

Services Sector in India: Does It Contribute to Population Movement and Poverty Reduction?

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2020

IEG Working Paper No. 401



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Abstract

Based on the cross-sectional data this study examines the role of the services sector in the context of migration from the rural to the urban areas. The dominance of the services sector in the urban setup seems to be working as a pull factor. While industrialisation is seen to encourage migration, the three-equation-recursive model estimated in our study clearly brings out the positive role of the services sector in explaining the variations in the migration rate and enhancing the per capita consumption expenditure in the urban areas. Further, our findings confirm that average consumption expenditure reduces urban poverty significantly. The popular belief is that migration transfers rural poverty into the urban domain, polluting the quality of city life. But our results bring out the positive role that migration plays in reducing poverty. This is indeed an important and cost-effective mechanism compared to the direct cash-transfer and employment guarantee programmes adopted in the rural context. At the heart of this entire argument there lies, however, the crucial role that the services sector plays in encouraging migration and reducing poverty.

1. Analytical Frame

Much of the older literature on migration envisaged the modern industrial sector as a repository of productivity jobs, acting as a pull factor. The wage differential between the farm sector and the industrial sector appeared substantially large which in turn drove the migrants to the urban localities. With over-crowding of labour in the agriculture sector resulting in declining productivity the unionised industrial wages shot up during the seventies which provided a strong empirical support to these theoretical underpinnings. However, over time the illusion of the industrial wage has been widely evidenced and it is not seen to be functional in influencing the migration decision. The absence of the industries and the adoption of capital intensive technology both are responsible for this. On the other hand, the services sector which has been prompting the overall growth of the economy seems to have emerged as a huge absorber of labour notwithstanding its tendency to generate low productivity employment on a large scale. In fact, the low income activities in the urban informal services sector also work as a pull factor for urban in-migration in the face of rural unemployment, underemployment and poverty and in the absence of the rural non-farm activities offering vibrancy and dynamism. The services sector which is broadly characterised in terms of duality – a high and a low productivity segment with a bimodal distribution of income – bears linkages within these segments, resulting in spill-over effects. In other words, the expansion in the high productivity segment can generate labour demand through secondary effects in the lower rungs and wages may rise to provide respite to the job seekers. Whether poverty declines in response to this phenomenon depends on the extent of rise in wages in the informal services sector.

On the other hand, the agglomeration literature argues in favour of concentration of activities which result in productivity gains and wage rise as part of the productivity benefits get transferred to the workers. Even the concentration of services – and not just manufacturing – can lead to these outcomes, as the literature on urbanisation economies, opposed to the localisation economies, would suggest. Hence, in the back drop of the deindustrialisation phenomenon in the context of the cities in the developing countries the scope for agglomeration benefits still holds and the possibility of faster reduction in poverty can be perceived. Though the original ideas about agglomeration economies dealt much with the production sector the new extensions are indeed interesting.

The present paper proposes to examine the rural-urban migration phenomenon in relation to the growth in services sector on the one hand and the impact of migration on urban poverty on the other given the agglomeration benefits associated with concentration and increased urbanisation. The rest of the paper is structured as follows: the present section revisits the literature on services sector, migration and job search through networks in an attempt to offer an integrated framework. Section 2 reflects on broad patterns related to migration, composition of economic growth and poverty with its rural and urban constituents. An econometric approach is followed in section 3 which develops three equations on migration, consumption expenditure per capita and urban poverty as part of a recursive system. Finally, section 4 summarises the major findings.

How internal migrants behave at different stages of the migration process, how migrants prepare for migration, how they migrate, what are the difficulties they face on arriving in urban areas and what links do they maintain with rural areas are some of the key issues (Lall, Selodan and Shalizi, 2006). Specifically, for labour migration while economic opportunities play a key role, a variety of motivations pertaining to migration include not only conditions at the place of origin and destination but also the patterns of recruitment and migration networks

(de Hann, 1994) and cultural factors (Basu, Basu and Ray, 1987). The forced nature of migration has also been brought out in the context of western India (Breman, 1985). Forced migration refers to displacement of individuals and/households due to conflicts, destitution and impoverishment, natural or environmental disasters, chemical or nuclear disasters, famine, or development projects. It is a complex, wide-ranging and pervasive set of phenomena. Though internal migration from poorer areas signifies a form of safety valve, there are many costs of migration which the data on remittances tend to neglect (de Hann, 2011). Costs of migration include not only the transport cost and the resettlement cost at the place of destination but also several social costs such as social exclusion, deprivation from familial bonding and benefits associated with it and a variety of harassments that the low income migrants face from the labour contractors, slum lords and the city residents (Mitra, 2013).

Deshingkar, Kumar, Chobey and Kumar (2006) studied the role of migration and remittances in enhancing livelihoods in Bihar. It is noted that migration is gradually increasing due to the lack of opportunities locally and increasing opportunities elsewhere given the discrimination based on caste which is still prevalent in these areas. Also, better off young people tend to migrate to urban areas and social connections determine the choice of destinations. Wages depend on skill and education. It is observed that migration and remittances improve the standards of living by smoothening out consumption and spreading risk.

Though migration for employment from rural to urban areas is indeed a major tool of poverty alleviation, the opportunities are gradually declining (Kundu and Mohanan, 2009). The job prospects are definitely better for the migrants in large cities than those in small towns. But these possibilities are closing down for the unskilled, illiterate population, particularly into large cities because the metropolitan cities are resisting immigration of unskilled and illiterate male population due to changes in the requirements in labour market. The newly emerging activities in the urban areas, even including those in the informal sector, are skill intensive which the unskilled labour from the rural areas cannot match. However, De Hann, Brock and Caulibaly (2002) study the patterns of migration in Mali and they go on to show how the people have successfully used migration as a strategy for risk management as migration for work (domestic as well as across borders) is an integral part of households in Mali.

On the whole, we are able to perceive the importance of the services sector both for the educated and the uneducated job seekers at the place of destination. For the educated job market participants the services sector offers high productivity work opportunities. On the other hand, for the uneducated job seekers the services sector posits easy entry with very less barriers in terms of financial resources or skill requirements. Udall (1976) had argued that the services sector is a manifestation of residual type activities operating with an absorptive capacity of a sponge. Since the supplies of labour exceed the demand significantly and also there is a severe competition among the workers, the wage rate remains at a pitifully low level. Mitra (1994), however, observed a bimodal distribution of income within the services sector which conforms to the job seeking behaviour of both educated and uneducated workers.

Further, the recent literature suggests that even the less skilled workers are aiming at the services sector as jobs in the industrial sector have almost disappeared, particularly in the large metropolitan cities, because of a variety of factors such as strict location regulations for industries, mechanisation and digitization in the production process displacing labour, and stagnancy or deceleration in industrial expansion. Even for the less educated and unskilled workers opportunities are opening up in the cities to escape poverty; hence, the so-called

residual activities are also emerging to be a sector of respite. As Eichengreen and Gupta (2013) observed, the positive association between the service sector share of output and per capita income is widely evident both in countries with relatively low levels of per capita GDP and higher per capita incomes: the first being made up primarily of traditional services, the second of modern services. Even in the countries with low incomes the second wave is occurring after 1990, especially so in democracies, and in countries that are open to trade, and in countries close to global financial centres. While factors such as a high income elasticity of demand for services, increased input usage of services by other sectors, supply side factors including reforms and technological advances also played a significant role though employment growth in the Indian services sector has been quite modest (Gordon and Gupta (2003). However, in India employment expansion appears to be more in sub-sectors where educational requirements and quality of employment is low (Nayyar, 2009). But an opposite view suggests that the services despite being the largest and fastest growing sector in India employment has not kept pace with the share of the sector in gross domestic product and has not produced the number or quality of jobs needed (Mukherjee, 2013). As Ghose (undated) reiterated India's services sector is overdeveloped in relation to its industrial sector and the share of services in employment is exceptionally low in relation to the share in GDP. Ramaswamy and Agrawal (2012) did not find any acceleration in the service-sector employment growth relative to manufacturing in the urban areas of India though the young males had increased their share of regular employment both in manufacturing and services. However, greater duality persisted in services sector in terms of the incidence of informality and wage inequality: those with more skills received higher increases in real wage and the sector is relatively more skill demanding than manufacturing.

There are other factors too explaining a surge in services value added: productivity in manufacturing improved with growth of the economy, and the benefit of the improvement got passed on to the users while the services sector did not experience such a consistent drag. Rather education, health etc. has been a consistent beneficiary of the price adjustment which helped the service sector's share in GDP to move up persistently (Datta, 2015). Factors which compel poorer households to spend more on services also need to be looked into: for example, when the state stops providing essential services, the poor are forced to substitute private for public services at the cost of food and nutrition (Basu and Das, 2017).

The next question is how do the rural based migrants access the urban job market information. The literature on social capital, network formation and accessing sources of livelihood through these networks is rich. The two key elements of social capital include the resource endowments of one's associates and the social relationship itself through which associates' resources can be accessed (Ioannides and Loury, 2004; Portes, 1998). Job search through informal channels such as friends, relatives and members of the same caste group, is generally said to be widely prevalent and productive (Ioannides and Loury, 2004). Elliott (1999) noted that workers from high-poverty neighbourhoods were substantially more likely to use informal job-search methods than those from low-poverty neighbourhoods, and through the informal networks mutual benefits are ensured (Stark, 1995). However, a number of studies highlighted the negative aspect of informal networks as well. Elliott (1999) noted for less educated workers that the use of informal contacts resulted in significantly lower wages.¹ Rather a diversification of networks can raise their payoffs (Kono, 2006), indicating possible gains associated with a shift from the informal to formal networks at a later stage though the informal networks in the initial stages are inevitable for an entry to the job market.

¹ For details, see Kono (2006), Luke and Munshi (2006), Montgomery (1991), and Munshi and Rosenzweig (2006).

Ioannides and Loury(2004) highlight social interactions and the ways in which social norms and structures condition individual behaviour. Access to information is heavily influenced by social structure and individuals use connections to build and maintain networks. Differences among workers exist in terms of their use of information outlets. However, the role of information networks in the job search process is not straight forward. The strength of the networks and information benefits may be positively associated. The structural holes argument suggests: (a) a network with more non-redundant contacts can provide more information than the same size network with redundant contacts and (b) a network with a given number of non-redundant contacts provides more information if those contacts reach separate and therefore more diverse social worlds(Ioannides and Loury, 2004). High degree of social capital, implies high levels of social closure. So, the non-redundant information or contacts that structural holes possess is better communicated to and acted upon in networks with closure. Individuals when act similarly are more likely to be connected with one another than with others who act differently. “Strength of position” concept argues that individuals are more likely to associate with others in similar social and occupational positions. This proposition implies that social networks develop along dimensions such as race, ethnicity, religious affiliation and education. From this it may be inferred that migrants with higher levels of education may land up with better outcomes compared to the uneducated and unskilled job seekers.

Also, the role of employer heterogeneity on contact effects can be brought in. The practice of referrals implies less screening required to fill positions. Refereed applicants have more information about non-pecuniary aspects of employment and therefore, better matches take place. Finally, connections between new hires and incumbent employees can make the job transition smoother, as well as, create additional loyalties and attachments to the jobs. Even within the formal sector inter-organisational mobility is enhanced by having a large network of informal ties that supply access to information and resources. Also, availability of a small dense network of social contacts with high closure and cohesiveness is important. These two propositions would imply that social network structure and content interact in determining careers within organisations. Mortensen (1994) argued that the equilibrium wage distribution increases with the probability that the offer is from a contact.

Information passed from employed individuals to their unemployed acquaintances makes it more likely that their acquaintances will become employed implying that there is a positive correlation between employment and wages of networked individuals within and across periods (Ioannides and Loury, 2004 and Mitra, 2004).Duration dependence and persistence in unemployment may be explained by arguing that when an individual’s direct and indirect social contacts are unemployed, the likelihood of obtaining information about jobs through contacts is accordingly determined. Also, the likelihood of dropping from labour force increases if the individual’s social contacts have poor employment experience and higher initial drop-out rates.So, history matters in clarifying wage inequality and this explanation is different from the one relating to human capital differences (Ioannides and Loury, 2004).

Another aspect relates to network effects being interpreted as neighbourhood effects. For example, cities and clusters in cities with higher unemployment rates etc. will tend to discourage migration. But evidence on non-monotonic neighbourhood effects on labour market outcomes exists. This would imply that some of the large cities in spite of being saturated in terms of labour market prospects may attract fresh migrants.

On the whole, we are able to observe that the network effects facilitate the dissemination of job market information, which in turn helps absorption of the rural migrants. The labour

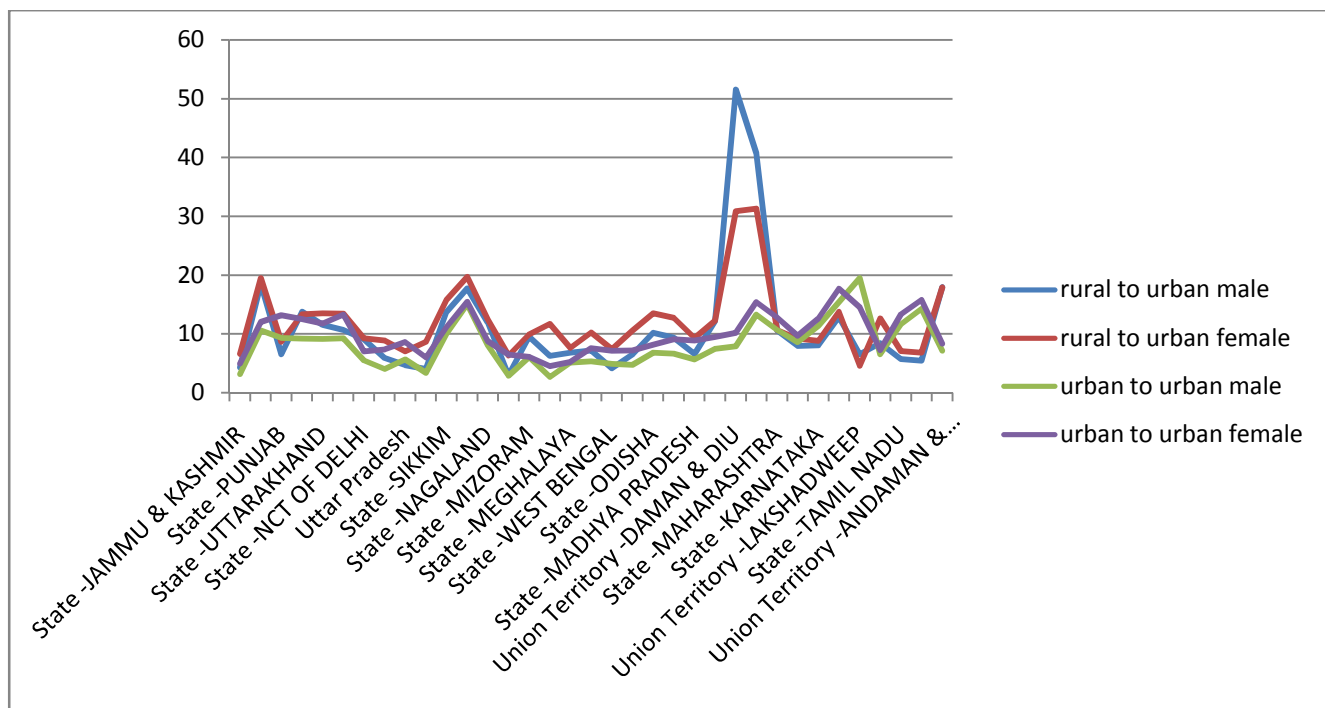
income (product of human capital) is equal to parental effect, ethnic group effect, neighbourhood of upbringing effect and social network effects.

Next, we argue that such network operations are prevalent and effective pertaining to the services sector located in large cities. In the organised or formal industrial sector there are standard practices of direct recruitment which are getting more obsolete with the rising phenomenon of contractualisation. But the informal economy of which a large proportion is located within the domain of the services sector depends on networks for hiring. The job seekers' destiny and labour market outcomes including the wage income, are determined on how effective these networks are. Hence, two empirically testable propositions based on macro data refer to whether large services sector encourages greater migration and second, whether such services sector induced migration helps reduce urban poverty.

2. Migration Rates

Table A1 in the appendix presents the migration rates – rural to urban and urban to urban - across states among both the sexes. The rates are defined as the gross decadal flow of population from rural and urban areas to the place of destination as a percentage of total urban population. While at the all-India level the rural to urban and urban to urban rates are almost similar for each of the sexes (the female specific rates being one percentage point higher than their male counterparts), the interstate differences are substantial. In many states as the graph (Figure 1) shows, the rural to urban rates dominate their urban to urban counterparts. Different factors seem to be influencing migration decision across regions. Both low and high income states and highly and sluggishly urbanised states seem to be having rapid population flow (e.g., Maharashtra and Odisha). The coefficient of variation particularly of the rural to urban rate among males is the highest and the urban to urban rate among the females is the lowest (Table 1). While Jammu and Kashmir registered a rate of only 4.4 per cent, Himachal Pradesh unfolds a figure of 18.5 per cent among the males. Since among the females, decisions to migrate is dependent on other male members of the household, the inter-state variations may not be wide. On the other hand, among the males employment is a common reason and, therefore, it does not vary much across states. Rural to urban male migration is influenced by a number of factors some of which tend to vary across states and thus, significant variations in the rate do not come as a surprise. Percentage of rural males who moved due to marriage or those who moved after birth varies widely with a much higher coefficient of variation than that of the all-purpose migration rate. Among the females while marriage being a common reason of migration does not show significant variations, business and education show wide cross-sectional differences.

Figure 1: Migration Rates



Source: Population Census, 2011

Table 1: Coefficient of Variation Calculated from State Level Data

| Purpose of Migration | Rural to Urban Person | Rural to Urban Male | Rural to Urban Female | Urban to Urban Person | Urban to Urban Male | Urban to Urban Female |
|---|-----------------------|---------------------|-----------------------|-----------------------|---------------------|-----------------------|
| All Purpose Migration Rate Migrants Moved | 69.785 | 86.685 | 49.592 | 40.275 | 48.092 | 34.918 |
| Due to Employment (%) Migrants Moved | 45.329 | 31.457 | 54.769 | 40.739 | 33.233 | 58.137 |
| Due to Business (%) Migrants Moved | 64.955 | 36.289 | 110.440 | 101.152 | 69.103 | 166.498 |
| Due to Education (%) Migrants Moved | 80.665 | 66.440 | 98.982 | 71.742 | 60.158 | 86.130 |
| Due to Marriage (%) Migrants Moved | 47.004 | 122.587 | 36.587 | 47.738 | 107.404 | 40.178 |
| Moved after Birth (%) | 85.940 | 93.539 | 81.382 | 67.572 | 66.487 | 69.074 |

| | | | | | | |
|-------------------|--------|--------|--------|--------|--------|--------|
| Moved with HH (%) | 18.166 | 24.705 | 29.520 | 16.765 | 16.763 | 25.999 |
| Other Reasons (%) | 34.145 | 41.559 | 36.040 | 39.699 | 42.258 | 43.094 |

Note: Migration (Y1) is taken as a percentage of total urban population (Y), reasons for migration Xi (i=1,2,3,...) is taken as a percentage of total migration (Y1), where. $X_i = Y1$.

Source: Based on Population Census Data, 2011

From Table 2 it may be noticed that rural-urban male and female migration rates are positively associated with each other implying that females often move as companions of the males, single female migration being still a nominal phenomenon in India. Services share in the state domestic product does not seem to be positively correlated with either rural male or rural female migration rate. Rather the share of industry shows a positive though mild, association with both male and female migration from the rural to the urban areas. This is quite contrary to the hypothesis we have tried to posit in section 1. Rural poverty is also not a factor which seems to be inducing migration, rather it shows a mild negative correlation with male migration from the rural areas. This may be interpreted as the inability of the rural poor to move to the urban space in search of jobs as they cannot finance the cost of migration. However, the interesting part is that there is a strong positive association between rural and urban poverty. This may mean that the rural poor migrate and transfer their poverty to the urban areas or states with sluggish economic opportunities and a high rural poverty also seem to be having urban vulnerabilities. On the other hand, the graphical plot of some of the variables show that services share and rural and urban poverty both are negatively associated somewhat. In other words, the role of the services sector in reducing poverty cannot be completely ignored. The correlation between the services share and rural poverty is in fact around -0.38 though in the urban context the absolute magnitude is much less. Nevertheless, these preliminary findings prompt us to pursue the analysis further in econometric framework.

Table 2: Correlation Matrix

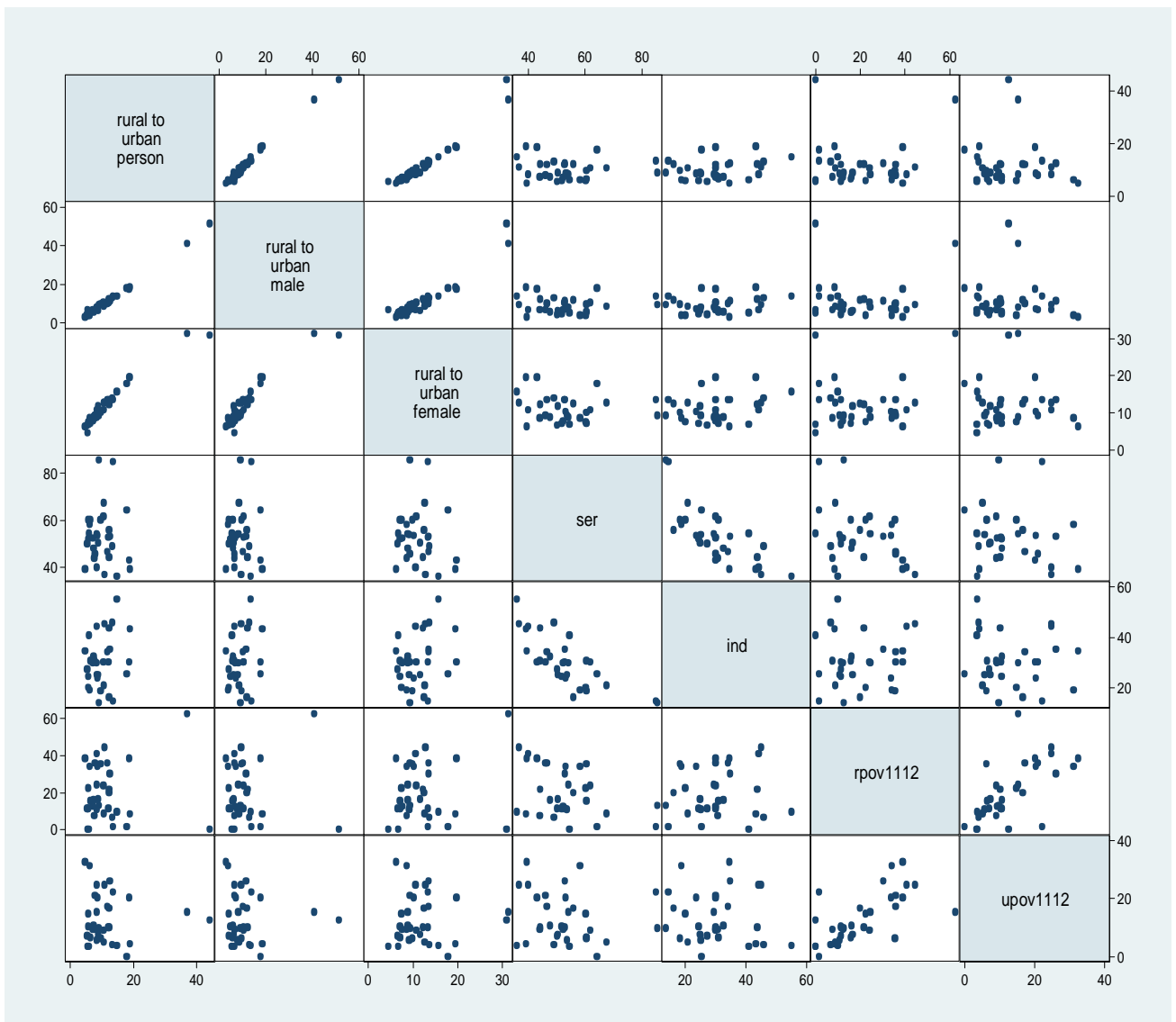
| | Rural to Urban Person | Rural to urban Male | Rural to Urban Female | Ser | Ind | Rural Poverty 1112 | Urban Poverty 1112 |
|-----------------------|-----------------------|---------------------|-----------------------|---------|--------|--------------------|--------------------|
| Rural to Urban Person | 1.0000 | | | | | | |
| Rural to urban Male | 0.9862 | 1.0000 | | | | | |
| Rural to Urban Female | 0.9799 | 0.9336 | 1.0000 | | | | |
| Service | -0.0542 | 0.0157 | -0.1426 | 1.0000 | | | |
| Industry | 0.2379 | 0.2069 | 0.2692 | -0.7577 | 1.0000 | | |
| Rural Poverty | -0.1238 | -0.1844 | -0.0426 | -0.3799 | 0.0760 | 1.0000 | |

| | | | | | | | |
|--------------------|---------|---------|---------|---------|---------|--------|--------|
| 1112 | | | | | | | |
| Urban Poverty 1112 | -0.1981 | -0.2482 | -0.1263 | -0.1427 | -0.0862 | 0.7457 | 1.0000 |

Note: IND and SER are the share of industry and services in State Domestic Product respectively (2011-12). Rural to Urban stands for migration as a percentage of urban population.

Source: Based on data from Population Census, 2011, National Accounts Statistics, CSO, and NSS data on consumption expenditure.

Figure 2: Scatter Matrix



Note and Source: See Table 2

3. Econometric Model

As the analytical frame highlights, the predominance of the services sector has been acting as a pull factor in the context of migration from the rural areas. In addition, we have also taken

the share of industry in total state domestic product to capture the effect of industrialisation on migration. The overall per capita income is an indicator of growth and demand expansion. In addition, the urbanisation index is included to capture the urban diseconomies. Higher rate of urbanisation may discourage further fresh flow of population from the rural areas. In the rural context the labour force participation rate, particularly among the males, is taken as a proxy of labour supplies. With higher participation the number of potential migrants increases.

Rural poverty is expected to act as a push factor for migration (Harris-Todaro, 1970 and Dandekar and Rath, 1971) though the alternative view has also been mentioned to indicate that poor cannot afford to migrate. However, given the desperation of the poor, seeking livelihood and given the bleak employment prospects in the rural areas the urban informal sector acts as a driver. Hence, rural poverty can be taken as a major determinant of migration. However, rural poverty itself is an endogenous variable which is determined by a number of variables. Since the focus of the paper is not to explain rural poverty in a causal framework it will be important to take an important instrument for rural poverty. The rural per capita consumption expenditure which is a measure of rural living standards appears to be such an instrument. With lower living expenses poverty is supposed to rise and hence, more potential migrants can be found. Alternately, better living standards can reduce poverty and enhance the affordability of certain sections of the rural population to migrate to the urban areas. Road per population is taken as a proxy for physical infrastructure which is expected to augment population flow from the rural to the urban areas.

In the second equation urban consumption expenditure is taken to be a function of rural to urban migration. If the migrants are able to get absorbed into better activities in comparison to their rural job status then an improvement in the urban consumption expenditure is expected (Kannapan, 1985). On the other hand, migration may result in a decline in the urban living standards if the migrants get residually absorbed in low productivity activities. As our analytical frame upholds the services in the urban areas comprise an important sector for labour absorption, the fact to which a number of studies are testimony (Mitra, 2013). Even the informal services help people earn their livelihood and escape poverty for which many migrants flow to the urban space in search of jobs in the informal services (Mitra, 2004, 2010). The share of services in total state domestic product is, therefore, included in the equation. The other determinant of urban per capita consumption is literacy of the urban population though mere literacy cannot capture the extent of human capital formation. Increased electricity consumption per capita can be a broad proxy for income an increase in which is expected to raise the consumption expenditure per capita. In fact, higher consumption of electricity may be due to expansion in economic activities which result in higher income and consumption.

In the third equation urban poverty is taken to be a function of urban per capita consumption expenditure, urban child-woman ratio, urban household size and health outcome measured in terms of infant mortality rate for girls and boys. Child woman ratio which is an indicator of greater demographic pressure is likely to aggravate poverty. The same may be expected of urban household size. Adverse health outcome measured through infant mortality rate may add to poverty while consumption expenditure may reduce poverty.

This model is recursive in nature with three equations in the sequence. All the equations are identified. Since the first equation, the migration function, does not have any endogenous variable on the right-hand side, it is estimated by OLS. However, the robust estimates of the standard errors have been generated so that the t ratios are not affected due to

heteroscedasticity. In the second and third equations the observed values of the endogenous variables on the right side are replaced by their estimated values which give us consistent estimates of the parameters as the estimated values of the endogenous variables are not correlated with the error terms. The estimated values of the rural to urban migration rate from the first equation are inserted in the second equation representing the urban consumption expenditure function. The estimated values of the urban consumption per capita consumption are then inserted in the third equation representing urban poverty equation. In other words, the second and the third equations are estimated by two-stage-least-square in order to derive the consistent estimates of the parameters.

The results presented in Table 3 indicate that rural to urban migration rate is significantly influenced by both the shares of services and industry. In fact, both seem to be having almost same coefficient, that is, similar impact on migration. It may be recalled that some of the older studies had also brought out significant and equal role played by both manufacturing and services income per capita in reducing urban poverty (Mitra, 1992). However, per capita net state domestic product does not turn out to be statistically significant as the growth or income effect is possibly picked up by the consumption per capita as mentioned below. Road per capita adds to migration significantly and the labour force participation rate in the rural areas also stimulates migration. The rural per capita consumption expenditure is an important determinant of migration but it is seen to be having a positive impact, implying that rural poor with lower consumption expenditure are less likely to migrate. The urbanisation index reduces migration: relatively higher levels of urban population are indicative of population pressure, acting as diseconomies rather than economies.

In the second equation migration is seen to be positively associated with urban consumption expenditure per capita, indicating that migrants are able to get absorbed in relatively high income jobs. States which experience higher flow of population from the rural areas are able to witness better job search strategies in the urban space and hence, better labour market outcomes in terms of wages, which are reflected in per capita consumption expenditure. This is corroborated by the significant coefficients of the services share and the electricity consumption per capita. Both are positive implying that services activities help income and consumption to rise and similarly rise in electricity consumption per capita representing expanded economic activities and higher incomes also raise consumption expenditure. Literacy, however, does not turn out to be statistically significant.

Higher consumption expenditure per capita reduces poverty which is seen to be aggravated by greater demographic pressure measured in terms of child-woman ratio. Rise in household size is however, associated with a decline in poverty which could be due to the fact that larger number of individuals participating in the labour market may raise the household per capita income and consumption. The important finding relates to the infant mortality rate. With poorer health outcomes measured in terms of higher infant mortality rates poverty is expected to rise as labour productivity and income earning capacity decline. This is evident as we consider the infant mortality rate among the boys. However, in the case of infant mortality rate among the girls the coefficient turns out to be negative and significant. This reveals a great deal of complexity associated with Indian gender inequality. There is a growing concern that even in relatively higher income or non-poor households unequal treatment shown to girls and women results in poor health outcomes (Kumar and Mitra, 2019). Hence, there can be a negative association between health related variables for females and consumption expenditure.

Table 3: Results of the Recursive System

| RHS Variables | Equ.1 LHS Variable RUMIG OLS; Robust | Equ.2 LHS Variable MPCEU 2SLS | Equ.3 LHS Variable UPOV 2SLS |
|--------------------|---|--|---------------------------------------|
| LFPRMR | 0.21 (1.92)* | | |
| PCNSDP | -0.00002 (-0.41) | | |
| IND | 0.35 (3.10)** | | |
| SER | 0.30 (2.64)** | 29.45 (4.13)** | |
| URBAN | -0.1 (-2.02)* | | |
| ROADPC | 0.006 (3.54)** | | |
| MPCER | 0.005 (3.22)** | | |
| EstRUMIG | | 102.52 (3.03)** | |
| EstMPCEU | | | -0.009 (2.90)** |
| ULIT | | 2.93 (0.14) | |
| ELECPCCON | | 0.44 (3.01)** | |
| UCHILDW | | | 272.98 (3.72)** |
| UHHSZ | | | -11.96 (-2.55)** |
| IMRG | | | -1.28 (-2.28)* |
| IMRB | | | 1.16 (2.08)* |
| INTER | -40.10 (-3.01)** | -617.40 (-0.47) | 34.69 (1.90)* |
| Adj.R ² | 0.54 | 0.56 | 0.45 |
| N | 32 | 32 | 32 |

Note: LFPRMR: Labour force participation rate among females and males in rural and urban areas, 2011–12, Labour Bureau, Ministry of Labour and Employment, Government of India; IND: Share of industry in gross state domestic product, 2011–12; SER: Share of services in total gross state domestic product, 2011–12; URBAN: % of population residing in urban areas, 2011 Census; ROADPC: State-wise road length in relation to population, 2011, Ministry of Road Transport and Highways; ELEC: State-wise annual per capita consumption of electricity in kWh, 2012–13, Ministry of Power; ULIT: Literacy rate in the urban areas, Population Census, 2011; IMRB and IMRG: Infant mortality rate, boys and girls

respectively, 2011, Sample Registration System 46, 47 and 48, Office of Registrar General, Ministry of Home Affairs;UHH:; Urban household size, Population Census, 2011; UCHILDW: Urban child-woman ratio in the urban areas, Population Census, 2011; PCNSDP: Per capita net state domestic product in Rs. 2011–12; Data Book for Planning Commission, 2014; MPCEU and MPCER: Monthly per capita consumption expenditure in the urban and rural areas respectively, National Sample Survey on Consumption Expenditure, 2011-12; RUMIG: Rural to urban decadal migration as a percentage of total urban population, Population Census, 2011.

4. Conclusion

Based on the cross-sectional data this study examines the role of services sector in population movement from the rural to the urban areas. While the received theory largely focussed on the industry being instrumental in attracting the migrants, the dominance of the services sector in the urban setup seems to be working as pull factor. The perception about the services sector that it provides low productivity activities at the lower rungs, especially to the unskilled and the semi-skilled workers, seems to be changing. There are several new activities emerging within the services sector and they are providing opportunities to escape poverty. Even the so called petty activities within the services sector remain as sources of livelihood and they help migrants experience upward mobility in relation to the rural living standards. While industrialisation is seen to encourage migration, the econometric model estimated in our study clearly brings out the positive role of the services sector in explaining the variations in the migration rate and enhancing the per capita consumption expenditure in the urban areas. In other words, it is not necessarily true that those who are engaged in the high income activities in this sector, characterized by a bi-modal income distribution, are the only legatees. Even those who are in relatively lower rungs are able to improve their income and consumption by migrating to the urban space: higher is the migration rate, higher is the consumption expenditure per capita and higher is the services sector share in the total product, higher is the consumption. Further, if the average consumption expenditure were to improve by the increasing income of only those who are at the higher echelons, poverty would have remained invariant. But our findings confirm that average consumption expenditure reduces urban poverty significantly. Then, why migration should not be allowed to the urban areas? The popular belief is that migration transfers rural poverty into the urban domain, polluting the quality of city life. But our findings bring out the positive role that migration plays in reducing poverty. This is indeed an important and cost-effective mechanism compared to the direct cash-transfer and employment guarantee programmes adopted in the rural context. The importance of infrastructure is also borne out by the evidence that road per capita facilitates population mobility. These findings have important policy implications.

Though industry is an important determinant of migration, the recruitment practices seem to have changed significantly as compared to the past practices. The labour contractors play a crucial role as far as recruitment in industry and construction sectors is concerned. Therefore, the relevance of the network in the context of job search, as discussed at length in section 1, can be traced to the services sector, primarily. Given the wide variety of activities conducted within the services sector, prevalence of multiple networks, occupational mobility and income changes constitute a propelling phenomenon.

While poor health outcome and poverty overlap, in the case of girls, health vulnerability is seen even in the households which are better-off in terms of consumption expenditure. Poor cultural practices and gender discrimination cutting across economic classes are evident. Mere literacy does not contribute to earning capacity and hence, consumption expenditure remains insensitive to any improvement in literacy levels. Indicators with skill improvement would have possibly resulted in higher earnings and consumption expenditure. Demographic pressure measured through child-woman ratio is seen to raise poverty at the household level and similarly, the higher levels of urbanisation deters further migration by creating diseconomies at the macro level. Power supply possibly contributes to income generation as it is seen to be positively and significantly associated with consumption expenditure per capita, which again holds a pertinent policy directive.

References

Basu, Deepankar and Debarshi Das, (2017) Service Sector Growth in India from the Perspective of Household Expenditure, December, 2, 2017, *Economic and Political Weekly*, vol LII no 48, pp.68-75.

Basu, Alaka, M. Kaushik Basu, and R. Ray (1987), Migrants and the Native Bond: An Analysis of Microlevel Data from Delhi, *Economic and Political Weekly*, Vol. 22, Annual No.

Breman, Jan (1985), *Of Peasants, Migrants, and Paupers: Rural Labour Circulation and Capitalist Production in West India*. Delhi: Oxford University Press.

Dandekar, V. M., and N. Rath. (1971), *Poverty in India*. Pune: Indian School of Political Economy.

Datta, Madhusudan, (2015), Stagnant Manufacturing and Baumol's Disease Indian Economy since 1968-69, *Money and Finance*, July, pp.69-98.

De Haan, A. (1994), 'Towards a Single Male Earner: Decline of Child and Female Employment in an Indian Industry', *Economic and social history in the Netherlands*, 6, 145-67.

De Haan, A. (2011), *Inclusive Growth?: Labour Migration and Poverty in India*, International Institute of Social Studies.

De Hann, A., Brock, K., & Coulibaly, N. (2002), 'Migration, livelihoods and institutions: contrasting patterns of migration in Mali', *Journal of Development Studies*, 38(5), 37-58.

Deshingkar, Kumar. Chobey and Kumar (2006), 'The Role of Migration and Remittances in Promoting Livelihoods in Bihar', Overseas Development Institute, London

Eichengreen, Barry and Poonam Gupta, (2013) The two waves of service-sector growth, *Oxford Economic Papers* 65 (2013), 96-123.

Elliott, J. (1999) Social isolation and labour market insulation: network and neighbourhood effects on less-educated urban workers, *Sociological Quarterly*, 40(2), pp. 199–216.

Ghose, Ajit (Undated), *Services-led Growth and Employment in India*.

Gordon, Jim and Poonam Gupta, (2003), *Understanding India's Services Revolution*, International Monetary Fund, November, 12.

Harriss, J. and Todaro, M. P. (1970) Migration, unemployment and development: a two-sector analysis, *The American Economic Review*, 60(1), pp. 126–142.

Ioannides, Y. M. and DatcherLoury, L. (2004) Job information networks, neighbourhood effects and inequality, *Journal of Economic Literature*, 42, pp. 1056–1093.

Kannapan, S. 1985. “Urban Employment and the Labour Market in Developing Nations.” *Economic Development and Cultural Change*, 33 (4).

Kono, H. (2006) Employment with connections: negative network effects, *Journal of Development Economics*, 81, pp. 244–258.

Kumar, Abhishek and Mitra, Arup, (2019), Growth, health and gender imbalance: evidence from India, *Area Development and Policy*, March 26.

Kundu, A. and Mohanan, P. C. (2009), *Employment and Inequality Outcome in India*, OECD Conference Paris, OECD Paris.

Lall S.V., Harris, S. &Shalizi, Z. (2006) *Rural-Urban Migration in Developing Countries: A Survey of Theoretical Predictions and Empirical Finding*. Development Research Group, TheWorld Bank.

Luke, N. and Munshi, K. (2006) New roles for marriage in urban Africa: kinship networks and the labour market in Kenya, *The Review of Economics and Statistics*, 88(2), pp. 264–282.

Mitra, A. (1992) Urban poverty: a rural spill-over?, *Indian Economic Review*, 27, pp. 403–419.

Mitra, A. (1994) *Urbanisation, Slums, Informal Sector Employment and Poverty: An Exploratory Analysis*. Delhi: D. K. Publishers.

Mitra, A. (2004), Informal sector, networks and intra-city variations in activities: findings from Delhi slums, *Review of Urban and Regional Development Studies*, 16(2), pp. 154–169.

Mitra, A. (2010), “Migration, Livelihood and Well-Being: Evidence from Indian City-Slums.” *Urban Studies*, 47 (7): 1371–1390. doi:10.1177/0042098009353621.

Mitra, Arup, (2013), *Insights into Inclusive Growth, Employment and Wellbeing in India*, Springer, Delhi.

Montgomery, J. D. (1991) Social networks and labour market outcomes: towards an economic analysis, *American Economic Review*, 81, pp. 1408–1418.

Mortensen, Dale and Tara Vishwanath, (1994), Personal Contacts and Earnings: It is Who You Know, *Labour Economics*, 1(1), pp.187-201.

Mukherjee, Arpita (2013) : The Service Sector in India, ADB Economics Working Paper Series, No. 352, <http://hdl.handle.net/11540/2314>

Munshi, K. and Rosenzweig, M. (2006) Traditional institutions meet the modern world: caste, gender, and schooling choice in a globalizing economy, *The American Economic Review*, 96(4), pp. 1225–1252.

Nayyar, Gaurav, (2009) The Nature of Employment in India's Services Sector: Exploring the Heterogeneity, Department of Economics, University of Oxford, Discussion Paper Series, ISSN 1471-0498

Portes, A. (1998) Social capital: its origins and applications in modern sociology, *Annual Review of Sociology*, 24, pp. 1–24.

Ramaswamy, K.V. and Tushar Agrawal (2012), Services-led Growth, Employment and Job Quality: A Study of Manufacturing and Service-sector in Urban India, Indira Gandhi Institute of Development Research, Mumbai March, <http://www.igidr.ac.in/pdf/publication/WP-2012-007.pdf>

Stark, O. (1995) *Altruism and Beyond: An Economic Analysis of Transfers and Exchanges within Families and Groups*. Cambridge: Cambridge University Press.

Udall, A. T. (1976), "The Effects of Rapid Increases in Labour Supply on Service Employment in Developing Countries", *Economic Development and Cultural Change*, Vol. 24, No.4.

Appendix

Table A1: Migration Rates

| States and UTs | rural to urban person | rural to urban male | rural to urban female | urban to urban person | urban to urban male | urban to urban female |
|---------------------------|-----------------------|---------------------|-----------------------|-----------------------|---------------------|-----------------------|
| JAMMU & KASHMIR | 5.4 | 4.4 | 6.6 | 4.0 | 3.2 | 4.9 |
| HIMACHAL PRADESH | 19.0 | 18.5 | 19.5 | 11.3 | 10.6 | 12.1 |
| PUNJAB | 7.5 | 6.6 | 8.6 | 11.1 | 9.3 | 13.2 |
| CHANDIGARH | 13.6 | 13.8 | 13.3 | 10.7 | 9.2 | 12.5 |
| UTTARAKHAND | 12.5 | 11.6 | 13.5 | 10.4 | 9.2 | 11.8 |
| HARYANA | 12.0 | 10.7 | 13.4 | 11.1 | 9.2 | 13.3 |
| NCT OF DELHI | 9.2 | 9.1 | 9.2 | 6.2 | 5.5 | 7.0 |
| RAJASTHAN | 7.3 | 5.9 | 8.9 | 5.6 | 4.1 | 7.3 |
| Uttar Pradesh | 5.8 | 4.8 | 7.0 | 7.1 | 5.7 | 8.6 |
| BIHAR | 6.2 | 4.1 | 8.7 | 4.6 | 3.4 | 6.0 |
| SIKKIM | 14.7 | 13.8 | 15.8 | 10.6 | 10.0 | 11.1 |
| ARUNACHAL PRADESH | 18.7 | 17.8 | 19.7 | 15.2 | 15.0 | 15.5 |
| NAGALAND | 12.2 | 12.0 | 12.4 | 8.4 | 8.1 | 8.8 |
| MANIPUR | 4.7 | 3.0 | 6.3 | 4.7 | 2.9 | 6.5 |
| MIZORAM | 9.7 | 9.6 | 9.9 | 6.1 | 6.1 | 6.1 |
| TRIPURA | 9.0 | 6.3 | 11.7 | 3.6 | 2.7 | 4.5 |
| MEGHALAYA | 7.2 | 6.9 | 7.6 | 5.1 | 5.1 | 5.2 |
| ASSAM | 8.7 | 7.2 | 10.2 | 6.4 | 5.3 | 7.6 |
| WEST BENGAL | 5.7 | 4.2 | 7.4 | 6.0 | 4.9 | 7.2 |
| JHARKHAND | 8.4 | 6.5 | 10.6 | 5.9 | 4.8 | 7.2 |
| ODISHA | 11.8 | 10.2 | 13.5 | 7.5 | 6.8 | 8.2 |
| CHHATTISGARH | 11.0 | 9.4 | 12.8 | 7.9 | 6.7 | 9.1 |
| MADHYA PRADESH | 7.9 | 6.6 | 9.3 | 7.2 | 5.7 | 8.9 |
| GUJARAT | 12.2 | 12.2 | 12.2 | 8.4 | 7.5 | 9.5 |
| DAMAN & DIU | 44.2 | 51.6 | 30.8 | 8.7 | 7.9 | 10.2 |
| DADRA & NAGAR HAVELI | 36.9 | 40.8 | 31.3 | 14.2 | 13.3 | 15.4 |
| MAHARASHTRA | 10.6 | 10.6 | 10.6 | 11.7 | 10.7 | 12.8 |
| ANDHRA PRADESH | 8.6 | 8.0 | 9.2 | 9.2 | 8.6 | 9.7 |
| KARNATAKA | 8.5 | 8.1 | 8.8 | 12.0 | 11.4 | 12.6 |
| GOA | 13.3 | 12.9 | 13.8 | 16.5 | 15.4 | 17.7 |
| LAKSHADWEEP | 5.6 | 6.6 | 4.6 | 17.1 | 19.5 | 14.5 |
| KERALA | 10.6 | 8.5 | 12.6 | 6.9 | 6.5 | 7.2 |
| TAMIL NADU | 6.4 | 5.7 | 7.1 | 12.5 | 11.6 | 13.3 |
| PUDUCHERRY | 6.2 | 5.5 | 6.8 | 15.0 | 14.3 | 15.8 |
| ANDAMAN & NICOBAR ISLANDS | 17.9 | 18.0 | 17.9 | 7.7 | 7.1 | 8.4 |
| All India | 8.5 | 7.7 | 9.4 | 8.7 | 7.7 | 9.9 |

Note: Migration rate is defined by considering the decadal migrant population as a percentage of urban population in 2011. (Source: Population Census, 2011)

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