

# DR-CAFTA and Migration in Central America

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# Central American Free Trade )Agreement (CAFTA

- Series of Free Trade Agreements (FTAs) between Costa Rica, Nicaragua, Guatemala, Honduras, El Salvador and the US
  - Similar to NAFTA
  - Signed on 4 May 28, 2004
- Dominican Republic approved the agreement in 2007
  - Now termed DR-CAFTA
- Eliminate tariffs (eventually) on goods that protect domestic markets
  - General decline over 10 years in tariff rates
- **Concern that a decrease in protection of agricultural goods will increase emigration rates as households adjust to changing economy**



# Migration and NAFTA

“expanded trade between sending countries and the United States is the single most important remedy” for unwanted migration  
(CSIMCED, 1990)

- The same policies that increase economic growth may temporarily increase migration



# Lessons learned from NAFTA

- Migration trend has neither significantly increased nor decreased with the passing of NAFTA (Boucher, Taylor, Yúnez-Naude)
- NAFTA may have a small negative effect on migration, but quantitatively small in comparison to role of migration networks (Richter and Taylor)
- Corn production increased post-NAFTA (Dyer and Taylor)
  - Did not sell corn, diversified income sources
- Gendered impacts of trade agreements! (Richter and Taylor, 2007)

# CAFTA and Migration

- Impact of CAFTA on emigration depends on
  1. Current emigration rates,
  2. Labor in agricultural sector and
  3. Diversification of agricultural production and integration in local and international markets

# Migration and Remittance Trends

- Long history of migrating to the US
  - 13 million Central American immigrants in 2006
- Mexico is a top 10 destination country, albeit an intermediate destination
- Remittances have increased dramatically
  - 25.6% of GDP for Honduras in 2006
  - Potential to transform rural sector and economies



# Central American Agricultural Sector

- Over past three decades large decrease in the percentage of population in agricultural sector
- Increased diversification in non-agricultural sector
- Most countries rely on traditional exports, bananas, coffee, and sugar.
  - But there has been some diversification in export crops and in manufacturing
- Main trading pattern is the US, both imports and exports
  - Costa Rica has expanded trade with China and countries outside of the Americas



# Exploring the impacts of CAFTA on Emigration

- Most models of migration are based on Todaro's hypothesis that each potential migrant bases decision on expected income.
- The New Economic of Labor Migration (NELM) shifts focus to larger units, such as households.
  - Decision made in large units
  - Buffer households against risk, increase liquidity, etc.
- Households are embedded in communities, regions, and nations.
  - Migration (remittances) affect non-migrant households
  - Integration with markets transmit impact of remittances and changes in prices

# Micro-Economy Wide Modeling

- Micro-economy wide models are a middle ground between household-farm models and aggregate CGE models for policy analysis
- Model the linkages of households within the village and with markets in regional and national economy
  - Direct effect of changes in local markets on production decisions
  - Indirect effect because not all goods are tradable

# Experiments conducted on Base Model

- Stylized-hybrid model based on household surveys in Central America and Mexico with current data on migration and agricultural production
- Goal is construct plausible scenarios of the effect of CAFTA on prices of agricultural goods
  1. Change in basic crops prices
    - Decrease the price of corn by 10%
  2. Increase in traditional exports
    - Increase the price of export crop (coffee) by 10%
  3. Stabilization of exchange rate
    - 10% currency devaluation



# 1. Decrease price of maize by 10%

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<b>Percentage Change In...</b>	<b>Costa Rica</b>	<b>Gua- temala</b>	<b>Hon- duras</b>	<b>Nica- ragua</b>	<b>El Salvador</b>
Wages	0	0	-.01	-0.34	-0.02
Labor Demand					
Rural	-.01	-.0095	-0.26	-3.97	-0.84
Urban	.002	.002	.05	1.2	.07
International Migration	.48	3.10	40.46	745.6	169.58
Income (nominal)	-.0007	-.00068	-.01	-.28	-.02

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## 2. Increase the price of export crop (coffee)

<b>Percentage Change In...</b>	<b>Costa Rica</b>	<b>Gua- temala</b>	<b>Hon- duras</b>	<b>Nica- ragua</b>	<b>El Salvador</b>
Coffee	6.19	7.74	6.18	5.99	6.28
Other Ag	-0.03	-0.001.	-.04	-0.39	-.04
Wages	.02	.001	.03	0.32	.03
Labor Demand					
Rural	0.51	0.02	.63	3.74	1.31
Urban	-.09	-.004	-.12	-1.13	-0.11
International Migration	-17.54	-5.41	-98.25	-709.16	-265.71
Income (nominal)	.08	.003	0.10	.82	.10

# 3. 10% Currency Devaluation

- If CAFTA promotes macroeconomic stability in member countries, it may discourage migration by stabilizing exchange rates
- Currency devaluation have a marked impact on migration
  - More than 20,000 in the majority of cases
  - 81, 000 in El Salvador
  - Small quantitatively in Costa Rica
- Effects are larger than changes in prices of main goods

# Yúnez-Naude and Taylor (2006)

- Used detailed household surveys from each country (not from DR or CR)
  - Allowed for diversification of households by producer types and information on internal and international emigration
- Conducted similar experiments as previous study with similar results

1. CAFTA may increase demand for labor in urban sector (manufacturing)
  - ❖ Increase Urban Wage rate by 10%
  - Increase in migration—both internal and international—and income levels
    - Less than 5% for El Salvador and Guatemala
    - Less than 1% in Honduras and Nicaragua
  - Increase in Income levels:
    - Larger increase in less commercial households
      - Ex: Small farmers in El Salvador increase income by 8%, while large commercial farmers increase incomes by 0.25%
  - Decrease in production of livestock and non-agricultural production
    - Guatemala experiences more decreases in Livestock than other countries: 5% decrease for small commercial producers
    - Non agricultural production has a substantial decrease for small producers (18% decrease in non-agricultural production)

2. Long term effect of remittances on local productive activities
- ❖ Purchase capital with remittances using results of model with increased urban wage rate
  - Remittances (with perfect markets) should have no effect on local productive activities. Only see increase in income levels
  - Increase in production of basic grains, livestock, and non-agricultural production
    - Changes are less than 5% and on average only 1%
    - On average increases are larger for Guatemala than other countries (1.61% across all activities and producer types)
    - On average, 2% increase in non-traditional crops
    - Nicaragua decreases production in non-traditional crops

# General Conclusions

1. Migration effects may offset one other; for example, lower corn prices stimulate migration while higher agro-export prices tend to do the opposite.
2. Currency devaluation has largest effect on emigration rates
3. In the long run an increase in emigration can compensate for the decreases in labor and production in the rural sector in the short run.

# Policy Discussion

- Increases in GDP may increase emigration in short run but currency stabilization may reduce migration pressures over time
  - CAFTA should promote exchange rate stabilization
- Do not fight demographic transitions
  - International migration trends are in place
  - Rural-to-urban transition will continue
- Policies should help households compete in the new economy (post-CAFTA) and take advantage of the changes that are occurring in rural economies.
  - *Only way to address rising emigration rates*

# Policy Discussion

## 1. Increase economic potential of Remittances

- Impress on banks to decrease transaction costs of sending remittances.
- Infrastructure investment: roads, telecommunications, internet, electricity
  - decrease costs for financial institutions
- Increase confidence in local financial institutions
  - Ex: *Ley de Ahorro y Crédito Popular* in Mexico

## 2. Remittances are not a panacea for economic development

## 3. Decrease costs for investing in new activities

- Invest in complementary markets: insurance (index insurance) and credit markets (credit bureaus)
- Decrease costs for households to find out about new markets [extension services]