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Our original Minerva research project on the causes of maritime piracy made notable theoretical, empirical and data collection advances. Building on this research, in particular our exploratory expert surveys on piracy in Somalia, Nigeria, Indonesia, and the Philippines, we became interested in the implications of piracy for political violence. We extended our original Minerva research project by conducting a highly spatially and temporally disaggregated examination of the relationship between lootable resources, such as the gains from piracy, illicit drugs, or the theft of natural resources and their effect on conflict intensity and duration. These analyses offer critical insights into the sustainability of insurgencies.

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Office of Naval Research (ONR)

Research Performance Progress Report

PI Brandon Prins, University of Tennessee
Co-PI Ursula Daxecker, University of Amsterdam
Award #N00014-16-1-3136
Maritime Crime in Civil Conflict: An Extension of the Maritime Piracy Event &
Location Data Project

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Contact Information

Project title: Maritime Crime in Civil Conflict: An Extension of the Maritime Piracy Event & Location Data Project

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Research Problem

Our original Minerva research project on the causes of maritime piracy made notable theoretical, empirical and data collection advances. Building on this research, in particular our exploratory expert surveys on piracy in Somalia, Nigeria, Indonesia, and the Philippines, we became interested in the implications of piracy for political violence. We extended our original Minerva research project by conducting a highly spatially and temporally disaggregated examination of the relationship between lootable resources, such as the gains from piracy, illicit drugs, or the theft of natural resources and their effect on conflict intensity and duration. These analyses offer critical insights into the sustainability of insurgencies. Indeed, such analyses help answer the fundamental question at the heart of the resource curse puzzle; exactly how does resource wealth increase the risk of insurgency? Does it do so by financing rebels, by weakening state institutions, or by strengthening a country's currency leading to export declines (Ross 2013)? We established a link between piracy and conflict, while controlling for other explanations, which lends more support to rebel-centered explanations of the resource curse. Our supplemental research project collected data on the spatial location of natural resource extraction, local governance capacity, maritime piracy, and conflict events in a small number of countries (i.e., Nigeria, Somalia, and Indonesia). Unlike an examination at the country-level, spatially disaggregated analyses allow us to assess more accurately whether conflict events within a given area are affected by lootable resource production in the same area. We also examine local governance capacity in these same three countries and explore how capacity relates to crime, conflict and maritime piracy.

Project Goals

Goals	Status
Conduct micro-level analyses of the effect of piracy on civil conflict	Complete
Build sub-state datasets on piracy in Indonesia, Somalia, and Nigeria	Complete
Explore relationship between piracy and civil conflict duration	Complete
Explore relationship between piracy and civilian victimization during civil war	Complete
Forecast piracy globally and in specific country contexts	Complete
Investigate sub-national relationship between local governance capacity and maritime piracy	Complete

Research Accomplishments

Scientific Progress & Key Findings
- An increase in pirate attacks leads to an increase in conflict intensity in civil war. Piracy provides revenue for insurgent groups that can be used to buy weapons and pay fighters. The effects we find for piracy are larger than those of other lootable resources.
- We examine the relationship between piracy and conflict duration. Extant research shows that lootable resources prolong civil war. Research also shows that stronger rebels shorten civil conflict by bringing the regime to the negotiating table. We find that strong rebels with access to lootable resources, such as proceeds from piracy, fight longer wars. It appears that access to the valuable resource incentivizes continued fighting.
- We find that piracy emerges in weak countries, but pirates do not necessarily locate in the weakest parts of weak countries. Local governance and infrastructure enable illicit markets and so pirates find havens where black markets can flourish and security forces are weak or can be bribed.
- Our evidence from conflicts in coastal African and Southeast Asian states from 1993-2010 shows that maritime piracy increases conflict intensity, and that the inclusion of dynamic factors helps improve the predictive performance of empirical models of conflict events. Further, our results imply that sustained pirate activity can lengthen civil war. Effective conflict resolution strategies must therefore recognize the resource bases of fighting to achieve lasting political solutions to violent conflicts.
- We create sub-national (grid cell) datasets of Indonesia, Somalia, and Nigeria (data available from authors). We use these datasets to explore the relationship between local governance and maritime piracy. We find that economic development and political corruption go hand in hand to facilitate maritime piracy. These are the first analyses that cross-nationally compare how sub-national environments influence pirate operations.

Piracy Trends in 2015
- Global piracy counts in 2015 are down over 40% from 2011 but held nearly constant from 2014.
- Although total piracy counts are down in 2015, the success rate of attacks is at the highest level (88%) since reporting began in the early 1990s.
- Greater Gulf of Aden piracy drops dramatically from 2011 (152 incidents) to 2015 (0 incidents).
- Piracy in Indonesian waters increases by over 50% from 2011 to 2014 but then drops 7% in 2015.
- Nigerian piracy increases by over 160% from 2011 to 2013, but drops by 40% in 2014 and drops in 2015.
- Bunkering of transport oil now a threat not only in Guinea Gulf waters but in SE Asia as well.
- Success rate of pirate attacks is on average around 80% in Indonesian waters and around 74% in Nigerian waters. In 2015 the success rate in Indonesian waters was 90% but only 65% in Nigerian waters.

Piracy Trends in 2016
- Global piracy counts in 2016 down approximately 22% from 2015
- Piracy in Greater Gulf of Aden remains nearly non-existent
- Piracy in Indonesian waters down about 100% in 2016 compared to 2015.
- The spike in piracy in Vietnamese waters in 2015 appears to have disappeared and incidents are down to below normal levels (only 3 incidents so far in 2016).
- Piracy increased significantly in the Americas, going from 8 incidents in 2015 to 27 in 2016. Most incidents occur while ships are stationary and so mostly armed robbery. Callao Port in Peru was most pirated port in the world.
- Piracy in Filipino became more violent. Attacks against ships by pirates linked to Abu Sayyaf increased and appears to be a funding arm of the insurgent group.
- Piracy in Nigerian waters has dramatically increased in 2016, doubling from 2015. This is one of the most dangerous spots for piracy in the world.
- 18-year low in the number of piracy attacks against steaming ships.

Piracy Trends in 2017

- Global piracy counts down 25% in 2017 compared to 2016. Piracy continues to decline globally.
- Pirate attacks continue to drop in Indonesia, but we see increases in the Philippines, Bangladesh, and Nigeria
- Gulf of Guinea piracy is the most spot to watch. Pirate attacks have become more violent and kidnappings have become more commonplace. These are dangerous waters.
- There has been a large increase in the number of pirate attacks off Venezuela, mostly a response to the political, economic and social unrest. Most attacks are opportunistic, directed at yachts.
- The use of IMB, IMO, and ASAM data to build our MPELD dataset continues to be valuable. We add approximately 25-35% more observations each year by curating information from all three sources.

Conclusions: *Potential Impact on DoD Capabilities and Broader Implications for National Defense*
Maritime piracy represents a post-Cold War challenge to U.S. and international security and remains underexplored. Yet understanding the incidence and evolution of maritime piracy in multiple contexts is essential for developing effective government policy and clarifying public perceptions of the pirate threat. In order to craft effective counter-piracy strategies, governments need to know where and why incidents are occurring, but also how pirate groups are organized and carry out their attacks. Improving our understanding of the determinants of piracy thus has several implications for national defense. Our research also explores both the securitization of the US relationship with Africa and other under-developed countries and connections between piracy and insurgent and terrorist groups. Importantly, our recent findings suggest that counter-piracy efforts have additional benefits, such as reducing conflict violence by eliminating a funding source for insurgents. While

substitution effects for forms of resource appropriation not included in our model (e.g. petty crime) remain possible, our results for oil and diamonds show that insurgents cannot easily replace loot from piracy with gains from other natural resources. Further, we find that governance voids at the sub-national level do not necessarily associate with piracy. Pirates find sanctuary in places where infrastructure exists for markets to function and local elites can be bribed to look the other way. Our evidence suggests that economic development and state building will not necessarily drive away pirates, at least not initially. At first, improvements in governance and infrastructure may provide the very conditions that make piracy viable. In the long-run, the US government and international organizations must work closely with local actors to improve infrastructure, eliminate corruption, and weaken ties between criminal organizations and local elites.

Appendix
Outreach Activities
Sharable data resources to be generated
- Global Piracy Incidents Database (GPI) – Data on piracy events recorded at the incident level by event, by time, and by country. Updating dataset for 2017.
- Maritime Piracy Event and Location Dataset (MPELD) – Geo-spatial coding of piracy incidents and important correlates of piracy. Updating dataset for 2017.
- Maritime Piracy Mapping Application (MPMap)
- Nigerian Monthly Piracy Dataset – Piracy data at the month level for Nigeria.
- Sub-national maps of Indonesia, Somalia, and Nigeria that code piracy incidents, infrastructure, weather, and demographic conditions
- Grid-cell datasets of Indonesia, Somalia, and Nigeria that code information on local governance, piracy, infrastructure, and weather.

Publications through this Minerva research
- Brandon Prins, Ursula Daxecker & Anup Phayal. "What do Pirates Want? To Steal Riches at Sea So they can Pay for Wars on Land." Washington Post, January 25, 2017. https://www.washingtonpost.com/news/monkey-cage/wp/2017/01/25/what-do-pirates-want-to-steal-riches-at-sea-so-they-can-pay-for-wars-on-land/?utm_term=.890980e2bd85
- Brandon Prins & Ursula Daxecker. 2017. "Maritime Piracy and Foreign Policy." *Oxford University Handbook of Foreign Policy*. Cambridge: Oxford University Press.
- Ursula Daxecker & Brandon Prins. 2017. "Financing Rebellion: Piracy as a Rebel Group Funding Strategy." With Ursula Daxecker. Published in special issue of the *Journal of Peace Research* on forecasting.
- Ursula Daxecker & Brandon Prins. 2016. "The Politicization of Crime: Electoral Competition and the Supply of Maritime Piracy in Indonesia." With Ursula Daxecker. *Public Choice* 169 (3-4): 375-393.

Works in Progress
- Ursula Daxecker, Anup Phayal, & Brandon Prins. 2017. "Fuelling Rebellion: Maritime Piracy and the Duration of Civil War." Working paper. Currently under review.
- Ursula Daxecker & Brandon Prins. 2017. *Pirate Lands: State Capacity and Maritime*

Piracy. Working book manuscript. Finishing final revisions and then will send to Oxford University Press for review.
- Ursula Daxecker, Jessica di Salvatore, Anup Phayal & Brandon Prins. 2017. "Introducing a New Dataset on Maritime Piracy: MPELD." Working paper.

External briefings related to this Minerva research (excluding academic conferences)

- 2018 Global Security Program. University of Glasgow, October 10
- 2018 Royal Netherlands Institute of Southeast Asian and Caribbean Studies, University of Leiden, June 21
- 2018 Political Economy and Transnational Governance seminar, April 15
- 2018 Workshop Beyond Political Violence, University of Essex, February 27
- 2017 Department of Political Science, Michigan State University, April 21.
- 2016 Special workshop on State Capacity and Crime." University of Amsterdam, December 10-11.

Training and Development (1)
- Undergraduate course on non-state actors and political violence was developed and offered for the first time in the spring of 2016.
- Presentation with slides on global trends in maritime piracy developed for undergraduate audience (sharable).
- Presentation with slides on maritime piracy in Gulf of Guinea, Nigeria, Somalia, and Indonesia developed for advanced undergraduate and graduate students (sharable)

Training and Development (2)
- Students supported by Minerva Research Grant Funds
  - Post-doctoral researcher – Received tenure-track faculty position at University of North Carolina, Wilmington.
  - PhD student – Completing doctoral study at the University of Tennessee-Knoxville
  - Research assistant at the University of Amsterdam