Does U.S. Military Aid Finance Illegal Armed Groups?
Evidence from Colombia

Center for Global Development

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Motivation

- Dramatic increase in U.S. military aid over the past decade
  - Often deployed in a counter-insurgency context

- What is the political impact of this military assistance?
  - Very little micro-econometric analysis of this question

- This paper:
  - Within-country analysis
    - U.S. military aid on political violence and elections in Colombia
  - Exploits variation over time in aid and across municipalities in armed group access to aid
  - Uses IV strategy based on U.S aid to other countries

Background I: Colombian Conflict

- Started as communist insurgency in 1960s

- Three key actors
  - Left-wing guerillas, right-wing paramilitaries and the govt.
  - Evidence of collusion between army and paramilitary
  - Political assassinations and voter intimidation by paramiltiaries

- US gives Colombia large amounts of military aid
  - Stated to be counter-narcotics strategy
  - Hard to distinguish from counter-insurgency as armed groups financed by drug trade

Background II: Military Bases

- US military aid allocated to Colombian military brigades

- Military brigades attached to particular government military bases
  - Some municipalities have bases; others do not
  - Generates spatial variation in aid allocation

- Military brigades transfer resources to paramilitary groups
  - Manifest in joint operations; logistical support; weapons supply
  - High-level officials indicted for collusion

Background III: Paramilitary-Military Ties

- Brigades plan joint operations (Human Rights Watch, 1999)
    - 24th brigade: joint operations in Putumayo
    - 17th brigade : San José de Apartadó massacre

- Brigades provide support for paramilitary operations
    - Army blockaded roads during 1997 Mapiripán massacre
    - Airforce bombardment assisted Northern block paramilitary group

- Paramilitary groups formed by former military members (Human Rights Watch, 2000)
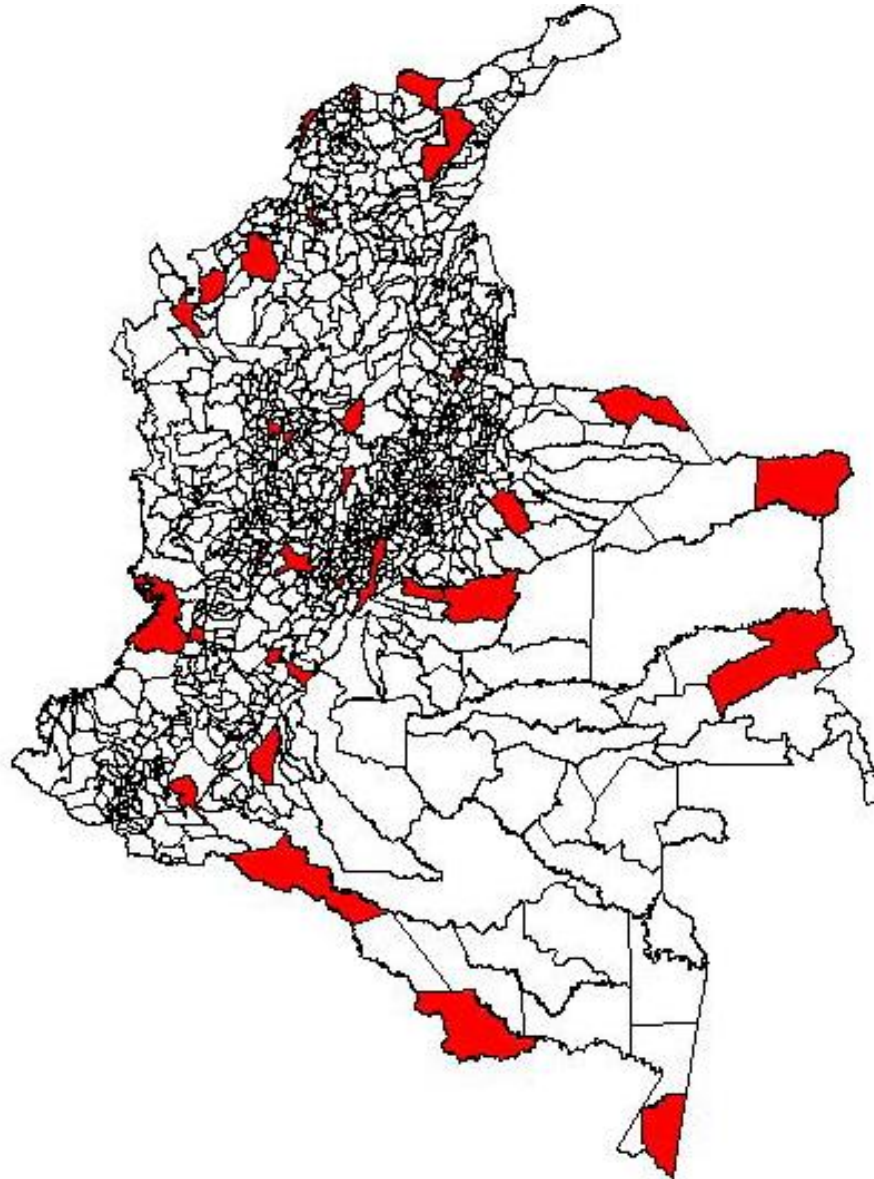   - 3rd brigade (Cali): formed the Calima front paramilitary group

Empirical Strategy

- Compare changes in violence:
  - Over time as US funding changes
  - Across municipalities with and without military bases

$$y_{jt} = \alpha_j + \beta_t + (USmil_t \times Base_j)\lambda + \mathbf{X}_{jt}\phi + \omega_{jt}$$
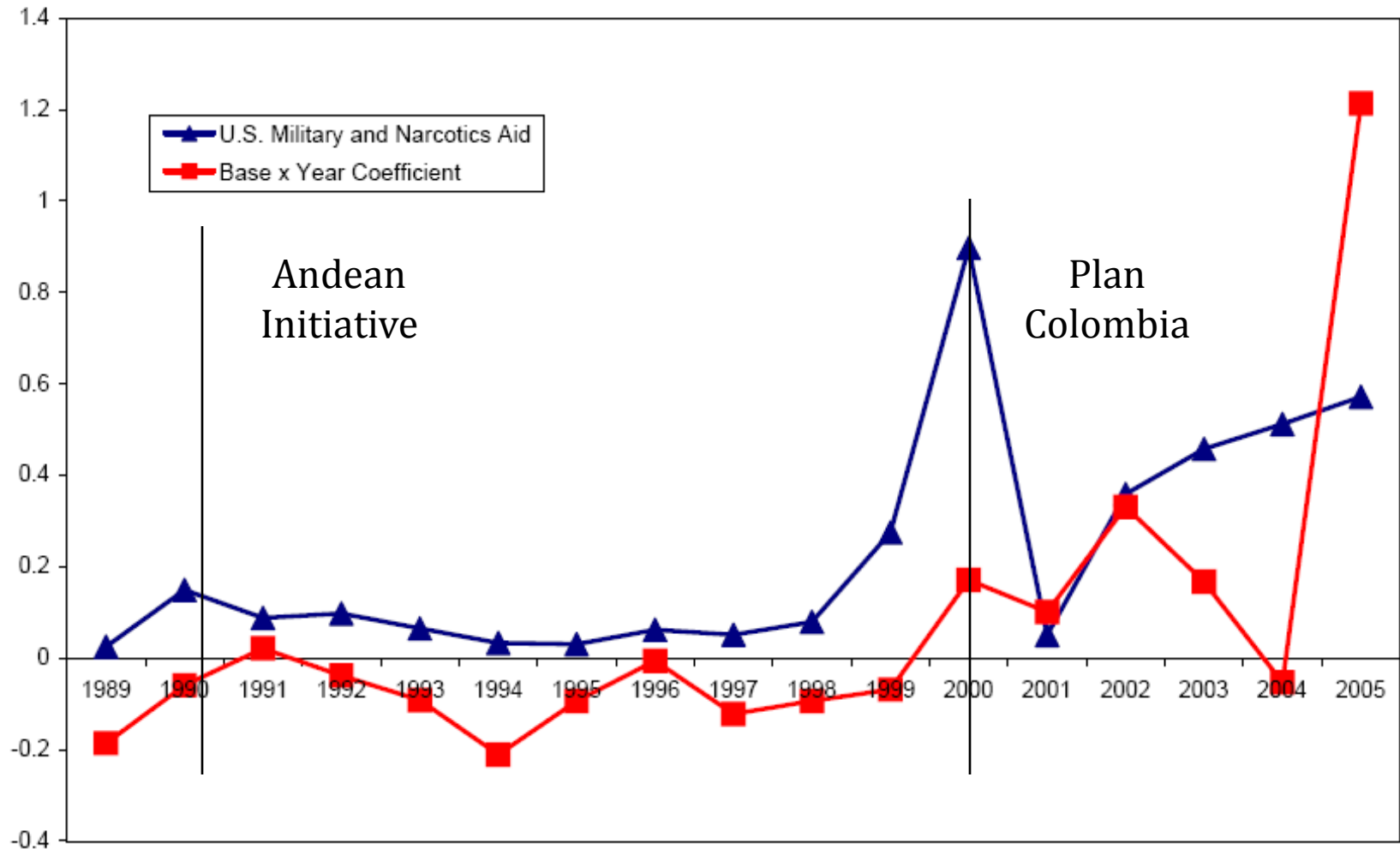
- Conflict data from CERAC (1988-2005)
  - Event-based data
  - Distinguishes between paramilitary vs. guerilla attacks
  - Also records government attacks

Military Base Locations

Military Aid and Paramilitary Attacks

U.S. Military Aid and Differential Paramilitary Attacks in Base Municipalities

Coefficient on Base x Year Dummies (controls for mun. and year FE; log population)

Results:Violence

	Paramilitary attacks	Government attacks	Guerilla attacks	Paramilitary attacks	Government attacks	Guerilla attacks
Log US Military Aid X Base	0.148** [0.061]	0.125** [0.060]	-0.082 [0.111]			
Log US Development Aid X Base				0.915 [1.815]	-0.384 [0.943]	2.513 [4.146]
Observations	16723	16723	16723	16723	16723	16723
Number of municipalities	936	936	936	936	936	936

Notes. Variables not shown include municipality and year fixed effects and log of population. Standard errors clustered at the municipality level.

Coefficients imply:

- 1% increase in military aid increases paramilitary and govt. attacks by 1.5% and 1% more in base regions

- Annual change of 92% in military aid over 88-05 increased paramilitary attacks by 138% more in base regions, on average
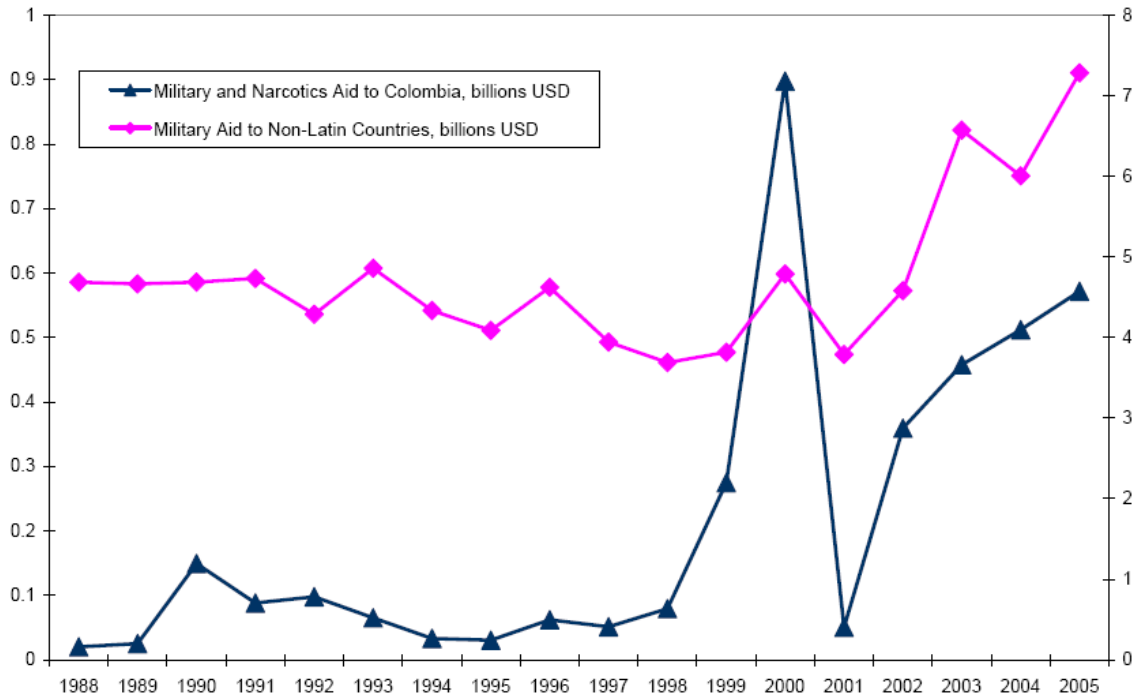
Threats to Identification

- Base selection
  - Bases may be in regions with high violence responsiveness

- Reverse causality
  - US military aid to Colombia may respond to growth in conflict that varies spatially

IV Strategy

- Approach
  - IV with military aid to countries outside of Latin America
  - Isolates part of US aid to Colombia reflecting broader US geopolitical outlook

U.S. Military Aid to Colombia vs. All Non-Latin American Countries

- Military and Narcotics Aid to Colombia, billions USD
- Military Aid to Non-Latin Countries, billions USD

	log US military-narcotics aid to Colombia
log US world military aid (to non-Latin nations)	3.57
	[1.336]**
Observations	18
R-squared	0.309

IV Results

	Instrumental Variables Estimates			Reduced Form Estimates		
	(1)	(2)	(3)	(4)	(5)	(6)
	Paramilitary attacks	Government attacks	Guerilla attacks	Paramilitary attacks	Government attacks	Guerilla attacks
Log US Military Aid X Base	0.315**	0.292***	-0.276			
	[0.123]	[0.104]	[0.252]			
Log US All Non Latin American Military Aid X Base				1.112**	1.028***	-0.973
				[0.435]	[0.366]	[0.888]
Observations	16723	16723	16723	16723	16723	16723
Number of municipalities	936	936	936	936	936	936

Notes. Variables not shown include municipality and year fixed effects and log of population. Standard errors are clustered at the municipality level.

Military Operations and Drug Crops

	Captives Taken	Weapons Seized	Freed Kidnaps	Antinarcotics Operations	Coca
Log US Military Aid X Base	2.197**	0.482**	0.414***	-0.450***	0.002
	[0.940]	[0.238]	[0.151]	[0.142]	[0.016]
Observations	7458	7458	7458	7458	7458
Number of municipalities	936	936	936	936	936

- Differential increase in several types of military operations

- Differential decrease in anti-narcotics operations

- No differential effect on coca cultivated

Political Assassinations

- Is aid-induced paramilitary violence politically motivated?
  - Look at politician homicides (Colombian Security Agency data)
  - Look for differential effect in election vs. non-election years
    - Regional elections held every three years

- Three-way interaction:

$$y_{jt} = \alpha_j + \beta_t + (USmil_t \times Base_j \times Ele_t)\theta + (USmil_t \times Base_j)\lambda + (Ele_t \times Base_j)\vartheta + \mathbf{X}_{jt}\phi + \omega_{jt}$$

Results: Assassinations in Election Periods

Dependent Variable:	Paramilitary Political Assassinations		Guerrilla Political Assassinations	
Log US Military Aid X Base X Election Year	0.307*	0.268***	0.028	0.053
	[0.165]	[0.094]	[0.023]	[0.033]
Election Year X Base	0.795***	0.663***	0.039	0.089
	[0.295]	[0.253]	[0.039]	[0.072]
Log US Military Aid X Base	-0.750***	-0.449***	-0.033**	-0.016
	[0.287]	[0.154]	[0.016]	[0.012]
Estimator	OLS	IV	OLS	IV
Observations	16723	16723	16723	16723
Number of municipality	936	936	936	936

Notes. Variables not shown include municipality and year fixed effects and log of population. Standard errors clustered at the municipality level are in parentheses.

Results show:

• Differential increase in paramilitary assassinations in base regions in election years, relative to non-election years

• No effect on guerilla assassinations

Results: Political Participation

Dependent variable:		Log votes		
Election type:	Governor	State Assembly	Mayor	Town Council
Log US Military Aid X Base	-0.090*	-0.090**	-0.046*	-0.076***
	[0.053]	[0.036]	[0.025]	[0.028]
Observations	1860	1864	1602	1854
Number of municipalities	933	935	823	934

Notes. Variables not shown include municipality and year fixed effects and log of population. Standard errors clustered at the municipality level.

- Coefficients imply that a 1% increase in aid reduced turnout
  - .09% in gubernatorial and state assembly elections
  - .05% in mayoral and .08% in town council elections

Effects in Contested Regions

- Does fall in turnout reflect targeting by paramilitaries?

- Turnout falls more in "contested" regions
  - Militarily contested: clashes each year 1995-1997
  - Electorally contested: previous election was "close"
    - Difference in vote share between top 2 candidates < 5%

Conclusion

- U.S. military aid increases paramilitary violence more in base areas
  - Increases paramilitary assassinations in election years
  - Lowers voter turnout in regional elections
  - No effect on guerilla violence

- Implies foregin military assistance to countries in civil war
  - May strengthen armed non-state actors
  - Undermine domestic political institutions