Maximising Developmental Benefits of Migrant Remittances: The Indian Experience

Narendra Jadhav[•]

Abstract

In spite of the fact that migrant workers' remittances have emerged as a major source of external financing for many developing countries, there is general dearth of literature on their developmental impact on the receiving country. There is a general feeling and limited evidence that such flows are less procyclical and more stable than private capital flows. In India, immigrant remittances have emerged as a major strength to the balance of payments, though the composition of such flows has undergone changes over time. The GATS has not as yet yielded desired liberalisation with respect to cross-border movement of workers. In fact, there is certain hardening of stance by industrialised countries in this respect. Recent market-oriented policy measures in India are likely to have boosted remittance inflows. Measures aimed at reducing the transactions costs involved in cross-border flow of remittance would provide additional inducement to workers' remittance flows towards developing countries.

[•] **The author is Principal Adviser, Department of Economic Analysis and Policy (DEAP) of the Reserve Bank of India, Mumbai, India.** **The views expressed in the paper are author's personal views.** **The author would like to acknowledge the useful assistance received from Shri Bhupal Singh and Shri Sujan Hazra. However, the usual disclaimer applies.**

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Introduction

The annals of human development have witnessed various episodes of large-scale international labour migration. Apart from the movement of slave labour in the middle-ages, historical processes such as genesis of industrialisation in many developed economies, development of the 'new world', etc. had close links with international migration. It is, therefore, somewhat ironical that traditional theories of international trade, especially those in the neo-classical tradition, assumed away movements of factors of production including labour. Recognition of the importance of migrant remittance is directly contingent on the role assigned to international labour movement in economic development. Formal analysis of migrant remittances and their implications for development process of a receiving country has started taking a definite shape only during the last three decades.

Notwithstanding the late recognition, remittances from migrant workers is now considered to be of considerable economic importance for labour surplus economies like India. First, such flows are generally unilateral. Capital inflows to such countries generally create obligations for future outflows either in the form of debt servicing or investment income and other payments, whereas remittance inflow do not. Secondly,

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migrant remittances generally involve flow of fund between family members. Therefore, compared to other forms of cross-border flows, migrant remittances are less likely to be pro-cyclical. This makes such flows more stable source of external financing. Thirdly, the bulk of international capital flows have traditionally been from one industrialised country into another. It is of particular interest to note that in recent years, developing countries, as a whole, have turned into net capital exporting countries, while industrialised countries, as a group, have turned into importers of capital. In contrast, migrant remittances are more equitable in the sense that they flow from more developed countries to less developed countries. Given all these features of workers' remittances and almost monotonic rise in such flows in the recent past, various developing countries are taking wide-ranging measures to further attract such flows.

Migrant remittance flows are determined both from the demand as well as the supply side factors. In the destination country, the demand for immigrant labour is determined by both the prevailing domestic labour cost as well the supply of skilled/unskilled labour. From the viewpoint of the source country, the outward movement of labour would be determined by the wage differential, the skill content of labour and the cost of and flexibility in migration. Thus, the entire process of migration and consequent remittance flows is a complex interaction of a range of factors.

In the Indian context, placed in a macroeconomic framework, workers' remittances are closely linked to export of a number of professional and business services, which entail natural movement of persons to render such services abroad. The surge in migrant workers' remittances to India, particularly during the decades of the 1980s responding to oil boom in the Middle East, and the information technology revolution in the 1990s, have placed India among the highest remittance receiving countries in the World. This paper discusses some issues associated with workers' remittance flows to India and also provides some thoughts on how the development process in India could be facilitated with a proactive policy to further boost such inflows.

The rest of the paper has been divided into five sections. Section II provides an overview of the normative literature on workers' remittances in a macroeconomic framework. The next section analyses various channels through which of the workers' remittances flow into India. Behaviour of remittance flows *vis-à-vis* the capital flows is also analysed. Based on conceptual frameworks of earlier studies, Section IV undertakes empirical exercises on the determinants of worker's remittances inflows to India. The Section also provides the Indian perspectives on the debate over the consumption *versus* the investment bias of workers' remittances. Section V provides an overview of the implications of the General Agreement on Trade in Services (GATS) under the aegis of the World Trade Organisation (WTO) for workers' remittances. Finally, the last section presents policy perspectives and conclusions.

Section II: Migrant Remittances and Development Paradigm: An Overview of the Theoretical Approaches

The remittance flows and their implications for development are linked to the theory of migration since remittances are a derived product of the export of labour from labour surplus to the labour deficient regions - a process of bringing price of labour to an equilibrium level over a long term. However, the methodological and theoretical problems that pervade the migration and development literature often make it difficult to assess the real impact of remittances (Taylor and Fletcher, 2002).

There are two main theoretical approaches to migrant remittances. The first approach is known as "Migrant Syndrome" (Reichart, 1981), popularly called the "Dutch Disease". According to this approach the inward remittances resulting from migration can only partially compensate for the loss of human capital. It is contended that migration carries "Dutch disease" effect on the migration source economies, as there is competition for limited labour by the local production entities that may result in decline in the production of tradable goods. Furthermore, the deterioration in the local production conditions may have adverse spillovers for the poorer households. This view could be relevant if migration takes place from an economy, which is at or near full employment. Labour surplus

developing countries, which are the main source of international labour migration, may not fit into this scheme. Apart from open unemployment, these economies generally have enclaves of disguised unemployment and seasonal unemployment. In particular, use of family labour in agriculture and informal services sector is widespread in many of these economies. Therefore, migration of such workers is in fact likely to increase rather than decrease the per capita income of the country in general and poorer families in particular.

The contrasting view on the migration and remittances is provided by the developmental perspective rooted in the New Economics of Labour Migration (NELM) (Stark and Bloom, 1985). This approach considers migration as an integral part of the household objective to enhance income levels, investment capacity and acquire insurance against risk. It is argued that remittances can ease the production and investment constraints, setting in motion a development dynamics. A fundamental departure of the NELM migration model from that of the individual model (Todaro, 1969) is that under the NELM household model, decision-making is based on a larger context with collective decisions. Unlike the individual models, where there is no rationale to share remittances with the households of migration source economy, the household approach of the NELM models emphasizes maximization of income, mitigation of risk and release the constraints on the domestic production capacity. It may be added that in the household approach to migration and remittance behaviour, the objective function is to maximize expected utility by allocating the household labour between migration and non-migration activity.

In a life cycle perspective, remittance inflows can be negative during the initial period of migration of worker as it involves the cost of migration to be borne by the source economy household. This phase is followed by increasing flow of remittance as the migrant worker starts generating income. Subsequently, the decision of migrant worker to settle down in the destination country can reduce the flow of remittances as the

migrant is likely to act as an insurance against adverse shocks to the household of the source country.

Poirine (1997) viewed remittances an implicit family loan arrangement, exhibiting "three waves" shape. Under this perspective, remittances are repayment made by the migrant worker to the source household for the loan contract made for human capital development of the migrant worker. In the first stage, migrant worker remits a significant portion of income to the source family in order to repay the implicit loan obligations. During the second stage, the migrant remittances are implicit loans to siblings to finance their education in the source country.

On the basis of the theoretical framework discussed above, the important points that emerge are:

- **Worker's remittances, after paying for the migration cost, contribute to the household income;**
- **Remittances release financial constraints on the household production, leading to first round indirect effect on income. The remittances release the borrowing constraints/budget constraint, particularly for the small scale investments or unorganised business enterprises;**
- **The aggregate demand effect generated by the remittance inflows has a linkage effect to raise economic activity in non-migrant household;**
- **Deriving from the Informal Loan Theory, remittances have investment and growth enhancing impact if the migrant returns to the source country once the implicit loan is fully repaid.**

Section III: The Developmental Perspective of Migrant Remittances in India

Private Unrequited Transfers and India's BoP

In the Indian context, "private unrequited transfers" include all unilateral remittances by non-resident Indians (NRI) and foreign nationals of Indian origin for the purposes of family maintenance, transfer of savings, gold and silver brought by non-residents, and gifts. There is no *quid pro quo* for these transactions. The remittances on account of family maintenance and transfer of savings constitute the bulk of Indian private transfer receipts. These are shown against credit under "private transfers" in the current account. The private unrequited transfers do not, however,

include credit to external deposit accounts such as Non-Resident (External) Rupee Account [NR(E)RA] and Foreign Currency Non-Resident (Bank) Account [FCNR(B)] and transfer for investment in India. Only local withdrawals from such accounts are included in private unrequited transfers. In other words, private unrequited transfers are those inward remittances, which are eligible to get recorded in the current account of balance of payments and influence the *disposable income* of the country. Since the credits to external deposit accounts recorded in the capital account form a part of the external liability influencing the creditor or debtor position or international investment position of the country, they do not constitute part of private unrequited transfers.

India's current account balance has remained in deficit since Independence in 1947 except for few intervening years. The trade balance has always been negative owing to imports exceeding exports. In a developing country such as India, current account deficit is often seen as a policy choice to augment domestic investment - by supplementing domestic savings by foreign saving. One component which has consistently lent considerable support to India's balance of payments by financing trade deficit has been workers' remittances. The full impact of the merchandise deficit has not been felt on current account deficit because of the appreciable increase in invisible receipts over the years, especially through private unrequited transfers - mainly workers' remittances.

India occupied an important place in the list of select labour exporting countries receiving workers' remittances. In absolute terms, India is the highest in 2000, received the largest amount of remittances. But in relation to trade deficit while nearly three-quarters of trade deficit was financed by remittances in India, Jordan, Bangladesh and Sri Lanka financed the entire trade deficit by workers' remittances in 2000 (Table 1).

Table 1: Workers' Remittances as Percentage of Trade Deficit for Select Labour Exporting Countries

Country	Gross workers' remittance (US $ mln.)		Remittance/trade deficit (Per cent)	
	1981	2000	1981	2000
India	2281	9034	40.0	74.1
Pakistan	2195	1075	75.0	92.8
Morocco	988	2161	63.5	66.8
Jordan	935	1664	44.4	114.0
Philippines	325	1057*	14.6	9.5
Bangladesh	402	1654	24.5	118.4
Egypt	2230	2852	56.9	34.3
Sri Lanka	203	1142	32.2	109.4

* Data pertains to 1997.
Source: IMF: International Finance Statistics, March 1984 and Balance of Payments Yearbook.

Changing Pattern of Workers' Remittances to India

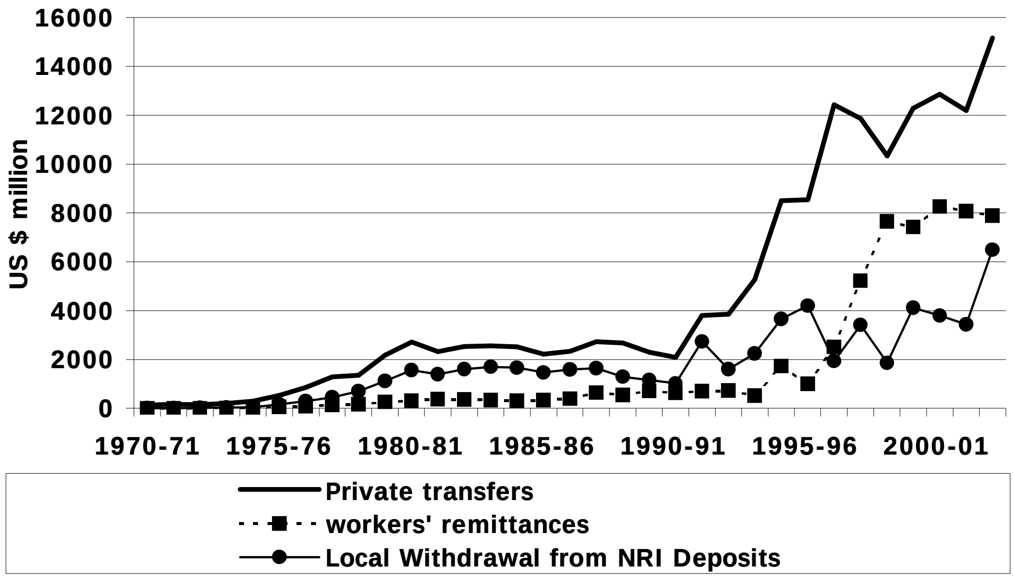
Appropriately capturing workers' remittances in most developing countries is the daunting task. The IMF's BoP manual defines workers' remittances as current transfers by migrants who are employed in other economies and considered resident of those economies. Another form of transfers is compensation of employees, which comprise wages, salaries and other benefits (in cash or kind) earned by individuals for work performed for and paid by residents of new economies. Employees in this context, include seasonal or other short-term workers (less than one year) who have centers of economic interest in their own economy. Besides the above-mentioned channels, the inflows can also take the form of in-kind transfers and funds transferred by non-residents through various saving schemes, which are subsequently transformed into local deposits or channelised into the domestic economy. Apart from the official channels, remittances may take place through informal channels. It is argued some times that a sizeable portion of remittances was channeled through illegal channels, known as *hawala* transactions in India before the adoption of market-based exchange rate regime.[1] With the introduction of market-based exchange rate and general easing of restrictions on foreign

[1] There is a view that the 'paperless' informal nature of *hawala* transactions coupled with low transaction costs, often make such channels attractive *vis-à-vis* the official route for transfer of remittances.

currency transactions during the 1990s, there are indications that attractiveness of such illegal routes have gone down significantly.

The private transfers by the NRIs, which include workers' remittances and local withdrawal from NRI deposits, rose from US $ 2.1 billion in 1979-80 to 15.2 billion in 2002-03 (Chart 1). However a major part of the private transfers has been contributed by workers' remittances. In 2002-03, workers' remittances contributed about 66 per cent of the private transfers, while local withdrawal from the NRI deposits contributed the remaining 34 per cent.

Chart 1: Private Transfers and Workers' Remittances to India

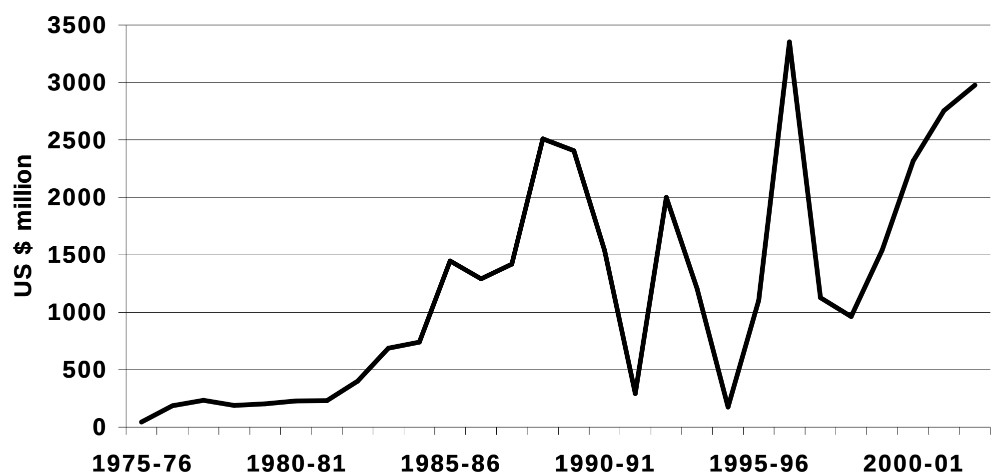


While the private transfers capture unilateral current account flows from NRIs, a significant flow of funds from NRIs as noted above, takes place in the form of capital flows as well. These are channelised through NRI deposit schemes viz., Foreign Currency Non-Resident (Bank) Account and Non-Resident (External) Rupee Account. There is close link between income of the migrant Indian workers and inflows in the form of NRI deposits. A sizable portion of NRI deposits is withdrawn in India. Notwithstanding such a trend, until the portion of NRI deposit is actually withdrawn locally, in terms of accounting practices, such deposits continue to be outside the purview private transfers. At the analytical level,

however, inflows of NRI deposits provide a perspective to future private transfers in the form of local withdrawals from NRI deposits. It is, therefore, pertinent to analyse the broad trends in capital inflows to India in the form of NRI deposits.

The net inflows under NRI deposits schemes increased from US $ 0.2 billion in 1980-81 to US $ 3.0 billion in 2002-03 (Chart 2). In spite of relative volatility of the NRI deposit inflows *vis-à-vis* the private transfers, the NRI deposits have emerged as an important component of the capital flows into India, particularly since the latter half of the 1980s. On an average, the NRI deposits contributed about 21 per cent of capital flows to India during the 1990s and so far (Chart 3). However, since the NRI deposits are capital flows, they are influenced by a host of factors such as interest rate differential, incentive structures and financial market development.

Chart 2: Net Inflows of Non-Resident Deposits to India

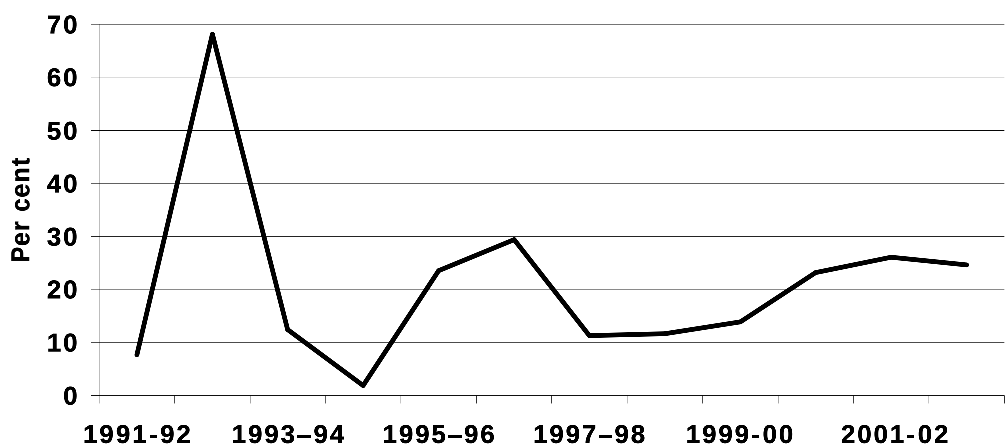


The Sources of Workers' Remittances

The regional pattern of migration and the growth prospects in the destination country play important part in determining the inflow of the remittances to the host country. In the Indian context, during last three decades, noticeable waves of migration can be identified. First, in

response to large demand for semi-skilled/unskilled labour from the oil exporting countries of the Middle East, labour migration began in mid-1970s and peaked in the early 1980s. This was in response to labour shortages in those countries associated with the economic boom emanating from the oil discoveries and oil price shock of the 1970s. The second important wave of migration of workers began since the mid-1990s, in response to expanding demand for highly skilled workers from the industrialized countries arising from the productivity boom in those countries. Relative to the earlier wave of migration, the current wave is dominated by the high skill content of workers particularly in information technology sectors.

Chart 3: Contribution of NRI Deposits to Capital Flows in India



It is evident that there has been a structural shift in the regional sources of remittance flows to India during the 1990s responding to the changing pattern of demand from predominantly unskilled/semi-skilled to highly skilled labour. As the oil boom in the Middle East countries has slowed down, the contribution of the region has significantly come down between 1997-98 and 2002-03 (Table 2). However, the slowdown in such remittance flows have not impacted on the aggregate remittance inflows to India, which has been sustained by higher inflows from the America and Europe. Notwithstanding the current sustained growth in remittance flows to India, however, the issue of sustainability of such remittance flows remains a question in view of the information technology sector showing signs of slowing down and the constraints imposed on movement of workers.

Table 2: Source Regions of Private Transfers to India

(Per cent)

Year	Africa	America	Asia	Europe	International Institutions	Total (US $ Mill)
1997-98	2.3	37.1	31.3	26.0	3.3	11875
1998-99	1.7	36.7	37.1	23.6	0.9	10341
1999-00	1.0	45.5	31.9	20.6	1.0	12290
2000-01	1.3	44.9	34.3	19.0	0.5	12873
2001-02	4.5	48.2	23.0	23.2	1.1	12192
2002-03	0.6	51.1	22.0	25.8	0.5	15174

Stability of Workers' Remittance

Workers' remittances are generally recognised as relatively reliable source of external finance compared with other capital inflows. The basic argument in this regard is that various forms of capital flows, especially short-term private capital, are guided by prospective rates of return. Therefore, such flows are generally procyclical in nature. In addition, rather than the fundamentals of the economy, such flows are often guided by rumors and perceptions. Therefore, these forms of cross-border flows are often subject of sharp volatility through herd behaviour. Migrant remittances, on the other hand, are likely to be influenced by a different set factors including lifecycle savings, family obligations, etc. and therefore, less sensitive to factors such as current rate of return.

Preliminary findings presented in Table 3 show that, in India, the relative volatility, measured in terms of coefficient of variation, of private transfers increased in the recent period (1991-92 to 2002-03) as compared with the earlier period (1975-76 to 1989-90). It needs to be emphasized that private transfers have witnessed the lowest volatility after merchandise exports during the period 1991-92 to 2002-03 as compared to other components of current receipts such as income and services exports. Similarly, the volatility is less as compared with inflows on capital account items such as NRI deposits and foreign investment.

This reinforces the cross-country evidence on stability of private remittances vis-à-vis other items of external financing. Within the private transfers, while the workers' remittances displayed increased volatility, the local withdrawal from NRI deposits witnessed relative stability due to the overall policy approach of switching composition in favour of rupee denominated deposits, realignment of maturity and interest rates on such deposits.

Table 3: Volatility of Various Types of Flows to India

Item	1975-76 to 1989-90		1991-92 to 2002-03	
	CV (%)	Mean ($ bn.)	CV (%)	Mean ($ bn.)
Private Transfers	34.2	2.1	38.7	9.8
Workers' Remittances (Including Local Withdrawal from NRI Deposits)	43.9	1.5	54.7	7.6
Current Account Flows				
Services	41.2	2.7	60.2	11.6
Income	42.6	0.5	66.1	1.5
Capital Flows				
NRI Deposits	100.5	0.8	62.6	1.6
Foreign Investment	-	-	59.2	3.7

CV = Coefficient of Variation.

Section IV: Determinants of Workers' Remittances

The investment and growth impact of the workers' remittances at micro level are closely linked to the determinants of remittances. The level of workers' remittances is determined by the migrants' educational level, incomes, motivation to transfer the accumulated capital for investment in the home country (Brown, 1997). Within the informal loan theory, Glytsos (1997) views time horizon of the migrant worker as an important factor effecting formation of savings. The implicit loan by family to the migrant worker, the implicit rate of interest and the expected payback period are also recognised as the determinants of the remittance flows.

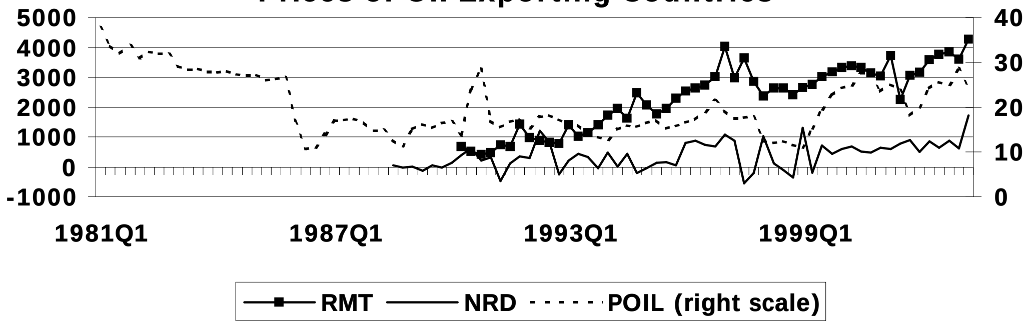
Unlike the microeconomic analysis on workers' remittances, the macroeconomic analyses are limited (Buch *et al,* 2002). Regarding the determinants, the empirical literature does not provide any unambiguous

answer as to what determines the flow of workers' remittances. Presenting an econometric analysis for Turkey Straubhaar (1986) reveals that remittance flows were neither affected by the variations in the exchange rate nor the real rate of return on investment. This implies the relative stable behaviour of remittances *vis-à-vis* other capital flows.

The behaviour of remittance flows to India can be conceptualised in the following framework. It needs to be recognised that cyclicality in the output/income growth in the source economy is likely to influence the remittance flows. A predominant share of workers' remittances to India continues to be contributed by inflows from the oil exporting countries of Middle East.[2] Thus, the behaviour of remittances to India is considered to be significantly influenced by the cyclical fluctuations in growth/oil exports of such countries. This variable can be best represented in the form of oil price behaviour of oil exporting countries (Chart 4). Another important source of remittance inflows to India is the US. It is expected that cyclical fluctuations in US GDP, particularly the GDP originating from services will impact on remittance flows to India.[3] The GDP of US has been taken as the proxy for economic activity in that country since a major part of remittance from US comes from NRIs employed in the sectors such as software, information technology, and other business services. Furthermore, the skill composition of migrant workers from India is oriented towards fast growing technological sectors. The cyclical fluctuations in output of industrialised economies are explicitly experienced in the labour market, which affects the demand for labour in the international market. This impacts either the existing level of migrant labourers or the fresh inflows or both. Furthermore, the cyclical fluctuations in output may also affect the wage levels, which have spillover effects on remittance flows from such economies. While the wage rate may go up during the cyclical upturn, the reverse may hold for the phases of cyclical downturn.

[2] Although the share of remittance transfers from Middle East has declined in total remittances from 31 per cent in 1997-98 to 22 per cent in 2002-03, it still contributes to a major part of inward remittances. The decline in share can be attributed to both the slowing down of oil exporting economies as well as the relatively fast growth in inflows from America.

Chart 4: Workers' Remittances, NRI Deposits and Oil Prices of Oil Exporting Countries



RMT: Workers' Remittances NRD: Non-Resident Deposit Flows POIL: International Oil Prices

Do the remittance flows display interest rate sensitivity? The available empirical literature suggests that while private capital inflows are highly sensitive to interest rate movements, remittance inflows are relatively less sensitive to interest rates. In the Indian context, the above issue needs to be explored with caution. It is quite possible that workers' remittances as classified in the balance of payments statistics of India may be less sensitive to interest rate fluctuations since such remittances are well recognised as providing social insurance to the households in the country of origin.

Notwithstanding the pre-supposed stability in worker's remittance as mentioned above, a major part of funds remitted by migrant workers are channelised through an indirect route. The inflows to NRI deposits subsequently assume the form of "local withdrawal" from the deposits denominated in Indian rupees. These form part of the private transfers. Thus, while in the ' first leg' of inflow, funds remitted form part of NRI deposits, in the 'second leg' the funds withdrawn locally form part of private transfers. Since the funds remitted by NRI's through the above-mentioned *modus operandi* are analytically not very different from worker's remittances, such remittances have been clubbed with worker's remittances. The significance of such remittances is evident from the fact that their contribution to total private remittances remained significantly

[3] Swamy (1981) identified level and cyclical fluctuations in economic activity in the host country as an important determinant of workers' remittances.

high around 30 per cent during the recent period, i.e. 1995-96 to 2002-03. However, unlike explicit worker's remittances, such implicit remittances may be more influenced by interest rate movements as those initially assume the form of investments and subsequently get assimilated into private transfers. Therefore, the overall behaviour of workers' remittances (implicit as well as explicit) may be influenced by interest rate differentials in the Indian case. The available body of literature on interest rate differential (also the exchange rate) impacting on remittance flows is, however, inconclusive.[4]

On interest rate differentials as a variable explaining the behaviour of NRI inflows in Indian case, Nayyar (1989) argued that repatriated deposits grew at a faster rate in response to interest rate differentials resulting from declining interest rates in international capital markets. Another study in the Indian case in respect of NRI deposit flows concludes that the flow of NRI deposits respond positively to the difference between interest rates on these deposits and LIBOR (Gordon and Gupta, 2003). However, no empirical evidence is available on behaviour of workers' remittance in response to interest rate shocks.

Wage differential between the source and the destination countries has been recognised as an important explanatory variable for remittance flows. Theoretically, it is argued that it is the differences in the price of labour, which leads to movement of labour from low wage to high wage sectors/regions. While recognising the theoretical underpinnings, it also needs to be recognized that developing countries are a labour surplus economies with relatively high rate of unemployment/disguised unemployment. Even the marginal wage differential may lead to migration of labour. As the migration has been obviously to high income countries with practically no constraint on labour supply and given the highly restrictive policies regarding movement of labour *vis-à-vis* capital in developed countries, the argument of high wage differentials has limited

[4] Swamy (1981) found that the interest rate differentials between the host and the destination countries and exchange rates were not significant variables in affecting remittance flows. Straubhoar (1986) also provides empirical support to such observations. Russel (1986) however,

relevance in the case of developing countries. The contemporary international migration is determined more by demand than supply factors as international migration is highly restricted by immigration rules, quotas, visas and other regulations on access (Quibria, 1986).

The following specification is formalised in order to explain the behaviour of workers' remittances to India.

$$\text{Log } WR_t = \alpha + r_1 \log USY_t + r_2 \log Poil_t + r_3\, dr_t$$

where,

USY = US GDP to represent economic activity in the host country;

Poil = export price of oil for oil exporting countries;

dr = differential between NRI deposits rates and LIBOR.

The remittance behaviour is captured in the form of following specification.[5] The elasticity of the remittance behaviour to economic activity in the host country is found significant at 0.33. It need to be noted that the oil prices of oil exporting countries are taken as the indicator of economic activity since the remittances in the past were predominantly originated from the Middle East and the shift in the composition in the remittance flows to America is of the recent origin. While the exchange rate elasticity is found to be significant, the interest rate differentials do not have significant impact on the remittance inflows to India. This also strengthens the argument that private remittances are a more stable source of developmental finance.

$$\begin{array}{llll} \text{Log RMT} = & -0.091 & +0.326 \log POIL(t) & +1.888 \log NER(t) \\ & & (1.950) & (6.010) \\ & & +0.830\, AR(1) & -0.448\, MA(1) \\ & & (8.812) & (-2.601) \end{array}$$

$R^2 = 0.92$ DW = 2.09 Sample: 1988 Q2: 2003: Q1

Where,

RMT = Remittances;
POIL = Price of International Crude Oil;
NER = Nominal Exchange Rate.

remarks that these may not be a threshold level of difference; the interest rate and exchange rate differentials have to attain so as to impact on remittance flows.

5 In order to rule out possibilities of spurious relations, stationarity of the variables have tests have been conducted, though the same has not been reported here.

Inflows through NRI Deposits

While the workers' remittances are unrequited transfers, in the Indian case the NRIs also contribute to the foreign exchange inflows in the form of investments. It is contended that migrants may be more likely to remit into savings account if they can have foreign currency denominated accounts, higher than normal interest rates, tax exemptions, better exchange rate etc. (Meyers, 1998). Some analyses reveal that relative rate of return on savings in the host and home countries, as also the incentive schemes such as foreign currency accounts and premium exchange rates, do not significantly influence remittances flows, thus, contradicting the conventional thinking of predominance of such factors (Lucas and Stark, 1985).

In India, during the decade of the 1980s varied instruments and investment avenues were devised to mobilise inward remittances from NRIs. These various schemes were implemented to channelise NRI workers' savings by offering attractive returns, options for denomination in domestic/foreign currency, repatriability and liquidity. The net inflows through NRI deposits during the 1980s remained, on an average, US $ 1.1 billion during the 1980s and US $ 1.8 billion during the period 1990-91 to 2002-03 (excluding the outlier 1991-92). The following specification can be postulated to analyse the behaviour of NRI deposit inflows.

$$\text{Log NRD}_t = \beta + \alpha_1 \log \text{POIL} - \alpha_2 \log \text{NEER} + \alpha_3\, dr$$

The following are estimates of the behaviour of NRI deposit inflows to India.

$$\begin{array}{llll}
\text{Log NRD(t)} = & 14.309 + & 0.412 \log \text{POIL(t-2)} + & \\
 & & (2.00) & \\
-1.886 \log \text{NEER(t-1)} & + 0.014\ \text{DR(t-3)} & - 0.315\ \text{DUM} & \\
(-2.174) & (-2.845) & (7.729) & \\
+ 0.886\ \text{AR(1)} & & - 0.388\ \text{MA(1)} & \\
(-1.895) & & (-2.724) &
\end{array}$$

$R^2 = 0.59$ DW = 1.82 Sample: 1990 Q1: 2003: Q1

Where,

POIL = oil export prices of the oil exporting countries, taken as the indicator of economic activity in those countries.

RER = Real exchange rate of rupee with dollar,

RDIF = differential between NRI deposit rate of one year maturity and the 12 month LIBOR,

DUM = dummy variable for 1994:4, 1997:3, 1998:2 and 1999:2, indicating the negative shocks to NRI inflows including the impact of the East Asian Crisis.

The NRI deposits are significantly influenced by the economic activity in the remittance source country. It may be mentioned that POIL, symbolic of external activity, significantly affects the NRI inflows. The Non-resident deposits are significantly influenced by the exchange rate movements and are sensitive to interest rate differentials, which are the typical characteristics of the private capital inflows.

Sustainability of Workers' Remittances

The sustenance or increase in the private transfer receipts depends upon the interplay of many economic and non-economic forces. In some quarters it is feared that these forces are no longer working favourably for India and hence the future outlook of the private transfer receipts does not appear to be promising. It is argued that a good proportion of workers' remittances flows from the Indian workers employed in the Middle East & Gulf Countries. The demand for labour in these countries is coming down as a result of cut back in their development expenditure necessitated by drop in their oil revenue and because of on-going fiscal correction process. Besides, the Indian labour has to compete with their counterparts from other countries such as Sri Lanka, Bangladesh, Pakistan, China and Egypt. Excessive supply of labour has depressed the wages, resulting in lower income. This together with increasing cost of living as a result of persistent inflationary tendencies in these countries has affected the ability of the workers to save thereby affecting remittances to India. The local labour force in these countries is also growing in tandem with the population growth, which is rising at the rate of more than 3 percent in the Gulf countries.

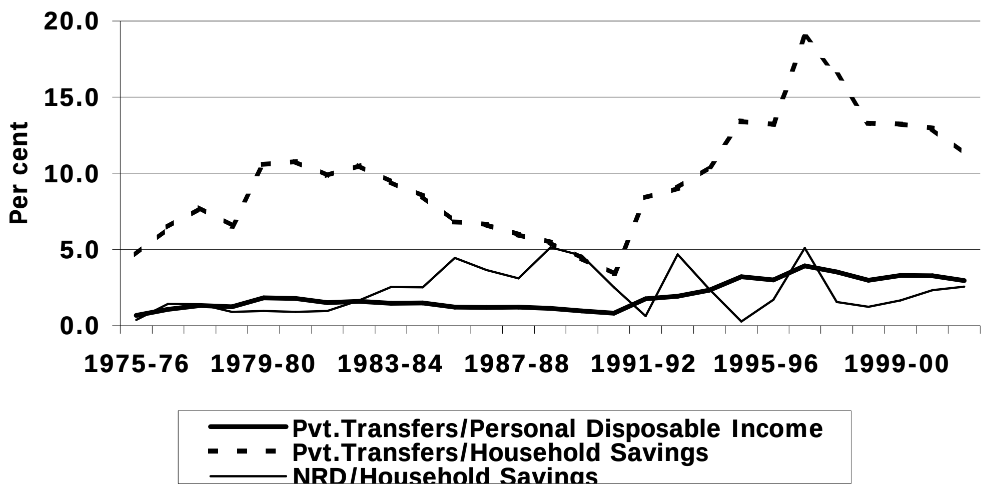
The concern on slowdown in migrant remittances seems to have been little exaggerated. In the recent past, there has been a shift in the labour force migrating from India. The demand for labour from the Middle Eastern countries has swung from manual labourers to skilled workers and technical professionals. This would in fact increase the remittances as technical jobs are better paid. Furthermore, since the Arab countries are still to reorient their education system to meet modern job requirements, demand for foreign labour would continue. Of course, the element of competition from other labour exporting countries would remain. It is, however, likely that a decline in the demand for labour from the Gulf countries, would be offset by increase in demand for Indian software experts from the developed world. In fact, increase in remittances in the recent years is partly attributable to rising demand for software personnel from India in industrialised countries.

Implications for Investment and Growth

There is still no consensus on the consumption bias of remittances vis-à-vis the investment as also the growth enhancing impact on the source country of migrant workers. It is assumed that the multiplier effect of remittances is significant even if they have inbuilt consumption bias. Some empirical evidence for Bangladesh shows that remittances had a multiplier effect of 3.3 per cent on GNP, 2.8 per cent on consumption and 0. 4 per cent on investment. It is found that remittances can contribute to faster growth in the source countries, particularly if they find a favourable policy environment that does not discriminate against productive investments (Faini, 2001).

Select indicators in the Indian context provide a broad picture about the growth enhancing effect of remittances. It is evident that private transfers to India consistently rose during the 1990s and on an average stabilised at about 14 per cent of household savings (Chart 5). Private transfers as ratio to personal disposable income also witnessed a rising trend and stabilised at above 3 per cent. A case study of emigration from Kerala and Punjab reveals that it has not only helped in raising the living standard of households of the migrant worker but has also helped in the development of the areas from where emigration is quite high (Nangia and Saha, 2002).

Chart 5: Worker' Remittacnes Consumption and Household Savings in India



Modeling the relationship between remittances and growth in a macroeconomic modeling is a difficult task as it is difficult to establish the channels through which it may affect growth. Relating the growth of per capita income to secondary school education, a policy variable and remittances Faini (2002) found the elasticity of per capita income growth with respect to remittances at 0.17. In the Indian context, the plot of the long-run growth in per capita income and remittances does not reflect any straightforward relationship between these two variables (Chart 6). However, there has been an improvement in the correlation coefficient between these two variables as the remittance flows have assumed significant proportions in the economy in the recent decades. The correlation coefficient improved from 0.09 for the period 1970s to 0.11 during 1980s and 0.22 during the period 1991-2003.

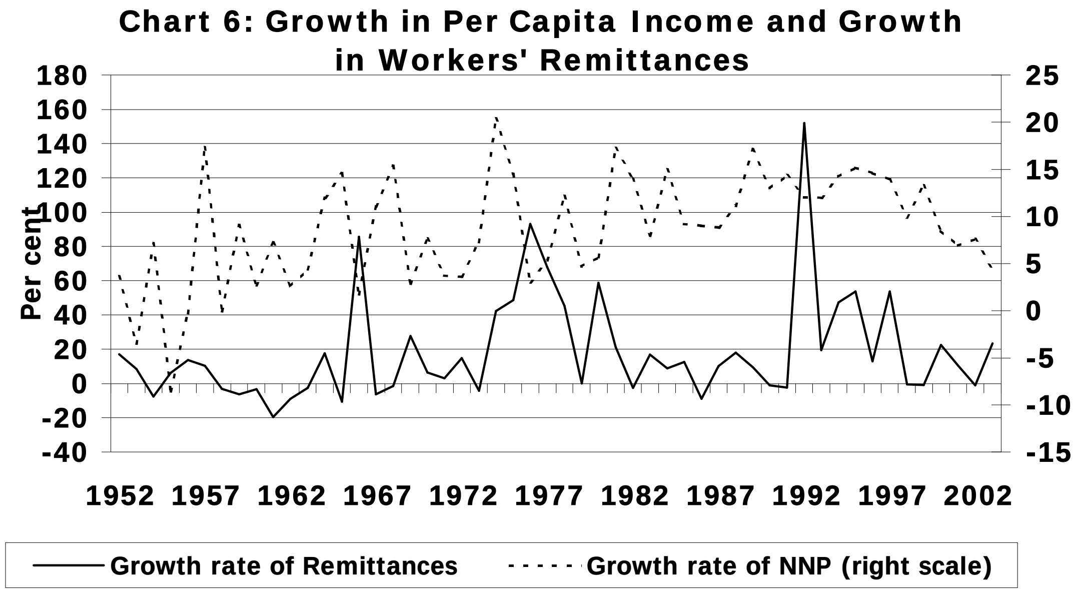


Chart 6: Growth in Per Capita Income and Growth in Workers' Remittances
Per cent
180
160
140
120
100
80
60
40
20
0
-20
-40
25
20
15
10
5
0
-5
-10
-15
1952
1957
1962
1967
1972
1977
1982
1987
1992
1997
2002
Growth rate of Remittances
Growth rate of NNP (right scale)

Section V: GATS and Workers' Remittances

Until the establishment of the GATS, trade in services, including labour services, remained outside the scope of multilateral framework. Even under the GATS, labour service is not considered as a separate service. However, under each service area (such as financial services, telecommunication services, etc.), allowing cross-border entry of natural persons providing that specific service is considered as a separate mode of entry for foreign service providers.[6]

Notwithstanding the fact that GATS has made a beginning to provide multilateral framework with respect to labour services, i.e., international migration of workers on temporary basis, the initiatives have yielded little positive effect so far. First, none of the member countries of GATS has undertaken specific vertical commitments to allow pre-specified number of natural persons from other member countries to provide specific services. Almost without exception, in most services trade, countries have horizontal commitments, which entails providing generalised (as opposed to specific) commitments to allow entry of foreign personnel under certain conditions to provide certain types of services in that country.

Developing countries have consistently urged that industrialised countries should adopt less protectionist approaches while dealing with cross-border movement of natural persons for providing various services. Industrialised countries, on the other hand, have argued that labour migration falls within the overall immigration laws of the respective countries, which are conditioned by various strategic factors and therefore, it may not be possible to undertake specific binding commitments by them under each sector. This stance of the industrialised countries has been challenged on various grounds.

[6] The four modes of supply under GATS are: mode 1: Cross-border supply: services are provided in another member's territory; mode 2: Consumption abroad: the service is purchased in another member's territory; mode 3: Commercial presence: supply of service in another member's territory through a commercial presence; mode 4: Movement of natural persons: supply of a service by temporary presence of persons in another member's territory.

First, it has been argued, that international trade in most types services including labour services is governed by domestic laws of the member countries. The GATS has been set up explicitly to bring a level of harmonisation in such domestic laws so as to facilitate international trade in services. Therefore, the same logic should be applied to labour services as well and as in other services, members should undertake specific commitments under labour services through mode 4 entry under each service category.

Secondly, industrialised countries, especially the European Union countries, have showed great urgency to bring cross-border investment under multilateral norms. In fact, investment policy is one of the four contentious issues known as "Singapore Issues". Like capital, labour is also a factor of production. While arguing for setting up multilateral norms on capital movement, industrialised countries are averse such specific norms in the context of cross-border movement of labour. This has been pointed out as a major contradiction in the stance of industrialised countries.

Thirdly, most industrialised countries, in particular the United States, have initiated various proposals in the WTO to block any move towards taxation of electronic commerce. Under the current level of development in information technology and telecommunications, it is possible to supply various types of services through electronic commerce. This would a form of mode 1 (cross-border) entry for provision of services. Given the state of technology and market share, mainly service providers from industrialised countries would benefit from tax-free framework for electronic commerce. At least in principle, service providers should not be discriminated on the mode of delivery. There are arguments that in order to counterbalance the implication electronic commerce for developing countries, industrialised countries should liberalise mode 4 entry by developing countries service providers.

The Doha Developmental Agenda envisages specific liberalisation of cross-border movement of workers to facilitate the economic development of less developed countries. No concrete step, has, however, been

initiated so far in this context. On the contrary there are certain developments, which are putting additional barriers to cross-border labour movement. Industrialised countries generally have yearly ceilings on the number of visa they would issue during a year to allow entry of personnel from other countries for temporary employment in that country. In recent years, many industrialised countries have reduced the ceilings on the number of visas they would issue in a year. In addition, under regional and bilateral agreements, they have earmarked certain number of visas to be issued to regional/bilateral partners. This, in turn, implies a reduction in the visas to be issued to residents of the countries, which are not members to such regional/bilateral agreements.

Section VI: Concluding Remarks

1. In sum, the existing body of empirical literature on workers' remittances brings forth the scarcity of empirical studies on linkage between remittances, savings, investment and growth in a macroeconomic framework. It is argued that the economics of workers' remittances has so far been largely ignored in globalisation debate in general and in international finance in particular presuming consumption bias and limited aggregative impact on investment and growth (Buch *et al,* 2002). In the Indian context, the empirical work on analysing remittance behaviour and exploring its macroeconomic linkages is also at a nascent stage.

2. The source-wise analysis of flow of workers' remittances to India reveals that there has been a compositional shift in remittance inflows from oil exporting region to North America. The slowdown in oil exporting countries in the 1990s as the oil boom receded and emergence of high productivity services sectors such as information technology in the Northern Hemisphere countries leading to rising demand for skilled workers have resulted in such shifts. Thus, shift in the labour demand from unskilled/semi-skilled to highly skilled labour has sustained the inflow of remittances to India.

3. While, most empirical studies reveal relative stability of workers' remittances *vis-à-vis* other capital flows, the evidence in the Indian case is somewhat not very clear. The major reason for this is likely to be the sharp increases in workers' remittance in recent years. Within the private transfers, while the workers' remittances displayed increased volatility, the local withdrawal from NRI deposits witnessed relative stability. This phenomenon is related to the reduced volatility in the NRI deposit inflows in the latter period, which can be attributed to the overall policy approach of switching composition in favour of rupee denominated deposits, realignment of maturity and interest rates.

4. An important issue that is likely to significantly impact on the workers' remittances to India and other developing countries is the GATS framework for international trade in services and the issue of openness of trade in services under different modes of supply. At present immigration policies in developed countries are so complex that making a direct investment in a developing country is often less cumbersome than movement of labour to developed countries (Mattoo, 2003).[7] The greater openness in trade in services under mode 4 of delivery can significantly enhance the global remittance flows. However, the little progress on this issue in GATS framework and the unfavourable approach of the developed countries on natural movement of persons do not imply any significant gains from the trade negotiations in the near term in this regard.

5. The issue of consumption bias of remittances versus the investment enhancing effect is widely debated. Country studies provide conflicting evidence on this issue and no consensus has been reached so far. Assuming the consumption bias of workers' remittances, there is definite second round effect on investment as the rising consumption demand from the remittance-receiving household is likely to provide boost to the goods producing sectors. The significance of remittances to India (including local withdrawal from NRI deposits) can be visualised from the

fact that these amount to about 3 per cent of GDP. In the Indian context, since a significant portion of total remittance inflows from NRIs come through the route of local withdrawal from NRI deposits, it would be safe to assume that these withdrawals might be getting transformed into domestic savings/investments. During the financial year 2002-03, such remittance inflows amounted to 1.2 per cent of GDP.

6. Some estimates put the population of Indians staying abroad at 20 million. Harnessing the savings of such migrant Indians could attract a large amount of remittances for which some of the policy measures are necessary. The recent liberalisation measures have helped Indian community abroad to transfer their savings to India. Similarly, credible policy measures and favourable macroeconomic environment would augment remittances to India. Furthermore, more liberalised exchange regime and financial infrastructure to facilitate transfers through formal channels could help augment the remittance inflows. This may be important in the case of unskilled/semi-skilled temporary migrant workers, particularly from Middle East countries. In addition, specific measures aimed at reducing the transactions costs involved in cross-border flow of remittance is also likely to provide a major boost to workers' remittance flows towards developing countries. In the Indian case, the resilience exhibited by the economy in the recent past, and growing confidence about the future of India's economy augur well for a sustained enlargement of workers' remittance flows to India.

[7] Faini (2002) is of the view that restrictive immigration policies in the traditional migrant labour receiving countries largely account for the more marginal role of migratory force.

References

Brown, Richard P.C. (1997) : "Estimating Remittance Functions for Pacific Island Migrants", *World Development*, 25 (4): 613-626.

Buch, C.M., Anja Kuckulenz and Marie-Helene Le Manch (2002): "Worker Remittances and Capital Flows", *Kiel Working Paper No.1130, Kiel Institute for World Economic*, Germany.

Faini, R. (2002) : "Migration Remittances and Growth", *Italian Ministry of the Economic and University of Brescia*

Glytsos, N.P. (1997) : "Remitting Behaviour of 'Temporary' and 'Permanent' Migrants : The Case of Greeks in Germany and Australia", *Labour*, 11(3) : 409-435

Lucas, Robert E.B. and O. Stark (1985) : "Motivations to Remit : Evidence from Botswana", *Journal of Political Economy*, 93 : 901-18.

Mattoo, Aditya (2002) : "Introduction and Overview in Aditya Mattoo and Antonia Carzaniga, eds, Moving People to Deliver Services : Labor Mobility and the WTO", *Oxford University Press*.

Meyers, W.D. (1998) : "Migrant Remittances to Latin America : Reviewing the Literature", *International Dialogue – The Tomas Rivera Policy Institute.*

Nayyar, Deepak (1989) : "International Labour Migration from India : A Macro-Economic Analysis. In To the Gulf and Back Migration : Studies on the Economic Impact of Asian Labour Migration", edited by Rashid Amjad (pp. 95-142), Geneva : International Labour Office.

Nangia, P. and Saha, U.(2002), Profile of Emigrants from India: A Comparative Study of Kerala and Punjab.

Poirine, Bernard (1997) : "A Theory of Remittances as an Implicit Family Loan Arrangement", *World Development*, 25(4) : 589-611.

Quibria, M.G. (1986) : "Migrant Workers and Remittances : Issues for Asian Developing Countries", *Asian Development Review*

Reichart, Joshua (1981) : "The Migrant Syndrome : Seasonal U.S. Wage Labour and Rural Development in Central Mexico", *Human Organization*, 40 : 56-66.

Stark, O. and D. Bloom (1985) : "The New Economics of Labor Migration", *American Economic Review,* 75 : 173-8.

Straubhaar, T. (1986) : "The Determinants of Remittances : The Case of Turkey", *Weltwirtschaftsliches Archive*, 122 (4) : 728-40.

Taylor, J.E. and P.L. Fletcher (2002): "Remittance and Development in Mexico", *Rural Mexico Research Review*

Todaro, Michael (1969): "A Model if Migration and Urban Unemployment in Less-Developed 'Countries", The American Economic Review, 59 : 138-4.