CLIMATE CHANGE AND INTRA REGIONAL MIGRATION IN SUB-SAHARAN AFRICA

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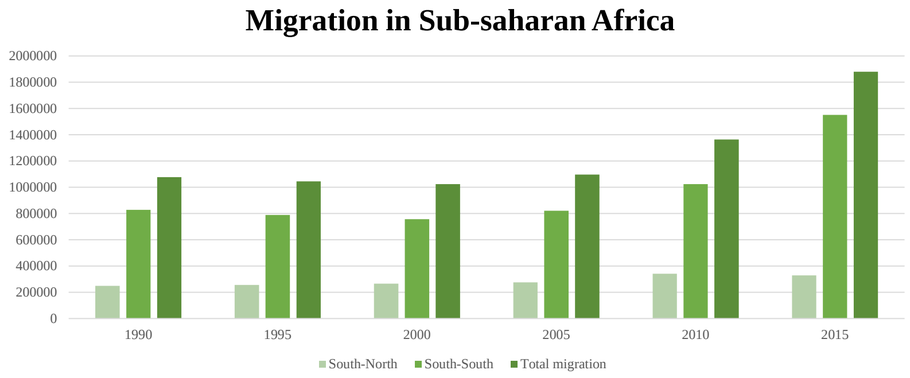
MOTIVATIONS

The stock of migrants is growing in SSA moreover , south – south migration is larger than south-north in SSA

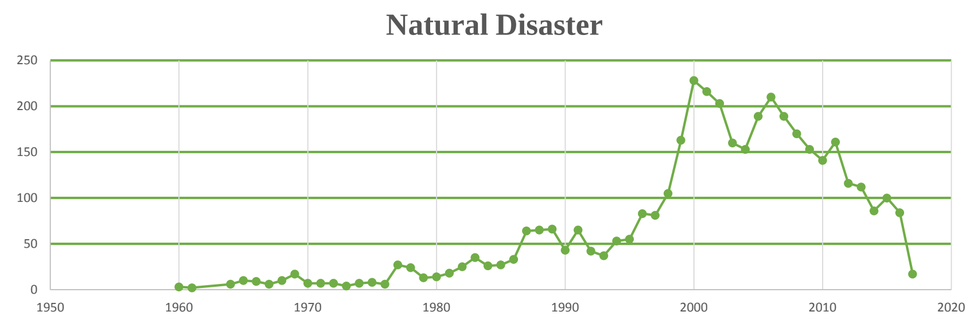
Figure 1:



Source: World Bank (2016)

Climate change becoming more and more visible in SSA

Figure 2 : Evolution Of natural disaster Disaster in SSA



Source : EMT-DAT; the OFDA/CRED International Disaster Database)

RESEARCH QUESTION

What is the effect of Climate change on intra-regional migration through the chanel of agricultural productivity in SSA?

MAIN CONTRIBUTIONS

- The use of Standard precipitation evotranspiration index (SPEI)
- The use of macroeconomic approach

DATA AND METHOD

- Global bilateral migration data (GBMD)
- SPEI from the high resolution (0,5*0,5°) gridded dataset by Vicente-Serrano et al,(2010)

Sample: 42 countries of Sub-Saharan Africa
Over the period 1960-2000

Two Stage Least Square

The Model

$$\ln(A_{it}) = \beta_0 + \beta_1 \ln(CC_{it}) + \beta_2 \ln(L_{it}) + \beta_3 \ln(P_{it}) + \beta_t + \beta_{ij} + \mu_{it}$$

$$\ln(M_{ijt}) = \alpha_0 + \alpha_1(A_{it}) + \alpha_2 \ln(D_{ij}) + \alpha_3 \ln(P_{it}) + \alpha_4 \ln(P_{jt}) + \alpha_5 X_{ij} + \alpha_t + \alpha_{ij} + \varepsilon_{ijt}$$

KEYS FINDINGS

- ❑ First, climate change (SPEI) has a negative and significant effect on agricultural productivity.
- ❑ Second, this decline in agricultural productivity has a significant and positive effect on intra-regional migration in sub-Saharan Africa.

CONCLUSIONS

Agricultural productivity is a privileged channel through which Climate change impacts intra regional migration in SSA