Economic Impact of Rural to Urban Temporary Labour Migration on Farming Communities in Sri Lanka

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Introduction

Migration is considered as the oldest action against poverty. However, temporary labour migration from agriculture/rural sector is considered as a universal concomitant of economic modernisation. The increasing attention on rural to urban labour migration research has simultaneously generated different views regarding the pattern of migration and the impact of remittance inflows.

Sri Lanka has experienced a large movement of rural labour, which is predominantly agricultural, seeking employment opportunities in Export Processing Zones since economic liberalisation in 1977. However, there is no substantial endeavor to identify the magnitude of temporary labour migration and to quantify the impact of rural to urban migration and remittances on the sending communities in Sri Lanka.

Migration emerged as a debatable global development strategy with profound opportunities and challenges for both sending and receiving destinations (Todaro, 1980). Theory of migration history starts from the Furr's remark on migration[2] and Revenstein's response to that; which is called "Laws of Migration" (Lee, 1966). Conceptual framework of migration can be reviewed in a broad range of studies starting from Ravanstein's Laws of migration, to the famous Todaro model, and the new economics of labour migration (De Haan, 1999). However, Lewis (1954) initiated the idea of rural urban migration using his two sector model, emphasising that the expansion of the modern sector absorbs cheap labour shifting from agriculture sector. Empirical studies show that China has made a large contribution to the literature on rural to urban migration.

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[2] It was a remark of Farr's to the effect that migration appeared to go on without any definite law.

This study explores the economic impact of rural to urban labour migration on sending communities paying particular attention to the determinants and usage of remittances and income gains through rural to urban labour migration in Sri Lanka.

Data and Methodology

Data for this analysis comes from a distinctive structured questionnaire survey conducted by the author from January to April 2011 in Sri Lanka; comprising 377 rural to urban migrant workers drawn from non-randomly[3] selected 20 urban factories located in Gampaha district in Sri Lanka.

This study employs Tobit, probit and OLS regression models. Data consist with truncation problem as all the migrants do not remit. Tobit regression model is tested for identifying the determinants of internal remittances in Sri Lanka as it overcomes the nature of this type of data (censored regression)(Tobin, 1958). Further, this analysis employs probit model to examine the determinants of the purpose of remittance. Probit estimations provide the factors' influence on the decision of remittances while Tobit estimation provide simultaneous decisions of whether to remit or not, and how much to remit. The robustness of the results has been tested. OLS regression is also used to compare the coefficients.

Results

Income gain is the most important motivation for both internal and international migration. This analysis attempted to calculate monthly income gains for three main groups of respondents controlling the covariates. The result shows that monthly raw income gain varies between 3000 to 13,000 rupees (Figure 1). Presumably, some of the characteristics introduced for the controls such as work experience, education are highly rewarded in the urban sector.

Remittance is the most tangible direct impact of migration. The results of Tobit and OLS analysis confirm that altruistic remittances depend positively on migrants' monthly income and negatively on household farm income[4] considering both regular and annual remittances. Further, this study identified in-kind flows as an important determinant of the annual remittances in Sri Lanka.

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[3] Random sampling was not possible due to the factory restrictions. Thus through the BOI contacts, the researcher was able to get approval to visit theses selected factories.

[4] Farmland ownership has been included as a proxy for household income as income data is not much reliable.

Figure 1: Monthly income gains from rural urban migration

Mid point average income
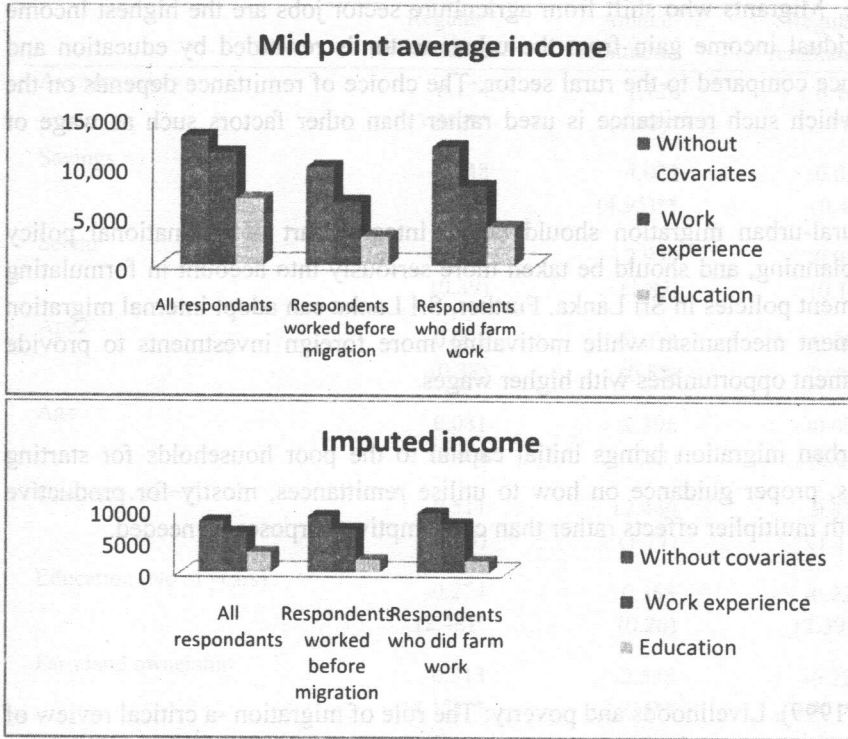
Imputed income

Source: Author Survey Data

Note: Income data has been collected as in the form of intervals. Using left and right censored point of each interval imputed income generated using STATA. Income gain has been calculated taking income difference.

The effects of rural to urban labour migration on the development of rural communities can be examined through the usage of remittances by the household of origin. This study indicated that considerable proportion - nearly one third of the remittances - go for productive investment which can generate multiplier effects in terms of income and employment. These are education and farming (Table 2).

Conclusion and Policy Recommendations

This study explored the process of rural to urban labour migration, determinants and usage of remittances and income gains of rural urban migration in Sri Lanka. In conclusion, altruistic remittances depend positively on migrants' monthly income and

negatively on household farm income[5] considering both regular and annual remittances. Monthly income gain from rural to urban migration varies on average between 3000 to 13000 rupees. Migrants who shift from agriculture sector jobs are the highest income gainers. Individual income gain from the urban sector is rewarded by education and work experience compared to the rural sector. The choice of remittance depends on the purpose for which such remittance is used rather than other factors such as wage or experience.

Temporary rural-urban migration should be an integral part of the national policy analysis and planning, and should be taken more seriously into account in formulating rural development policies in Sri Lanka. Further, Sri Lanka can adopt internal migration as a development mechanism while motivating more foreign investments to provide better employment opportunities with higher wages.

As rural to urban migration brings initial capital to the poor households for starting small business, proper guidance on how to utilise remittances, mostly for productive investment with multiplier effects rather than consumptive purposes, is needed.

References

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[5] Farmland ownership has been included as a proxy for household income as income data is not much reliable.

Table 1: Determinants of remittance: Tobit and OLS Results

Determinants	Tobit		OLS	
	Regular[1] remittance	Annual[2] remittance	Regular[1] remittance	Annual[2] remittance
Average salary	0.174	1.126	0.163	1.142
	(3.95)**	(1.99)*	(2.49)*	(2.00)*
Savings	-0.048	4.022	-0.034	3.985
	(0.75)	(4.95)**	(0.44)	(2.07)*
Seettu	-0.049	2.959	-0.013	2.823
	(0.39)	(1.87)	(0.13)	(2.01)*
Age2	-0.001	-0.032	-0.000	-0.027
	(0.38)	(0.88)	(0.02)	(0.89)
Age	0.081	2.396	-0.007	1.979
	(0.40)	(0.93)	(0.03)	(0.97)
Gender(male =1)	0.511	12.440	0.470	12.285
	(0.93)	(1.77)	(1.11)	(1.78)
Education (No of years)	-0.274	0.368	-0.224	0.417
	(2.48)*	(0.26)	(2.39)*	(0.24)
Farmland ownership	-0.313	-2.538	-0.223	-2.545
	(4.12)**	(2.71)**	(3.96)**	(2.88)**
Bonus	0.150	1.164	0.129	1.146
	(4.37)**	(2.60)**	(1.96)	(1.75)
No of students in the family	1.064	2.749	0.890	2.507
	(4.22)**	(0.84)	(4.00)**	(0.86)
Experience	0.089	0.479	0.110	0.575
	(1.08)	(0.45)	(1.65)	(0.50)
Marital(single=1)	1.497	0.521	1.013	-0.354
	(2.93)**	(0.08)	(2.51)*	(0.05)
In-kind received	-0.209	-4.531	-0.160	-4.087
	(1.25)	(2.15)*	(1.26)	(1.98)*
Constant	0.253	-22.667	1.972	-16.024
	(0.08)	(0.53)	(0.78)	(0.45)
Observations	357	357	357	357
R-squared	-	-	0.23	0.19

* significant at 5%; ** significant at 1%. Robust t statistics in parentheses.

Note :   1. Considers monthly or once in three months regular remittances in 1000 rupees
        2. Including in-kind send by the migrants, in 1000 rupees.

Table 2: Determinants of remittances and usage of remittances in origin household (probit estimates)

Determinants	Ever remit[1]	Daily expenses	Education	Farm work	Housing & durable	Loan repayment	savings
Average salary	0.000	-0.001	0.003	0.001	0.004	-0.003	-0.004
	(0.84)	(0.31)	(1.15)	(0.37)	(1.35)	(1.37)	(1.53)
Total land owned	-0.001	-0.027	0.005	0.016	-0.005	-0.009	-0.001
	(2.04)*	(2.65)**	(1.04)	(2.59)*	(1.02)	(2.25)*	(0.10)
No of migrants	-0.004	-0.053	0.004	0.029	-0.032	0.019	-0.050
	(1.56)	(1.29)	(0.18)	(0.97)	(1.41)	(1.37)	(1.87)
No of years of schooling	-0.003	-0.004	-0.005	-0.012	0.019	-0.004	-0.005
	(1.97)*	(0.27)	(0.57)	(1.24)	(1.67)	(0.93)	(0.64)
Marital (single=1)	0.049	-0.171	0.052	-0.009	0.032	0.044	0.070
	(3.72)**	(2.77)**	(1.78)	(0.20)	(0.93)	(1.80)	(1.94)
In kind received	0.009	-0.070	0.058	0.053	0.013	-0.026	0.053
	(1.98)*	(1.38)	(1.91)	(1.35)	(0.46)	(1.34)	(1.73)
Age	0.006	0.005	0.028	0.022	0.019	0.002	-0.007
	(3.78)**	(0.22)	(2.35)*	(0.96)	(0.91)	(0.26)	(0.51)
Age2	-0.000	-0.000	-0.000	-0.000	-0.000	0.000	0.000
	(3.65)**	(0.05)	(1.92)	(1.25)	(1.29)	(0.06)	(0.44)
no of years of experience	-0.001	-0.010	-0.008	0.001	0.010	-0.006	0.002
	(2.59)**	(1.06)	(1.40)	(0.08)	(1.46)	(2.06)*	(0.34)
No of students of family	0.004	-0.070	0.077	-0.004	-0.033	-0.006	0.027
	(1.75)	(2.11)*	(4.17)**	(0.19)	(1.44)	(0.72)	(1.71)
Observations	373	373	373	373	373	373	373

Robust z statistics in parentheses   * significant at 5%; ** significant at 1%

Note: ever remit dummy variable consider annual remittances including in-kind send by migrants, if the amount is positive the value takes 1 other wise zero.