# Don't Change Horses in Midstream: Leader Change and Civil Conflict Outcomes

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#### Motivation

How does leadership change (gov't or rebel) affect the likelihood of negotiated settlements in civil war?

## What do we know already?

Leadership change matters for the duration and termination of conflict:

- Interstate wars
  - Leader incentives to end wars (Stanley and Sawyer 2009, Croco 2011, MacGillivray and Smith 2008; Goemans 2000)
  - Occurrence and success of negotiations (Ghosn 2010)
  - Ending interstate rivalries (Goertz and Diehl 1995, 2000; Bennet 1997, 1998, Dreyer 2012)

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- Terror organizations (Jordan 2009, Price 2012, Johnston 2012)

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- Terror organizations (Jordan 2009, Price 2012, Johnston 2012)
- Civil war (Tiernay 2013, Thyne 2012)

- Bargaining model of duration and termination (Mason and Fett 1989;
   Brandt et. al 2008; Regan 2002)
  - Leaders consider the probability of victory, costs/benefits of victory, costs/benefits of settlement
  - Only when both sides determine that settlement is the best option and reach convergence will the war come to an end

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  - There are credibility and commitment issues (Walter 1997; Fearon 1995)

## What we expect: leader relationship

Focus: relationship between government and rebel leaders.

A longer relationship can:

- Increase information through shared experiences, gained knowledge of the other side, perhaps meetings or negotiations that may have stalled or failed
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 $H_1$ : As the duration of the relationship between the government and rebel leaders increases, the likelihood of a settlement will also increase

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  - In civil war, we expect only internal changes can have this effect
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 $H_2$ : Internal leadership changes, in either the government or rebel group, will increase the likelihood of a negotiated settlement

#### What we expect: external leader changes

#### External change is expected to have the opposite effect

- Outsiders bring new policies, 'resetting' information gained under the previous leader
- 'Reset' credibility built in terms of committing to a settlement
- External changes in the rebel group in particular may disrupt credibility

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*H*<sub>3</sub>: External (rebel) or outsider (government) leadership changes will decrease the likelihood of a negotiated settlement.

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  - Relationship: number of years the same head of government and head of rebel group have been in control
  - Government Change: inside/outsider (original coding)
  - Rebel Change: internal/external (Tiernay 2013)

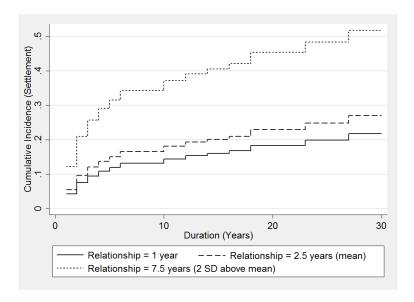
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- Controls: Polity 2, active dyads, population, GDP per capita, lootable resources, rebel territorial control

# **Findings**

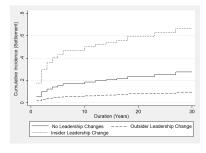
#### Leader Tenure

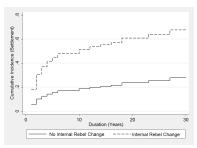
	Model 1 One-Year Effect	Model2 Two-Year Effect	Model 3 Three-Year Effect	Model 4 Four-Year Effect
Relationship	1.183**	1.188**	1.198**	1.194**
•	(0.023)	(0.017)	(0.014)	(0.019)
Insider Gov't	3.377**	3.122**	3.527***	4.379***
	(0.014)	(0.017)	(0.003)	(0.000)
Outsider Gov't	0.311*	0.463*	0.696	0.639
	(0.063)	(0.055)	(0.210)	(0.117)
Rebel Internal Change	3.480***	2.958**	2.329*	2.136*
	(0.010)	(0.023)	(0.060)	(0.087)
Rebel External Change	2.360	1.838	1.707	1.551
	(0.136)	(0.284)	(0.351)	(0.457)
Regime Type	1.070**	1.075**	1.070**	1.068**
	(0.047)	(0.033)	(0.042)	(0.045)
Ongoing Wars	1.043	1.071	1.054	1.065
	(0.688)	(0.512)	(0.618)	(0.554)
Population†	0.638***	0.614***	0.604***	0.587***
	(0.000)	(0.000)	(0.000)	(0.000)
GDP per capita†	0.939	0.930	0.916	0.914
	(0.597)	(0.542)	(0.471)	(0.460)
Lootable Resources	1.665*	1.684*	1.715*	1.713*
	(0.081)	(0.068)	(0.059)	(0.058)
Territorial Control	2.657***	2.784***	2.696***	2.640***
	(0.001)	(0.000)	(0.000)	(0.000)
N <sub>Conflicts</sub> (N <sub>Failed</sub> ) 189 (55)	189 (55)	189 (55)	189 (55)	
N	578	578	578	578
$\chi^2$	62.22	60.85	56.10	60.00
Log Likelihood	-228.918	-230,466	-231.172	-229.162

#### **Cumulative Incidence Functions**



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- Policy implications

Thank you!

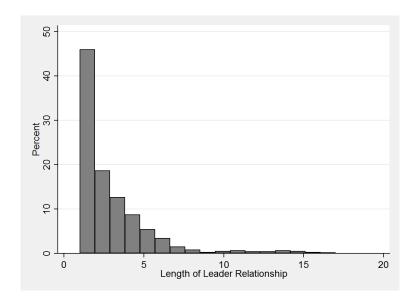
# Supplemental materials

	Ν	Mean	St. Dev.	Min	Max
Relationship	891	2.6	2.5	1	17
Gov't Insider Change	891	0.06	0.2	0	1
Gov't External Change	891	0.13	0.34	0	1
Reb Internal Change	693	0.01	0.12	0	1
Reb External Change	693	0.03	0.17	0	1
Regime Type	874	1 .0	6.3	-9	10
Active Dyads	891	2.7	2.0	1	9
Population†	891	10.3	1.7	6.2	13.9
GDP per capita†	747	6.5	1.3	4.4	10.5
Lootable Resources	889	0.33	0.47	0	1
Territorial Control	878	0.41	0.49	0	1

<sup>†</sup> indicates a logged value

Table: Descriptive Statistics

# Relationship Histogram



## **Endogeneity Concerns**

- Leadership change may be related to the status of the war
- If leader changes happen because the war is going poorly (one side is unlikely to win), it may increase the chances of a settlement
  - Initial efforts to address this by using Inverse Mills Ratios (no obvious instrument)
  - First stage models regime change, IMRs from it used in regular models for outcome
  - No evidence of endogeneity via these tests

## Supplemental materials

	Model 1	Model 2	Model 3
	Relationship	One-Year Effect	Two-Year Effect
Relationship	1.211***	_	_
	(0.002)		
Gov't Insider Change	_	2.947**	2.604**
		(0.026)	(0.046)
Gov't Outsider Change	_	0.283**	0.427**
		(0.041)	(0.033)
Rebel Internal Change	_	2.990**	2.568**
		(0.021)	(0.044)
Rebel External Change	_	1.961	1.475
g .		(0.232)	(0.495)
Regime Type	1.073**	1.059*	1.063*
3.	(0.014)	(0.081)	(0.066)
Ongoing Wars	1.106	1.037	1.069
3 3 1	(0.286)	(0.731)	(0.527)
Population	0.683***	0.655***	0.633***
	(0.000)	(0.001)	(0.000)
GDP per capita	0.911	0.952	0.949
	(0.370)	(0.678)	(0.657)
Lootable Resources	1.777**	1.720*	1.732*
	(0.018)	(0.068)	(0.060)
Territorial Control	2.825***	2.866***	3.167***
	(0.000)	(0.000)	(0.000)
N	725	578	578
$\chi^2$	47.032	63.75	56.10
X Log Likelihood	-337.203	-231.24	-231.17
LOG LIKEIIIIOOG	-331.203	-231.24	-231.11

p-values in parentheses; \*p < 0.10, \*\*p < 0.05, \*\*\*p < 0.01;

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Table : Separating Relationship Measure from Change Indicators

## Supplemental materials

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	Any Gov't, Any Reb	Gov't Out, Any Reb	Gov't Out, Reb Ext
Relationship	1.183**	1.059	1.061
	(0.023)	(0.149)	(0.139)
Insider	3.377**	2.904**	2.873**
	(0.014)	(0.028)	(0.030)
Outsider	0.311*	0.311*	0.316*
	(0.063)	(0.066)	(0.070)
Rebel Internal Change	3.480**	3.551***	3.261**
	(0.010)	(0.009)	(0.013)
Rebel External Change	2.360	2.268	2.278
	(0.136)	(0.131)	(0.129)
Regime Type	1.070**	1.067*	1.067*
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Ongoing Wars	1.043	1.065	1.067
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Population	0.638***	0.621***	0.620***
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GDP per capita	0.939	0.935	0.934
	(0.597)	(0.588)	(0.584)
Lootable Resources	1.665*	1.718*	1.712*
	(0.081)	(0.062)	(0.064)
Territorial Control	2.657***	2.560***	2.538***
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N <sub>Conflicts</sub> (N <sub>Failed</sub> )	189 (55)	189 (55)	189 (55)
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