



Emigration and source countries; Brain drain and brain gain; Remittances.

Mariola Pytliková

CERGE-EI,

VŠB-Technical University Ostrava, CReAM, IZA, CCP and CELSI

Info about lectures: <http://home.cerge-ei.cz/pytlikova/LaborSpring19/>

Office hours: by appointment

Contact:

Email: Mariola.Pytlikova@cerge-ei.cz

Mobile: 739211312

<https://sites.google.com/site/pytlikovaweb/>

Study Materials and Reading List

- Slides of the lectures
- All materials provided on: <http://home.cerge-ei.cz/pytlikova/LaborSpring19/>

Compulsory Readings:

- Docquier, F. and Rapoport, H (2012) "Globalization, brain drain, and development" *Journal of Economic Literature* 50 (3), pp. 681-730.
- Bansak, Simpson, Zavadny: The Economics of Immigration, Part IV Other Effects of Immigration, Chapter 11

Other Relevant Literature:

- Dustmann, Ch, Frattini, T. and A. Rosso (2015) "The Effect of Emigration from Poland on Polish Wages". *Scandinavian Journal of Economics* Vol 117 (2), pp. 522-564.
- Gibson, J. McKenzie, D (2011) "Eight questions about brain drain". *Journal of Economic Perspectives* 25(3), pp. 107-128.
- Yang, D (2011): "Migrant remittances" *Journal of Economic Perspectives* 25(3), pp. 129-152.

OUTLINE

- Effects of emigration on sending countries – wages, employment of stayers, and overall welfare
- Brain-drain; brain-gain
- Remittances

Emigration and source countries;

- migration has labor market implications in both sending and receiving countries. For the sending country, migration by workers decreases labor supply in origin.

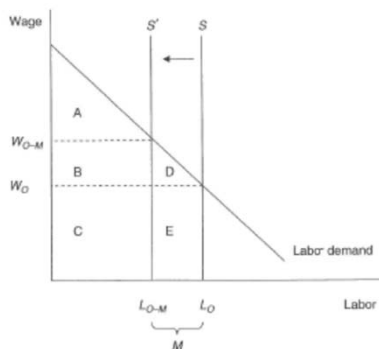


Figure 11.1 Labor market effects of migration in the source country.

Before immigration L_0 workers are employed in the origin at wage W_0 . After migration, L_{0-M} workers are employed there at wage W_{0-M} .

- assumption of identical workers (labor supply perfectly inelastic),
- wage rise for the workers that remain in the country o.
- although a global welfare gain, there is a welfare loss in origins
- before migration workers earn $C+E$, and firms $A+B+D$
- after M workers leave, the remaining workers L_{0-M} earn $B+C$, and firms A
- Migration leads to a transfer of area B from firms to workers, and to a social welfare loss of D =>the sending country suffers on net, while the world as a whole gains.

Emigration and source countries - Empirics

- Dustmann, Frattini and Rosso, SJE 2015 – analyse effects of emigration from Poland on Polish wages during period 1998-2007 using household data. By estimating region-specific emigration rates they find that emigration led to a slight increase in wages for high- and medium-skilled workers, which are the two groups with the largest relative outmigration rates.
- Mishra (2007) finds that out-migration from Mexico leads to higher wages - 10% decrease in the number of Mexican workers (in a given schooling and experience group) increases the average wage in that skill group by approx 4 %. Aydemir and Borjas (2006) also concluded that there is an increase in the average wage of natives Mexicans how stayed behind.
- Gangnon (2011) also discovered a wage increase between 1.3% and 3.3% for non-migrants of Honduras, when the emigration rate to US increases by 10%.
- Unfortunately, these models do not include the decrease in taxes, the effects on trade and production in Mexico, or other elements that might offset the wage increase.

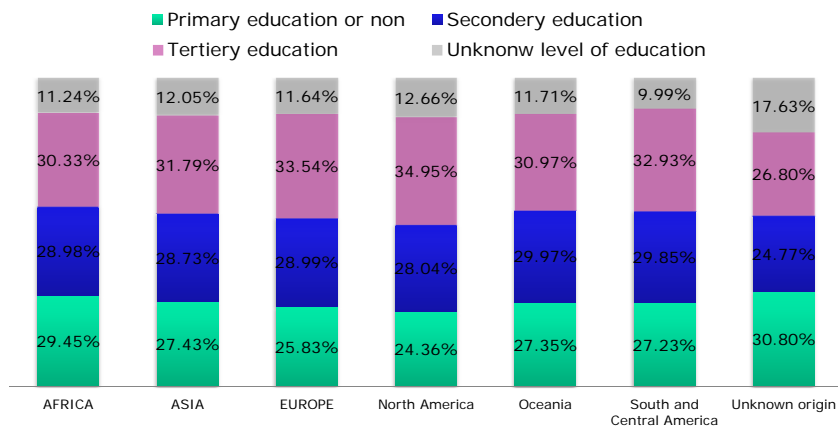
Emigration and source countries - Empirics

- In an article simulating the effects of emigrants on the wages of non-movers in the source country, Docquier et al. (2010) divided the emigrants by skill endowments and showed that for all European countries emigration lowers the average wages of non-movers. Still, it appears that the effects are different for high-skilled (positive effect) and low-skilled workers (negative effect on wages of non-movers).

Brain-drain, brain-gain

- Migration of the most talented highly educated from poor to rich countries
- Traditionally understood as detrimental to poor countries due to human capital externalities, affecting its development especially in the long-run, but also in the short-run, by having a shortage of highly educated labor, and fiscal shortfalls.
- BUT some evidence pointing towards positive effects on source country human capital. Using a cross-country dataset, Beine et al.(2008) show that a doubling of emigration rate increases in the human capital formation of natives by 5%.
- Docquier&Rapoport (2009) show that, depending on specific conditions, migration of the highly skilled can have a positive effect (the case of Indian IT sector), a mixed effect (the case of African medical staff) or a negative effect (the case of European researchers) on source countries.
- Also strong networks and return migration may benefit source countries through better access to capital, technology and ideas.

Educational attainment of foreigners, by region of birth around year 2000



Source: own calculations, using DIOC-E 2.0 dataset

Brain-drain, brain-gain

- Also strong networks and return migration may benefit source countries through better access to capital, technology and ideas.
- migrants' diaspora has a positive effect on the source country, creating an economic connection between the sending and receiving country (Ratha et al, 2011),
- in particular emigrants may increase exports for the source country by generating foreign demand for national products, but also by establishing business networks (Hanson, 2008) or generating foreign investments (Ratha et al, 2011).

Remittances

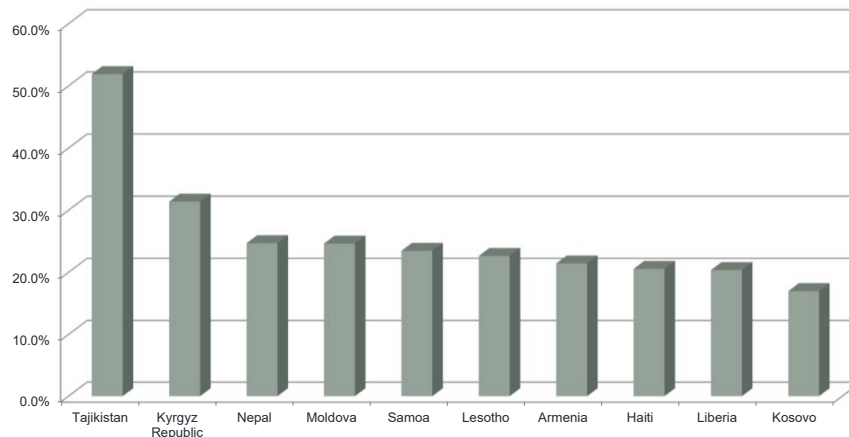
- **Tab. 1** Top 12 remittance recipient and sending countries (millions USD).

Recipient economies (2013)		Sending economies (2012)	
India	69 969	United States	51 093
China	60 000	Russian Federation	31 648
Philippines	25 351	Saudi Arabia	29 493
France	22 863	Switzerland	28 598
Mexico	22 282	Kuwait	15 935
Nigeria	21 000	Germany	15 392
Egypt, Arab Rep.	17 469	France	12 404
Pakistan	14 626	Luxembourg	10 976
Germany	14 496	Qatar	10 842
Bangladesh	13 776	Italy	10 754
Vietnam	11 000	Netherlands	10 674
Belgium	10 566	Spain	10 458

Source: the World Bank

Remittances

- **Fig. 1** Remittances as a percentage of GDP – recipient countries, 2013, (Top 10)



Source: the World Bank

Remittances

Consensus among researchers that remittances contribute positively on the source country economies..

- Remittances increase the income of non-migrants families leading to an increase in domestic saving as well as an increase in the household's spending on education and health (Ratha et al, 2011), and on consumption (Andresen and Christensen, 2009)
- remittances may increase business formation in the source country, helping households to overcome the credit market restrictions (Ratha et al, 2011, Hanson, 2008; and Culiuc, 2006 for Moldavia).

Remittances and poverty:

- Remittances seem to elevate poverty problems as advocated by Ratha et al, 2011 in their survey of the literature regarding the impact of migration for the sending and receiving countries.

Remittances

Remittances & Growth

- Remittances are very important for inflows of capital into developing economies and they form significant part of their GDP (Anghel, Piracha and Randazzo, 2015)

Remittances and inequality:

- Shen et al. (2010) analyzed empirically the effects of emigration and remittances on the inequality of the sending country and find that the relationship between remittances and inequality has an inverse U-shape, which unifies the previous work in this area. It has been shown that remittances can have both a positive and a negative effect on the sending country, depending on the initial state of inequality in the country. The high initial inequality will be increased in the short-run by remittances, but the effects will spread from the families of migrants to the entire economy and will reduce inequality in the long-run.

Effects on sending countries: Research frontiers - families left behind

Pros

- The migration of a family member brings additional income through remittances, which can support household consumption and investment.
- This income effect can reduce the need for child labor and increase children's schooling, notably for girls in developing countries.
- Remittances can improve families' sanitation, health care, and nutrition and fill in for missing formal health insurance in the short term.
- Remittances can enable remaining family members to engage in higher-risk, higher-return productive activities.
- Where most migrants are men, the bargaining power of women who stay behind may be strengthened.

Effects on sending countries: Research frontiers - families left behind

Cons

- The migration of an economically active family member places a heavier burden on those who stay behind, who must make up for the lost employment and spend more time on household chores.
- The absence of the main caregiver can increase children's probability of dropping out of school and delay school progression.
- Disrupted family life can lead to poor diets and increased psychological problems.
- Migration may reduce incentives for education when perceived future returns to education are low because of expectations of migration.
- Migration can reduce labor force participation for family members left behind, especially for women.

Effects on sending countries: Research frontiers - families left behind

Empirical evidence

- Household survey data – may account for internal and international migration
- Compare outcomes of interest for migrant-sending households and for non-migrant-sending households
- Take care of selection bias (individuals and households are not randomly selected but self-selected into migration; they choose how many family members will migrate; they choose when to migrate and for how long; they choose whether send remittances or not..) – Studies usually apply:
 - **IV** (variables that are correlated with the migration decision but uncorrelated with the outcome of interest outside of its impact on migration),
 - **selection-correction models**,
 - **natural experiments** – e.g. a few recent studies have taken advantage of data on policy experiments in New Zealand, which introduced immigration-visa lotteries for selecting applicants from Samoa and Tonga. The studies then compared households with a lottery winner (with migrants) with households with a lottery loser (without migrants), Gibson et al. RESTAT2011 and 2013; This strategy solves the problem of self-selection into migration because households in both groups had members who were willing to migrate.
 - **matching methods** (which assume that selection into migration depends on observable characteristics only and match migrants with comparable non-migrants based on these observable characteristics).
- **OUTCOMES:** Health, labor supply, intra-family roles and transfer of norms; education (**PRONS:** remittances sent back home can ease the household budget constraint by making more resources available. ->less need of child labor, which frees up children's time for school. **CONS,** the disruption to family life as a result of a parent's migration, especially the lack of a parent's care and supervision, might negatively affect children's school performance.

OUR NEXT LECTURE – Thursday 21.2.2019, 11.30-13.00

*Immigration Policy, some final thoughts on immigration
Family Policies*