# Remittances in a an Economywide Setting

#### **David Roland-Holst**

UC Berkeley

RETA on Remittances and Poverty in Central Asia and South Caucasus

Draft for Discussion at Second Working Meeting
Kuala Lumpur, Malaysia
14-16 October 2007

#### Contents

- 1. Remittances in perspective
- 2. Labor supply issues
- 3. Demand and structural change
- 4. Results
- 5. Conclusions

#### Remittances in Perspective

- 1. Macro
- 2. Meso (industries, households, and other public and private stakeholder groups)
- 3. Micro (individual firms and households)

#### Macro Perspective

- A classic, unrequited foreign exchange transfer
- Domestic labor resource outflow
- Stimulus to import demand
- Exchange rate appreciation undermines export competitiveness
- Ultimate ER effect depends on patterns of origin (rouble vs. euro)

#### Remittances and Aid

Country/Region	Remittances	Aid	Ratio
CE Europe & Central Asia	4.16	2.7	1.54
Turkey	1.96	0.33	5.94
Philippines	5.46	1.96	2.79
Colombia	1.16	0.23	5.04
Mexico	1.19	0.09	13.22
Middle East & N. Africa	7.19	3.07	2.34
Egypt	8.69	6.85	1.27
Morocco	6.68	2.76	2.42
South Asia	2.87	4.68	.61
India	1.59	0.64	2.48

#### Meso Perspective

- Recipients diverse recipient profiles, can be propor
- Induced demand effects potential for Dutch Disease
- Labor opportunity cost depends on occupational status of migrants (brain drain, labor surplus outlet, etc.)
- Financial sector issues depends on patterns of retention (saving), intermediation, and induced borrowing

#### Micro Perspective

- Direct income
  - Increased purchasing power
  - Risk management, consumption smoothing
  - Social capital
- Liquidity and working capital
  - Smallholder
- Technology transfer
  - May increase import content of consumption/investment
  - Skill transfer, adoption stimulus
- Human capital
  - Education, network externalities
- Labor supply
- Bottom Line the effect of remittances depends on how they are used
  - Experience/permanence matters
  - Transactions costs matter (indirect "fees", fungibility, transparency, etc.) remittance infrastructure a public good?
  - Networks matter
  - Gender matters (at both ends)
  - Immigration (destination) policy matters

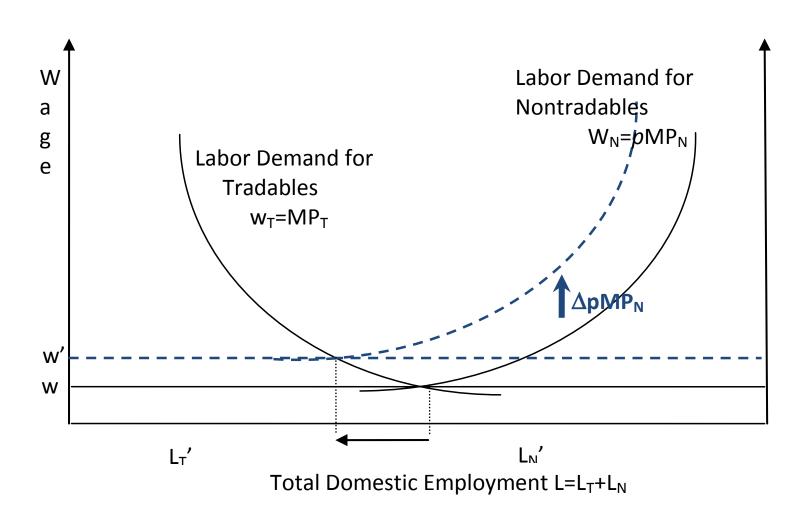
#### Remittances and Labor Supply

- Migrants increase vacancy rates
- Remittances may increase household reservation wages
  - Evidence for Jamaica, Philippines, indicates a negative correlation
  - May also be due to increased education (China)
- Demand side stimulus may offset this depending on tightness of labor markets

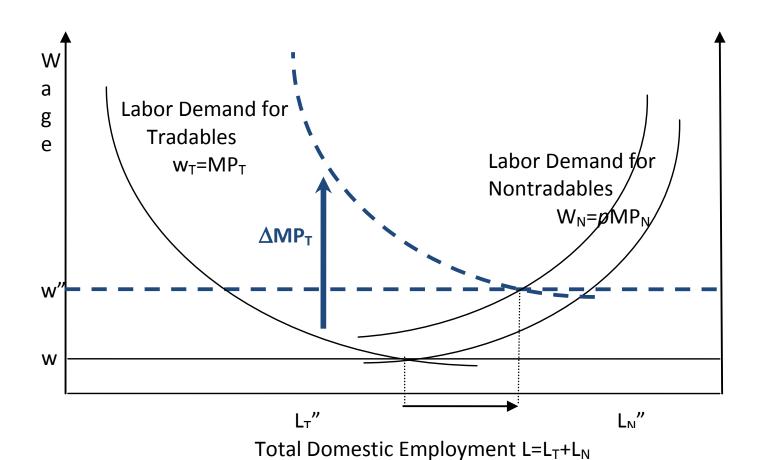
#### Structural Effects

- Like all foreign income, remittances can alter demand patterns in favor of nontradables (Dutch Disease)
- This will induce real exchange rate appreciation and undermining export competitiveness
- Obviously, this depends on income elasticities, which differ significantly between countries and income groups

## **Dutch Disease Schematically**



#### What's Special about FDI? *Productivity*



## Scenarios for the Kyrgyz Republic

Any external inflow can affect the variables, but the net effect is an empirical question.

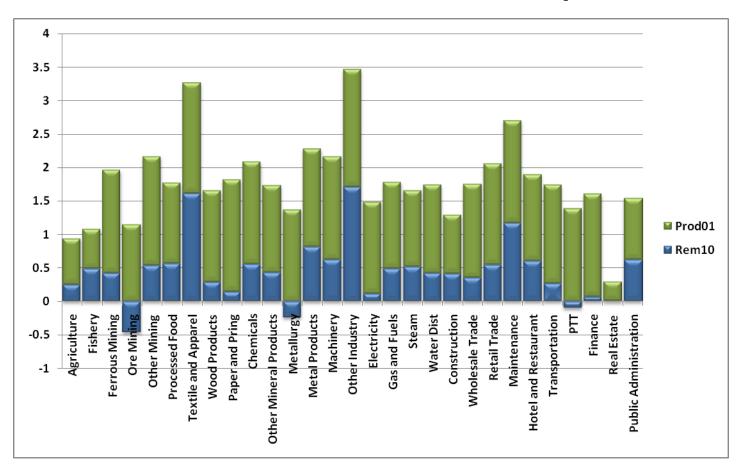
For the Kyrgyz republic, we contrast two simple scenarios:

- 1. A 10% increase in baseline remittance flows.
- 2. Scenario 1 combined with a 1% increase in total factor productivity.
- The results would be larger in an inter-temporal comparison, but the qualitative effects do not change.

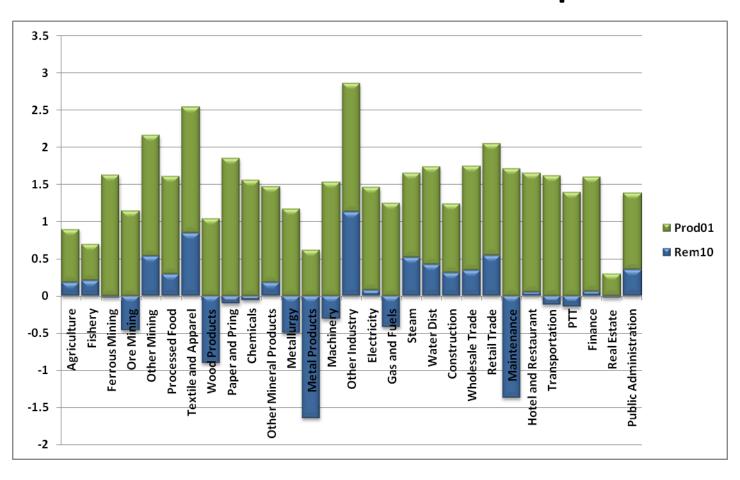
## Macro Results

	Rem10	Prod01	Total
Remittances	10.00		10.00
HH Income	1.40	1.06	2.46
СРІ	.18	06	.11
REX	.10	11	01
Real GDP	01	1.16	1.15
Consumption	1.38	1.25	2.62
Investment	.54	.54	1.09
Exports	62	1.45	.83
Imports	.98	1.17	2.15
Unskilled Emp	.33	.33	.66
Skilled Emp	.17	.51	.68
Unskilled Real Wage	.13	.26	.39
Skilled Real Wage	04	.44	.40

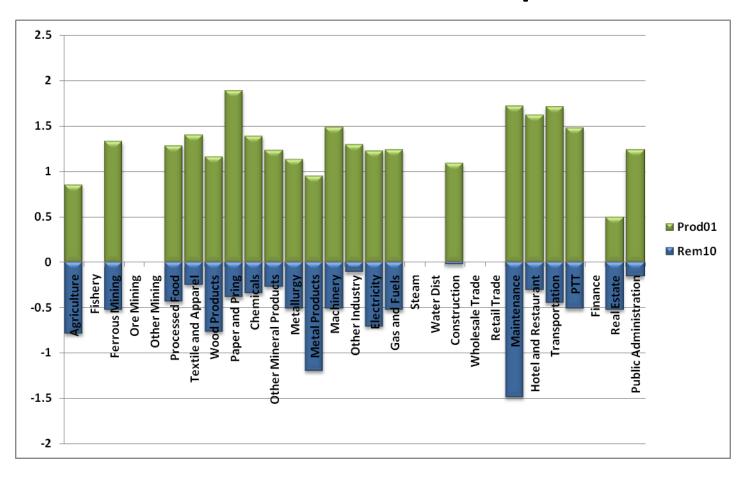
## Meso Results - Absorption



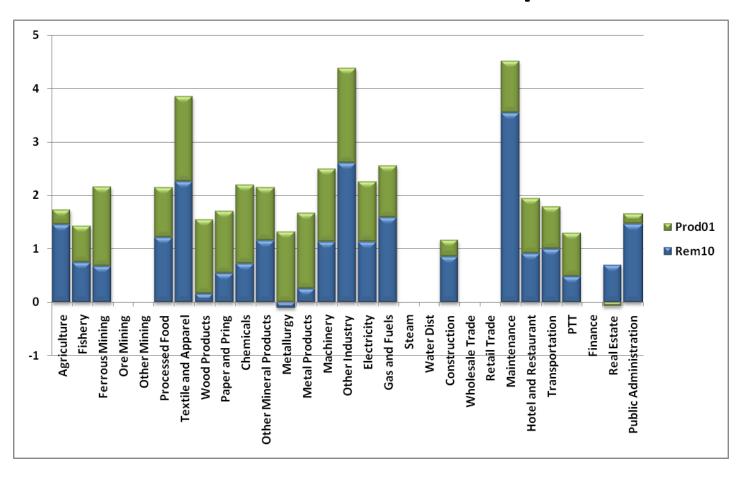
## Meso Results - Output



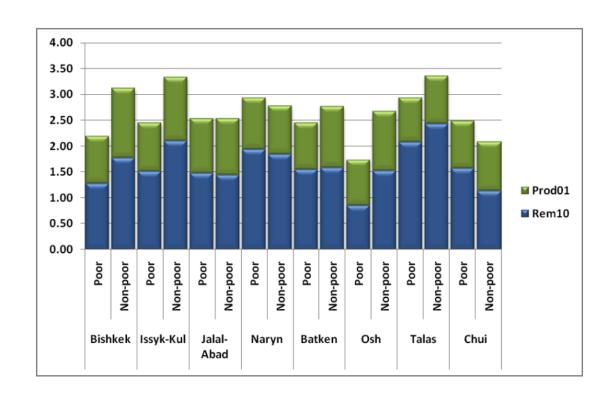
## Meso Results - Exports



#### Meso Results - Imports



#### Meso Results - Households



#### Conclusions

- The ultimate impact of remittances depends on detailed structural characteristics
  - Recipient profiles
  - Induced demand and saving patterns
  - Domestic sector, resource profiles
  - Labor opportunity cost
- Clearly, it will be difficult to generalize country experiences
- Because of its investment in micro data, this project has an opportunity to significantly strengthen the basis of evidence for more effective policy

#### **Extensions**

- Dynamics
  - Adjustment scenarios
    - "stress testing" against regional cycles
    - Alternative global growth and commodity trends
  - Sustainability and policy complementarity
- More countries
  - Elucidate linkages
  - Improve generality and policy coherence
- Second-order poverty impacts
  - How remittance driven demand employs the poor (construction, food production, basic services)
- Sub-national analysis
  - GIS
  - Transboundary enclaves