Are Workers' Remittances Causing Growth in Developing Countries?

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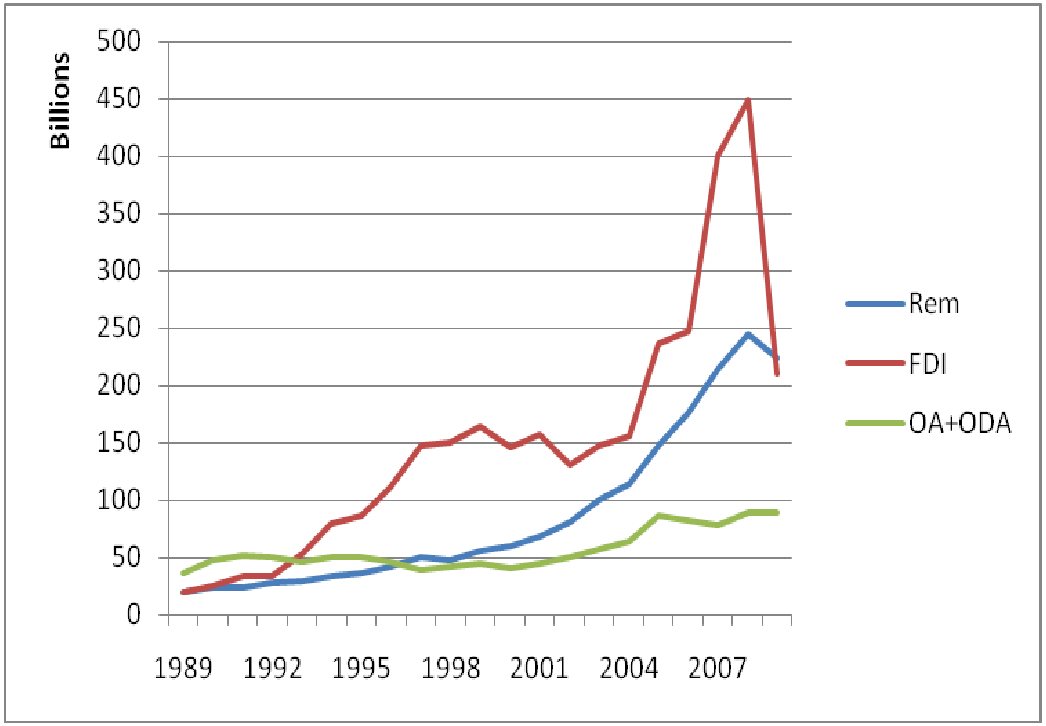
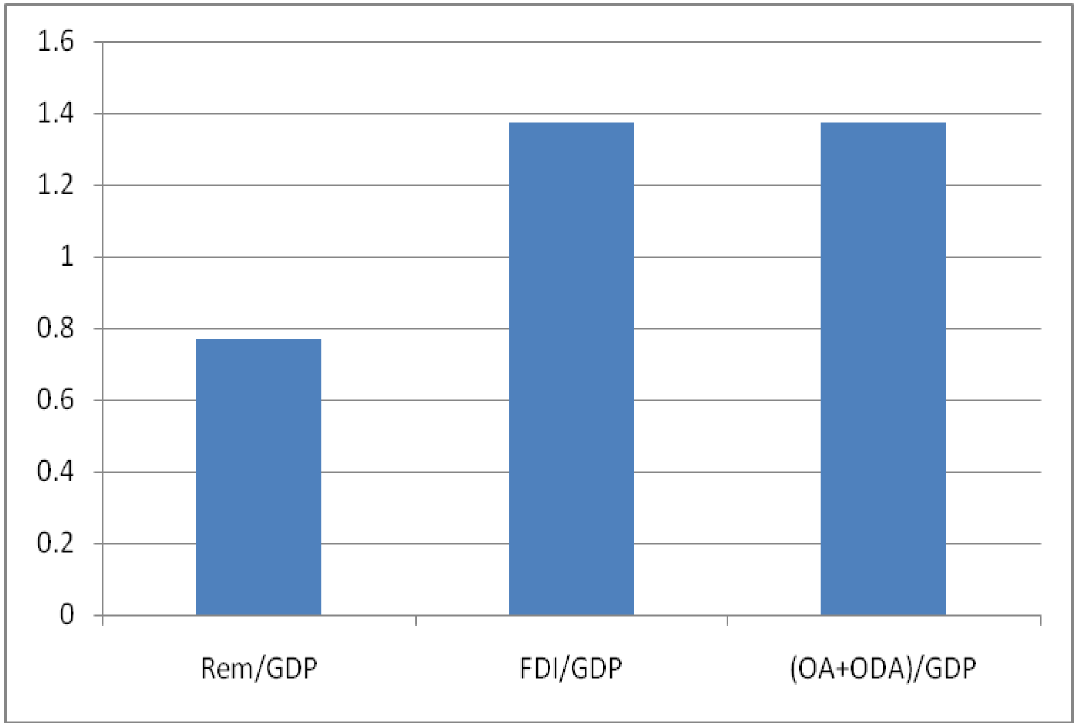
What are Workers' Remittances?

- Transfers of money by migrants
- Typically made to family members in home countries

Why study Remittances? - Size



Why study Remittances? - Volatility



Why study Remittances?

- 95% (US $214 billion) of world remittances went to developing countries in 2007
- Top 20 in 2007 had Remittances to GDP ratios between 9% and 45%
- Average Remittances to GDP ratio for 2007 was 6%
- Second only to FDI and greater than OA+ODA since the mid-nineties
- Remittances less volatile than FDI and ODA over 1989-2009

Why study Remittances?

- Bigger story on benefits vs. costs of migration
- OCA theory

Outline

- Theory
- Literature Review
- What I do
- Preview of Results
- Data
- Empirical Methodology
- Results
- Conclusion

Theory

Increase in Investment

- Imperfect capital mobility, frictions in domestic financial intermediation
- Financial constraints, HH rationed out credit market

Increase in TFP through human capital formation

- Provide minimum subsistence level, HH more productive
- Invest in education

Reduction in labor effort

- Afford more leisure

Dutch Disease

- Export sector negatively impacted

Dominant Literature

- IMF (2008) – Macroeconomic Consequences of Remittances
- IMF Working Paper (2009) – Do Workers' Remittances Promote Economic Growth?
- Remittances decrease growth – leads to reduction in labor

What I do – Is this true!

Re-examine IMF papers using panel data techniques:

- Better control of endogeneity
- Control for weather
- Using 5 yr moving averages over fixed 5 yr averages
- Newer dataset covering 1970-2009
- Different country sample

Preview of Results

- Evidence that remittances have positive effect on growth
- Controlling for weather important
- Better control of endogeneity important

Empirical Methodology

$$Growth_{it} = \alpha + \beta wr_{it} + \gamma X_{it} + \eta_i + \mu_t + \varepsilon_{it}$$

- Growth – real GDP growth per capita
- Variable of Interest: wr = log(WR/GDP)
- Conditioning set – initial per capita GDP, Trade, M2, FDI, OA+ODA, NDC, inflation rate, average growth top 20 trading partners, population growth, average monthly temperature and rainfall
- 2 methods – OLS with FE and SGMM

Data

- IMF - Average Growth of Top 20 trading partners & ICRG Political Index
- NCDC – average monthly rainfall and temperature
- WDI – all other variables
- Sample contains 108 countries over 1970-2009

1. Results - Overall

		OLS with Fixed Effects	SGMM
Main interest	**WREM** P-value R-squared Observations Countries	**0.56**** 0.038 0.480 611 45	**0.62*** 0.054 0.724 (Hansen p-val) 630 51
Other	**FDI** P-value	**0.51*** 0.059	**0.92*** 0.069
Other	**OA+ODA** P-value	**0.02** 0.926	**0.37** 0.337

2. Results – Weather and Instrument

		Without Weather	With Weather
OLS with FE	**WREM** P-value R-squared	**0.36** 0.192 0.436	**0.56**** 0.038 0.480
SGMM	**WREM** P-value Hansen p-val	**0.45*** 0.099 0.551	**0.62*** 0.054 0.724

3. Results - Magnitude of effect

For WR/GDP ratio of 3%

- In FE case, every $1 increase in remittances causes GDP to increase by roughly $0.20

Conclusion

- Significant evidence that workers' remittances causing growth in developing countries
- Magnitude of growth is large
- Correcting endogeneity issues important
- Weather important in studying remittances
- Policymakers should actively encourage remittances