

Security Transitions

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Motivation

- Since 1960, 115 foreign military occupations have *ended*.
 - Regime change, suppression of armed groups, implementation peace agreements hang in balance during/after withdrawal.
 - Remains important policy issue as a large number of occupations remain active and withdrawals are common.
- How do military occupations end?
 - **Security transitions**: gradual withdrawal of occupying forces and redeployment of weaponry to local allies.
 - Foreign-to-local transitions are difficult to manage & survival of elements that triggered the military occupation in the first place.
 - Crucial for subsequent economic and political development and yet we know little about how interventions end & lack of data.

This paper

- In this paper, we study the security transition from international to local forces in the [Operation Enduring Freedom](#) in Afghanistan (2011-14) (\$1.07 trillion USD)
- Exceptionally granular data, recently declassified.
 - SIGACTS: catalogue of attacks carried against int'l + local forces.
 - ANQAR survey: perceptions of security, territorial control, government performance, presence of INS.
- Empirically, we explore two stages of the transition:
 1. **Announcement**: public announcement of districts to be transitioned from ISAF to Afghan forces (staggered rollout).
 2. **Physical withdrawal**: actual ISAF base closures (variation with respect to logistical hubs).

This paper

- (Many) ambiguous effects:
 - + Shift away from well-trained and resourced military.
 - + Legitimacy of local forces and strength of institutions.
 - Local knowledge, extraction of information.
 - Insurgents might find more difficult to mobilize and extract resources.
 - We find the following pattern
 1. **Announcement**: significant drop in violence and improvement in civilian perception of security.
 2. **Physical withdrawal**: **complete reversal** with increase in violence and perceptions of security.
- ⇒ Consistent with “lying low” strategic behaviour: insurgent drawing forces down until ISAF has transitioned out. Repeated in recent peace deal.

Related literature

- How insurgencies *emerge*

Fearon and Laitin (2003), Collier and Hoeffler (2004), Miguel et al. (2004), Bazzi and Blattman (2014), Berman et al. (2015)

- State capacity is central

Besley and Persson (2009, 2010), Padro i Miguel and Yared (2012), Powell (2013), Gennaioli and Voth (2015), Esteban et al. (2015), Sanchez de la Sierra (2017), Condra et al. (2018)

- Mixed evidence of development interventions

Berman et al. (2011), Fetzer (2014), Beath et al. (2013) vs Crost et al. (2014), Sexton (2016), Nunn and Qian (2014)

- After-war effects

Bellows and Miguel (2006), Blattman (2009), Fearon et al. (2009), Voigtlander and Voth (2012), Jha and Wilkinson, (2012), Vanden Eynde (2015), Cilliers et al. (2016), Bauer et al. (2016)

⇒ Much less on the transition out of the conflict

1. **Background and data**
2. Results: announcement
3. Results: physical withdrawal
4. (Ruling out) mechanisms
5. Conclusion & policy relevance

Measuring the security transition

We build a database that marks two particular points in the security transition:

- **Announcement:** the *official security transfer to ANSF* that was announced in tranches
- **Physical withdrawal:** construct a database of NATO/ ISAF base installation closures and handover ceremonies

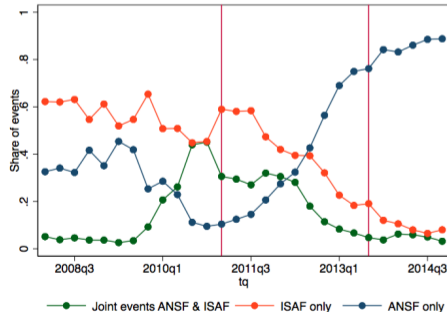
For (1) we can rely on official data, while for (2) we mine DoD documents and online (social) media and conventional media to construct a location specific dates of withdrawal and base handovers.

Key dates in the transition process

- 2001: Start of the intervention in Afghanistan.
- Nov 2009: President Karzai announces the desire to see a complete transition by the end of 2014
US announces that the transition process would start in 2011
- July 2010: Joint Afghan-NATO Inteqal Board (JANIB) established to track district security provision + oversee the transition process
They select the first transition tranche to the Afghan National Security Forces (ANSF), announced in March 2011
- Nov 2011, May 2012, Dec 2012, June 2013: President Karzai announces tranches 2-5
- Dec 2014: transition ceremony

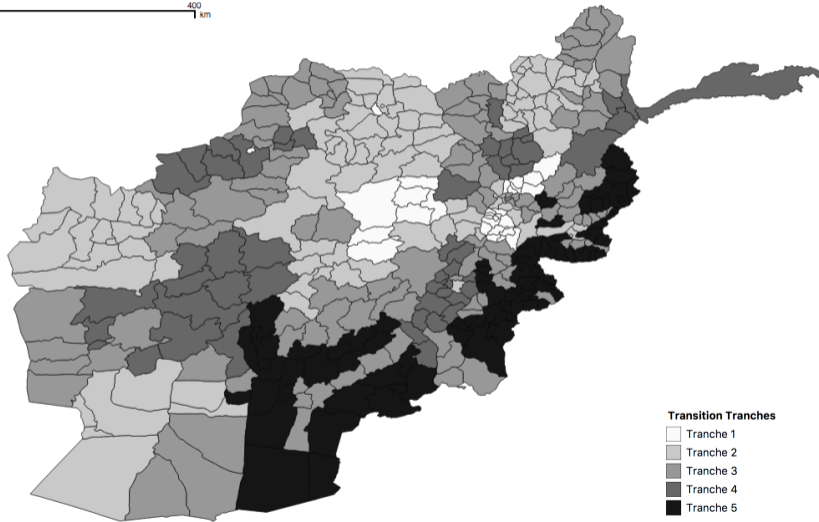
Assignment of districts to transition tranches

- Transition mark a real shift of responsibilities, but did not represent a complete break
- ISAF maintains a supporting and advisory role throughout the process, and throughout the transition the ANSF takes the majority of field operations



Transition tranches

0 400 km



Completion of security transition via withdrawal

- Withdrawal and base handovers: mine online (social) media
 - Throughout ISAF's engagement, up to 140k NATO country troops operated out of estimated 825 physical bases in Afghanistan
 - Identify 338 main facilities regularly mentioned in DoD's Periodic Occupational and Environmental Monitoring Summary (POEMS)
 - Extensive search on social and traditional media for evidence of public handover ceremonies
 - For 170 bases, we were able to identify the district as well as confirm whether they were closed or demolished or handed over to ANSF
 - Aggregate to the district level, and use the last date as the transition indicator

We rely on two main data sources to measure the impact of the security transition:¹

1. **SIGACTS**: administrative data on conflict events, 2005-2014

Approximately 500k georeferenced observations, down to several meters and time-accurate

Catalog of attacked carried against the int'l forces

Mandatory reporting to SIGACTS

2. **ANQAR**: citizens perceptions of safety and security, 2008-2016

ANQAR tracks civilian attitudes toward government forces, anti-government entities, and coalition partners

Data on \approx 370,000 individual respondents, across dozens of waves from 2008 to 2016

¹IPJ, US Central Command, NATO: 2015 and 2017

Summary Stats: SIGACTS/ANQAR

	Mean (1)	Standard Deviation (2)	N (3)
<i>Panel A: District-quarter level, SIGACTS</i>			
All casualties	5.048	15.548	10976
Direct Fire	9.800	43.122	10976
IED Explosion	3.110	10.343	10976
ANSF	0.362	0.481	10556
ISAF base closure	0.221	0.415	10976
<i>Panel B: District-quarter level, ANQAR</i>			
Security improved in village in last 6 months (share)	0.322	0.220	8889
Taliban grown weaker in last 6 months (share)	0.433	0.234	8170
Seen ANA at least monthly in village (share)	0.685	0.324	8661
ANSF brings most security to area (share)	0.507	0.236	8888
Anti-government elements in control (versus govt, share)	0.185	0.226	8889
<i>Panel C: District level</i>			
Travel distance to nearest military airport (cost units)	18785	10305	392

Notes: Observations at the district-quarter level in Panel A (2008-2014) and B (2008-2016); and district-level level in Panel C.

Roadmap

1. Background and data
2. **Results: the onset of the transition**
3. Results: physical withdrawal
4. (Ruling out) mechanisms
5. Conclusion & policy relevance

Difference-in-difference estimation

- Base specification: at the district level

$$y_{i,r,t} = \gamma \times ANSF_{i,t} + \alpha_i + \beta_{r,t} + \eta_i \times t + \epsilon_{i,t}$$

where i indicates district, r the Regional Command and t is the quarter

- District FE (α_i), nonlinear RC trends ($\beta_{r,t}$) and district-specific linear trends ($\eta_i \times t$)
- $ANSF_{i,t}$ switches on when Afghan forces takes over from ISAF
(γ is our coefficient of interest)

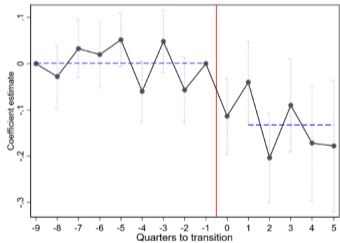
DiD Results (SIGACTS)

	All fatal Events		Direct Fire Attacks		IED Explosions	
	(1)	(2)	(3)	(4)	(5)	(6)
ANSF	-0.134*** (0.032)	-0.096*** (0.031)	-0.131*** (0.036)	-0.064* (0.035)	-0.070** (0.029)	-0.076** (0.029)
Number of Districts	377	377	377	377	377	377
District time trend	No	Yes	No	Yes	No	Yes

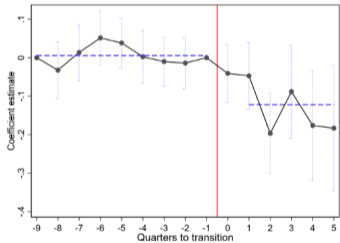
Notes: Regressions at the district-quarter level, covering the period 2008-2014. All regressions include location (i.e. district/gridcell) fixed effects and regional command \times time fixed effects. The dependent variable is expressed as log plus one. Standard errors clustered at the district level and are presented in parentheses, stars indicate *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Event studies (SIGACTS)

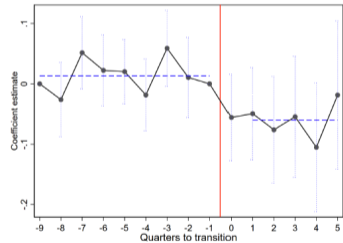
Events with casualties



Direct Fire



IED Explosion



DiD Results (ANQAR)

	Security		ANSF presence and control		
	Improved (1)	Taliban weaker (2)	See ANA Monthly (3)	ANSF brings security (4)	Taliban control (5)
ANSF	0.027* (0.015)	0.025 (0.017)	0.031* (0.018)	0.024* (0.014)	-0.002 (0.013)
Number of Districts	375	375	375	375	375
RC × Time FE	Yes	Yes	Yes	Yes	Yes
District Time Trend	Yes	Yes	Yes	Yes	Yes

Notes: Regressions at the district-quarter level, covering the period 2008-2016. All regressions include district fixed effects, regional command × time fixed effects, and district-specific trends. The dependent variables measure shares of respondents at the district level. Standard errors clustered at the district level and are presented in parentheses, stars indicate *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Roadmap

1. Background and data
2. Results: announcement
3. **Results: physical withdrawal**
4. (Ruling out) mechanisms
5. Conclusion & policy relevance

Completion of security transition

- Unlike the transfer process, which was constrained by five tranches, the decision to close individual bases was highly discretionary
- Timing of the completion of the transition is potentially endogenous to the (perceived) success of the handover to ANSF
- We leverage on logistic constraints to construct an instrument for the base closures
- Scale of the withdrawal logistics is enormous by any standard
Estimated 70,000 vehicles and 120,000 containers (Loven, 2013)
- To make matters worse, Afghanistan is a land-locked country with poor physical infrastructure

Constrained logistical routes



- ⇒ Through Karachi in Pakistan: unreliable and difficult access.
- ⇒ Through North: 3,900m Salang Pass, vulnerable to avalanches and landslides, and restricted to no-weapons use.

Logistical challenge to fly out most equipment



⇒ In total, 70,000 coalition military vehicles need to be moved.

Logistical challenge to fly out most equipment



⇒ Significant use of fixed and rotary wing capacity to consolidate non-vehicle borne material around main exit points near main military air hubs.

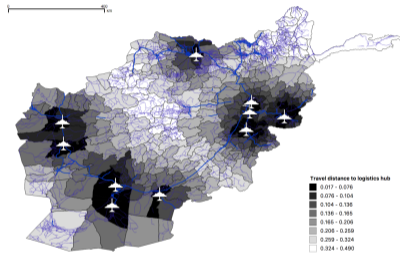
Logistical challenge to fly out most equipment



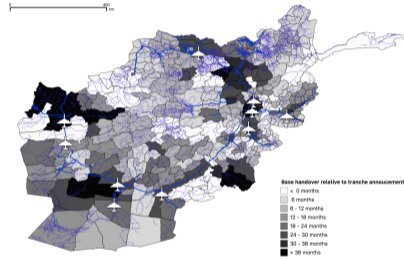
⇒ Heavy-duty Boeing C-17 Globemasters provided up to 7 trips a day between Afghanistan and Kuwait. Led to consolidation around the air-ready bases which served as transport hubs

Base closures

Distance to nearest logistic hub



Last base closure, relative to tranche date



- We build a variable capturing travel distances on the least cost path which serves as an instrumental variable.
- The nearest airport serves as exit point is strong correlate of timing of base/district handover competition.

Withdrawal

- Main specification:

$$y_{d,t} = \kappa \times \text{ISAF base closure}_{d,t} + \gamma \times \text{ANSF}_{d,t} + \beta_t \times X_d + \eta_d \times t + \epsilon_{d,t}$$

where

$\text{ISAF base closure}_{d,t}$ is an indicator if ISAF base was closed in a district-time (instrumented by the travel distance to military airport \times post-2011)

$\text{ANSF}_{d,t}$ is the indicator for the transition to ANSF

District-time linear effects, and X_d are controls such as distance to the border (more demanding specification has tranche-specific fixed effects)

Distance to military airport and base closures, first stage

	ISAF Base Closure		
	(1)	(2)	(3)
Travel distance to military airport \times Post 2011	1.728*** (0.237)	1.898*** (0.235)	2.007*** (0.236)
ANSF	0.193*** (0.028)	0.190*** (0.029)	
Number of Grid Cells			
IV control set \times time FE	No	Yes	Yes
Tranche \times time FE	No	No	Yes

Notes: Regressions at the district-quarter level, covering the period 2008-2016. All regressions include district fixed effects, regional command \times time fixed effects, and district-specific trends. The additional IV control set includes the distance to any airport and to the province border. The dependent variable is a binary indicator for the last (observed) ISAF base closure at the district level. Standard errors clustered at the district level and are presented in parentheses, stars indicate *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Effect of withdrawal on conflict outcomes (SIGACTS)

	All Casualty Events		Direct Fire Attacks		IED Explosions	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: District level – OLS</i>						
ISAF base closure	0.002 (0.035)	-0.002 (0.037)	-0.006 (0.040)	0.001 (0.043)	-0.010 (0.029)	-0.010 (0.031)
ANSF	-0.101*** (0.031)		-0.056 (0.036)		-0.093*** (0.029)	
Number of Districts	377	377	377	377	377	377
Tranche × time FE	No	Yes	No	Yes	No	Yes
<i>Panel B: District level – IV</i>						
ISAF base closure	0.656** (0.305)	0.613** (0.294)	0.581* (0.324)	0.506 (0.308)	0.768** (0.300)	0.734** (0.284)
ANSF	-0.202*** (0.059)		-0.146** (0.063)		-0.213*** (0.061)	
Weak IV statistic	48.8	57.9	48.8	57.9	48.8	57.9
Number of Districts	377	377	377	377	377	377
Tranche × time FE	No	Yes	No	Yes	No	Yes

Notes: Regressions at the district-quarter level, covering the period 2008-2014. All regressions include district fixed effects, regional command × time fixed effects, and district-specific trends. The instrument used for ISAF base closure is the interaction of the travel distance to the nearest military airport and an indicator for the post-2011 period. The IV control set includes distance to any airport × time fixed effects, and distance to province borders × time fixed effects. Outcomes are measured as log plus 1. Standard errors clustered at the district level and are presented in parentheses, stars indicate *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Effect of withdrawal on conflict outcomes (ANQAR)

	Security		ANSF presence and control		
	Improved (1)	Taliban weaker (2)	See ANA Monthly (3)	ANSF brings security (4)	Taliban control (5)
<i>Panel A: District Level</i>					
ISAF base closure	-0.177*** (0.054)	-0.205*** (0.056)	0.160** (0.078)	-0.121** (0.056)	-0.067 (0.057)
ANSF	0.062*** (0.019)	0.061*** (0.020)	-0.008 (0.022)	0.044** (0.019)	0.009 (0.018)
Weak IV statistic	63.5	63.6	63.4	63.5	63.5
Number of Districts	375	375	375	375	375
<i>Panel B: District Level, Tranche FE</i>					
ISAF base closure	-0.171*** (0.053)	-0.184*** (0.055)	0.132* (0.075)	-0.127** (0.053)	-0.062 (0.056)
Weak IV statistic	71.7	72.2	71.7	71.7	71.7
Number of Districts	375	375	375	375	375

Notes: Regressions at the district-quarter level, covering the period 2008-2016. All regressions include district fixed effects, regional command \times time fixed effects, and district-specific trends. The instrument used for ISAF base closure is the interaction of the travel distance to the nearest military airport and an indicator for the post-2011 period. The IV control set includes distance to any airport \times time fixed effects, and distance to province borders \times time fixed effects. The dependent variables measure shares of respondents at the district level. Standard errors clustered at the district level and are presented in parentheses, stars indicate *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Robustness of main results

- Consistent to using novel conflict network displacement estimation
- Consistent to using a matched distant gridcell pair approach (10 km × 10 km). (pop, elevation, terrain, road conn., land cover)
- Tranche-by-tranche effects specification suggests security gains not driven by single cohort.
- Alternative outcomes: other types of violence; dummy outcomes at the grid cell level.
- Estimate pre-treatment effects as a placebo test.
- No evidence of changing pattern in survey participation

Roadmap

1. Background and data
2. Results: announcement
3. Results: physical withdrawal
4. **(Ruling out) mechanisms**
5. Conclusion & policy relevance

Mechanisms

- **Mechanism 1:** transfer of security to the ANSF could reduce violence because the ability of the Taliban to mobilize was weakened by the ISAF withdrawal.
 - Inconsistent with rise in violence after the base transitions
- **Mechanism 2:** complementarities between ANSF and ISAF
 - Troop effort or efficiency rises with the security transfer and falls with base closures
 - Monitoring, technical support, targeted aid allocation to transition districts, ...
 - We do not find evidence of increase in misbehaviour by ANSF, perceptions of complementarity or aid timed with the transition process
 - We also look at tactical support activities which are generally correlated with violent events – but the response does not change with respect to the transition stage
- **Mechanism 3: lying low as strategic response**

Mechanisms: Lying Low

- This was a distinct possibility at the time:

If you tell the enemy that you're leaving on a date certain, unequivocally, then that enemy will wait until you leave." – John McCain (2010)

"They cannot wait us out. They cannot defeat us. And they cannot escape this choice." – Hillary Clinton (2011)

"If I was an insurgent, I would wait until the Americans left and try my luck with the ANSF" – Capt. Michael Wallace (Washington Post, 2014)

- Facts: surge in violence after 2014 and *return* of US troops in 2017

Mechanisms: Lying Low

- Lying low or waiting it out does not in itself imply reduction in violence that matches the transition patterns!
 - The Taliban could wait things out across Afghanistan as soon as the 2014 withdrawal target is announced.
- Reductions in violence after the transition suggest *strategic behaviour*, for example in a signaling game:
 - Lying low is costly: signals to the local population, ability to defend.
 - If there is some discretion left about the speed of the withdrawal, incentive to make the transition look successful until troops leave.
 - Pooling equilibrium when capacity of ANSF versus Taliban is unobservable to ISAF (see model).

Mechanisms: Lying Low

The signaling strategy appears to have worked:

“During the reporting period, the ANSF has performed effectively in the field, losing no major bases or district centers to the insurgency and protecting the majority of the Afghan population. Although challenges remain, the ANSF demonstrated an increasing level of effectiveness.”

– DoD, July 2013 (relying on SIGACTS data used in study)

Roadmap

1. Background and data
2. Results: announcement
3. Results: physical withdrawal
4. (Ruling out) mechanisms
5. **Conclusion & policy relevance**

Conclusion & policy relevance

- Our findings suggest that insurgents acted strategically around the withdrawal
 - Violence decreased after the announcement of the transition, but increased after the physical withdrawal of troops.
- The experience of Afghanistan is not unique:
 - 1989 Soviet transfer of power to Afghan forces
 - The end of US-led operations in Iraq in 2011
 - Current peace negotiation with Taliban.
- Cases reveal similar patterns of insurgent violence declining during the initial phase of the security transition and surging after the final withdrawal of foreign troops.
- Suggest that the patterns of violence reflect a broader dynamic as foreign wars end. Insights could motivate more effective training of local troops and guide assessment of battle readiness before, during, and after security transition.

Appendix

Displacement

- Insurgents' strategic behaviour in time as well as **in space**: when and where to attack
 - Not clear how insurgency displaces in space when districts are transitioned
 - Especially as obfuscation might be of strategic interest
- To shed light on this issue, we apply the paper of [de Paula, Rasul and Souza \(2019\)](#)
 - Allows to recover the network dependencies using observable panel data
 - We assess: *(i)* the extent to which spillovers confound the identification of the diff-in-diff results; *(ii)* explain the presence, magnitude and mechanisms behind displacement

Displacement

- Diff-in-Diff

$$y_{i,r,t} = \gamma ANSF_{i,t} + [\text{FEs}] + \epsilon_{i,t}$$

where i is district, r is regional command and t is a quarter.

[FEs] = district, district linear trends, and regional command by time

- Diff-in-Diff with spillovers

$$y_{i,r,t} = \underbrace{\rho \sum_{j=1}^N w_{i,j} y_{j,r,t}}_{\text{endogenous effects}} + \gamma ANSF_{i,t} + \underbrace{\delta \sum_{j=1}^N w_{i,j} ANSF_{j,t}}_{\text{exogenous effects}} + [\text{FEs}] + \epsilon_{i,t}$$

where $w_{i,j}$ represents the extent to which district j affects i

Displacement

- Diff-in-Diff with spillovers

$$y_{i,r,t} = \underbrace{\rho \sum_{j=1}^N w_{i,j} y_{j,r,t}}_{\text{endogenous effects}} + \gamma ANSF_{i,t} + \underbrace{\delta \sum_{j=1}^N w_{i,j} ANSF_{j,t}}_{\text{exogenous effects}} + [\text{FEs}] + \epsilon_{i,t}$$

- Also a **spatial econometric model**, but with **unknown** $w_{i,j}$
- Two perspectives:
 - (i) Evaluate γ , the main treatment effects, controlling for spillovers
 - (ii) Shed light on the mechanisms behind the displacement in $w_{i,j}$

DiD Results: Handover

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
All Fatal Events	ANSF transition effect (γ)	-0.095*** (0.031)	-0.119*** (0.033)	-0.109*** (0.029)	-0.153*** (0.032)	-0.102*** (0.026)	-0.101*** (0.025)	-0.099*** (0.025)	-0.098*** (0.025)	-0.088*** (0.025)	-0.102*** (0.026)
	Exogenous effects (δ)		0.041 (0.051)	0.030 (0.063)	0.119** (0.046)	0.015 (0.153)	0.383 (0.389)	-0.146 (0.185)	-0.447*** (0.027)	-0.554*** (0.026)	0.039 (.060)
	Endogenous effects (ρ)										0.039 (0.554)
Direct Fire Attacks	ANSF transition effect (γ)	-0.066* (0.035)	-0.064*** (0.027)	-0.074*** (0.026)	-0.073** (0.034)	-0.065** (0.027)	-0.066** (0.027)	-0.064** (0.027)	-0.019 (0.027)	-0.012 (0.026)	-0.066** (0.028)
	Exogenous effects (δ)		-0.143 (0.197)	-0.031 (0.056)	0.016 (0.049)	-0.035 (0.163)	0.032 (0.415)	-0.143 (0.197)	-0.477*** (0.030)	-0.615*** (0.028)	0.004 (0.042)
	Endogenous effects (ρ)										0.001 (0.226)
IED Explosions	ANSF transition effect (γ)	-0.074** (0.029)	-0.086*** (0.029)	-0.074*** (0.026)	-0.104*** (0.029)	-0.083*** (0.023)	-0.082*** (0.022)	-0.081*** (0.023)	-0.074*** (0.022)	-0.068*** (0.022)	-0.088*** (.027)
	Exogenous effects (δ)		0.010 (0.046)	-0.031 (0.056)	0.052 (0.041)	0.056 (0.136)	-0.121 (0.346)	-0.036 (0.164)	-4.482*** (0.027)	-0.576*** (0.026)	0.002 (.087)
	Endogenous effects (ρ)										-0.386 (0.644)
Number of districts		392	392	392	392	392	392	392	392	392	392
District time trend		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Spillover specification		-	Neighbor dist.	Neighbor dist. ²	Neighbor prov.	Dist. < 250km	Dist. < 500km	Driving dist. < 500km	Flexible, zero beyond 500km	Flexible, zero beyond 1000km	Flexible, zero beyond 1000km
Edges that are supposed to be known		-	100%	100%	100%	100%	100%	100%	27.51%	17.35%	17.35%

Notes: Column (1): regressions at the district-quarter level, covering the period 2008-2014, including district and regional command x time fixed effects. Dependent variable is expressed as log plus one. Standard errors clustered at the district level and are presented in parentheses. Columns (2)-(7) are spatial panel regressions with spatial neighboring matrix assumed to be known and given, respectively, by neighboring districts, neighboring district squared, neighboring provinces, geodesical distance smaller than 250km and 500km and driving distance smaller than 500km. Specifications reported in columns (7)-(10) have estimated and flexible spatial neighboring matrix, following de Paula et al. (2019), where weights between districts with driving distance beyond 500km and 1000k are assumed to be equal to zero, which corresponds to 27.51% and 17.35% of all weights. Stars indicate *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

DiD Results: Physical Withdrawal

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
All Fatal Events	Base closure (gamma)	.765** (0.336)	1.452*** (0.510)	1.676*** (0.383)	0.847** (0.337)	0.947*** (0.254)	0.496* (0.264)	0.771*** (0.220)	0.501** (0.216)	0.540** (0.215)	0.533*** (0.179)
	Exogenous effects (delta)		-0.981 (0.613)	-1.689*** (0.553)	-0.216 (0.420)	-1.657* (0.926)	-4.090 (2.747)	-2.932** (1.352)	4.262*** (0.236)	4.701*** (0.230)	2.713*** (0.281)
	Endogenous effects (rho)										0.587*** (0.071)
Direct Fire Attacks	Base closure (gamma)	.787** (0.397)	0.951** (0.408)	1.816*** (0.343)	0.547 (0.359)	1.006*** (0.271)	0.725*** (0.281)	0.885*** (0.235)	0.387* (0.231)	0.679*** (0.228)	0.628*** (0.191)
	Exogenous effects (delta)		-0.264 (0.590)	-1.404*** (0.495)	0.417 (0.447)	-1.467 (0.987)	-1.432 (2.927)	-4.398*** (1.440)	5.006*** (0.276)	5.480*** (0.259)	2.900*** (0.306)
	Endogenous effects (rho)										0.697*** (0.063)
IED Explosions	Base closure (gamma)	1.109*** (0.364)	1.776*** (0.456)	1.816*** (0.343)	1.420*** (0.301)	1.051*** (0.227)	0.789*** (0.236)	1.018*** (0.197)	0.529*** (0.195)	0.645*** (0.193)	0.377** (0.166)
	Exogenous effects (delta)		-1.008* (0.548)	-1.404*** (0.495)	-0.658* (0.375)	-0.235 (0.829)	-4.275* (2.457)	0.011 (1.210)	3.966*** (0.223)	3.858*** (0.206)	1.474*** (0.292)
	Endogenous effects (rho)										0.692*** (0.070)
Number of districts		392	392	392	392	392	392	392	392	392	392
Tranche x time FE		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Spillover specification		-	Neighbor dist.	Neighbor dist. ²	Neighbor prov.	Dist. < 250km	Dist. < 500km	Driving dist. < 500km	Flexible, zero beyond 500km	Flexible, zero beyond 1000km	Flexible, zero beyond 1000km
Edges that are supposed to be known		-	100%	100%	100%	100%	100%	100%	27.51%	17.35%	17.35%

Notes: Column (1): regressions at the district-quarter level, covering the period 2008-2014, including district and regional command x time fixed effects. Dependent variable is expressed as log plus one. Standard errors clustered at the district level and are presented in parentheses. Columns (2)-(7) are spatial panel regressions with spatial neighboring matrix assumed to be known and given, respectively, by neighboring districts, neighboring district squared, neighboring provinces, geodesical distance smaller than 250km and 500km and driving distance smaller than 500km. Specifications reported in columns (7)-(10) have estimated and flexible spatial neighboring matrix, following de Paula et al. (2019), where weights between districts with driving distance beyond 500km and 1000k are assumed to be equal to zero, which corresponds to 27.51% and 17.35% of all weights. Stars indicate *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.