Analyzing the Impact of International Migration on Multidimensional Poverty in Sending Countries: Empirical evidence from Cameroon

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Introduction

• The international migration from SSA has also grown very fast over the past decade given that number of people who have leaved the continent has moved from about 14 million in 1990 to more than 17 million in 2013 (UN, 2014)

• Human welfare remains a concern in Africa which is the poorest region of the world with more than 43% of people living with less than 2$ per day

• The relation between international migration and people well-being remains timely in SSA where those two phenomena have an important magnitude
Introduction

Facts in Cameroon:

• The stock of international migrants from Cameroon has rapidly increased since 1990s (from 228 000 in mid-2000 to 300 000 in 2015, UN-2015)

• More than one third of the households in Cameroon receive remittances from relatives living away from the country (NBS, 2016)

• The amount of remittances received by Cameroonian households has increased more rapidly given its amount has moved from 33 $ million in 2001 to 251 $ million in 2014 (World Bank, 2015)
Introduction

International migrant stock growth rate

- SSA region
- Cameroon
Introduction *(Facts in Cameroon)*

- The country has completed a economic growth rate since the end of 1990s with an annual average rate standing about 3.5%
- Cameroon did not achieve the MDGs in 2015 as expected
- Monetary poverty has weakly decreased between 1997 and 2014, moving from 42% in 1997 to 40.2% in 2001, and then to 39.9 in 2007 and finally to 37.4 in 2014 (NBS)
- Multidimensional poverty headcount ratio has felled from 53.76 in 2004 to 46.02 per cent in 2011 (Alkire and Housseini, 2014)
Introduction

Rationale of the study:

• Both international migration and internal people’s displacement is mainly driven by economics and well-being improvement reasons

• International migration impacts the whole economy and the households’ welfare, in various ways (Azam and Gubert, 2006)

• An analysis of the relation between international migration and people’s well being in a country like Cameroon is timely and relevant
Introduction

• Many studies have investigated on the impacts of international migration on people or households’ well being

• Those studies mainly approached well being through the monetary poverty

• Very few are the empirical evidences focusing on Cameroon despite the magnitude and the trend of poverty and international migration there

Objective of the study:

• Analyze the impact of international migration on multidimensional poverty in Cameroon
PLAN

I. Analytical framework

II. Data and descriptive statistics

III. Econometric results
I. Analytical framework

• **Literature review:** International migration reduces poverty in sending countries

• **Cross sectional studies:** Adam and Page (2005) in 71 developing countries; Gupta et al. (2007) in 76 countries; Anyanwu and Erhijakpor (2010) in African countries

• Some few cross-sectional studies considered the poverty at the household level (Acosta et al., 2007; Adams, 2007), but they only considered monetary poverty

• **Microeconomic studies:** Adams, 1991 in Egypt; Rodriguez in Philippine; Barham and Boucher (1998) in Nicaragua; Mollers and Meyer (2014); Tamo (2014) in Cameroon
I. Analytical framework

• **Conceptual and measurement considerations**

• household is considered like participating to the international migration if at least one among the members lives away from the country

• Household’s welfare index including three dimensions that are education, income and the standard of living and seven indicators that are level of education, access to electricity, access to drinking water, access to a sanitation system, ownership of television, ownership of a transport mean, and the amount of expenditure per day
I. Analytical framework (Conceptual and measurement consideration)

• The multidimensional poverty is measured through the headcount ratio (H) and the intensity of multidimensional poverty (A) in the country (Alkire and Foster’s methodology, 2011)

• Rubin’s 1977 causal framework is used to estimate the impact analysis in which we control the selection bias related to observable characteristics through the propensity scores matching technique and the selection bias due to unobservable characteristics thank to an application of the Heckman’s double selection model procedure
II. Data and descriptive statistics

• Data used for econometric analysis are those from the 2012 national representative survey on the migrant profiles and the impact of migration on human development in Cameroon sponsored by the International Organization for Migration

• Distribution of households by migration status

<table>
<thead>
<tr>
<th>Categories</th>
<th>Frequencies (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>International migrant households</td>
<td>37.46</td>
</tr>
<tr>
<td>Non migrant households</td>
<td>62.54</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>
II. Data and descriptive statistics

• Cross-table of multidimensional poverty and migration status

<table>
<thead>
<tr>
<th>Multidimensional poverty indicator</th>
<th>Whole sample</th>
<th>Migrant household=1</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>23.58</td>
<td>16.73</td>
<td>27.68</td>
</tr>
<tr>
<td>A</td>
<td>0.70</td>
<td>0.65</td>
<td>0.71</td>
</tr>
<tr>
<td>M₀</td>
<td>16.56</td>
<td>10.96</td>
<td>19.92</td>
</tr>
</tbody>
</table>

• About 24 per cent of households are multidimensional poor
• Multidimensional poverty seems to be high among non-migrant households
III. Econometric results

- Regression of international migration on multidimensional poverty

| Variables | Odds Ratio | Std. Err. | Z  | P>|z| | [95% Conf. Interval] |
|-----------|-----------|-----------|----|-----|---------------------|
| Dependent variable: Migration status ("Non-migrant" as the category of reference) | | | | | |
| Multidimensional poverty status ("Not poor" as the category of reference) | | | | | |
| Poor | 1.92*** | 0.27 | 4.53 | 0.00 | 1.44         2.52 |
| Cons | 1.15*** | 0.09 | 5.84 | 0.00 | 1.28         1.64 |

- Multidimensional poverty significantly affects the choice of households regarding the sending or not of their relatives in another country
III. Econometric results

- Average treatment effect on migrant households (propensity score matching)

<table>
<thead>
<tr>
<th>Sample</th>
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<th>Treated group</th>
<th>Control group</th>
<th>Difference</th>
<th>Std. Err</th>
<th>T-stat</th>
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</thead>
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<tr>
<td>Unmatched</td>
<td>H</td>
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<td>27.68</td>
<td>-10.92***</td>
<td>0.02</td>
<td>-4.5</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>0.65</td>
<td>0.71</td>
<td>-0.06***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATT</td>
<td>H</td>
<td>17.50</td>
<td>19.12</td>
<td>-1.62***</td>
<td>0.02</td>
<td>-0.6</td>
</tr>
<tr>
<td></td>
<td>A</td>
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<td>0.92</td>
<td>-0.28***</td>
<td>0.01</td>
<td></td>
</tr>
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</table>

Test for significance based on the Adjusted Wald Test

-6.3 0.02 -0.5

- the rate of multidimensional poverty in the treated group is 17.5 per cent against 19.12 per cent in the control group. The difference of rate of -1.62 between the two subgroup is therefore the impact of the treatment on the outcome
### III. Econometric results

- Average treatment effect on migrant households (two-stages selection model)

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- the average impact of treatment on treated households is 2.55 per cent of reduction of multidimensional poverty
Conclusion

• Measurement of the impact of international migration only through remittances

• Cross-sectional approach or macroeconomic approach

• Monetary approach of poverty

• However, it is still possible to contribute to the existing literature related to migration and households’ well-being by highlighting the mechanisms through which international migration affects well-being of sending households
Thank you for your attention