agent or firm operating abroad. The foreign exchange resources, therefore do not formally enter the country's balance of payment account. However, a portion of this amount is used to finance smuggled consumer durables and goods into the country as well as to finance consumption and investments abroad by Pakistani residents.

¹⁰ The survey was carried out in end-1985 and early 1986. The major objective of the survey was to understand the process of re-absorption of the return migrants into the labour market and the economy. The detailed results of the survey, including sampling design, are to be published shortly.

Table 8

Year	Agriculture	Large-scale		Small-scale		Ownership of Dwellings	Transport & Communication		Services
		Mfg.		Mfg.					
1976-77	3035	1526		585		1709	1167		1021
1977-78	3490	1486		635		2035	1227		1221
1978-79	3585	1755		732		2273	1384		1359
1979-80	4435	2591		920		3003	2100		1703
1980-81	4668	3291		1069		3850	1850		1919
1981-82	4610	3252		1221		4501	1776		2168
1982-83	5487	4068		1344		5899	1936		2338
1983-84	6708	5655		1472		6395	2390		2540
1984-85	7178	7469		1595		6946	3157		2678
1985-86	8048	9387		1746		7705	3853		2913

Source: [12, Statistical Annexure Table 2.5 (p. 25)].

1985, showed that official remittances may be as low as 57 percent of total workers' remittances sent from abroad.¹¹ However, at that stage, since the ARTEP survey results of return migrants was not available, the estimates used for average earnings were based on Gilani's 1979 results, to which a nominal increase in wages was added for the 1980-85 period. The results of the recent ARTEP survey now tend to suggest that this may have overestimated average earnings in 1985. While detailed alternative projections have not yet been calculated, rough estimates suggest that the difference between 'actual' and 'official' remittances may be closer to 25 percent than to 30 percent. For the purpose of the present exercise, we have used the figure of 25 percent to indicate remittances which come into the country through 'un-official' channels and to indicate the 'maximum' remitted resources available to households with migrants in the Middle East between 1976-77 and 1985-86. The official estimates are used to indicate the minimum figure.

Average Earnings, Expenditure, Remittances and Savings of Migrants Abroad

We start by examining the total earnings of a migrant worker overseas. This may be divided into three main parts. The first is the consumption expenditure incurred during his stay abroad. The second is the amount remitted by the migrant to his family from abroad. The third, which is the residual, may be taken for the time being as his savings abroad. These savings may then either be used to purchase consumer goods and durables which he may bring along with him on visits or on final return (for his personal use, for members of his household or for gifts for friends and relatives), or brought home in the form of cash savings, again on visits or final return. The total cash remittances received in Pakistan would be the sum of remittances sent from abroad and cash brought by the migrant on his visits as well as on his final return to Pakistan.

Estimates of average earnings, average expenditure, average savings and average remittances by the worker while abroad, as shown by the results of Gilani *et al.* and ARTEP Phase II study, are given in Tables 9 and 10. Gilani's estimates were based on interviews with households of the migrant workers, who were, in the vast majority of cases, still abroad. The ARTEP results are based on interviews with return migrants who have finally returned to the country. Also, while Gilani's results are for the year 1979, the ARTEP results are the average for the period till 1985 and mainly cover the years between 1975 and 1985.

¹¹ A preliminary report [11], entitled 'Estimates of Demand for Pakistani Labour and Workers Remittances from Selected Middle East Countries (Saudi Arabia, UAE, Kuwait, Oman and Qatar) 1986-90' as part of the ARTEP Phase II Migration Project was submitted to the Planning Commission in March 1986.

Table 9
Gilani's Estimates of Average Earnings, Expenditure, Remittances and Savings of Migrant Workers
(Thousand Rupees)

	Annual Estimates for				
	Unskilled Workers	Skilled Workers	Professional	Service and Clerical Workers	Businessmen
Average Income	45.06	53.8	117.6	60.16	77.92
Average Expenditure	13.31 (29.5)	19.44 (36.2)	31.52 (26.8)	20.8 (34.6)	28.71 (36.8)
Average Remittances	23.74 (52.7)	28.34 (52.6)	53.68 (45.6)	33.84 (56.3)	31.94 (41.0)
Average Savings	8.01 (17.7)	6.02 (11.2)	32.4 (27.6)	5.52 (9.1)	17.27 (22.2)

Source: Gilani *et al.* [3, p. 105].

Note: Figures in parenthesis are percentages.

Table 10
ARTEP Estimates (Average 1975-85) of Average Earnings, Expenditure, Remittances and Savings of Migrant Workers

	Annual Estimates	
	Rupees	Percentages
Average Earnings	58,896	100
Average Expenditure	13,548	23.0
Average Remittances	31,068	52.8
Average Savings	14,280	24.2

Source: ARTEP Phase II Migration Project (Preliminary Results).

Unfortunately, we do not have the breakdown of average earnings for different categories of workers from the ARTEP survey (although these will soon be available) and Gilani does not provide an aggregate estimate of average earnings and expenditure, although he does have an estimate of average remittances (including cash on visits) and this comes to Rs 28,966 [3, pp. 100-101]. However, the vast majority of workers belong to the skilled and semi-skilled category of production workers¹² and we may use Gilani's estimates for these categories of workers with the results of ARTEP survey. Before this is done, it is important to emphasize that Gilani's estimates of average earnings abroad are based on data provided by the head of the household of the migrant worker while those of the ARTEP are based on a survey of the return migrants. Secondly, Gilani's estimates of average remittance include cash brought by the migrant on his visits to Pakistan, while in the ARTEP estimate it is included in the savings estimate. Finally, and perhaps most importantly, Gilani's estimates of remittances would underestimate 'actual' total remittances by the amount of savings brought by the migrant worker on his final return. This may have considerable significance, especially for a period when permanent return-migration may be extremely large as compared with that for earlier years.

However, despite these differences, the results of the two surveys are not very dissimilar. The sum of average remittances and average savings out of average earnings comes to 77 percent in the ARTEP survey and to about 70 percent in Gilani's survey. The average expenditure is significantly lower (23 percent of average earnings) in the ARTEP survey than Gilani's average of over 30 percent. It is this difference which, together with the cash remittances brought by the migrant on visits to Pakistan but excluded from Gilani's estimates of savings, primarily accounts for the higher saving rate in the ARTEP survey result.

Use of Remittances

Turning to the crucial issue as to how remittances are spent, Gilani's well-known results are presented in Table 11, according to which total consumption expenditure was 62 percent, real-estate expenditure was 22 percent, and investment and financial savings accounted for 13 percent (and there was a residual of 3 percent). Of the consumption expenditure incurred by the migrant household, expenditure on marriages was 2.3 percent, on consumer durables 2.8 percent and on remaining items of expenditure 57 percent. Of the large percentage of expenditure on real estate, more than half was spent on the construction and purchase of residential houses. Of the investment and financial savings amounting to about 13 percent of total remittances received, over three-fourths were industrial and commercial investments.

¹²Based on data of the Bureau of Immigration and Overseas Employment, the out-migrants registered with them in the skilled, semi-skilled and unskilled category was on the average over 90 percent of the total.

Table 11
*Crude Estimates of Total Remittance Expenditure from Middle East
from 1976-77 to 1985-86: Alternative I (Gilani Estimates)*

Item	Expenditure as Percent of Total Remittances (%)	ESTIMATE I (Official Remit- tances) from Middle East (Million Rs)	ESTIMATE II (Official + Unofficial Remittances) (Million Rs)
1. Consumption	62.19	126,294	168,391
a. Recurring Consumption	57	115,754	154,338
b. Marriages	2.35	4,772	6,363
c. Consumer Durables	2.84	5,768	7,690
2. Real Estate	21.68	44,027	58,703
a. Construction/Purchase of Residential House	12.14	24,653	32,871
b. Improvement in House	2.27	4,610	6,147
c. Commercial Real Estate	5.72	11,616	15,488
d. Agricultural Land	1.55	3,148	4,197
3. Investment/Savings	12.95	26,298	35,065
a. Agricultural Investment	3.3	6,702	8,935
b. Industrial/Commercial Investment	8.21	16,672	22,230
c. Financial Investment/Saving	1.44	2,924	3,898
4. Residual	3.18	6,458	8,611
5. Total	100	203,077	270,770

Source: [3, p. 144].

Very preliminary results from the ARTEP survey are shown in Table 12. As pointed earlier, these results differ from those of the Gilani study in that they show return migrants' expenditure of remittances sent back by them while abroad, cash brought on visits and cash on final return. They exclude that part of the return migrants' savings abroad which were spent mainly on consumer durables and gifts for relatives and friends as these expenditures were incurred abroad. However, results of expenditure patterns including these items is shown separately in Table 12.

A comparison of Gilani's and ARTEP results show that the major breakdown of the use of remittances between consumption and non-consumption expenditures are approximately the same, with slightly over 60 percent of remittances being spent on consumption. As compared with Gilani's study, the ARTEP survey shows a much higher expenditure on marriages — almost 10 percent of total remittances — but this item also includes expenditure on Haj. Expenditure incurred by migrant households on the purchase of real estate is lower in the ARTEP estimate, although still significantly

Table 12

Use of Remittances and Savings Abroad: ARTEP Estimates

(Percentages)

Item	Use of Remittances	Remittances plus Savings Abroad
1. Consumption	63.3	56.8
a. Recurring Consumption plus Durables	53.5	47.6
b. Marriages/Haj	9.8	9.2
2. Real Estates (while abroad)	17.3	16.4
3. Investment while Abroad	1.3	1.2
4. Investment on Return (incl. real estate)	18.1	17.1
5. Consumer Durables (purchased abroad and brought to Pakistan)	—	4.8
6. Gifts from Family and Relatives on Trips and Final Return	—	3.7
	100	100

Source: ARTEP Phase II Migration Project (Preliminary Results).

high at 17.3 percent compared with 21.7 percent in the Gilani survey. The most important and significant difference between ARTEP's and Gilani's estimates concerns investment/savings out of total remittances. According to Gilani's survey results, about 13 percent of remittances are either invested or saved by the household of the migrant. The ARTEP survey shows that less than 2 percent of total remittances sent by the migrant while abroad are invested by the household as either agricultural or industrial/commercial investment. To the extent that the ARTEP estimate does not reflect migrants' financial savings kept within Pakistan, the difference with Gilani's estimate would be slightly, though not significantly, less. However, on *final* return, the migrant does invest a significant proportion of the savings abroad, which he brings back as cash, together with those savings which were

accumulated for him or by his household while he was abroad. The total amount of this investment comes out as high as 18.1 percent of the total remittances.

This particular finding of the ARTEP survey is extremely important and provides an interesting insight into how the migrant worker may be deciding on how to spend his earned income. The main objectives of the migrant, while he is abroad, are to supplement the income of the household through remittances (primarily to improve its consumption level) and to meet the cost of what he considers are important social obligations, mainly marriages (in most cases of himself and sisters) and Haj (for his parents). Very little of the savings from these remittances are invested by the household. Also the other important goal of the migrant, when he is still abroad, is to possess his own residential house or substantially improve the existing premises. This is achieved either with remittances or with cash brought along on visits, which allows him to construct, improve or, in some cases, purchase a residential house.

The main investment decision in the form of purchase of agricultural machinery or agricultural land or setting up of an industrial or commercial unit is put into effect in most cases after he returns from abroad. In some cases, the construction, purchase or improvement in residential premises may also be undertaken then. The ARTEP survey of return migrants has an advantage over the Gilani survey in that it covers this aspect of migrant's behaviour, which would not have been satisfactorily covered in Gilani's estimate. It also has important policy implications in terms of government assistance in guiding the migrant to make an economically desirable decision with his savings, brought with him on final return, together with accumulated savings from previously remitted income.

The ARTEP survey also provides estimates of the amount spent by the migrant on purchase of consumer goods and durables mainly for his immediate family or as gifts for relations and friends. Out of the total income sent as remittances and that saved by the migrant while abroad, the expenditure incurred on consumer durables comes out as 4.8 percent of the total and gifts on visits and final visits as about 1.8 percent and 1.9 percent of total income (Table 12). The major portion spent on consumer durables is on TVs, VCRs, radios and cassette players, and comes to 44.2 percent of total amount spent on durables. Of his total savings abroad, as much as 27 percent are spent on purchase of durables and gifts on trips home and final return.¹³

Remittances and the Domestic Economy

After analysing the use of remittances at the household level, we now turn to its impact on the overall economy. Clearly, the absolute amount of remittances was

¹³ Based on ARTEP Phase II Migration Project data.

so large that they were bound to affect the pace and structure of growth and investment in the domestic economy as well as the level and pattern of imports. If we add together the total remittances which came into Pakistan from the Middle East countries between 1976-77 and 1985-86, this comes to a total of Rs 203 billion. If we use the ARTEP estimates to include remittances through unofficial sources, this figure comes to Rs 271 billion.¹⁴ As a measure of the magnitudes involved, total investment undertaken by both the public and private sectors during this period comes to Rs 502 billion and that for private sector alone to Rs 192 billion.¹⁵ This means that total remittances through official channels were in absolute terms greater than total private-sector investment during this period.

A rather simple exercise has been undertaken by us to establish some broad orders of magnitude of the contribution of remittances to key sectors of the economy and overall economic development. In terms of increase in total consumption expenditure, remittances during the period from 1976-77 to 1985-86 (using Gilani's breakdown Table 11) contributed Rs 123 billion according to Estimate I and Rs 165 billion according to Estimate II.¹⁶ The total increase in consumption expenditure (at market prices) during this period was Rs 356 billion.¹⁷ Of the increase in total consumption during this period, therefore, at least 34.6 percent was accounted for by remittances, and this figure could be as high as 46.4 percent if we use Estimate II which includes remittances coming into the economy through unofficial channels.¹⁸ We do not have an estimate of the amount of consumption expenditure out of remittances which went into imports. We have already noted that the amount spent by households on purchase of consumer durables was only 2.8 percent according to Gilani's estimate. ARTEPs survey does not have a separate estimate of this amount but does show that a significant amount of consumer durables is bought by the migrant on his trips home and on his final return. The major amount of the increase in consumption of migrant households is on food items and clothes, as shown by Gilani as well as by Abbasi and Irfan [1]. The amount spent on weddings, however, would include consumer durables given away as dowry but could also

¹⁴ The flow of remittances converted into rupees at the official exchange rate. As mentioned earlier, we have taken the flow of remittances through unofficial channels as 25 percent of the total flow.

¹⁵ Based on total investment estimates given in [12, Statistical Annexure Tables 2.3 and 2.5].

¹⁶ Since we are calculating the increase in consumption due to remittances from the Middle East during this period the level of remittances in 1976-77 is subtracted from the total.

¹⁷ Calculated from [12, Statistical Annexure Table 2.3].

¹⁸ Since consumption expenditure is calculated as a residual in national income accounts and taken as the difference between GNP and total investment, the inclusion of unofficial remittances should also be added to GNP to get the correct share of remittances in actual increase in consumption expenditure as shown in Estimate II. This would reduce the percentage share in Estimate II by a small margin.

consist of those durables brought by the migrant from abroad. At the same time, there is little doubt that the 'demonstration effect' of these consumer durables was considerable and that the consumer durable items bought home by the migrant stimulated domestic demand for these items. A large part of this demand was met by purchases abroad by Pakistanis on short visits and through purchase of smuggled goods from within the country. Official estimates of such consumer luxuries greatly underestimate their actual consumption.¹⁹ Some idea of the quantum increase in the purchase of consumer durables may be formed by seeing the number of licences issued for TV sets during these years although, as is well known, the numbers not registering their TV sets is extremely large. In 1975-76, the number of TV sets for which licences were issued was 353,992. This, in 1985-86 had risen to 1,157,804, showing an increase of over 800,000 sets. Again, the total number of VCRs registered was 146,924 in 1985-86, which would again grossly underestimate the total imports and domestic 'illegal' purchases [12, Statistical Annexure Table 6.4].

The sectors whose growth of output was significantly affected by the increased demand generated by remittances were small-scale manufacturing, construction, transport and communication, and wholesale and retail trade. In the case of the small-scale sector, as Hamid [4] has shown, there was considerable increase in demand for basic consumer goods and durables mainly by families who could not afford these goods earlier but were now in a position to do so because of remittances. Many new industries, therefore, came up and a large proportion of these were in the small-scale sector. A good example was the plastic industry producing tableware, utensils, water-coolers, containers, and toys. The other was the engineering industry, producing appliances such as desert coolers, washing machines, and gas cookers and ovens in addition to traditional items like fans, sewing machines and bicycles, whose demand also greatly increased. The residential construction boom gave rise to related industries such as electric cables and fittings, sanitary ware and metal fixtures. Also, the machines used in the production of a number of these commodities were produced by the local small-scale engineering industry. The high (almost 10 percent) rate of growth of output of small-scale manufacturing from 1976-77 to 1985-86 was a reflection of this changing trend in demand over this period (Table 6). However, it is not possible to say whether as a result of a slowing down of remittances after 1982-83 this sector's growth has also slowed down. Estimates of growth rate of the entire period after 1976-77 are based on the Survey of Small and Household Manufacturing Industries (SHMI) of 1982-83. It is indeed unfortunate that data for the small-scale sector are not regularly available, with the result that it is impossible to pick up important changes in its rate of growth over different time periods.

The other important sector to be affected by remittances was construction, which had a growth rate of over 8 percent during the period from 1976-77 to

¹⁹ A case in point are the estimates and discussion on consumer luxury items expenditure

1985-86. This was 30 percent higher than the growth rate of this sector in the preceding period, viz. from 1969-70 to 1976-77. According to the Federal Bureau of Statistics, this sector covers all construction activities including repairs, maintenance and demolition of buildings and other construction works undertaken by households, private bodies and public authorities. After the slowing down in the inflow of remittances after 1982-83, the growth of this sector could have been expected to slow down but, on the contrary, the growth rate as given by official figures increased to 9.8 percent in the last three years as compared with 7.3 percent in the six years after 1976-77. Here, again, because of insufficient statistical information, the contribution of the construction sector is indirectly assessed on the basis of certain assumptions (e.g. for urban areas the cost of construction is ten times the availability of cement for local consumption and 40 percent of the total cost equals the value added in construction. The value of the rural works programme is taken as 60 percent of total expenditure and for the rest of the rural areas it is assumed that the gross rent derived from the Household Income and Expenditure Survey consists of 8 percent of the cost of construction and the value added is 50 percent thereof) [15, p. ix]. Again, as pointed out for the small-scale sector, there needs to be a more careful assessment of the growth of output of this sector to establish changing trends in output over time.

The two other sectors which showed a high rate of growth of output after 1976-77 are 'transport, storage and communication' and the 'wholesale and retail trade' sectors (Table 6). There is, however, in the case of these two sectors a very marginal slowing down in the growth of output after 1982-83, the peak year for remittances, but, again, given the rather indirect way in which the growth of output is calculated for these sectors, it is difficult to put too much weight on this.

Unfortunately, even more difficult than relating sectoral output growth to the use of remittances is the task of relating total private investment to the investment undertaken by the migrant worker or his household. Investment statistics provided by the Federal Bureau of Statistics are again estimated indirectly, and the assumptions involved in many cases may well lead to a wide divergence with the actual situation. In the case of investment by the migrant household, there are also many other difficulties, especially in relating investment in construction/purchase/improvement of residential houses. Where an existing residential unit has been purchased, this would not be an additional asset as far as the economy is concerned. Similar is the case of the purchase of lands which are not included in investment estimates of the Federal Bureau of Statistics for ownership of dwellings.

However, some broad comparisons are still instructive. Total private gross fixed capital formation in ownership of dwellings comes to Rs 44,316 million, or Rs 44.3 billion (Table 8). Using Gilani's breakdown for the use of remittances in construction/purchase of residential house and improvement in housing, the figure based on

official remittances comes to Rs 29.3 billion, and, using the estimate for official and unofficial remittances, the figure comes to Rs 39.1 billion. On the assumption that purchase of land in the case of construction came to about 25 percent of the total expenditure and adding to it a figure of 25 percent for purchase of the existing residential houses, the estimate for investment financed out of remittances comes to 33 percent of the total and, on the basis of the higher estimate of remittance flows, it comes to 44 percent. Even on the basis of the lower estimate it is clear that remittances amounted to a very large part of investment in ownership of dwellings during this period. Indeed, if it had not been the many tentative assumptions that the estimates are based on, one could argue that the Federal Bureau of Statistics estimates of investment in ownership of dwelling may well be underestimating actual investment.

In terms of investment through remittances in other sectors of the economy the contribution is again indirectly estimated. In terms of investment in agriculture based on Gilani's estimates, the two alternative estimates give figures of 13.1 percent and 17.4 percent of total private gross fixed capital formation in agriculture being financed through remittances.²⁰ As regards industrial and commercial investment, we may assume that almost all the investment in industry went into the small-scale sector. As a percentage of private gross fixed capital formation in small-scale manufacturing and services, the contributions of remittances are as high as 53.5 percent and 71.3 percent respectively, which would seem on the very high side.²¹ Again, one may suggest that the Federal Bureau's estimates of private investment in these sectors may be considerably underestimated.

It would also have been extremely interesting to estimate the contribution of remittances to investment in the transport and communication sector, especially as import of vehicles by Pakistanis residing abroad has to be done through firms in Pakistan. Unfortunately, these figures are not readily available.

CONCLUSIONS

Despite the rather preliminary nature of the exercise undertaken in this paper, there are, we feel, some important conclusions that could be emphasized even at this stage. These are as follows.

(i) The inclusion of workers' remittances in national income account does pose some problems in terms of interpretation of the conventional national-income-accounting identities used. One has to differentiate between the accounting conventions and behavioural effects.²² The decline in domestic saving rate, for example,

²⁰ Estimates of total investment are from Table 8 and of remittances from Table 2.

²¹ See footnote 20.

as a result of increase in workers' remittances is more the result of an accounting convention than a behavioural relationship. At the same time, the estimate of gross national savings, which increases as a result of workers' remittances, primarily means that dependence on other external resources to finance investment has correspondingly decreased and not that the economy saves more now than it did previously.

(ii) The contribution of workers' remittances to the national economy comes out very clearly from our analyses. Also, the results of the ARTEP survey, even in its preliminary form, comes out with some interesting results. Firstly, it shows that a significant amount of earnings abroad are retained by the migrant and brought back with him on his final return to Pakistan. This result may have important implications as far as the flow of official remittances is concerned.

The fact that they, in recent years, have not declined as much as one would expect on the basis of estimates for out- and return-migration, may well reflect these savings which are now being brought back by the return migrants. As these return flows become larger, they will 'cushion' to some extent the expected decline in remittances. Secondly, the fact that these savings are brought back by migrants on final return to the country means that it is still not too late in the day to try to tap these resources and, with government assistance, help to channelize them for productive use. It appears that the time when he needs this assistance most is when he finally returns and is going to take a decision to use his savings for either industrial or commercial or, in some cases, agricultural investment.

(iii) Present statistics on the growth rates of the sectors most directly affected by migration seem to be of rather poor quality and would make it especially difficult to pick up any changes in trends. The situation seems worse in the case of investment estimates where it would appear that official estimates may well be underestimating the actual investment by the private sector for a number of sectors. A more detailed and thorough exercise than the one we have been able to undertake would, however, be needed to establish this more accurately.

Finally, on a positive note, the results of the use of remittances tend to suggest that they may not have been as wastefully utilized as the general impression would indicate. Certain expenditures, especially weddings etc., are wasteful and could have been less extravagant. On the other hand, the use of earnings abroad also shows that between 30–35 percent of the remittances were in fact invested in some form or the other. That more than half of this went into real estate was to have been expected, given that housing must be considered one of the essential needs. Also, if we combine Gilani's and ARTEP results, total investment in agriculture, industry or commerce may be substantial, especially in terms of official estimates of private investment. What would be more beneficial to the economy in the long run would, however, be the investment of this money in small-scale industrial enterprises rather than in commercial undertakings.

REFERENCES

1. Abbasi, Nasreen, and Mohammad Irfan. "Socio-economic Effects of International Migration on the Families left behind". Islamabad: Pakistan Institute of Development Economics. 1983. (Studies in Population, Labour Force and Migration Project, Report No. 7)
2. Ahmed, Viqar, and Rashid Amjad. *Management of the Pakistan Economy, 1947–82*. Karachi: Oxford University Press. 1984.
3. Gilani, Ijaz, *et al.* "Labour Migration from Pakistan to the Middle East and its Impact on the Domestic Economy, Part I". Islamabad: Pakistan Institute of Development Economics. June 1981. (Mimeographed; Research Reports Series, No. 126)
4. Hamid, Naved. "Employment and Industrialisation in the Small Scale Manufacturing Sector". Bangkok: ILO/ARTEP. 1983. (Mimeographed; its results are included in ILO/ARTEP [9])
5. Hussain, Akmal. "Impact of Out and Return Migration on the Functioning of the Domestic Labour Market and its Implications for Employment Generation". Bangkok: ILO/ARTEP. (The main findings of this mimeographed paper are included in ILO/ARTEP [9])
6. ILO/ARTEP. *Employment and Structural Change in Pakistan – Issues for the Eighties*. Bangkok. January 1983.
7. ILO/ARTEP. *Impact of Return Migration on Domestic Employment in Pakistan: A Preliminary Analysis*. Bangkok. April 1984.
8. ILO/ARTEP. *Mid-Term Review of the Employment and Labour Market Situation during the Sixth Five Year Plan (1983–88)*. New Delhi. March 1986.
9. ILO/ARTEP. *Preliminary Estimates of Demand for Pakistani Labour and Workers Remittances from Selected Middle East Countries (Saudi Arabia, UAE, Kuwait, Oman and Qatar)*. Interim Report. New Delhi. March 1986.
10. Irfan, Mohammad. "Consequences of Out Migration on Domestic Labour Market". Islamabad: Pakistan Institute of Development Economics. 1983. (Mimeographed)
11. Khan, Azfar. "The Impact of International Labour Migration to the Middle East on the Rural Barani Areas of the Punjab and the NWFP: General Findings of Village Surveys 1984". Paper prepared for ILO/ARTEP, Bangkok. November 1985. (Mimeographed draft)
12. Pakistan. Finance Division. Economic Advisers' Wing. *Economic Survey, 1985–86*. Islamabad. May 1986.
13. Pakistan. Ministry of Labour, Manpower and Overseas Pakistanis. Manpower and Overseas Pakistanis' Division. *Labour Market Adjustment to Immigration in Pakistan*. Islamabad. January 1986.

²² This point is also rather forcefully made in Papanek [17].

14. Pakistan. Planning Commission. *The Sixth Five Year Plan: 1983-88*. Islamabad. October 1983.
15. Pakistan. Statistics Division. Federal Bureau of Statistics. *National Accounts of Pakistan (Product and Expenditure) 1981-82 to 1984-85*. Karachi. 1985.
16. Paine, Suzanne. *Exporting Workers: The Turkish Case*. Cambridge: Cambridge University Press. 1974. (Occasional Paper No. 41 of the Department of Applied Economics, University of Cambridge)
17. Papanek, G. F. "The Effect of Aid and other Resource Transfer on Savings and Growth in Less Developed Countries". *Economic Journal*. Vol. 82, No. 327. September 1972.
18. Rashid, Jamil. "The Political Economy of Manpower Export". In H. Gardezi and J. Rashid, *Pakistan: The Unstable State*. Lahore: Vanguard Books Ltd. 1983.
19. United Nations. *National Account Statistics: Main Aggregates and Detailed Tables, 1982*. New York. 1985.

Comments on "Impact of Workers' Remittances from the Middle East on Pakistan's Economy: Some Selected Issues"

Thank you very much, Mr Chairman, for having invited me to be a discussant this afternoon. I found this to be a very interesting paper. It offered some new insights and new data although I would have liked to have seen more of the results of the work under ARTEP Phase II. But, as has been explained, they are perhaps not quite ready yet. I particularly enjoyed and support the author's focus on the concept of 'accumulated savings'. It helps to explain, in a large measure, why workers' remittances rose in 1985-86 despite the accelerated flow of returnees. And it has interesting implications for the economy. It suggests that the much-apprehended abrupt fall-off in remittance flows following the cut-back in economic-activity levels in the host countries may well not occur because accumulated savings will provide, to use the author's own phrase, a 'cushion' to the economy and the external account. More importantly, it will give the economy and policy-makers time to make adjustments to what is a fundamental and possibly irreversible change in the structure of the balance of payments.

One of the measures that the author suggests is that the Government should consider instituting policies aimed at ensuring that these flows are attracted into productive channels. While that is a statement full of good intentions, the author does not say what kind of measures he has in mind: whether, for example, he is thinking in terms of some kind of tax or compulsory purchase of Government financial instruments. Nor does he discuss the difficulties that the enforcement of such measures would entail. I would be interested in knowing what ideas the author had in mind.

On the impact analysis, which is the central part of the paper, I was a shade disappointed. I thought that the methodology that was used, confining the author to the simple arithmetic of percentages and proportions, was a little simplistic. There are available reasonably good time-series data on sectoral growth rates of output, investment and workers' remittances and on the share of remittances going to different categories of expenditure. Given this information, the impact analysis could have been done with more rigour and stronger empirical underpinnings. I recall that the first version of the PIDE macro-economic model had remittances as an argument in the consumption function. (It was dropped discreetly in the revised version for reasons which remain unexplained.) Mr Amjad could have tried to re-estimate such

a functional relationship, or added remittances as an argument in an import and investment function. He could have also tried to correlate more directly sectoral growth rates and remittance flows etc., because his simple analysis does not tell us very much. In fact, it raises more questions than it answers. In some sectors, the impact is actually perverse; in others the effect is rather marginal. In the small-scale manufacturing sector, Mr Amjad claims that the acceleration in growth rate appears to be correlated with remittance flows. However, I am told that there are still some problems with these data; in particular, the deflator is quite suspect and the results need to be taken with caution.

Finally, despite the paper's somewhat mixed results, the author's conclusions are rather bold. He claims that the notion that much of these flows have been consumed rather than invested is exaggerated and that remittances have brought some, if not much, benefit to the economy. I am afraid, here I must disagree. Despite this enormous windfall, its macro-economic impact has been minimal. Our investment-to-GDP ratio has stagnated; our saving rate remains dismally low; and our persistently large fiscal and external imbalances are a threat to macro-economic stability. Mr Amjad talks about Pakistan's low capital-output ratio but I assure him that our low capital-output ratio is not so much a reflection of a high degree of efficiency in capital use as a symptom of our neglect of replacement and new investment and the curtailment of essential allocations for the maintenance and improvement of our economic and social base. Pakistan is today faced with a rapidly deteriorating physical and social infrastructure, as well as with capital destruction. Our past neglect of investment in power has resulted in serious energy-shortages and extensive load-shedding. In the irrigation sector, there has been an alarming deterioration in the command areas of our canals and watercourses. More than half of the water is lost as a result of seepage and percolation, affecting crop production and exacerbating an already serious drainage problem. Our transport system has been subject to premature road failures with more than 88 percent of our highways in need of rehabilitation. Our social sectors continue to fare poorly. This neglect is clearly reflected in our social indicators — low literacy and enrolment rates, high infant-mortality and low life-expectancy, poor nutrition and a high and apparently rising rate of population growth. Our industry remains highly protected and inefficient, and turns out low high-cost, non-competitive and poor-quality products, mainly for the domestic market.

My point is simply this. Despite the windfall afforded by the inflow of remittances, Pakistan has *not* improved its investment performance and has not addressed the urgent problem of substantially upgrading its capital stock, strengthening its social base and bringing down its large fiscal and current-account deficits through improved savings and export performance. While in the near term we could continue to live off our capital base, as we have done in the past, such a policy will quickly

produce diminishing returns and growth will falter. To me at least, it is clear that by far the greater part of the inflows of remittances has been used for wasteful consumption or invested in unproductive uses — in real estate, gold and low-productivity services sector.

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