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**REMITTANCES IN INDIA: FACTS & ISSUES**

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# REMITTANCES IN INDIA: FACTS & ISSUES

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*This paper provides a factsheet of domestic and international remittances at the State level and across household characteristics and discusses the extent of remittance dependency, its growth since the 1990's, the different uses of remittances across States, the possible impact on source region inequality and its importance in enhancing 'financial inclusion.' Data from the 49<sup>th</sup> and 64<sup>th</sup> round migration related National Sample Surveys, the Reserve Bank of India and the 2001 Census are used for the analysis. Some of the findings are: (a) The domestic remittance market was estimated to be \$10 billion in 2007-08, 60% being Inter-State transfers and 80% directed towards rural households (b) Domestic remittances financed over 30% of household consumption expenditure in remittance receiving households that formed nearly 10% of rural India (c) Domestic remittance dependency was high in Bihar, Uttar Pradesh and Rajasthan and has generally grown since the 1990s, most notably in Orissa. (d) The top 25% households received around 50% of domestic remittances suggesting that remittances could be increasing source region inequality (e) 70% of domestic remittances were estimated to be channelled in the informal sector as against 25% in China revealing a huge opportunity for financial institutions to serve migrant workers (f) Kerala, Punjab and Goa accounted for over 40% of international remittance flows and are among the top remittance-dependent economies of the world.*

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## I. INTRODUCTION

Migrants' remittances, an age old phenomenon, have assumed great importance over the last decade in development studies. With increasing international and internal migration, they are considered to be an 'important and stable source of external development finance' for households in source regions (Ratha 2003), reducing transient poverty and at times even structural poverty (Kapur 2004). At the same time, remittances can also lead to financial dependency, divert attention from productive investments and due to the self-selection nature of migration, increase inequality in source regions.

Despite its significance, systematic research on remittances in India has been severely limited due to the lack of nationally representative data. Barring the seminal Kerala Migration Surveys that have enabled studies on remittances to Kerala and some other studies for specific remittance corridors<sup>1</sup>, research efforts on the subject have been limited.

Against this background, the National Sample Survey Organisation's (NSSO) 64<sup>th</sup> round survey on Employment, Unemployment and Migration in 2007-08 assumes great significance as it collected nationally representative information on remittances at the household level for the first time.<sup>2</sup> Subsequently, the NSSO published a 429 page report titled "Migration in India: 2007-08" in June 2010 presenting detailed information on migration and remittances across various socio-economic attributes. However, the report did not provide estimates of aggregate volumes of domestic and international remittances at the State level or across household attributes.

This paper attempts to address that gap. The estimates are important for a number of reasons. First, it shows the extent to which some States are dependent on remittances. For example, we show that while the Indian economy on the whole is not dependent on international remittances, Kerala, Punjab and Goa are among the most remittance-dependent economies of

the world. Second, it enables calculation of the share of remittances that flow to certain States or certain type of households. We show that the top 25% of households receive nearly 50% of the domestic remittances. Third, though domestic remittances are an integral part of the campaign to enhance ‘financial inclusion,’ limited information has restricted discussion on the same. In this paper, we estimate the domestic remittance market to be around \$ 10 billion of which less than 30% is covered by formal sector remitters as against 75% in China.

Apart from estimating aggregate remittance volumes, the paper also discusses the extent of remittance dependency and it’s growth since the 1990’s, the different uses of remittances across States, the possible impact on source region inequality as well as its role in enhancing financial inclusion. The paper is organised as follows: Section II discusses the methodology of estimating aggregate remittance volumes as well as the biases affecting the data. Sections III and IV discuss State level estimates of international and domestic remittance flows respectively. Section V discusses the implications of these estimates while Section VI concludes.

## **II. METHODOLOGY**

The National Sample Survey (NSS) questionnaire on employment, unemployment and migration particulars (Schedule 10.2 of the 64<sup>th</sup> round) collected information on household characteristics, employment status & migration particulars of household members and information on out-migrants. Out-migrants were defined as former members of the household who had migrated out of the village or town in the past and were alive on the date of the survey. Questions on out-migrants included among others, the present place of their residence and the rupee value of remittances sent by them during the last 365 days. The survey was administered to around 1.25 lakh households, of which 53,961 reported out-migrants and 29,963 reported remittance receipts.

Remittances were defined in the survey as “transfers, either in cash or in kind, to the households by their former members who had migrated out” (NSSO 2010a, p. 14). Both formal and informal channels were considered though no question was asked on the mode of money transfer by the out-migrant. Zachariah & Rajan (2007, p. 37) have noted that household surveys can at best capture ‘household remittances’ and not ‘total’ remittances which flow through different channels and for different purposes. For example, remittances sent to community organisations or remittances realised from the redemption of diaspora bonds do not figure as remittances in household surveys. We follow this distinction between ‘household’ and ‘total’ remittances throughout the paper. Household remittances data nevertheless provides useful estimates of shares of remittances across specific categories. Zachariah & Rajan (2007, 2010) combine ‘household remittance’ shares with an estimate of total remittances to compute total remittances to the districts of Kerala and across religious affiliations.

In the survey, the out-migrants’ present place of residence in relation with the household being surveyed was classified as being any of the five categories: same district, same State but different district, another State, another country or ‘not known.’ This is sufficient information to classify out-migrants as international migrants or internal migrants (Inter-State or Intra-State) and the remittances sent as international or domestic. However, it does not enable analysis of specific State- to- State, country- to- State or urban-to-rural remittance corridors because the exact location of the out-migrant is not asked in the survey.

Given the structure of data, there are two ways of estimating remittance volumes at aggregate levels. One way is to multiply the following three terms: (a) No. of households in the population, (b) Proportion of Households receiving remittances and (c) the average amount of remittances received by remittance-receiving households. We refer to this as the ‘Proportion of Households’ (PHH) method. This method has been used earlier in estimating remittance

volumes for Kerala in studies based on the Kerala Migration Surveys (KMS).<sup>3</sup> The second way is to multiply the following two terms: Total out-migrants that send remittances and the average amount of remittances sent by the remittance-sending out-migrant. We refer to this as the ‘out-migrant’ (OM) method. This method has been used in the NSS migration report to estimate all-India estimates of remittance volumes (NSSO 2010a, A-49 to A-57).

Table 1 displays estimates of domestic and international household remittances at the all-India level based on NSS data using both the PHH and OM method. Both methods, should in theory lead to similar results and as rows 4 & 7 of Table 1 show, this is indeed the case.

Annual domestic and international household remittances in 2007-08 were pegged at roughly Rs. 32,500 crores and Rs. 16,700 crores respectively.<sup>4</sup>

We use the PHH method to describe estimates in this paper as the household is widely used as the main unit of analysis in developmental issues and it also enables comparison of NSS and KMS data for the State of Kerala. Estimates of international and domestic household remittances for all States & Union Territories (UT’s) in rural and urban areas using the PHH method are given in Table A.1 and A.2 respectively. Given the sample design and size, it is difficult to compute reliable estimates of remittance volumes at the sub-State level and hence, this has been left out in the analysis. Estimates for domestic household remittances across household characteristics such as consumption classes and social groups are given in Table A.3.

Table 1  
All-India Annual Household Remittance Volume Estimates, 2007-08

	<i>Present place of residence of out-migrant</i>						
	<i>India</i>			<i>Abroad</i>			
	<i>Source region of OM in India</i>			<i>Source region of OM in India</i>			
	<i>Rural</i>	<i>Urban</i>	<i>Total</i>	<i>Rural</i>	<i>Urban</i>	<i>Total</i>	
<i>PHH method</i>							
1	Total No. of HH in India (cr.)	15.927	6.327	22.254	15.927	6.327	22.254
2	Proportion of HH receiving remittances (%)	9.959	3.560	8.139	1.175	1.133	1.163
3	Average annual amount of remittances received per receiving HH (Rs.)	16,042	30,962	17,898	58,709	79,782	64,546
4	Volume of HH Remittance Inflows (Rs. Cr.)	25,444	6,975	32,419	10,991	5,721	16,712
<i>OM method</i>							
5	Estimate of total no. of remittance-sending OM (cr.)	1.961	0.266	2.227	0.213	0.080	0.293
6	Average amount of remittances sent by remittance-sending OM (Rs.)	13,000	26,300	14,600	51,600	71,900	57,100
7	Volume of HH Remittance Inflows (Rs. Cr.)	25,494	6,984	32,509	10,986	5,723	16,702

Notes: PHH= Proportion of Households. OM= Out-Migrant. Source: Row 1 figures from NSSO (2010b, A2-A4). Row 2 and 3 figures computed using NSSO (2010c), with sampling weights. Row 5 and 6 figures from NSSO (2010a, A51,54 &57). Figures in Rows 1, 2, 3, 5 and 6 are rounded to nearest decimal place. Row 4 is product of Rows 1, 2 and 3, divided by 100. Row 7 is product of Row 5 & 6.

## Bias in Estimates

The estimates can be biased due to conceptual issues regarding the measurement of remittances, the biases in the three terms used in the PHH method, as well as the fact that source region surveys miss out on entire-household migration.

Regarding conceptual issues, the distinction between ‘household’ and ‘total’ remittances was clarified earlier. Among the terms used in the PHH method, ‘No. of households in the population’ is downward biased as we use the NSS estimate of 22.254 crore households



reflecting a total population of 101 crores and not 114 crores as projected by the Registrar General of India for January 2008 (NSSO 2010b, D-3). Thus, actual figures are under estimated by about 15% on this account. The second and third terms in the PHH method are ratios and averages which should be robust provided sufficient sample sizes. Low sample sizes affect the estimation of international remittances more than domestic since the total sample consisted of only 2,984 households that received international remittances as against 27,130 households that received domestic remittances.

The Kerala Migration Surveys of 2007 and 2008 covered a much larger sample than the NSS survey for Kerala and can be used to assess the extent of bias in estimates based on NSS data. Table 2 presents the comparison of these surveys. It is observed that the ‘proportion of households receiving remittances’ is lower in the NSS data by around 20% (Row 6). As a result of which, estimates based on NSS data at Rs. 6,668 are lower than the more comparable estimates of Rs. 7,036 crores to Rs. 10, 821 crores observed in the two KMS surveys that took place before and after the NSS survey. The total number of households in the population and the average amount of remittances are relatively similar for KMS 2007 and the NSS survey. Average remittances are inflated in KMS 2008 because of a heavy appreciation of foreign currencies in late 2008.

Thus, owing to a 15% underestimation of ‘total households’ and 20% underestimation in the ‘proportion of households receiving remittances’, the cumulative bias in the terms used in the PHH method is taken to be around 30%. That is, total household remittances shown in Table 1 and Table A.1, A.2 & A.3 are underestimated by about 30%.

Table 2

<b>Comparison of survey estimates of international remittances to Kerala</b>			
	<i>KMS 2007</i>	<i>NSS 2007-08</i>	<i>KMS 2008</i>
1 Survey Period	Apr-Sep	Jul-Jun	Aug-Dec
2 No. of HH in total sample	10,000	3,515	15,000
3 Annual HH Remittances in Cash and Kind (Rs. Cr.)	7,036	6,668	10,821
4 Annual HH Remittances (Rs. Cr.)	8,573	6,688	12,511
5 Total No. of HH (Cr.)	<i>0.75538</i>	<i>0.73264</i>	<i>0.75658</i>
6 % of HH recd. remittances	17.1	13.7	17.1
7 Avg. Amount of annual HH remittance recd. per remittance-receiving HH (Rs.)	<i>66,370</i>	<i>66,665</i>	<i>96,780</i>
8 Product of Row 5,6, 7, divided by 100	<i>8,573</i>	<i>6,668</i>	<i>12,511</i>

Notes: KMS= Kerala Migration Survey. NSS= National Sample Survey. HH= Household. Source: NSS figures computed from NSSO (2010b) and NSSO (2010c). KMS figures compiled from Zachariah & Rajan (2007, 2010). Computed figures from the KMS studies are in italics. Row 8 includes rounding error in multiplication.

Due to the bias of omitting entire-household migration in source region surveys,<sup>5</sup> out-migration volumes are expected to be considerably underestimated. However, it may be argued that households that have migrated en masse would have weaker ties with source regions leading to a lower propensity to remit and also remit money towards investment purposes rather than supporting families back home. To some extent then, these remittances would fall outside the notion of 'household' remittances. However, it is difficult to quantify the overall bias. What is important to note is that all these biases affect estimation of aggregate volumes but not the shares of remittances across various categories if the bias is assumed to be equal across categories. The next two sections describe the State level estimates in the context of international and domestic remittances respectively.

### III. INTERNATIONAL REMITTANCES

India is the largest recipient of international remittances in the world (World Bank 2010). In 2007-08, the Reserve Bank of India (RBI) recorded \$ 43.5 billion as ‘private transfers to India.’<sup>6</sup> Of this, 50% were classified as remittances towards ‘family maintenance’, 43% as ‘local withdrawals/ redemptions from Non Resident Indian (NRI) deposits’<sup>7</sup> and another 6% were classified as personal gifts/ donations to charitable / religious institutions in India (RBI 2010a). ‘Gold and Silver brought through passenger baggage’ was another item but with negligible inflows.

There are two distinct features of total international remittances to India. One part goes towards family maintenance and primarily sustains household consumption. These remittances are mainly conducted via wire transfers and bank drafts (RBI 2006). Another part flows out of NRI deposits and can be considered as primarily sustaining domestic investments of the NRI’s. Over 60% of the \$44 billion outstanding NRI deposits in March 2008 were NRE (Non-Resident External) accounts (RBI 2010b) where the joint-holders can only be NRI’s and not resident Indians. Thus, withdrawals from these accounts are presumably directed towards domestic investments of the NRI’s in real estate, equity market and other avenues.

The NSS figures for household remittances are comparable only with the ‘family maintenance’ part of total remittances. As Table 1 showed, the NSS migration survey pegs annual international household remittance inflows to nearly Rs. 17,000 crores or roughly \$ 4 billion in 2007-08. With a 30% underestimation bias in the PHH method, the true figure would be closer to \$ 6 billion. Further, since the survey omits entire-household migration, the NSS migration report estimates 44.4 lakh Indians living abroad,<sup>8</sup> nearly half of the 1 crore estimate of World Bank (2008) and 80 lakh estimate of Non Resident Indians (NRI’s) by the

Ministry of Overseas Indian Affairs (MOIA 2010). Even if the estimate based on NSS data is doubled to \$ 12 billion due to this underestimation, it falls short of the RBI estimates of ‘family maintenance’ remittances of \$ 21.9 billion by nearly 50%.<sup>9</sup> One reason for this shortfall could be that the rich migrants abroad are under-represented as NSS surveys are known to under-sample the richest households. Another reason could be that a substantial part of remittances for family maintenance flow through ways not captured by ‘cash and kind’ as in the NSS survey. Either way, this large underestimation remains a puzzle.

The RBI does not give a State level break up of ‘private transfers to India.’ Zachariah & Rajan (2010) use a combination of data that includes household remittances, NRI deposits and emigrant stocks to compute total remittances to Kerala. They also provide passport data for other States enabling an estimation of total remittances to the major States of India.

However, this method does not take into account the fact that substantial flows come via NRI deposits that has little to do with the number of people migrating in a given year.

We allocate total remittances across States as follows: First, we compute the State shares of annual household remittance volumes from the NSS data. This is taken to be the allocation mechanism for the ‘family maintenance’ part of total remittances. Second, we compute State shares using foreign deposits data taken from the RBI. The RBI provides a State-wise distribution of foreign sector deposits in Scheduled Commercial Banks. Since, over 85% of these deposits are NRI deposits,<sup>10</sup> this is taken to be a reliable allocation mechanism for the ‘local withdrawals/redemptions of NRI deposits’ part of total remittances. Third, we take a simple average of these two shares for each State/UT assuming a 50-50 split between the ‘family maintenance’ and ‘local withdrawals’ part of total remittances. The actual split was 50-43 in 2007-08 but we ignore the part going towards gifts, donations, etc. as no allocation mechanism for the same exists. Total remittances of \$ 43.5 billion or Rs. 1.74 lakh crores are then allocated across States and UT’s using these average shares. This is, to the best of our

knowledge, the most comprehensive way to allocate total remittances across States. The details are listed out in Table A.4 where it is observed that the computed State-shares are very different from State shares using passport data. Table 3 shows the top international remittance receiving States in India in 2007-08.

Table 3  
**Top International Remittance Receiving States in India, 2007-08**

<i>State</i>	<i>Share of All-India (%) based on HH remittances</i>	<i>Share of All-India (%) based on foreign deposits</i>	<i>Share of All-India (%) Simple average</i>	<i>Total Remittances (Rs. Cr.)</i>	<i>NDP (Rs. Cr.)</i>	<i>Total Rem/NDP (%)</i>	<i>Foreign deposits/All deposits (%)</i>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Kerala	39.9	19.0	29.4	51,211	1,45,235	35.3	28.5
Maharashtra	3.7	26.8	15.2	26,481	5,04,951	5.2	5.0
Tamil Nadu	12.4	7.5	9.9	17,277	2,68,667	6.4	6.2
Punjab	12.7	6.3	9.5	16,505	1,28,303	12.9	10.5
Andhra Pradesh	7.7	3.3	5.5	9,512	2,92,098	3.3	3.1
Delhi	0.2	9.5	4.8	8,392	1,31,884	6.4	3.7
Gujarat	1.6	7.9	4.8	8,305	2,57,694	3.2	8.5
Karnataka	2.1	6.6	4.3	7,564	2,07,773	3.6	5.2
Uttar Pradesh	5.4	2.1	3.8	6,553	3,03,228	2.2	1.7
Rajasthan	4.9	1.7	3.3	5,689	1,53,697	3.7	3.8
Goa	1.7	2.5	2.1	3,574	16,555	21.6	21.7
West Bengal	1.2	2.4	1.8	3,197	2,77,869	1.2	2.1
All India	100	100	100	1,74,000	40,51,770	4.3	5.1

Notes: HH= Household. NDP = Net Domestic Product. Source: Columns 1,2,3 and 7 are from Table A.4. Column 4 is obtained by applying Col 3 shares to all-India total remittances of Rs. 1,74,000 crores that is converted from \$ 43.5 billion estimate of RBI (2010a) @ Rs. 40/\$. NDP figures are at current prices, at factor cost, from RBI (2010b).

Column 1 shows the State shares using NSS data on household remittances. Kerala, with its huge migration stream to the Middle Eastern region ('Gulf' countries) accounted for nearly

40% of household remittance flows while Punjab with its established migration corridor to Canada, US and the UK, accounted for another 13%.

However, the average annual international household remittance received by a remittance-receiving household in Punjab was 50% higher than one in Kerala (See Table A.1), reflecting host country skill and wage differentials. More than three-quarters of the flows to these two States went to rural households. Heavy inflows in rural areas over the last three decades is one of the many reasons why the rural-urban divide is relatively low in these two States. Average annual household consumption expenditure in urban areas was only 17% and 29% higher than rural areas in Punjab and Kerala respectively compared to the all-India figure of 73% (NSSO 2010a, p. 153-154).

Tamil Nadu and Andhra Pradesh accounted for nearly a fifth of international household remittance flows, with roughly a 50-50 split between rural and urban households. In Uttar Pradesh, Rajasthan and Bihar, international household remittances were directed more towards rural households than urban households while the reverse is observed in the relatively richer States of Gujarat, Maharashtra, Karnataka and Goa.

Column 2 of Table 3 shows the distribution of foreign deposits (mostly NRI deposits) across States. Maharashtra alone accounted for nearly a quarter of all foreign deposits. Over 85% of these deposits were in Mumbai implying that about 20% of foreign deposits were in Mumbai itself (RBI 2009). Mumbai not only has a sizeable Gujarati population with a lot of NRI links but is also the financial hub of the country drawing in huge funds towards financial investments. Apart from Kerala and Punjab, Delhi, Gujarat and Karnataka also attracted a lot of foreign deposits. These deposits, unlike household remittances, are concentrated in urban areas. Only 5% of Non-Resident deposits were in rural areas whereas 23%, 23% and 49% were in semi-urban, urban and metropolitan areas respectively (RBI 2009).

Punjab, Goa and Kerala's heavy dependence on international remittance flows can be gauged by the 'total' international remittance to Net Domestic Product (NDP) ratio<sup>11</sup>. The ratio was 12.9% in Punjab, 21.6% in Goa and as high as 35.3% in Kerala. The Goa Migration Study 2008 placed remittance dependency in Goa at only around 6% based on passport allocation that does not take into account the channelling of remittances through NRI deposits. High remittance dependency in Goa can also be seen by the fact that the foreign deposit to all-deposits ratio was nearly 22%. In fact, the correlation of the two dependency measures was roughly 0.96 across over 30 States and UT's suggesting that both measures can be used to gauge remittance-dependency ratio. Either way, Punjab, Goa, and Kerala stand out with high remittance dependency figures.

Where do international remittances to India originate from? RBI (2006) suggests that 35% of international remittance flows originated in the Middle Eastern Region, 35% in North America, 20% in Europe and 10% in other countries.

What do we know about remittance outflows from India? The RBI estimates Private Transfer outflows to the tune of \$ 1.8 billion in 2007-08 (RBI 2010a). Nearly 90% of these flows were towards 'family maintenance.' State-wise estimates of these outflows are not available but presumably States with more immigrants were more likely to see remittance outflows.

According to Census 2001, there were half a million international immigrants who had migrated for economic reasons, mainly from Bangladesh and Nepal (GoI 2001). West Bengal (34%), Delhi (9%), Maharashtra (8%) and Northern States that have an international border accounted for the bulk of these immigrants and presumably, bulk of the remittance outflows.

#### **IV. DOMESTIC REMITTANCES**

In Table 1, the annual domestic ‘household’ remittance market in 2007-08 was estimated using the PHH method, to be about Rs. 32,500 crore. This used the logic that roughly 8% of 22 crore households received average annual domestic remittances worth Rs. 18,000. The OM method arrives at a similar estimate by calculating that roughly 2.3 crore remittance-sending internal out-migrants each sent on an average Rs. 14,600 back home in 2007-08. With the 30% under-reporting bias, the domestic household remittance market was conservatively estimated to be in the range of Rs. 45-50,000 crores or around \$ 10 billion in 2007-08. The bias occurring from omitting entire-household migration persists but is considered to be small in the domestic context. Unlike international remittances, there is no estimate of ‘total’ domestic remittances. However, the difference between ‘household’ and ‘total’ remittances is likely to be much smaller for domestic rather than international remittances. This is partly because local withdrawals from or redemptions of out-migrants bank deposits in source regions are considered to be a very small part of the domestic remittance market unlike the case of international remittances.

Nearly 80% of the domestic remittances went to households in rural areas. We also split domestic remittances and using the PHH method, compute Intra-State and Inter-State remittance volumes. At the all-India level, 60% of domestic remittances were Inter-State transfers and 40% were Intra-State transfers.

Table 4 shows the top domestic remittance receiving States in India in 2007-08. Uttar Pradesh (20%) and Bihar (12%), were the top two domestic remittance receiving States. Along with Rajasthan, West Bengal and Orissa, these States received over half of domestic remittance flows. The majority of transfers in these States were Inter-State in nature which points to substantial out-migration from these States. Inter-State transfers were less common



in Maharashtra, Tamil Nadu, Andhra Pradesh and Karnataka reflecting the dominance of rural-urban migration within the States. The proportion of remittance-receiving households was half the national average in Madhya Pradesh and Chhattisgarh (See Table A.2) and as a result, these two States received far lower domestic remittances than what their sizes would imply.

Table 4  
**Top Domestic Remittance Receiving States in India, 2007-08**

State/UT	HH remittances (Rs. Cr.)			Share of all-India (%)			% of HH remittances that are Inter-State			HHrem/NDP (%)
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	
Uttar Pradesh	5,468	923	6,391	21.5	13.2	19.7	77	66	75	2.1
Bihar	3,686	361	4,047	14.5	5.2	12.5	89	40	85	3.9
Rajasthan	2,953	605	3,558	11.6	8.7	11.0	71	49	67	2.3
West Bengal	1,920	652	2,572	7.5	9.4	7.9	54	55	55	0.9
Tamil Nadu	967	1,046	2,013	3.8	15.0	6.2	37	49	43	0.7
Orissa	1,425	306	1,730	5.6	4.4	5.3	63	62	63	1.6
Kerala	1,338	340	1,678	5.3	4.9	5.2	56	71	59	1.2
Maharashtra	1,116	549	1,665	4.4	7.9	5.1	14	42	23	0.3
Jharkhand	808	234	1,042	3.2	3.4	3.2	70	62	68	1.7
Andhra Pradesh	620	349	970	2.4	5.0	3.0	35	37	36	0.3
Karnataka	595	312	906	2.3	4.5	2.8	25	35	28	0.4
Haryana	639	225	864	2.5	3.2	2.7	71	62	69	0.6
All India	25,444	6,975	32,419	100	100	100	63	53	61	0.8

Notes: HH= Household. NDP= Net Domestic Product. Source: HH remittances from Table A.2. Inter-State transfer volumes computed using PHH method. NDP figures from RBI (2010b).

The household remittance to NDP ratio was higher than 1.5% in Uttar Pradesh, Rajasthan, Uttarakhand, Jharkhand, Orissa, Himachal Pradesh and Jammu & Kashmir and nearly 4% in Bihar, reflecting higher dependency on domestic remittances in these States. The actual

dependency ratio is likely to be higher by 30% for all States and UT's once the under-estimation bias is taken into consideration.

The NSS provides information only on remittance inflows, not on outflows. For outflows, like in the case of international remittances, one can get some understanding from Census data. According to Census 2001, there were 1.16 crore Inter-State migrants that migrated for economic reasons (GoI 2001). Maharashtra (24%), Delhi (17%), Gujarat and West Bengal (7%) accounted for the bulk of these migrants and presumably, the bulk of Inter-State remittance outflows.

## **V. DISCUSSION**

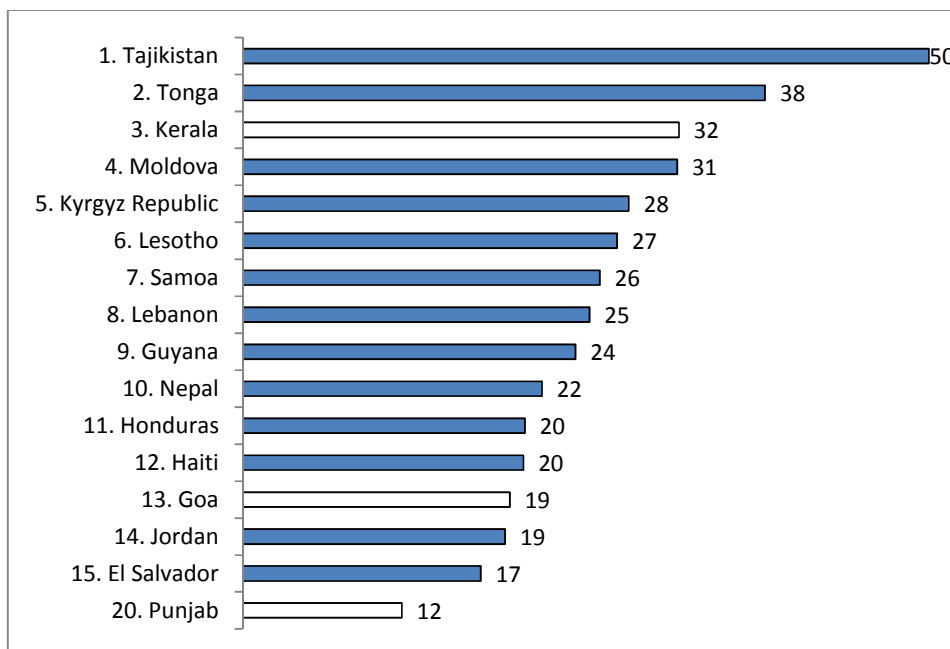
Below, we briefly discuss remittance dependency, it's growth since the 1990's, it's usage across States, the link between remittances and inequality, the role of remittances in enhancing financial inclusion and some suggestions on improving the database on remittances.

### **1. High Dependence on Remittances**

Though India is the largest recipient of international remittances, it is not considered to be a major international remittance-dependent economy. According to World Bank (2010), the remittance to Gross Domestic Product (GDP) ratio in 2008 was 4.1% in India compared to nearly 11% in Bangladesh and Philippines. However, remittances are concentrated in certain States and the remittance dependency ratio was above 10% in Punjab, Goa and Kerala. Figure 1 shows that if these States were counted as countries, they would figure among the top remittance-dependent economies of the world.<sup>12</sup>

Figure 1

**Top Remittance-Receiving Countries by % of GDP, 2008**



Source: World Bank (2010). Figures for Kerala, Goa and Punjab are for 2007-08 from Table 3 after adjusting NDP to GDP by the all-India factor of 1.12 (RBI 2010b, Table 1). Number next to country name refers to rank.

Indeed, Kerala and Punjab are significantly more populous than most of the countries listed in Figure 1 and therefore should count as the major international remittance-dependent regions of the world. International studies on remittance-dependent economies often overlook this fact in their analysis. Remittance dependency was also high in Daman Diu where the foreign deposits to total deposits ratio was as high as 24% (Table A.4).

As Table 4 showed, Kerala also accounts for a significant 5% share of domestic remittance flows, a fact underplayed by the focus of international remittances towards the State.

Similarly, while Uttar Pradesh and Bihar are known for high level of domestic remittance inflows, Jammu & Kashmir's high dependency on domestic remittances is seldom acknowledged.

At the household level, remittances often finance a substantial part of household consumption expenditure. Table 5 shows that annual remittances covered over 40% of the annual household consumption expenditure for remittance-receiving households in both urban and rural areas. Further, as we discuss later, over 90% of the households in the NSS survey reported household consumption expenditure as the primary use of remittances. Thus, we conservatively estimate that domestic remittances directly finance as much as 30% of household consumption expenditure in remittance-receiving households. These households constitute roughly 10% of rural India thus reflecting high remittance dependency for a considerable segment of the rural population.

Table 5  
**Household dependence on Domestic Remittances, 2007-08**

	<i>Rural</i>	<i>Urban</i>
1	39,432	73,505
2	16,042	30,962
3	41%	42%

HH= Household. Row 3 is Row 2 divided by Row 1. Source: NSSO (2010c), with sampling weights.

## 2. Remittance Dependency since the 1990s

Has remittance dependency grown in the past two decades? We attempt to answer this question by analysing comparable estimates of the proportion of remittance-receiving households in a region between the 1993 (49<sup>th</sup> round) and 2007-08 (64<sup>th</sup> round) NSS surveys. The 1993 survey which covered nearly 1.2 lakh households asked only one question on remittances: Whether the household received remittances from out-migrants who were defined as former members of the household that had left for stay outside the State during the last five years. In the 2007-08 survey, out-migrants were all former members of the

household that had migrated any time in the past. However, details on out-migrants' place of residence and duration since migration in the 2007-08 survey enables a comparison of the 1993 and 2007-08 surveys using the 1993 definition of out-migrants. Table A.5 provides such a comparison for all States and UT's and the broad trends are described below.

Between 1993 and 2007-08, 'household' remittance dependency as measured by the proportion of remittance-receiving households, broadly increased in rural and urban India for both domestic (Inter-State) and international remittances. International household remittance dependency increased noticeably over this period in Kerala, Punjab, Tamil Nadu and urban Goa. Domestic (Inter-State) household remittance dependency increased substantially in the rural areas of Himachal Pradesh, Rajasthan, Uttar Pradesh, Uttarakhand and West Bengal and was more pronounced in rural and urban Orissa. This reflects high out-migration from these States due to relatively better economic opportunities in other States during this period. Interestingly, domestic remittance dependency in rural Bihar did not increase much over the period as it was already quite high in 1993.

### **3. The Uses of 'Household' Remittances**

The NSS survey also collected information on how households used the remittances they received. Here, we will elaborate on how households in different States used remittances using the numerical documentation in NSSO (2010a). At the all-India level, over 90% of rural and urban remittance-receiving (RR) households used remittances for some form of household consumer expenditure. This included food items, education of household members, durable goods, marriage and ceremonial expenses, health care and 'other items'. Around 9% of RR households reported remittance usage for improving housing condition, 10% of RR households reported usage for debt repayment and 6% reported usage for savings or investment.<sup>13</sup>

While the broad trend across States was towards using remittances for household consumption expenditure (and within that food expenditure), there were some distinct regional variations as shown in Table 6. In Kerala and Tamil Nadu, there was higher reportage of using remittances towards debt repayment. This could be due to the debts incurred in overcoming the high transaction costs of migrating to the Gulf and also the fact that higher income levels in these States require less expenditure on household items. In Orissa, there was much higher reportage of using remittances towards marriage and ceremonial expenses and also towards improving housing condition. Most of the North-Eastern States showed high usage of remittances towards education while in Goa and most Union Territories there was higher reportage of use towards savings or investment.

Table 6  
Uses of Remittances in selected States, 2007-08

<i>Uses of Remittances</i>	<i>Selected States</i>	<i>% of RRHH reporting use of remittances</i>	
		<i>Selected States</i>	<i>All-India</i>
Debt Repayment	Kerala, Tamil Nadu	25%	10%
Improving housing condition (repairs, land purchase, etc.)	Orissa, Sikkim	17%	9%
Marriage and other ceremonies	Orissa	11%	5%
Education	Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Jammu & Kashmir	Above 55%	31%
Savings/Investment	Goa (39%) and most UT's	Above 20%	6%

RRHH= Remittance receiving household. Source: NSSO (2010a, p. 157)

#### 4. Remittances and Inequality

Migration in India, like most other places, is a self-selective process. Various NSS migration reports have shown the positive relationship between migration rates and education levels or consumption classes. This is also confirmed with the data on remittances. As Table A.3

shows, the proportion of households receiving domestic remittances and the average amount of domestic remittances received per receiving household was in general lower among poorer households, disadvantaged social groups, and in households that depended primarily on ‘labour’ (agricultural, casual, etc.) income. Table 7 shows the consequence of this. Households in the top consumption quintile cornered nearly half of all domestic remittance flows in rural and urban areas. These remittances to the better-off in source regions potentially exacerbate existing inequalities. However, this does not suggest that remittances are to be reduced. It only reflects the fact that the poorer sections of society are not being able to enjoy the benefits of migration due to relatively lower labour mobility and lower returns to migration.

Table 7  
**Domestic Remittances shares across consumption classes, 2007-08**

<i>HH characteristics</i>	<i>Rural</i>		<i>Urban</i>	
	<i>Share of total HH (%)</i>	<i>Share of aggregate domestic HH remittances (%)</i>	<i>Share of total HH (%)</i>	<i>Share of aggregate domestic HH remittances (%)</i>
<b>MPCE quintiles</b>				
First	16	8	15	5
Second	18	12	17	8
Third	19	16	19	13
Fourth	21	21	22	21
Fifth	25	43	27	54
All classes	100	100	100	100

HH= Household. MPCE= Monthly Per Capita Expenditure. Quintiles cut offs are on a population base. Source: Computed from Table A.3.

The fact that international remittances are sizeable and directed towards relatively advanced States like Kerala, Punjab, Goa and Maharashtra also suggests that international remittances could be increasing regional inequality by providing more funds for consumption and investment purposes in these States.

## 5. Financial inclusion

The Report of the Rangarajan Committee on Financial Inclusion included remittances along with credit, savings and insurance facilities as financial services that needed to be delivered at low cost to the relatively weaker sections of society (GoI 2008, p.1). The current delivery mechanisms of domestic remittances include formal institutions such as post offices and banks as well as informal channels such as returning friends and relatives or private informal sector remitters (Ghate 2005).

The Post Office Money Order has been a popular formal sector remittance instrument though at a service charge of around 5%, it is also considered to be the most expensive mode of remittance. The Post Office handled Rs. 8,363 crores worth Money Orders in 2007-08, declining to Rs. 7,955 crores in 2008-09 (India Post 2008, p. 15). Since the Post Office is the dominant formal sector remitter, total formal sector domestic remittances are estimated to be around Rs. 10-15,000 crores in 2007-08 as compared to the earlier arrived estimate of domestic household remittances to be between Rs. 45-50,000 crores. Thus, we estimate that the formal sector handles less than 30% of the domestic remittance market.

While informal remitters (like the '*tappawallas*' in Orissa) handle some money transfers, the major share of domestic remittances continues to be channelled through trusted friends and relatives of migrants returning home. Apart from the threat of thefts, the disadvantage of this medium is that migrants have to wait till returnees make their journey and remit less frequently, thereby affecting household consumption plans in the source regions. A recent survey in Mumbai and Delhi also shows 'timely delivery' as the most important attribute that migrants look for in a remittance product, the other reasons being low transaction costs and door-to-door delivery (MicroSave 2009). Indeed, with the introduction of the National Electronic Funds Transfer (NEFT) system, any person with a bank account and knowledge of



the internet can transfer money within India in a few seconds at a nominal charge. However, for the vast majority of unbanked and internet illiterate population, this is simply not an option. Cheap and accessible remittance services provided by banks or micro finance institutions that reach out to the vast migrant population are an urgent need of the hour. The need is particularly felt when one compares with China, the only other country with a bigger internal migrant population. Table 8 compares domestic remittances in India and China. Higher levels of urbanisation and a more mobile population place the Chinese domestic remittance market to be nearly thrice the size of the Indian market. But the share of formal sector remittances was 75% in China as against 30% in India. China Post handled 45% of domestic remittances in China as against 20% handled by India Post in India. Commercial banks handled another 25% of the market in China. Clearly, there is a lot of scope for Indian financial institutions to serve the migrant population more effectively. Remittance services also serve as a useful entry point for institutions to provide other important financial services such as savings and insurance products (Ghate 2005, NABARD-GTZ 2009).

Table 8  
**Domestic Remittances in India and China**

	<i>India</i> <i>2007-08</i>	<i>China</i> <i>2005</i>
Size of domestic remittance market	\$ 10 billion	\$ 30 billion
No. of remittance sending out-migrants	3 crore or 30 million	7 crore or 70 million
Frequency of sending remittances in one year	5 times	3 to 6 times
Share of formal sector remitters	30%	75%
Share of Post Office in remittances	20%	45%

Source: China figures from Cheng and Xu (2005). India figures from discussion in paper and NSSO (2010a). 3 crore estimate based on 2.27 crore estimate reported in Table 1 along with 25% under-reporting bias.

However, migrants in destination areas often do not have adequate documentation to access basic services (Deshingkar et al 2008), let alone formal sector remittance services. Against this backdrop, the Memorandum of Understanding (MoU) signed between the Unique Identification Authority of India (UIDAI) and the National Coalition of Organisations for Security of Migrant Workers in July 2010 is a welcome step to ensure identity certification of migrant workers.<sup>14</sup> With better identification and latest developments in mobile banking technology, it is hoped that the financial and non-financial requirements of internal migrants are better served in the coming decades.

## **6. Remittances data**

The 64<sup>th</sup> Round NSS survey for the first time collected information on remittance volumes at the household level. In spite of the inherent biases in household surveys on remittances, they provide useful data on a variety of issues and it is hoped that the NSSO continues this practice in future migration surveys. Information on remittances *sent* by entire households that have migrated as well as by seasonal migrants would widen the scope of analysis and strengthen the quality of domestic remittance estimates.<sup>15</sup> A more specific question on the location of the out-migrant would enable analysis of specific State-State, State-country and rural-urban migration and remittance corridors. A question on the mode of remittance would enable analysis of the different channels of remittances and shed some light on the discrepancy between NSS and RBI estimates. The fact that most remittance-receiving households use remittances towards household consumption expenditure suggests that it is an important source of financing household consumption for a significant section of the population. It would be worthwhile to include a question on ‘whether the household received remittances’ in the household level page of the more frequent NSS consumption surveys that are used extensively in poverty and inequality analysis.

## **VI. CONCLUSION**

India is the largest recipient of international remittances and hosts the second largest domestic remittance market in the developing world.<sup>16</sup> Research on the subject, especially domestic remittances, has been limited due to the paucity of data. This paper attempts to provide a factsheet of both types of remittances at the State level and across household characteristics using the 64<sup>th</sup> round NSS migration survey data and raises some of the issues related with remittances. It shows the high dependency of Kerala, Punjab and Goa on international remittances and of Bihar, Uttar Pradesh and Rajasthan on domestic remittances. Further, since 1993, remittance dependency appears to have grown in these States as well as in other States such as Orissa. It estimates the domestic remittance market to be roughly \$10 billion in 2007-08, 60% being Inter-State transfers and around 70% being channelled through the informal sector as against 25% in China. Further, around 50% of these remittances went to households in the top consumption quintile suggesting that remittances could be increasing source region inequality. Apart from this, the paper also highlights the different uses of remittances in different States and its role in enhancing 'financial inclusion.'

Recent studies on India have highlighted the positive impacts of domestic remittances on wealth creation and asset accumulation (Samal 2006) as well as in increasing teen schooling attendance (Mueller and Shariff 2009). More research on India would be required to understand the direct and indirect effects of remittances on poverty alleviation and inequality.

Table A.1  
International Household Remittances across States, 2007-08

State/UT	Total No. of HH (Cr.)		% HH recd. international remittance		Avg. international rem. recd. per receiving HH (Rs.)		Annual volume of international HH remittances (Rs. Cr.)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>	<i>Total</i>
1 Andhra Pradesh	1.488	0.549	1.11	1.00	40,542	1,11,949	670	612	1,281
2 Arunachal Pradesh	0.016	0.006	0.01	0.00	53,729	-	0	-	0
3 Assam	0.460	0.058	0.00	0.22	80,000	21,177	1	3	4
4 Bihar	1.363	0.149	0.55	0.22	36,084	4,71,129	272	154	426
5 Chhattisgarh	0.394	0.083	0.03	0.09	5,600	81,676	1	6	7
6 Delhi	0.020	0.299	0.04	0.03	42,000	2,88,331	0	30	30
7 Goa	0.015	0.019	1.70	5.29	2,96,506	2,01,454	75	202	276
8 Gujarat	0.659	0.423	0.32	0.51	49,289	76,801	104	165	270
9 Haryana	0.306	0.131	0.73	0.48	1,10,791	1,07,331	246	67	313
10 Himachal Pradesh	0.136	0.016	0.32	0.17	41,524	1,26,668	18	4	21
11 Jammu & Kashmir	0.129	0.030	0.19	0.53	35,737	41,396	9	6	15
12 Jharkhand	0.417	0.098	0.06	0.73	89,892	38,247	22	27	49
13 Karnataka	0.762	0.404	0.33	0.82	45,305	69,083	113	230	343
14 Kerala	0.548	0.184	14.21	11.99	65,255	71,640	5,085	1,583	6,668
15 Madhya Pradesh	0.926	0.301	0.01	0.14	25,389	53,533	3	23	25
16 Maharashtra	1.254	0.913	0.23	0.52	36,176	1,05,895	106	506	612
17 Manipur	0.031	0.012	0.03	0.13	27,922	50,669	0	1	1
18 Meghalaya	0.040	0.009	0.00	0.11	-	1,12,760	-	1	1
19 Mizoram	0.010	0.008	0.00	0.09	-	35,351	-	0	0
20 Nagaland	0.015	0.005	0.00	0.03	-	20,000	-	0	0
21 Orissa	0.710	0.127	0.10	0.46	32,048	90,276	23	52	76
22 Punjab	0.338	0.194	4.99	1.50	1,08,498	97,547	1,832	284	2,116
23 Rajasthan	0.871	0.275	1.29	1.55					

					47,689	65,628	536	280	816	
24	Sikkim	0.011	0.002	0.11	0.04	<i>23,251</i>	<i>35,000</i>	0	0	0
25	Tamil Nadu	0.958	0.740	2.62	1.96	41,632	70,685	1,043	1,023	2,067
26	Tripura	0.067	0.016	0.26	0.09	46,884	33,552	8	1	9
27	Uttarakhand	0.137	0.049	0.02	1.64	<i>76,435</i>	<i>32,146</i>	3	26	28
28	Uttar Pradesh	2.477	0.706	0.70	0.61	40,931	44,854	708	193	901
29	West Bengal	1.343	0.479	0.17	0.43	41,399	54,404	96	112	208
30	A & N Islands	0.005	0.003	0.13	0.03	<i>60,000</i>	<i>50,000</i>	0	0	0
31	Chandigarh	0.003	0.023	0.07	0.94	<i>1,08,204</i>	<i>3,60,057</i>	0	79	79
32	Dadra & Nagar Haveli	0.004	0.001	0.03	0.55	<i>72,000</i>	<i>99,357</i>	0	0	0
33	Daman & Diu	0.002	0.001	2.30	6.10	<i>59,439</i>	<i>1,15,149</i>	3	8	11
34	Lakshadweep	0.001	0.001	0.00	1.63	-	<i>47,893</i>	-	0	0
35	Puducherry	0.009	0.013	1.70	4.21	<i>59,120</i>	<i>75,071</i>	9	42	51
	All India	15.927	6.327	1.18	1.13	58,709	79,782	10,991	5,721	16,712

Notes: HH= Household. - No respondents in sample. Remittance volumes less than Rs. 50 lakh are rounded to zero. Averages based on a sample of less than 30 households are reported in italics. Source: Columns 1 and 2 from NSSO (2010b, A2-A4). Columns 3 to 6 computed using NSSO (2010c), with sampling weights. Columns 7 & 8 are the products of of Columns 1,3,5 & 2,4,6 respectively, divided by 100. Column 9 is the addition of Column 7 and 8.

Table A.2  
Domestic Household Remittances across States, 2007-08

State/UT	% HH recd. domestic remittance		Avg. domestic rem. recd. per receiving HH (Rs.)		Annual volume of domestic HH remittances (Rs. Cr.)			% of domestic HH remittances that are Inter-State transfers		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>	<i>Total</i>	<i>Rural</i>	<i>Urban</i>	<i>Total</i>
1 Andhra Pradesh	3.28	2.16	12,725	29,413	620	349	970	35	37	36
2 Arunachal Pradesh	6.12	4.89	13,892	20,048	14	5	19	19	38	24
3 Assam	7.37	5.51	14,224	24,161	482	77	559	35	29	34
4 Bihar	18.62	10.15	14,524	23,798	3,686	361	4,047	89	40	85
5 Chhattisgarh	4.42	2.85	8,171	21,168	143	50	192	29	35	31
6 Delhi	0.18	0.18	16,346	37,715	1	20	20	100	100	100
7 Goa	2.59	1.94	1,36,313	57,824	52	21	73	94	96	94
8 Gujarat	3.99	1.34	12,371	25,742	325	146	471	18	38	24
9 Haryana	5.85	3.23	35,699	53,326	639	225	864	71	62	69
10 Himachal Pradesh	22.97	5.64	22,818	38,527	712	36	747	60	40	59
11 Jammu & Kashmir	10.14	5.07	39,165	52,973	513	79	592	53	42	51
12 Jharkhand	9.00	6.69	21,524	35,836	808	234	1,042	70	62	68
13 Karnataka	6.32	2.05	12,352	37,556	595	312	906	25	35	28
14 Kerala	9.65	6.23	25,281	29,624	1,338	340	1,678	56	71	59
15 Madhya Pradesh	3.35	2.58	10,014	27,885	311	217	527	41	55	47
16 Maharashtra	7.86	2.12	11,331	28,391	1,116	549	1,665	14	42	23
17 Manipur	6.21	5.75	31,597	45,684	60	31	91	53	55	54
18 Meghalaya	4.53	3.64	27,881	45,677	50	15	65	13	30	17
19 Mizoram	5.16	6.11	20,542	38,027	10	18	28	53	46	48
20 Nagaland	7.93	6.95	14,634	15,469	17	6	23	23	36	26
21 Orissa	14.65	7.13	13,706	33,805	1,425	306	1,730	63	62	63
22 Punjab	3.67	1.23	46,559	52,507	578	126	704	51	54	51

23	Rajasthan	13.05	4.78	25,978	45,946	2,953	605	3,558	71	49	67
24	Sikkim	4.97	0.96	24,927	43,358	14	1	14	41	46	41
25	Tamil Nadu	6.80	4.76	14,843	29,705	967	1,046	2,013	37	49	43
26	Tripura	5.40	5.62	21,984	39,222	80	36	116	30	20	27
27	Uttarakhand	21.18	5.81	18,759	47,523	544	134	679	66	75	68
28	Uttar Pradesh	16.40	5.33	13,460	24,502	5,468	923	6,391	77	66	75
29	West Bengal	9.94	4.55	14,385	29,913	1,920	652	2,572	54	55	55
30	A & N Islands	5.95	4.37	28,489	33,202	9	4	13	8	33	16
31	Chandigarh	0.06	0.83	<i>1,64,000</i>	<i>89,675</i>	0	17	18	100	93	93
32	Dadra & Nagar Haveli	0.85	0.57	<i>24,040</i>	<i>49,375</i>	1	0	1	95	67	90
33	Daman & Diu	2.44	2.03	<i>49,396</i>	<i>93,604</i>	3	2	5	99	100	100
34	Lakshadweep	18.30	17.09	<i>27,047</i>	<i>47,121</i>	3	5	8	41	83	66
35	Puducherry	2.79	3.50	<i>13,773</i>	<i>62,775</i>	4	29	33	77	96	94
	All India	9.96	3.56	16,042	30,962	25,444	6,975	32,419	63	53	61

Notes: HH= Household. Averages based on a sample of less than 30 households are reported in italics. Source: Columns 1 to 4 computed using NSSO (2010c), with sampling weights. Col 5 is the product of Col 1,3 and Col 1 of Table A.1, divided by 100. Col 6 is the product of Col 2,4 and Col 2 of Table A.1, divided by 100. Column 7 is the addition of Column 5 and 6. Inter-State transfers for each State was calculated by the PHH method and Columns 8 to 10 report the shares out of domestic HH remittances.

Table A.3  
Domestic Household Remittances across Household Characteristics, 2007-08

Household characteristics	Total No. of HH (Cr.)		% HH recd. domestic remittance		Avg. domestic rem. recd. per receiving HH (Rs.)		Annual volume of domestic HH remittances (Rs. Cr.)		% of domestic HH remittances that are Inter-State transfers	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>
<i>MPCE quintiles</i>										
First	2.609	0.930	7.81	3.30	10,119	12,143	2,062	373	75	68
Second	2.844	1.058	9.26	3.05	11,408	17,404	3,005	562	71	51
Third	3.055	1.224	10.02	3.13	13,503	22,799	4,135	874	71	52
Fourth	3.372	1.381	10.13	3.38	15,494	30,677	5,292	1,433	64	49
Fifth	4.047	1.734	11.65	4.45	23,251	48,341	10,958	3,732	55	53
All classes	15.927	6.327	9.96	3.56	16,042	30,962	25,444	6,975	63	53
<i>Social Group</i>										
Scheduled Tribe	1.792	0.192	4.87	3.42	13,303	32,198	1,160	212	47	41
Scheduled Caste	3.454	0.920	8.94	2.59	12,955	20,964	3,999	498	63	39
Other Backward Class	6.849	2.342	10.84	3.90	16,013	26,568	11,886	2,425	67	54
Others	3.831	2.873	11.69	3.61	18,753	37,051	8,401	3,840	60	54
All groups	15.927	6.327	9.96	3.56	16,042	30,962	25,444	6,975	63	53
<i>Household Type</i>										
Agricultural labour	4.241		6.80		8,732		2,519		63	
Other labour	1.838		4.21		10,860		840		52	
Self employed in non-agriculture	2.295		6.60		15,051		2,281		61	
Self employed in agriculture	5.565		12.52		16,333		11,382		64	
Others	1.986		18.68		22,673		8,412		63	
All types	15.927		9.96		16,042		25,444		63	
Casual Labour		0.821		1.93		10,172		162		52
Self-employed		2.313		2.87		21,588		1,432		56



Regular wage/salary earning	2.587	2.23	30,251	1,742	51
Others	0.606	14.11	42,583	3,638	52
All types	6.327	3.56	30,962	6,975	53

HH=Household. MPCE= Monthly Per Capita Expenditure. All-India quintile cut offs as in NSSO (2010a, A-7 & A-10) are Rs. 423, 525, 639 and 833 in rural areas and Rs. 632, 860, 1178, 1728 in urban areas. Source: Columns 1 and 2 using NSSO (2010a, 2010c). Columns 3 to 6 using NSSO (2010c), with sampling weights. Columns 7 & 8 are the products of Columns 1,3,5 & 2,4,6 respectively, divided by 100. Inter-State transfers for each category was calculated by the PHH method and Columns 8 to 10 report the shares out of domestic HH remittances.

Table A.4  
**Allocating International Remittances across States, 2007-08**

<i>State/UT</i>	<i>Foreign Sector deposits (Rs. Cr.)</i>	<i>All Sector deposits (Rs. Cr.)</i>	<i>Foreign Sector deposits (%)</i>	<i>Shares based on deposits (%)</i>	<i>Shares based on HH remittances (%)</i>	<i>Simple Average Shares (%)</i>	<i>Shares based on Passport data (%)</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
1 Andhra Pradesh	5,479	1,78,691	3.1	3.3	7.7	5.5	11.5
2 Arunachal Pradesh	20	2,947	0.7	0.01	0.0	0.0	-
3 Assam	112	32,240	0.3	0.1	0.0	0.04	0.2
4 Bihar	749	68,855	1.1	0.4	2.5	1.5	7.2
5 Chhattisgarh	74	32,956	0.2	0.0	0.0	0.04	-
6 Delhi	15,872	4,29,446	3.7	9.5	0.2	4.8	0.5
7 Goa	4,116	19,010	21.7	2.5	1.7	2.1	0.3
8 Gujarat	13,303	1,57,209	8.5	7.9	1.6	4.8	1.9
9 Haryana	1,348	74,262	1.8	0.8	1.9	1.3	0.2
10 Himachal Pradesh	399	20,592	1.9	0.2	0.1	0.2	0.2
11 Jammu & Kashmir	437	25,722	1.7	0.3	0.1	0.2	0.4
12 Jharkhand	274	44,798	0.6	0.2	0.3	0.2	0.4
13 Karnataka	11,138	2,14,732	5.2	6.6	2.1	4.3	2.6
14 Kerala	31,805	1,11,488	28.5	19.0	39.9	29.4	21.3
15 Madhya Pradesh	846	85,544	1.0	0.5	0.2	0.3	0.3
16 Maharashtra	44,900	8,92,796	5.0	26.8	3.7	15.2	2.9
17 Manipur	1	1,958	0.1	0.0	0.0	0.0	-
18 Meghalaya	2	5,285	0.0	0.0	0.0	0.0	-
19 Mizoram	1	1,534	0.1	0.0	0.0	0.0	-
20 Nagaland	-	2,731	0.0	0.0	0.0	0.0	-
21 Orissa	558	55,472	1.0	0.3	0.5	0.4	1.1
22 Punjab	10,581	1,00,372	10.5	6.3	12.7	9.5	6.4
23 Rajasthan			3.8	1.7	4.9		

		2,776	73,493				3.3	7.6
24	Sikkim	5	2,164	0.2	0.0	0.0	0.0	-
25	Tamil Nadu	12,562	2,02,566	6.2	7.5	12.4	9.9	15.2
26	Tripura	-	5,178	0.0	0.0	0.1	0.03	-
27	Uttarakhand	417	36,632	1.1	0.2	0.2	0.2	0.1
28	Uttar Pradesh	3,594	2,17,532	1.7	2.1	5.4	3.8	16.4
29	West Bengal	4,074	1,90,213	2.1	2.4	1.2	1.8	3.1
30	A & N Islands	1	1,133	0.1	0.0	0.0	0.0	0.0
31	Chandigarh	1,515	24,235	6.3	0.9	0.5	0.7	0.2
32	Dadra & Nagar Haveli	2	636	0.3	0.0	0.0	0.0	-
33	Daman & Diu	264	1,101	24.0	0.2	0.1	0.1	-
34	Lakshadweep	1	354	0.3	0.0	0.0	0.0	-
35	Puducherry	472	4,765	9.9	0.3	0.3	0.3	0.0
	All India	1,67,699	33,18,641	5.1	100	100	100	100

Notes: HH= Household. - No data. Figures rounded to one decimal point. Source: Columns 1 and 2 from RBI (2009, Statement 3) and are as on March 31, 2008. Column 3 is Col 1 divided by Col 2. Column 4 is Col 1 divided by its All India Total. Column 5 is Col 9 of Table A.1 divided by its All India total. Column 6 is simple average of Col 4 & 5. Column 7 is computed from Zachariah & Rajan (2010, Table 32) and is for year 2008.

Table A.5

**Comparing Remittance Receiving Propensity across States between 1993 & 2007-08**

State/UT	% of HH receiving HH remittances (from out-migrants that left the State anytime within 5 years before the survey)							
	<i>Domestic Inter-State remittances</i>				<i>International remittances</i>			
	<i>Rural</i>		<i>Urban</i>		<i>Rural</i>		<i>Urban</i>	
	<i>1993</i>	<i>2007-08</i>	<i>1993</i>	<i>2007-08</i>	<i>1993</i>	<i>2007-08</i>	<i>1993</i>	<i>2007-08</i>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1 Andhra Pradesh	0.43	0.65	0.30	0.54	0.12	0.99	0.43	0.68
2 Arunachal Pradesh	0.15	1.18	0.72	2.12	-	0.00	-	-
3 Assam	1.24	1.65	0.55	1.42	0.00	-	-	0.16
4 Bihar & Jharkhand	9.36	10.94*	1.96	4.75*	0.40	0.36	0.00	0.15
5 Delhi	0.00	0.00	0.20	0.15	-	0.00	0.00	0.00
6 Goa	0.69	1.57	0.00	1.09	1.73	1.56	0.35	3.65
7 Gujarat	0.78	0.28	0.23	0.32	0.18	0.24	0.00	0.37
8 Haryana	2.96	2.12	0.78	1.51	0.14	0.48	0.00	0.43
9 Himachal Pradesh	3.62	7.35	1.48	1.35	0.17	0.24	0.36	0.13
10 Jammu & Kashmir	4.72	2.64	2.02	2.11	0.63	0.11	0.00	0.34
11 Karnataka	1.24	1.07	2.99	0.49	0.00	0.18	0.38	0.43
12 Kerala	4.52	3.60	1.88	2.55	7.47	8.97	4.71	7.29
Madhya Pradesh &								
13 Chhattisgarh	0.56	1.00*	0.26	1.11*	0.00	0.00	0.00	0.00
14 Maharashtra	0.32	0.63	0.00	0.41	0.00	0.10	0.19	0.28
15 Manipur	2.64	2.46	0.84	2.84	-	0.00	-	0.00
16 Meghalaya	0.14	0.39	0.31	1.05	-	-	0.00	0.00
17 Mizoram	0.85	1.68	0.49	1.72	-	-	-	0.00
18 Nagaland	0.00	1.33	0.11	1.77	-	-	-	0.00
19 Orissa	1.18	7.19	0.53	3.57	0.00	0.00	0.00	0.41
20 Punjab	2.33	1.08	0.80	0.46	2.27	3.70	0.51	1.05
21 Rajasthan	3.40	6.81	2.05	1.59	0.82	1.20	0.60	1.15
22 Sikkim	0.36	1.01	0.33	0.34	-	0.00	-	0.00
23 Tamil Nadu	1.54	1.61	0.48	1.41	0.53	2.42	0.54	1.73
24 Tripura	1.31	1.44	0.90	1.14	-	0.22	-	0.00
Uttar Pradesh &								
25 Uttarakhand	4.96	9.84*	0.93	3.79*	0.19	0.56	0.16	0.44
26 West Bengal	1.45	3.93	0.83	1.46	0.11	0.12	0.18	0.24
27 A & N Islands	0.65	0.58	0.11	1.20	-	-	-	0.00
28 Chandigarh	0.60	-	0.81	0.70	0.82	0.00	0.34	0.75
29 Dadra & Nagar Haveli	0.69	0.00	0.42	0.42	0.00	0.00	0.98	0.55
30 Daman & Diu	0.54	1.01	0.38	1.55	4.56	2.28	4.87	4.15
31 Lakshadweep	2.22	5.02	1.23	6.44	-	-	-	1.63
32 Puducherry	0.54	1.90	0.83	2.70	0.35	1.70	0.92	3.13
All India	2.73	4.62*	0.81	1.3*	0.49	0.88	0.40	0.79

Notes: HH= Household. \* Not strictly comparable with 1993 estimate due to issues in out-migrant definition. - No respondents in sample. All figures are rounded to nearest decimal place. Source: Computed from NSSO (1993) & NSSO (2010c), with sampling weights.

## *Notes*

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<sup>1</sup> See Sahu & Das (2008) for a recent report of the Gujarat to Orissa remittance corridor.

<sup>2</sup> The NSS 49<sup>th</sup> round survey in 1993 asked respondents if they received remittances but did not collect information on the volume of remittances. The India Human Development Survey conducted by NCAER and the University of Maryland in 2004-05 covering over 40,000 households did collect data on remittance volumes. However, the small sample of remittance recipients reduces the ability to produce reliable estimates of aggregate remittance volumes at the State level.

<sup>3</sup> For example, see Zachariah & Rajan (2010, p.69).

<sup>4</sup> 1 crore= 10 million and 10 lakh= 1 million

<sup>5</sup> The NSS 64<sup>th</sup> round survey inquires about remittance receipts, not about remittance outflows from entire-households that have migrated.

<sup>6</sup> RBI estimates do not count unofficial remittance flows. However, their magnitude in the Indian context is considered to be diminishing post exchange rate liberalisation in the 90's and with more efficient money transfer technologies.

<sup>7</sup> Flows into NRI deposits are capital inflows and local withdrawals are capital outflows as well as current account inflows.

<sup>8</sup> See NSSO (2010a, A-31).

<sup>9</sup> This is similar to the 'total consumption' underestimation by NSS compared to CSO estimates.

<sup>10</sup> Includes individuals as well as companies, trusts, etc. with over 60% ownership by NRIs & PIOs. Other types of foreign deposits are by non-resident banks and by embassies and consulates.

<sup>11</sup> In the national accounting framework, remittances are not components of NDP, GDP or total income but of total disposable income. The ratio is nevertheless used for comparative analyses.

<sup>12</sup> The author would like to thank Irudaya Rajan for pointing this out in a seminar.

<sup>13</sup> Totals don't add up to 100 as households could report usage on more than one indicator.

<sup>14</sup> [http://uidai.gov.in/UID\\_PDF/Front\\_Page\\_Articles/MOU/CSO/MoU\\_UIDAI-Coalition\\_of\\_Migrant\\_Workers\\_NGOs.pdf](http://uidai.gov.in/UID_PDF/Front_Page_Articles/MOU/CSO/MoU_UIDAI-Coalition_of_Migrant_Workers_NGOs.pdf). Accessed on October 17, 2010.

<sup>15</sup> Some streams of seasonal migration involve paying an 'advance' to the families and are thus out of the remittance economy.

<sup>16</sup> Given that rural-urban migration has peaked in the developed world, China and India could indeed be hosting the largest domestic remittance markets in the world.

## References

- Cheng, Enjiang and Xu, Zhong (2005), “Domestic Money Transfer Services for Migrant Workers in China: Executive Summary”, Report prepared for the Consultative Group to Assist the Poor, <http://www.microfinancegateway.org/gm/document-1.9.26799/80.pdf>, accessed on 20 Jan. 2011.
- Deshingkar, P.; Khandelwal, R. and Farrington, J. (2008), “Support for Migrant Workers: The Missing Link in India’s Development”, *Natural Resource Perspectives* 117, Overseas Development Institute, UK.
- Ghate, P. (2005), “Serving Migrants Sustainably: Remittance Services Provided by an MFI in Gujarat”, *Economic & Political Weekly*, April 23, pp. 1740-1746.
- GoI (2001), Census 2001 Migration Data, [www.censusindia.gov.in](http://www.censusindia.gov.in), accessed on 15 Nov. 2010. Office of the Registrar General and Census Commissioner, India. Government of India.
- (2008), *Report of the Committee on Financial Inclusion* (Chairman: C. Rangarajan). Government of India, New Delhi.
- India Post (2010), *Annual Report 2009-10*. Department of Posts. Ministry of Communications and Information Technology, Government of India.
- Kapur, D. (2004), “Remittances: The New Development Mantra?”, G-24 Discussion Paper Series No. 29 (New York and Geneva, UN Conference on Trade and Development, 2004).
- MicroSave (2009), “Migrant Remittances- An Untapped Market”, India Focus Note 27, [www.microsave.org](http://www.microsave.org), accessed on 15 Nov. 2010.
- MOIA (2010), “Population of Overseas Indians”, Ministry of Overseas Indian Affairs, <http://moia.gov.in/writereaddata/pdf/NRISPIOS-Data.pdf>, accessed on 18 Oct. 2010.
- Mueller, V. and Shariff, A. (2009), “Preliminary evidence on Internal Migration, Remittances and Teen Schooling in India”, IFPRI Discussion Paper 00858.
- NABARD-GTZ (2009), “Remittance Needs in India”, Technical Study for the Rural Financial Institutions Programme India, [http://www2.gtz.de/wbf/4tDx9kw63gma/NABARD\\_GTZ\\_Remittances.pdf](http://www2.gtz.de/wbf/4tDx9kw63gma/NABARD_GTZ_Remittances.pdf), accessed on 18 Oct. 2010.
- NSSO (1993), Unit level data of 49<sup>th</sup> Round (1993) NSS survey on Housing Condition and Migration, National Sample Survey Organisation, New Delhi.
- (2010a), “Migration in India 2007-08”, *NSS Report No. 533*, NSS 64<sup>th</sup> round.
- (2010b), “Employment and Unemployment Situation in India 2007-08”, *NSS Report No. 531*, NSS 64<sup>th</sup> round.
- (2010c), Unit level data of 64<sup>th</sup> Round (2007-08) NSS survey on Employment, Unemployment and Migration.
- Ratha, D. (2003), “Workers’ Remittances: An Important and Stable Source of External Development Finance”, Chap. 7 of *Global Development Finance 2003*, The World Bank.
- RBI (2006), “Report on the Working Group on Cost of NRI Remittances”, Reserve Bank of India, Mumbai.
- (2009), “Composition and Ownership Pattern of Deposits with Scheduled Commercial Banks: March 2008”, RBI Monthly Bulletin November 2009.
- (2010a), “Invisibles in India’s Balance of Payments: An Analysis of Trade in Services, Remittances and Income”, Vol LXIV, No. 3. RBI Monthly Bulletin.
- (2010b), “Handbook of Statistics on the Indian Economy 2009-10.” Reserve Bank of India, Mumbai.
- Sahu, G. B. and Das, B. (2008), *Income, Remittances and Urban Labour Markets: Oriya Migrant Workers in Surat City* (Bhubhaneshwar: Adhikar).

Samal, C. K. (2006), "Remittances and Sustainable Livelihoods in semi-arid areas", *Asia-Pacific Development Journal*, Vol.13, No. 2, pp. 73-92.

World Bank (2008), *Migration and Remittances Factbook 2008*, The World Bank.

-- (2010): Remittances Data (Inflows). Posted online on April 23, 2010.  
<http://go.worldbank.org/SSW3DDNLQ0>.

Zachariah, K. C. and Rajan, I. (2007), "Migration, Remittances and Employment: Short Term Trends and Long Term Implications", CDS Working Paper 395.

Zachariah, K. C. and Rajan, I. (2010), "Migration Monitoring Study, 2008: Emigration and Remittances in the context of surge in oil prices", CDS Working Paper 424.