

Determinants of internal displacement and the desire to return: Micro-level evidence from Colombia

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Outline of the presentation

- Objectives of the research
- Determinants and impact of intra-state conflict
- The model
- Empirical results
- Conclusions

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Objectives of the research

- Understand the causes of intra-state conflict, the elements that help sustain it, and policy measures to end the conflict and deal with its consequences.
- Assess factors determining displaced households' willingness to return to their place of origin, which will provide insights on the big challenges for a sustainable resolution of conflicts.

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Where is intra-state conflict more likely?

- Abundant natural resource endowment.
- Weak institutions.
- States lacking legitimacy.
- Society is polarized.
- Access to wealth and economic opportunities are highly unequal.
- Ethnic and religious cleavages.

Consequences of intra-state conflict

- Decline in economic activity and well-being.
- Destruction of physical and human capital.
- Disruption of productive activities.
- Erosion of the tax base.
- Biasing public expenditure.
- Weakening State's ability to protect and enforce property rights.
- Shift investment and money abroad.
- Heavy burden upon civilians

The Colombian context

- On-going civil war during the last 40 years.
- Highly unequal access to valuable resources (i.e. land) and availability of large rents from extraction of natural resources were some of the original causes of the conflict.
- The main parties involved are left-wing guerrilla groups and right-wing paramilitary groups.
- Drug trade, by providing access to valuable resources to illegal armed groups, intensified the conflict and expanded its territorial influence.
- Escalation of the conflict derived in increasing numbers of civilian victims: forced displacement, selective homicides, kidnappings, extortion and forced recruitment.

Imposing a heavy toll on the civil population

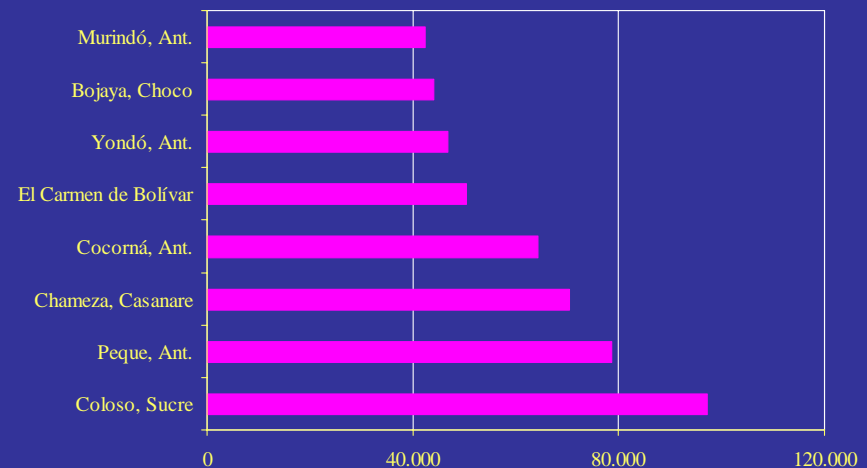
Forced displacement in Colombia: 3.7% of total population and 13.6% of rural population

Yearly number of displaced persons: 1997-2005



Municipalities with most acute intensity

Number of displaced population per 100,000 inhabitants



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Conceptual model: three stylized facts

- Main reason of warring groups to initiate activities in a locality is the need to obtain a community specific-prize (i.e. access to natural resources or territorial control).
- They exert fear through selected and targeted acts of terror that will lead civilians to abandon their properties.
- Producing terror is costly:
 - Cleavages tend to reduce the cost of terrorizing the population.
 - Costs increase in the existing level of public goods.

Model for determinants of displacement at the municipal level

- The rebels' problem is to choose a level of terror, n_j , such as to maximize profit

$$\pi = D(n_j) P_j - n(G_j; C_j) .$$

where

P_j : is the prize of the community

G_j : level of public goods

C_j : social cleavages and inequality

$n(G_j; C_j)$: Production function of terror

$D_j(n)$: Displacement function.

- From which we obtain the optimum level of terror

$$n_j^* (P_j; G_j; C_j)$$

Households' decision of displacement

- A household will migrate from municipality j to k if

$$n_{jt} [y(E_i, A_i; G_j) - M_{jk}] < n_{kt} [y(E_i, 0; G_k)]$$

where:

E_i : human capital such as education

A_i : location-specific such as land and social capital

G_j : level of public goods available

$y_{ij}(E_i, A_i; G_j)$: income of household i in community j

M_{jk} : Migration costs

N_j : level of terror

Households' decision to return to the place of origin

- A household will decide to return to the place of origin if

$$n_{jt} [y(E_i, A_i; G_j)] > n_{kt} [y(E_i, A_k; G_k) - M_{kj}]$$

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The Data

- Municipal estimations:
 - Red de Solidaridad Social: yearly and municipal incidence of displacement.
 - Administrative municipal data.
 - Municipal data on violence events.
- Households' estimation
 - RUT Information system: sample of 32.030 households.
 - Information on the nature of displacement, the actors involved and socio-demographic characteristics of affected households.
 - Information on labor conditions and access to education in origin and reception site.

Profile of the displaced population

- Near half of households displaced in reaction to a specific event or direct attack.
- Two thirds migrate within the departments borders.
- 38% of households are female headed.
- 24% participate in organizations.
- Unemployment raises significantly after displacement.

Determinants of displacement at the municipal level

Table 1. Tobit regressions for mean levels of displacement at the *municipio* level

	Red de Solidaridad data			RUT Data		
Land Gini	1.615*** (3.17)	1.652*** (2.79)	0.287 (0.59)	6.846*** (4.73)	8.036*** (4.60)	3.834*** (2.91)
Pop. Density (1000s/km ²)	1.040*** (8.25)	1.039*** (8.43)	0.493*** (4.65)	2.244*** (5.93)	1.907*** (5.15)	0.309* (1.69)
Road density (km/km ²)	-2.131*** (4.53)	-2.137*** (4.03)	-1.609*** (3.77)	-1.924 (1.34)	-3.620** (2.03)	-1.762 (1.36)
Educ. spending p.c.		-0.025*** (5.29)	-0.015*** (3.89)		-0.070*** (3.30)	-0.040** (2.51)
Mineral wealth		0.830*** (4.04)	0.599*** (3.63)		0.414 (0.77)	0.078 (0.19)
Guerrilla action			0.320*** (3.78)			0.100 (0.58)
Massacres			0.063*** (2.75)			0.118** (2.29)
Kidnappings			0.059*** (6.19)			0.064*** (3.21)
Violent deaths			0.303*** (7.38)			0.513*** (6.37)
Constant	1.457*** (4.04)	1.559*** (3.69)	1.876*** (5.46)	-6.777*** (6.24)	-6.467*** (4.91)	-4.143*** (4.17)
Observations	837	637	637	837	637	637
Pseudo R ²	0.14	0.17	0.28	0.13	0.16	0.26
Log likelihood	-1379.52	-1013.83	-879.00	-514.06	-415.20	-365.51

Absolute value of t-statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Note: Departmental dummies included throughout but not reported

Determinants of displacement at the municipal level

- The incidence of displacement is mitigated when public goods are provided:
 - Road density is expanded
 - Public spending on education improve
- The incidence of displacement increases when:
 - Land distribution is highly unequal
 - Royalties from mineral wealth are large
 - Guerrilla attacks, massacres, kidnappings, and violent deaths increase.
- Spending on security and expanding public investment appear to increase the cost of conflict for illegal armed groups and reduce its attractiveness compared to regular economic activities.

Determinants of households' desire to return

Table 2. Probit regressions of households's desire to return

	Specification			
	(1)	(2)	(3)	(4)
Reactive displacement	-0.011*** (3.27)	-0.018*** (5.03)	-0.013*** (3.78)	-0.013*** (3.85)
Age of head	0.001*** (6.28)	0.001*** (6.12)	0.001*** (5.75)	0.001*** (5.44)
Female headed household	-0.028*** (8.41)	-0.031*** (9.22)	-0.027*** (8.40)	-0.026*** (7.74)
Head has primary education	0.020*** (5.48)	0.016*** (4.57)	0.012*** (3.53)	0.013*** (3.84)
Head has sec. education	0.030*** (5.63)	0.025*** (4.85)	0.025*** (4.86)	0.028*** (5.51)
Persons < 14 years old	-0.003*** (3.54)	-0.004*** (3.82)	-0.003*** (3.64)	-0.003*** (3.48)
Persons 14 – 60 years old	-0.001 (1.13)	-0.001 (1.03)	-0.001 (1.00)	-0.001 (0.92)
Persons >60 years old	0.001 (0.21)	0.001 (0.18)	-0.001 (0.39)	-0.002 (0.70)
Wage employed originally	-0.010 (1.56)	-0.016** (2.57)	-0.005 (0.74)	0.011 (1.54)
Self employed originally	-0.005 (0.99)	-0.013** (2.44)	-0.003 (0.49)	0.015*** (2.63)
In agriculture originally	0.011*** (2.62)	0.002 (0.42)	0.010** (2.50)	0.015*** (3.70)
Access to land before displacement	0.053*** (15.00)	0.050*** (14.39)	0.043*** (12.64)	0.041*** (12.03)
Ethnic minority	-0.047*** (6.20)	-0.043*** (5.47)	-0.034*** (4.34)	-0.032*** (4.11)
Belongs to <i>campesino</i> organization	0.045*** (8.82)	0.042*** (8.32)	0.029*** (6.00)	0.033*** (6.80)
Received assistance		0.039*** (11.29)	0.030*** (8.76)	0.030*** (8.85)
Displacement intradepartmental			0.073*** (19.77)	0.069*** (18.95)
Security better than in origin			-0.035*** (8.44)	-0.029*** (6.95)
Wage employed now				-0.038*** (7.38)
Self employed now				-0.043*** (11.16)
In agriculture now				0.015*** (3.65)
Observations	32028	32028	32028	32028
Pseudo R ²	0.13	0.13	0.16	0.17
Log likelihood	-9910.31	-9845.84	-9550.34	-9440.51

Absolute value of z-statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Note: Departmental dummies included throughout but not reported

Determinants of households' desire to return

- Households less likely to return:
 - Reactive displacement.
 - Female headed households.
 - Households with high dependency rates.
 - Older household heads.
 - Head obtained a wage-job or are self-employed in reception.

(...cont)

Determinants of households' desire to return

- Households more likely to return:
 - Membership in peasant organizations before displacement.
 - Access to land in origin.
 - Households who had been employed in agriculture.
 - Better educated.
 - Received government assistance.
 - Improvements in security conditions.

Conclusions

- Paper provides insights on sources of intra-state conflict.
- Results support the importance of natural resources as a basis for sustaining guerrilla activities as well as structural characteristics (i.e land inequality) as a source of intra-state conflict.
- Provision of public goods reduces the potential for conflict.
- The desire to return is positively determined by having received assistance, having had land access in origin, the importance of social links and improvements in security conditions.
- Therefore, there is a considerable scope for fashioning return programs that can reduce the cost of civil conflict and reduce the potential for re-emergence of such conflict in the future.