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## **Migration and rural development**

Robert E.B. Lucas

*Boston University*

*e-mail: [rlucas@bu.edu](mailto:rlucas@bu.edu)*

**Abstract:** *The paper summarizes the key routes through which internal and international migration impact rural development and some of the evidence pertaining to these effects in low income countries. It concludes that, although the study of migration impacts on rural economies has come a long way from the early dual theories of development, some of the potentially more important aspects remain to be investigated systematically.*

**Key Words:** *migration, rural development, remittances, rural poverty.*

**JEL:** *F22, O13, O15, O18.*

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## **1. Migration and rural development: early perceptions**

The purpose of this background paper is to summarize the key routes through which internal and international migration impact rural development and some of the evidence pertaining to these effects in low income countries.

In the early, dualistic literature on economic development, migration of labor out of the rural sector and into industrial production was uniformly viewed as the key to modernization and income growth.<sup>1</sup> In the process a Kuznets's curve is quite mechanically drawn. Inequality initially rises between those fortunate enough to relocate in town versus those left in poverty in the rural areas. As urbanization proceeds, average incomes rise and the dispersion of income later narrows because fewer are left in agrarian destitution. Although difficult to rationalize within a utility maximizing framework, these early frameworks presumed the existence of a surplus pool of labor in the villages and the removal of labor to town consequently left agricultural production unaffected.<sup>2</sup> Nor were any feedback loops really recognized through which rural-urban migration might alter rural incomes indirectly.

Within these dualistic models, the decision whether to migrate or not was modeled at the discretion of the individual, potential migrant. Moreover, migrations were treated as permanent moves; a life-changing, discrete choice, usually taken early in life in order to reap the benefits over a longer time horizon.<sup>3</sup> The seminal contribution of Harris and Todaro (1970) added uncertainty, in the form of a gamble to find a formal sector job in town, yet the vagaries of life in the rural sector remained neglected. Moreover, the role of international migration, as opposed to rural-urban, internal migration went largely without attention among development economists, save for concerns with respect to the brain drain which was typically assumed to be a concern largely for the development of the urban sector.

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1. The classic references include Rosenstein-Rodan (1943), Lewis (1954) and Georgescu-Roegen (1960).

2. For early contributions see Leibenstein (1957), Ranis and Fei (1961) and Sen (1966). Wittenberg (2005) provides a more modern treatment.

3. Sjaastad (1962).

These early theories played an important role in their time. However, Occam's razor may have shaved away too much reality, so that we missed many of the key routes through which migration and rural development are linked. More recent contributions have begun to address some of these lacunae.

## 2. Beyond rural-urban relocation

Although the more recent literature now addresses forms of migration beyond the traditional focus on permanent, rural-urban migration, some forms of migration nonetheless remain neglected.

### *International migration and rural development*

The redirection of interest toward international migration and its development implications has come only quite recently. This fresh interest stems largely from two factors: the surge in migration into some of the OECD countries and the critical role that international remittances have come to play in international finance as ODA and financial capital flows have shrunk. Systematic data on how much of this international migration originates from rural areas within the developing countries is lacking. However, we may surmise that larger portions of emigrants are likely to be drawn from rural areas where these migration flows are dominated by lower skilled workers.

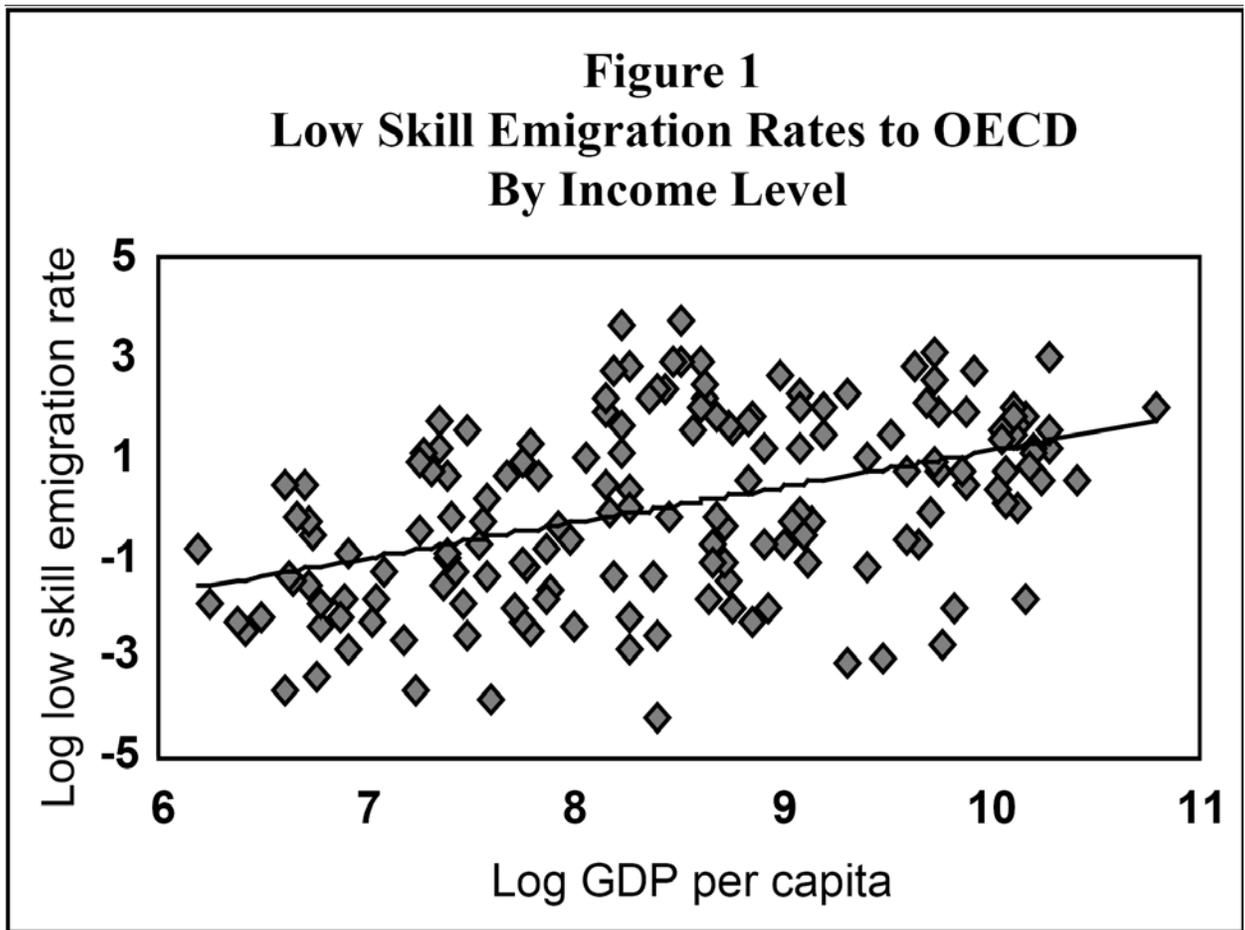
**Table 1. Stock of Adults with Nine Years of Schooling or Less  
In the OECD Countries in 2000**

Region of Origin	Number	Percent
Mexico + Turkey	4,653,664	23.0
Other OECD	6,482,589	32.1
Carribbean	648,348	3.2
C America	598,907	3.0
S America	573,184	2.8
W Europe	81,230	0.4
E Europe	1,490,565	7.4
Former Soviet	664,763	3.3
S Asia	842,482	4.2
E Asia	1,570,893	7.8
W Asia	356,193	1.8
N Africa	1,492,670	7.4
SS Africa	685,110	3.4
Oceania	73,338	0.4
<b>TOTAL</b>	<b>20,213,936</b>	<b>100.0</b>

Source: Derived from Docquier and Marfouk (2005)

In 2000 there were just over twenty million, foreign born adults, with less than nine years of schooling, present in the OECD member countries. (See Table 1). Of these about 55 percent were from other OECD countries (of which nearly 42 percent were from Mexico and Turkey). From the non-OECD countries, East Europe, East Asia and North Africa each supplied slightly over seven percent of the low-skilled adults in the OECD. On the other hand, the proportions from the low income regions, such as South Asia and Sub-Saharan Africa are relatively small.

Indeed, the number of low-skill adults in the OECD, relative to the low-skill working age population at home, generally rises with level of income across countries of origin. This is illustrated in Figure 1, which also shows a simple best-fit line between this emigration rate for low-skill workers and GDP per capita, both in logarithmic form. Out of 202 countries on which data are available, fifty two countries have more than five percent of their low-skill, working age population in the OECD countries. Twenty four of these fifty two countries have populations below one million: small countries have higher emigration rates for reasons to which we shall return. Of the remaining countries, eleven are OECD member states themselves (including Mexico and Turkey) and four others are EU states or applicant countries. The residual countries are listed in Table 2.



For the thirteen countries listed in Table 2, as well as for such countries as Mexico and Turkey, the emigration rate of low-skill workers to the OECD is sufficiently high that this may well have a significant direct impact on the rural areas within these countries. For some of these countries there is supporting evidence that a significant fraction of their emigrants indeed originate from rural areas.<sup>4</sup> None of the countries in Table 2 is among the least developed nations. A principal reason is that the least developed economies are generally further away from the OECD member countries, and distance discourages migration. For these many low income countries from which emigration of low income workers to the OECD countries remains low, the direct impacts of these migrations may well remain low.

4. See, for example, King *et al.* (2003) on Albania and Leichtman (2002) on Morocco.

**Table 2. Percent of Low Education, Working Age Population in OECD  
Select Countries of Origin, 2000**

Macedonia	18.2
Jamaica	15.5
Bosnia and Herzegovina	14.4
El Salvador	11.3
Lebanon	9.4
Albania	9.3
Serbia and Montenegro	7.9
Morocco	6.8
Dominican Republic	6.0
Laos	6.0
Guatemala	5.2
Tunisia	5.1
Cuba	5.1

Source: Derived from Docquier and Marfouk (2005)

To this an important caveat must, however, be added. The data in Tables 1 and 2 refer only to migration to the OECD. In some parts of the world there are important flows of low skill workers to non-OECD countries. This has, of course, been true on a spectacular scale with respect to migration of contract workers to the Persian Gulf over the last three decades. The vast majority of these migrants to the Gulf possess fairly low skill levels and come from the low income countries of South and Southeast Asia and from the Middle East. The number of low-skill workers in the Persian Gulf from these countries may well approximate the number of low-skill workers in the OECD countries from non-OECD states. Moreover, the workers in the Gulf are drawn from lower income countries, with larger rural populations, than are the OECD workers. Again there is clear evidence that from some of the countries of origin, the bulk of workers contracted to the Gulf are drawn directly from rural areas.<sup>5</sup>

Our understanding and documentation of south-south migration flows remains generally poor. Nonetheless, other international migration streams have involved large numbers of low-skill workers: the migration to the South African mines from neighboring countries; the large stocks of

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5. See Addleton (1992) on Pakistan; Zachariah *et al.* (1999) on Kerala.

irregular Indonesian workers in Malaysia; and more generally the undocumented movements of unskilled workers from lower to higher income countries within East and Southeast Asia.<sup>6</sup>

Emigration of low-skill workers is more likely to have a direct impact on rural areas than is the emigration of the highly skilled, yet departure of unskilled workers does not need to be confined to rural origins to have such an impact. Even where workers are actually drawn from the urban regions, their departure may induce internal, replacement migration from the rural areas. In general, such replacement migration remains poorly documented though it probably varies a good deal from country to country. Much depends upon the propensity to migrate internally which clearly varies a good deal depending upon geographic factors, language and ethnic homogeneity. One difficulty in examining the rural and urban origins of emigrants is that contract workers from rural areas may spend a brief period in town en route abroad, so that their point of departure appears to be urban. Nonetheless, it seems that most contract workers from the Philippines, for example, are indeed drawn from the Manilla region. Certainly there has also been substantial migration into the Manilla area from other parts of the Philippines, but Saith (1997) expresses doubts about whether this represents induced, replacement migration.

#### *Circular migration*

A second feature of migration that contrasts with the more traditional perceptions is the frequency of return migration. The duration of absence can vary widely, from seasonal movements, to short term contract work, to continued absence until ultimate retirement to the home area. Such patterns of circular and repeat migrations are common not only with respect to internal movements within developing economies but also among international migrants.

A number of reasons may be cited for return by migrants. First, the circumstances that led to the initial migration may change. Economic deterioration in the destination area or rising incomes at home may induce return. For example, the collapse of the urban economies in Indonesia and

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6. On South African mine labor see Lucas (1987); on Indonesian migration to Malaysia see Hugo (1998); and on movements within East and Southeast Asia see Hugo (2003) and Lucas (2005).

Thailand during the East Asia crisis resulted in massive urban-rural return migration.<sup>7</sup> The same may be said for the resolution of conflict at home or the outbreak of violence in the host region. For example, the sudden return by large numbers of migrants from the Gulf to such origins as Kerala during the 1991 Gulf crisis had a major impact on the home economies at the time. Second, migration may involve a gamble and some sorting among migrants. Those who prove successful may stay on while those who are disappointed may well leave. Third, with respect to international migrants, the conditions of initial entry may demand return as a condition of entry or irregular migrants may be caught and deported. Konica and Filer (2003:4) report, based on a 1996 survey, that “61 percent of Albanians who left the country since 1990 had returned by the summer of 1996. Among those who returned, about half were sent back by authorities in the destination country and half opted to return voluntarily.” De Soto *et al.* (2002: 44-45) add, in this Albanian context, that, “Most migration is for periods of less than six months... Usually the same members of the household go forth and back. Fifteen percent of those who emigrate have left at least six times since 1990.” Fourth, return may well have been planned at the outset, part of a ‘target saving’ strategy in which the migrant saves while absent, with the intent of returning home with his or her accumulated savings. In such settings, the rate of savings by migrants may be exceptionally high.<sup>8</sup>

The legal distinctions between ‘permanent’ and ‘temporary’ international migrants do not correspond neatly to the intent to return home; temporary migrant schemes can lead to quite permanent stays; many permanent immigrants ultimately return to their native country. Ironically, barriers to irregular migration may discourage return; the difficulty of subsequent re-entry can effectively prolong an initial stay once the border is successfully penetrated.

Whatever the motive, the intent to return home, which is highly dependent on family accompaniment, is critical to contact maintenance with the home area and to associated transfers home. Thus the impact on rural areas of origin depends very much upon the perceived likelihood of returning home, both among internal and international migrants. However, there is a tendency

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7. Fallon and Lucas (2002).

8. See Dustmann (2001) for a survey.

among international migrants to settle in urban areas of their home country upon return, even if they originate from the rural sector, and this tendency may serve to diminish the impact of such returns on the rural regions, at least directly.

#### *Rural-rural migration*

Rural-rural migration is far more common in lower income countries than is rural-urban migration. This is largely a product of the high proportion of the populations residing in the rural areas of the lower income countries. To ignore this common form of migration is to presume that the rural sector presents a homogeneous whole, which it does not. Movements between subsistence and plantation agriculture, between dry farming and irrigated areas, between villages subject to low correlations in their incidence of droughts, can play roles quite comparable to the strategies modeled with respect to rural-urban migrations. Yet to a very large extent rural-rural migration and its impacts remain neglected in the development literature. The role of rural-rural migration in rural development warrants much closer scrutiny.

#### *Forced migration*

Finally, a fourth feature of today's migrations that differs from the traditional development perceptions of migration is the incidence of forced migration. Both international refugees and internally displaced persons are currently large in number, though these are hardly new phenomena. Although there is typically some degree of selectivity as to who leaves and who stays, the proximate causes of 'forced' migration lie beyond the elements normally modeled in migration choices, whether those of the individual or family. These mass displacements of people and the associated loss of assets can severely impact economic development, including rural development, not only in the country from which the refugees flee but also in the bordering states

that normally provide asylum on a more or less permanent basis. Yet again our understanding of these impacts, both in the short term and longer term, remains exceedingly poor.<sup>9</sup>

### **3. Family strategies and rural incomes**

These many forms of migration offer a range of mechanisms through which economic development of rural areas in the developing regions can be affected in important ways. These mechanisms can be divided into two. First migration may offer a route out of poverty for the migrants themselves. This is the more traditional set of mechanisms emphasized. Second, migrants' departures may serve, directly or indirectly, to enhance or possibly worsen the consumption, incomes and well-being of those who remain in the rural areas. It should be emphasized that both sets of mechanisms affect rural development, provided that our reference group is those initially in the rural area.

An important step in the analysis of the second mechanism, effects on those left behind, has been the recognition that migration may form part of a family strategy, rather than an individualistic decision. (Mincer, 1978; Stark, 1991). Instead of a sharply dualistic view, the focus shifts to families straddling the urban-rural divide or international boundaries, with intra-family transfers actively linking the geographically disparate unit. In the world of incomplete markets, typical of rural settings in developing regions, this migration-remittance nexus can provide channels for insurance and access to credit. In turn, these provisions enable greater risk-taking and investments, both of which can enhance rural incomes.

A number of empirical studies serve to affirm this positive feedback on rural communities. Some of these studies focus on remittance flows themselves. Others look at the impact on rural assets or production. Lucas and Stark (1985) find remittances to rural Botswana particularly large for families in villages undergoing severe drought and where those families' livelihoods are vulnerable to the lack of rains. Gubert (2002) shows that remittances (largely from France) to the Kayes area of Western Mali respond positively to loss in crop production in the household at home, but also to shocks from debilitating illness and death among family members at home.

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9. See, however, the analysis of post-conflict Mozambique agriculture in Brück (2004).

Quartey and Blankson (2004) extend this idea to insurance from macro-economic shocks, examining household consumption-smoothing during periods of high inflation in Ghana. Among a sub-sample of Ghanaian food crop farmers the role of remittances in consumption smoothing is found to be large and statistically strong.<sup>10</sup> Lucas (1987) shows that both cropping and livestock management improved in several countries in Southern Africa, in response to accumulated earnings of migrants to South African mines, though the improvements to crop production were offset by the direct effects of labor withdrawal to the mines.

Besides the direct effect of migrant labor withdrawal upon labor supply, the migration-remittance combination may affect labor inputs by those who remain at home. Where there are significant transaction costs to hiring and finding work, departure of family members may lead to labor supply adjustments by family members following migrant exit, such as taking up tasks on a family plot. In addition, the income effect of remittance receipts will typically result in diminished labor effort among remaining family members. These two effects appear not to have been fully distinguished in the empirical literature, which typically explores the effects of remittance receipts alone upon labor effort.<sup>11</sup>

Funkhouser (1992) finds lower labor force participation the greater are remittance receipts among families in Managua. Rodriguez and Tiongson (2001) find a similar effect among urban families with overseas contract workers in the Philippines. Yang (2004) finds that families in the Philippines who were subjected to large losses in incomes, as a result of having a member abroad in a country where the exchange rate fell during the East Asia crisis, pulled their children out of school and some of these children entered the labor force. Amuedo-Dorantes and Pozo (2006) examine more detailed data on hours worked, by type of employment, in relation to remittances received in a cross section of Mexican households. In this study, overall hours worked by men are found to be insensitive to remittance receipts, either in urban or rural settings, though time worked in the formal sector is less and hours worked in the informal sector is higher with larger

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10. Hoddinott (1992,1994) finds supporting evidence for this notion of the insurance role played by remittances in Western Kenya, as do Schrieder and Knerr (2000) in Cameroon. See also Brown (1997) on Pacific island migrants.

11. See the more general discussion of the distinction between migration and remittance effects in McKenzie (2005).

remittances (which is rather puzzling). On the other hand, Amuedo-Dorantes and Pozo find that overall hours worked by rural females decline with remittance receipts, as a result of reduced informal sector and unpaid work, though this is not true among urban females. Finally, in an interesting study of households in western Mali, Azam and Gubert (2004:27) find that “although migration has certainly helped the adoption of improved technology, migrant households do not show better agricultural performance than non-migrant households, quite the opposite.” It seems that, in this context at least, the reduction in labor effort by farming households more than offsets any investments and improved technologies from remittance receipts.<sup>12</sup>

As noted previously, contacts with the home area, and remittance transfers in particular, are greater amongst migrants who intend to return home. This is particularly true when migration results in family separation rather than the immediate family members accompanying the migrant. However, there are instances of substantial remittances to more extended family members too.<sup>13</sup> In some contexts there is little choice about bringing the family. All but the most highly skilled migrants to the Persian Gulf are prohibited from being joined by their families. No doubt this familial separation is a large part of why remittances per migrant are by far the highest in the world from the Gulf. Remittances (albeit in the form of deferred pay upon return) were also large in earlier decades among foreign mine workers in South Africa who were required to live in bachelor compounds.

In other contexts, however, the dispersal of the family is endogenous to the strategy: whether the wife and children accompany the father to town, whether parents dispatch their children to find an urban job, are part of the family’s risk-spreading, asset- management, cost-of-living minimizing strategy. For instance, Agesa and Kim (2001) find that rural-to-urban migration in Kenya is more likely to split the family geographically, rather than resulting in family migration, when the number of dependent children at home is larger: a result that they interpret as reflecting the lower cost of living in the rural area conflicting with the psychological costs of separation.

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12. Azam and Gubert quite carefully attempt to control for the possibility that it is the less successful farming families from which migrants are drawn, which might have resulted in reverse causality underlying these results.

13. See Ilahi and Jafarey (1999) on remittances to the extended family in Pakistan.

No matter whether family separation is mandated or chosen, this separation results in far larger remittance transfers. But do the patterns of migration outlined in the previous section and their associated remittances result in poverty alleviation in the rural areas, or are poverty levels exacerbated by migrant departures?

#### **4. Migration and routes out of rural poverty**

Central to the issue of the poverty alleviating effects of rural migration is the selectivity in both migration and remittances; do the poor migrate and do they remit?

The consensus appears to be that members of poorer, rural families are more likely to migrate internally, whereas those from wealthier families have a higher propensity to migrate internationally. A major difficulty in testing this proposition lies in the definition of household income level; whether income is measured before or after the migrant leaves and, if the latter, whether income includes remittances.<sup>14</sup> Since remittances from overseas can be high, especially where the immediate family does not accompany the migrant, international migrants may appear to originate from better off families precisely because remittances are high. Even if current remittances are omitted from household incomes, there remains the question of whether these households are now better off because of accumulation out of prior remittances.

These ambiguities notwithstanding, even international migration does draw upon significant numbers of migrants from below the poverty line, at least in many contexts where large numbers of low-skill migrants are involved.<sup>15</sup> There is a separate but related question of whether poor families receive remittances. Again, however, although the very poorest families may not receive large amounts of remittances, and some observers have found that remittances may exacerbate the inequality of family incomes, nonetheless a significant portion of remittances are received by families who would otherwise be in poverty.<sup>16</sup>

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14. See Adams (1991, 1998, 2005).

15. See the review of evidence in Lucas (2005) chapter 8.

16. Adams (1991, 1998) estimates that overseas migration has sharpened inequalities in family incomes in Egypt and Pakistan respectively. In contrast, Taylor and Wyatt (1996) find that remittances to rural Mexico (over 80 percent of

Although the very poorest may not migrate, especially internationally, migration certainly encompasses members of many poor families and poor families do receive significant remittances. Nonetheless an important caveat must be added to this observation, a reservation that arises from the influence of geography.

Distance discourages migration. It is not always quite clear why distance matters but, at least with respect to internal relocation, it is dubious that the principal underlying cause is transport costs. It is more likely that the root of this effect lies in lack of familiarity and of information.<sup>17</sup> Whatever the cause, rural-urban migration is less likely to occur from villages that are ‘remote’ from metropolitan areas. Similarly, countries that are far from the industrialized regions send less emigrants to the OECD countries, especially less low-skilled migrants. Where more remote rural areas tend to be lower income, and given that many of the least developed countries are further removed from higher income ones, migration is selective and leaves pockets of poverty.

The role of network effects in both internal and international migrations exacerbates the isolation of some communities and countries from the migration process. Having kith and kin at the place of destination makes it easier for others to follow in a number of ways. These friends and relatives may help to find a job, provide accommodation upon arrival, ease access to or lower the cost of acquiring a visa, or simply smooth integration into the new environment. No matter what the underlying role may be, once the first few migrants have made an initial move the migration stream begins to swell. Transfers of resources help to develop the home community, but places and countries with little initial migration tend to be left out of these immediate gains.

Even where the poor are not directly involved in the migration-remittance process, either because of geographic isolation or for some other reason, this does not rule out the possibility that incomes of these poorer populations may be raised indirectly through the migration processes.

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which come from the US) reduce inequality. On poverty reduction effects of remittances see, for example Tingsabath (1989) on Thailand; Gustafsson and Makonnen (1993) on migration of Lesotho’s mine workers to South Africa; Lachaud (1999) on Burkina Faso; Adams (2005) on Guatemala; Adams and Page (2003) on global patterns. 17. For a more detailed discussion see Lucas (2001).

First, even if individuals from very distant villages do not move into town themselves, they may participate in a chain of replacement migration, moving into those rural areas from which migrants are drawn into town or overseas. Second, non-migrants may benefit indirectly from the investments financed by migrants' earnings. Such benefits may range from new jobs created, to greater availability or a wider variety of goods, to public amenities where remittances finance new infrastructure. Third, international remittances normally represent an infusion of foreign exchange. In contexts where the shadow value of this foreign exchange is high, this infusion may permit manifold, expanded, economic activity.<sup>18</sup> Fourth, and perhaps most importantly, is the potential for a trickle down of benefits through a multiplier effect. There is substantial evidence suggesting that multiplier effects from remittance spending, particularly from housing construction, can be quite large, though most of these analyses assume no capacity constraints on domestic expansion.<sup>19</sup> Yang and Martinez (2005) do, however, find that the income losses, suffered during the East Asia crisis by Filipino families without documented migrant workers overseas, were particularly large where such families lived in the same sub-regions as migrant families hit particularly badly by exchange rate shocks to their migrant members overseas. This would be consistent with significant multiplier contractions on the local economies from diminished remittance inflows. Where migrants are not drawn from communities in which the poor are concentrated, whether the expansionary effects of remittances benefit the poor indirectly then depends upon the geographic concentration of any multiplier effects. Certainly, not all of these multiplier effects from remittance spending are necessarily confined to the local community; some of the spending ripples may lead to much wider dispersion of the benefits.<sup>20</sup>

Migration from the rural areas, both overseas and internally to urban areas, typically improves the lot of some migrants who numbered among the poor. Transfers from these migrants generally reach some of the poor households remaining in the rural areas, either directly or indirectly. Yet

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18. On the other hand, this infusion of foreign exchange can serve to prop up an overvalued exchange rate, rendering more difficult the export of labor intensive items that might have provided employment.

19. See, for example, Stahl and Habib 1988 on construction in Bangladesh, Adelman *et al.* 1988 and Zarate 2002 on Mexico, Kandil and Metwally 1990 on Egypt, Glytsos 1993 on Greece.

20. Thus Nair (1998) argues, in the context of Kerala, that most of the expansionary effects of remittances have been dissipated among other states of India. Similarly, Mazzucato (2005) traces paths of spending out of initial remittances from the Netherlands to Ghana stretching across many regions of Ghana, encompassing goods and

pockets of poverty are no doubt left behind. These pockets may arise as a result of isolation from the migration process or through neglect after the migrant departs. Nonetheless, on average, migration may well offer an important route to severing inter-generational, socioeconomic immobility. So long as the next generation remains in the rural area with their parents it seems probable that the children's income prospects are closely tied to that of their prior generation. The transition offered by migration may offer a route to severing this determinacy. In general this hypothesized effect of migration upon inter-generational transmission remains to be explored empirically, however there is mounting evidence of the effect of migration upon the human capital acquired by the next generation.

Hildebrandt and McKenzie (2004) show that children of migrant families have a lower infant mortality rate and higher birth weight than other children in rural Mexico. This study also shows that improved health knowledge among returned migrant mothers plays a key role in these improved health outcomes for children and that this knowledge spreads to others in the village, improving child health among non-migrant families too.

The effect of the migration-remittance nexus upon education of the next generation is more mixed. At least four underlying effects are at work. First, parental absence may mean less supervision of school attendance and the loss of any positive influence through learning in the home too. Here, much may depend upon the nature of the society and the ability of the extended family to replace the absent parents effectively.<sup>21</sup> Second, the departure of working members of the family may put pressure on remaining children to quit school and to take up work. Third, there is considerable evidence that remittances are often spent on school fees. Given fungibility in household resources, it is not always clear what such evidence means but there is also supporting evidence that remittance incomes are positively correlated with educational enrollment.<sup>22</sup> Fourth, given the importance of network effects, children are more likely to migrate from families and communities with higher migration propensities. Will these children need an education to be able

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services in both urban and rural settings.

21. See Battistella and Conaco (1998) on this role for the extended family in the Philippines, for example.

22. See Edwards and Ureta (2003) on El Salvador, for example.

to follow their predecessors or does migration offer an opportunity to earn a decent living without much schooling? Here the answer appears to differ significantly from context to context, at least with respect to international migration. From the Philippines it seems that having a higher education significantly enhances emigration prospects, even if this means that a qualified nurse becomes a nanny abroad. Indeed, this association between emigration and education may be part of why relatively few from the Philippines apparently migrate overseas directly from rural areas. On the other hand, McKenzie and Rapoport (2005) find that in Mexico the opportunity to emigrate to the US without much education diminishes school retention. Given the observation in section 2 that low-skill migration to OECD countries is more common from nearby countries, it is tempting to hypothesize that this fourth effect may well differ with geographic distance from the host country; that from nearby countries the low-skill migration option may discourage education and from more remote locations the need for education to migrate may enhance the incentive to continue with school, but this remains to be explored.

## **5. Summing up**

Although the study of migration impacts on rural economies has come a long way from the early dual theories of development, some of the potentially more important aspects remain to be investigated systematically. South-south international migration may well be more important to rural development in the low income countries than is migration of low-skill workers to the high income countries. Yet south-south migration remains largely neglected. The patterns, selectivity and duration of return migration to the rural areas is probably quite key to continued ties between out-migrants and their rural roots. Census data tell us practically nothing about such return migration and specialized surveys are scant on this issue. Given that rural sectors are far from homogeneous, rural-rural migration is important in its own right and far more common than rural-urban migration in the low income countries. Yet very little is known about the patterns, causes and consequences of these movements. In some parts of the world, the in-pouring of refugees or internally displaced persons can have critical implications for rural activities and incomes, though almost no analysis exists of these impacts. Nor is much known about the economic reintegration of repatriated refugees following return.

The range of effects from both internal and international migration upon rural development are manifold, as should be apparent from the scope of topics addressed in this background paper. In particular it is important to recognize that both migration out of the rural areas and improvements for those left behind are part of rural development. Both those who leave and those who stay are part of the rural population of concern. Moreover, migration can touch families left in the rural areas even if none of their members migrate themselves. Links through labor replacement, chain migration, investments financed by remittances, insurance provided to the community and its resultant changes in technologies adopted, and the multiplier effects of remittance spending, all help to raise living standards even for those who do not migrate out. Whether the relatively poor or the relatively well-off gain more from the migration-remittance option is mixed: this should not be surprising. However, there is fairly uniform agreement that both internal and international migrations contribute to absolute poverty reduction. Migration may also enhance inter-generational socioeconomic mobility, though this remains to be explored. In contexts where migrations have occurred on more major scales, the resultant poverty reduction has often proved substantial. Indeed, it is often communities that are isolated from the migration process, perhaps as a result of geographic separation, that remain amongst the poorest.

## References

- Adams, Richard H., Jr. (1991), *The Effects of International Remittances on Poverty, Inequality, and Development in Rural Egypt*, Research Report No.86, Washington DC: International Food Policy Research Institute.
- Adams, Richard H., Jr. (1998), 'Remittances, Investment, and Rural Asset Accumulation in Pakistan', *Economic Development and Cultural Change*, **47** (1), 155–173.
- Adams, Richard H., Jr. (2005), 'Remittances, Poverty and Investment in Guatemala', forthcoming in Schiff, Maurice and Çağlar Özden (eds.), *International Migration, Remittances, and the Brain Drain*, Washington DC: World Bank.
- Adams, Richard H. Jr. and John Page (2003), 'International Migration, Remittances and Poverty in Developing Countries', Policy Research Working Paper 3179, Washington DC: World Bank, December.
- Addleton, Jonathan S. (1992), *Undermining the Centre: The Gulf Migration and Pakistan*, Oxford: Oxford University Press.
- Adelman, Irma, J. Edward Taylor and Stephen Vogel (1988), 'Life in a Mexican Village: A Sam Perspective', *Journal of Development Studies*, **25** (1), 5–24.
- Agesa, Richard U. and Sunwoong Kim (2001), "Rural to Urban Migration as a Household Decision: Evidence from Kenya", *Review of Development Economics*, **5** (1), February: 60-75.
- Amuedo-Dorantes, Catalina and Susan Pozo (2006), 'Migration, Remittances and Male and Female Employment Patterns', paper presented at the American Economics Association Meetings, Boston, January.
- Azam, Jean-Paul and Flore Gubert (2004), "Those in Kayes: The Impact of Remittances on their Recipients in Africa", processed paper, Toulouse: University of Toulouse, October 6.
- Battistella, Graziano and Cecilia Concaco (1998), 'The Impact of Labour Migration on the Children Left Behind: A Study of Elementary School Children in the Philippines', *Sojourn*, **13** (2), 220–241.
- Brown, Richard P.C. (1997), 'Estimating Remittance Functions for Pacific Island Migrants', *World Development*, **25** (4), 613–626.

- Brück, Tilman (2004), 'The Welfare Effects of Farm Household Activity Choices in Post-War Mozambique', Households in Conflict Network Working Paper 04, May, at [www.hicn.org](http://www.hicn.org).
- De Soto, Hermine, Peter Gordon, Ilir Gedeshi and Zamira Sinoimeri (2002), 'Poverty in Albania: A Qualitative Assessment', World Bank Technical Paper No.520, Europe and Central Asia Environmentally and Socially Sustainable Development Series, Washington DC: World Bank.
- Docquier, Frédéric and Abdeslam Marfouk (2005), "Measuring the International Mobility of Skilled Workers (1990-2000) - Release 1.1", processed, World Bank.
- Dustmann, Christian (2001), 'Why Go Back? Return Motives of Migrant Workers', in Djajić, Slobodan (ed.), *International Migration: Trends, Policies and Economic Impact*, London: Routledge, pp. 229-249.
- Edwards, Alejandra Cox, and Manuelita Ureta (2003), 'International Migration, Remittances and Schooling: Evidence from El Salvador', *Journal of Development Economics*, **72** (2), Special Issue, 429–461.
- Fallon, Peter R. and Robert E.B. Lucas (2002), 'The Impact of Financial Crises on Labor Markets, Household Incomes and Poverty: A Review of Evidence', *World Bank Research Observer*, **17** (1), 21–45.
- Funkhouser, Edward (1992), 'Migration from Nicaragua: Some Recent Evidence', *World Development*, **20** (8), 129-1218.
- Georgescu-Roegen, N. (1960), 'Economic Theory and Agrarian Economics', *Oxford Economic Papers*, **12** (1), 1-40.
- Glytsos, Nicholas P. (1993), 'Measuring the Income Effects of Migrant Remittances: A Methodological Approach Applied to Greece', *Economic Development and Cultural Change* **42** (1), 131–168.
- Gubert, Flore (2002), "Do Migrants Insure Those Who Stay Behind? Evidence from the Kayes Area (Western Mali)", *Oxford Development Studies*, **30** (3), October: 267-287.
- Gustafsson, Bjorn and Negatu Makonnen (1993), "Poverty and Remittances in Lesotho", *Journal of African Economies*, **2** (1), May: 49-73.
- Harris, John R. and Michael P. Todaro (1970), "Migration, Unemployment and Development: A

- Two-Sector Analysis”, *American Economic Review*, **60** (1), March: 126-142.
- Hildebrandt, Nicole and David J. McKenzie (2004) "The Effects of Migration on Child Health in Mexico", *Economia*, forthcoming.
- Hoddinott, John (1992), “Rotten Kids or Manipulative Parents: Are Children Old Age Security in Western Kenya?” *Economic Development and Cultural Change*, **40** (3), April: 545-565.
- Hoddinott, John (1994), “A Model of Migration and Remittances Applied to Western Kenya”, *Oxford Economic Papers*, **46** (3), July: 459-476.
- Hugo, Graeme J. (1998), ‘International Migration in Eastern Indonesia’, paper prepared for East Indonesia Project, Department of Geography, University of Adelaide, January.
- Hugo, Graeme J. (2003), *Migration and Development: A Perspective from Asia*, Geneva: International Organization for Migration.
- Ilahi, Nadeem and Saqib Jafarey (1999), ‘Guestworker Migration, Remittances and the Extended Family: Evidence from Pakistan’, *Journal of Development Economics*, **58** (2), 485–512.
- Kandil, M. and M.F. Metwally (1990), ‘The Impact of Migrants’ Remittances on the Egyptian Economy’, *International Migration*, **28** (1), 159–180.
- King, Russell, Nicola Mai and Mirela Dalipaj (2003), *Exploding the Migration Myths*, London: The Fabian Society.
- Konica, Nevila and Randall K. Filer (2003), ‘Albanian Emigration: Causes and Consequences’, CERGE–EI Working Paper 181, Prague: Center for Economic Research and Graduate Education of Charles University.
- Lachaud, Jean-Pierre (1999), “Envoi de fonds, inégalité et pauvreté au Burkina Faso”, Bordeaux: Working Paper, Center for Development Economics, University of Bordeaux.
- Leichtman, Maria A. (2002), ‘Transforming Brain Drain into Capital Gain: Morocco’s Changing Relationship with Migration and Remittances’, *Journal of North African Studies*, **7** (1), 109–137.
- Lewis, W. Arthur (1954), ‘Economic Development with Unlimited Supplies of Labour’, *Manchester School of Economic and Social Studies*, **22**, 139-191.
- Leibenstein, Harvey (1957), ‘The Theory of Underemployment in Backward Economies’, *Journal of Political Economy*, **65** (2), 91-103.
- Lucas, Robert E.B. (1987), ‘Emigration to South Africa's Mines’, *American Economic Review*,

77 (3), 313–330.

- Lucas, Robert E.B. (2001), ‘The Effects of Proximity and Transportation on Developing Country Population Migrations’, *Journal of Economic Geography*, **1** (3), 323–339.
- Lucas, Robert E.B. (2005), *International Migration and Economic Development: Lessons from Low-Income Countries*, Cheltenham, UK and Northampton, MA, USA: Edward Elgar.
- Lucas, Robert E.B. and Oded Stark (1985), ‘Motivations to Remit: Evidence from Botswana’, *Journal of Political Economy*, **93** (5), 901–918.
- Mazzucato, Valentina (2005), “The Study of Transnational Migration: Reflections on a Simultaneous Matched-Sample Methodology”, paper presented at the Workshop on Migration and Development Within and Across Borders, New York City, November 17-19.
- McKenzie, David J. (2005), “Beyond Remittances: The Effects of Migration on Mexican Households”, forthcoming in Schiff, Maurice and Çağlar Özden (eds.), *International Migration, Remittances, and the Brain Drain*, Washington DC: World Bank.
- McKenzie, David J. and Hillel Rapoport (2005) “Migration networks, Migration Incentives, and Education Inequality in Rural Mexico”. Paper presented at the Inter-American Development Bank “Economic Integration, Remittances, and Development” Conference.
- Mincer, Jacob (1978), ‘Family Migration Decisions’, *Journal of Political Economy*, **86** (5), 749-73.
- Nair, P.R. Gopinathan (1998), ‘Dynamics of Emigration from Kerala: Factors, Trends, Patters and Policies’, in Appleyard, Reginald (ed.), *Emigration Dynamics in Developing Countries. Vol. II: South Asia*, Aldershot: Ashgate Publishing, pp. 257-291.
- Quartey, Peter and Theresa Blankson (2004), “Do Migrant Remittances Minimize the Impact of Macro-Volatility on the Poor in Ghana?” Final Report Submitted to the Global Development Network, available at [www.imf.org/external/np/res/seminars/2005/macro/pdf/quarte.pdf](http://www.imf.org/external/np/res/seminars/2005/macro/pdf/quarte.pdf).
- Ranis, Gustav and John C.H. Fei (1961), ‘A Theory of Economic Development’, *American Economic Review*, **51** (4), 533- 565.
- Rodriguez, Edgard R. and Erwin R. Tiongson (2001), ‘Temporary Migration Overseas and Household Labor Supply: Evidence from Urban Philippines’, *International Migration*

- Review*, **35** (3), 708-725.
- Rosenstein-Rodan, P.N. (1943), 'Problems of Industrialisation of Eastern and South-Eastern Europe', *Economic Journal*, **53** (210/211), 202- 211.
- Saith, Ashwani (1997), 'Emigration Pressures and Structural Change: Case on the Philippines', *International Migration Papers*, No.19, Geneva: International Labour Office.
- Schrieder, Gertrud and Beatrice Knerr (2000), 'Labour Migration as a Social Security Mechanism for Smallholder Households in Sub-Saharan Africa: The Case of Cameroon', *Oxford Development Studies*, **28** (2), June: 223-36.
- Sen, Amartya K. (1966), 'Peasants and Dualism with or without Surplus Labor', *Journal of Political Economy*, **74** (5), 425-450.
- Sjaastad, Larry A. (1962), 'The Costs and Returns of Human Migration' (1962), *Journal of Political Economy*, **70** (5), Supplement, 80–93.
- Stahl, Charles and Ansanul Habib (1991), 'Emigration and Development in South and Southeast Asia', in Papademetriou, Demetrios G. and Philip L. Martin (eds), *The Unsettled Relationship: Labor Migration and Economic Development*, New York: Greenwood Press, pp. 163-179.
- Stark, Oded (1991), 'The New Economics of Labor Migration', in Stark, Oded (ed.), *The Migration of Labor*, Oxford: Blackwell Press, 23-31.
- Taylor, J. Edward and T.J. Wyatt (1996), 'The Shadow Value of Migrant Remittances, Income and Inequality in a Household–Farm Economy', *Journal of Development Studies*, **32** (6), 899–912.
- Tingsabadh, Charit (1989), 'Maximizing Development Benefits from Labour Migration: Thailand', in Amjad, Rashid (ed.), *To the Gulf and Back: Studies on the Economic Impact of Asian Labour Migration*, New Delhi: ILO–ARTEP, pp. 303-342.
- Wittenberg, Martin (2005), 'Industrialisation and Surplus Labour: A General Equilibrium Model of Sleep, Work and Leisure' processed paper, School of Economics, University of Cape Town, South Africa, May.
- Yang, Dean (2004), 'International Migration, Human Capital, and Entrepreneurship: Evidence from Philippine Migrants' Exchange Rate Shocks,' Working Paper Series 02–011, Ann Arbor: Gerald R. Ford School of Public Policy, University of Michigan.

Zachariah, K.C., E.T. Matthews and S. Irudaya Rajan (1999), 'Impact of Migration on Kerala's Economy and Society', Working Paper No.297, Trivandrum: Centre for Development Studies.

Zarate, German A. (2002), 'The Hidden Benefits of Remittances to Mexico', draft, State University of New York at Cortland, February.