

Good Intentions Gone Bad

Dodd-Frank 1502 and Conflict in Africa's Great Lakes Region

Jeffrey R. Bloem

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Background

- ▶ Most estimates: Between 2 and 6 million people have been killed due to violent conflict in the Democratic Republic of Congo (DRC) and surrounding countries within the past two decades
- ▶ Narrative: Armed groups control mineral mines and earn a substantial portion of their revenues through exporting gold, tin, tantalum, and tungsten
- ▶ In 2010: U.S. lawmakers design legislation with the intention of severing the connection between U.S. consumers and armed rebel groups

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- ▶ The passage of this legislation remains controversial
 - ▶ U.S. companies: Compliance costs levy an undue burden on the U.S. manufacturing industry (between \$71 million and \$16 billion)
 - ▶ Other critics: The policy is built on the faulty assumption that minerals *cause* conflict

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- ▶ Using a difference-in-differences empirical strategy:
 - ▶ In years immediately following passage of the legislation the prevalence of conflict increased slightly (5%) and then decreased (13%)
 - ▶ After the legislation was fully implemented the prevalence of conflict increased dramatically (between 24 and 28%)

Possible Mechanism

When his father could no longer make enough money from the tin mine, when he could no longer pay for school, Bienfait Kabesha ran off and joined the militia. It offered the promise of loot and food, and soon he was firing an old rifle on the front lines of Africa's deadliest conflict. He was 14.

- *The Washington Post* (2014)

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- ▶ Provide suggestive insight into the underlying causes of conflict in the DRC and surrounding countries
 - ▶ Supports the notion that minerals may not necessarily cause conflict
- ▶ Highlight the potential and limitations of conflict event data sets

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- ▶ Dodd-Frank 1502 is a transparency measure that creates a reporting requirement for all U.S. publicly traded companies
- ▶ Companies must publicly disclose whether any gold, tin, tantalum, and tungsten in their supply chain originated in mines controlled by armed groups
- ▶ The full list of “covered countries” includes:
 - ▶ Angola, Burundi, Central African Republic, the Republic of Congo, the Democratic Republic of Congo, Rwanda, South Sudan, Tanzania, Uganda, and Zambia

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- ▶ April 2015: Federal appeals court strikes down some aspects of the reporting requirements and leaves others in place

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 - ▶ The *Enough Project*: Armed groups earned \$158 million from conflict minerals in 2008 alone
- ▶ Therefore, if revenues from minerals are reduced then the prevalence of conflict will fall
- ▶ Mimics the “name and shame” mechanism used by the *Kimberly Process* re: “blood diamonds”

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 - ▶ Slow economic growth also linked to the prevalence of conflict (Blattman and Miguel 2010)

Theory of Change

Summary

Inputs	Outputs	Outcomes	Impacts
<i>Panel (a): Intended consequences</i>			
Mandatory reporting requirements	Less buying of minerals from mines that support armed groups	Less revenue earned by armed groups Less resources to finance armed conflict (less able to rebel)	Less conflict
<i>Panel (b): Unintended consequences</i>			
Mandatory reporting requirements	Less buying of minerals from mines in DRC and surrounding countries, in general	Less revenue earned by armed groups and less income earned by miners More poverty and inequality (more motivation to rebel)	More conflict

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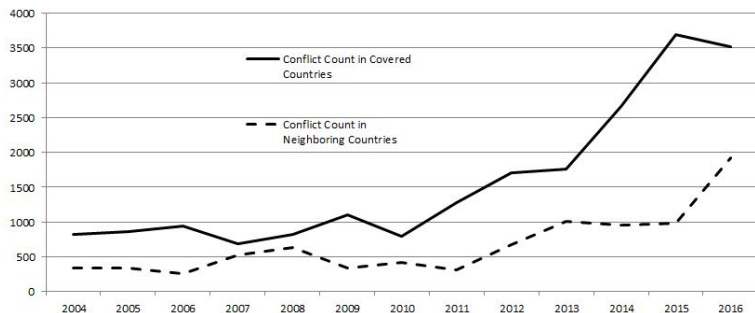
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- ▶ Country level controls from the World Bank's WDI

Estimation Strategy

$$y_{cit} = \alpha + \beta * T_t + \gamma * G_{ci} + \delta(T_t * G_{ci}) + \varphi * X_{ct} + \epsilon_{cit} \quad (1)$$

- ▶ y_{cit} measures the inverse hyperbolic sine of conflicts in country c in administrative area i at time t .
- ▶ T_t Time dummy
- ▶ G_{ci} Covered status dummy
- ▶ δ measures the DID estimate
- ▶ \mathbf{X}_{ct} represents a vector of country-level control variables
- ▶ ϵ_{cit} represents random error.

Identification Strategy



Core Results

	2011 (1)	2012 (2)	2013 (3)	2014 (4)	2015 (5)	2016 (6)
<i>Panel (a)</i>						
Group	0.0602 (0.0315)	0.0602 (0.0315)	0.0602 (0.0315)	0.0602 (0.0315)	0.0602 (0.0315)	0.0602 (0.0315)
Time	-0.0448** (0.0168)	0.1056*** (0.0199)	0.2720*** (0.0252)	0.2305*** (0.0272)	0.1948*** (0.0253)	0.3185*** (0.0309)
DID Estimate	0.0576** (0.0284)	-0.0247 (0.0316)	-0.1401*** (0.0377)	-0.0095 (0.0417)	0.2606*** (0.0435)	0.2165** (0.0482)
Constant	0.2151*** (0.0208)	0.2151*** (0.0208)	0.2151*** (0.0208)	0.2151*** (0.0208)	0.2151*** (0.0208)	0.2151*** (0.0208)
Country Level Controls?	No	No	No	No	No	No
R-squared	0.0049	0.0050	0.0173	0.0191	0.0501	0.0599
Obs.	3664	3664	3664	3664	3664	3664
<i>Panel (b)</i>						
Group	0.0616 (0.0341)	0.0517 (0.0343)	0.0444 (0.0350)	0.0301 (0.0352)	-0.0526 (0.0371)	-0.0790** (0.0381)
Time	-0.0527** (0.0169)	0.0857*** (0.0199)	0.2448*** (0.0254)	0.1985*** (0.0278)	0.1445*** (0.0254)	0.2441*** (0.0298)
DID Estimate	0.0591** (0.0284)	-0.0210 (0.0314)	-0.1347*** (0.0376)	-0.0010 (0.0418)	0.2799*** (0.0441)	0.2474*** (0.0489)
Constant	0.1005** (0.0452)	0.1043*** (0.0468)	0.1399** (0.0503)	0.2007*** (0.0545)	0.4266*** (0.0646)	0.4823*** (0.0674)
Country Level Controls?	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.0521	0.0657	0.0590	0.0461	0.0856	0.1040
Obs.	3664	3664	3664	3664	3664	3664

*Notes: The dependent variable in each of these regressions is the inverse hyperbolic sine of the number of conflict events, which behaves like the logarithmic function but allows for zeros. Robust standard errors are clustered at the 1st sub-national geographic level within each country. Statistical significance is represented through p-values: **p<0.01 and *p<0.05. Country level controls include population and HIV prevalence.*

Discussion

... Western advocacy efforts on conflict minerals have thus far made life more difficult for many Congolese while failing to stop the violence they purport to address. Instead, these efforts have thus far increased smuggling, lead armed groups to seek other sources of revenue, and left up to 2 million Congolese artisanal miners out of work. As is the case with the Kimberly Process, good intentions and the belief that attacking the perceived economic roots of conflict was a path to peace have largely proved ineffective.

- Seay (2012)

Robustness Check

	Time Trend	95% Confidence Interval	Difference
<i>Panel (a): Pre-legislation</i>			
Comparison Countries	-0.0062 (0.0052)	(-0.0164, 0.0039)	
Covered Countries	-0.01642** (0.0050)	(-0.0262, 0.0065)	-0.0102
<i>Panel (b): Post-legislation</i>			
Comparison Countries	0.0429*** (0.0052)	(0.0327, 0.0531)	
Covered Countries	0.0838*** (0.0050)	(0.0739, 0.0937)	0.0409***
R-squared	0.0702		
Obs.	23,816		

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Limitations

- ▶ Data quality
 - ▶ ACLED is widely regarded as a useful and reliable source of data for conflict studies (Raleigh et al. 2010; Weidman 2014; Maystadt et al. 2014)
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 - ▶ Next step: Perform additional robustness checks to control for the potential impact of the ongoing trend in conflict events

Conclusion

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Conclusion

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 - ▶ Strongest results occur in 2015 and 2016 with roughly a 25% increase in the prevalence of conflict plausibly caused by Dodd-Frank 1502
 - ▶ Question the assumption that minerals *cause* conflict
- ▶ Highlights the need for development assistance targeted to those who are harmed by the consequences of mandatory reporting requirements