

# Research note: “Should we stay or should we go? Exploring the outcomes of great power retrenchment”

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## Abstract

Within foreign policy and academic circles in the United States and other western countries, retrenchment has become an increasingly controversial topic. In spite of the increased attention, there have been few empirical studies that rigorously examine the outcomes of great power retrenchment. In this paper, we seek to fill this gap by performing a quantitative analysis of great power retrenchment outcomes from 1870–2007. Counter to the retrenchment pessimists’ expectations, we find that retrenchment leads to relatively positive outcomes for declining states. States that choose to retrench experience shorter periods of economic decline and are less likely to be the target of predatory conflict initiation.

## Keywords

Decline, retrenchment, great powers

## Introduction

Exploring the link between shifting power and variation in a state’s foreign policy has long been central to the study of international relations. However, it has also become a question of increased political importance as policy-makers in the United States grapple with fears of decreasing international influence caused by the economic and military growth of great power competitors. Scholarship exploring this topic has been deeply divided, with prominent scholars such as Brooks et al. (2013), Copeland (2000), and Gilpin (1983) suggesting that a strategy of retrenchment will leave declining states less safe and less prosperous and Copeland (2000) and Gilpin (1983) contending that retrenchment will open a declining state up to predation and imperil their security. On the other hand, scholars such as Layne (2009, 2012), MacDonald and Parent (2011), and Posen (2013) suggest that retrenchment will lead to a more secure and prosperous America.

Although there has been intense theoretical debate regarding the benefits and costs of retrenchment, these theories have only been tested on a handful of cases with various degrees of methodological rigor. Work by MacDonald and Parent (2011) represents one notable exception as they base their findings on a cross-case analysis of all major powers over the same time span that we analyze. However, their analysis is limited in its ability to control for confounding factors that may affect the success of strategies of retrenchment. We build on this

work by testing these arguments on a time-series cross-sectional dataset of all major powers that stretches from 1870 to the present. Scholars have often pointed to the United Kingdom’s successful policy of retrenchment following World War II as a rare exception to an otherwise bleak record (Gilpin, 1983). Our findings suggest that retrenchment is generally effective, making states more likely to recover their previous power and less likely to experience the most dangerous interstate conflicts.

We propose two hypotheses that directly test two of the most contentious claims in the literature.

**H1:** When in a period of decline, a state that chooses to retrench will be more likely to recover their previous position than a state that does not.

**H2:** A great power experiencing a period of decline will be less likely to be the target of predation at the hands of fellow states than a great power that does not.

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**Table 1.** Countries included in sample.

Great powers	Years in dataset
Austria-Hungary	1870–1918
China	1950–2007
France	1870–2007
Germany (including West Germany)	1870–2007
Italy	1870–1943
Japan	1895–2007
Russia (including the Soviet Union)	1870–2007
The United Kingdom	1870–2007
The United States	1898–2007

## Research design

We test our argument on a sample comprising all states identified as great powers by the Correlates of War (COW) project from 1870 to 2007. This specific time-span is analyzed due to data availability.<sup>1</sup> States enter the dataset in 1870 or the first year thereafter in which they achieve great power status and exit the dataset when they lose their great power status for the last time. The full list of countries and years included in the data is provided in Table 1.

To operationalize relative power, we follow MacDonald and Parent (2011) in constructing an ordinal ranking of all great powers in a given year. States are ranked according to their overall share of gross domestic product (GDP) per capita among great powers. This is preferable to measures of absolute power, such as overall capabilities, that do not allow us to capture the relational nature of our theory. States can experience *relative* decline because their own economic performance is poor, or because other states are simply advancing faster than they are.<sup>2</sup>

States are coded as entering a period of relative decline when they lose at least one rank in a given year. States exit a period of decline, or *recover*, when they regain at least one ordinal rank after they enter a period of decline. In our view, partial recoveries that reverse the process of decline without restoring a state to its full previous rank still indicate successful retrenchment. We also believe that states should maintain their improved ranking for some minimum period of time. States that regain a rank but immediately lose it again have not successfully recovered. Since we have no strong theoretical priors regarding how long this period should be, we use two different thresholds and present results for both. One requires a state to maintain their improved ranking for at least one year after recovery, and the other requires states to maintain their ranking for five years. Once states recover, they become “at risk” of experiencing another period of decline.

To operationalize retrenchment, we use the percentage change in a state’s military expenditures over the previous year as a proxy for its military posture. Whether they are drawing down foreign commitments or decreasing military investment at home, states engaged in a strategy of

retrenchment should display declining military expenditures. This provides a continuous measure that allows us to capture both whether a state retrenches and the degree to which it does so. Data on military expenditures come from the COW project’s National Military Capabilities Dataset and are measured in nominal values (Lemke and Reed, 1998).<sup>3</sup> Because we do not have reliable data on the inflation rate for military capabilities, we choose not to adjust these values for inflation. This decision should be inconsequential for our results, since we care more about yearly changes in military expenditures rather than their absolute level.<sup>4</sup>

We include several control variables to ensure that our models capture the effects of adopting a strategy of retrenchment rather than changes in latent military capabilities. To control for the effects of a state’s absolute power, independent of its position relative to other states, we include the absolute level of GDP per capita. We also include the change in GDP per capita over the previous year to control for abrupt changes in absolute power.

We also control for factors that may affect a state’s ability to retrench effectively. First, states with strong alliance portfolios should have an easier time retrenching by relying on allies to take up the slack in managing international security threats. We control for this using the *S* alliance score measure, which provides a measure of alliance portfolio strength relative to the system leader (Small and Singer, 1969). Second, states capable of nuclear deterrence may be able to reduce military spending more easily by cutting conventional capabilities. We control for this using data on nuclear weapons status from Jo and Gartzke (2007). Third, regime type may have an effect on a state’s ability to retrench. Because autocracies possess less veto players, we expect that they may be able to adjust their spending priorities more easily. In addition, since well-consolidated regimes of either type may be more capable of adjusting state policy than anocracies, regime type may have a curvilinear effect on our variables. To account for this, we include both the state’s Polity2 score and its square using data from the Polity IV dataset (Marshall and Jaggers, 2002).<sup>5</sup> To avoid the possibility of simultaneity bias, we lag our independent variables and the control variables accounting for power by one year in all models.

## Recovery models

H1 predicts that states in periods of decline are more likely to recover their previous status if they retrench. To test this, we use discrete time duration models to estimate the probability that a state in a period of decline recovers in a given year. The dependent variable for these models is our binary indicator of Recovery. For each version of our Recovery variable (1 year and 5 year), we estimate binomial logit models on the subset of the data for all years in which a state is coded as in decline. We model the change in the

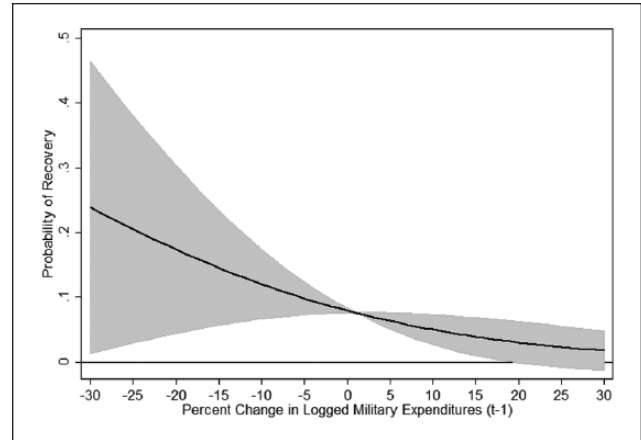
**Table 2.** Effects of retrenchment on recovery (one year threshold).

	(1)	(2)	(3)
Military Expenditures (percentage change)	-0.005 (0.044)	-0.036 (0.040)	-0.059* (0.033)
Gross domestic product (GDP)/capita		0.014 (0.317)	-0.339 (0.292)
GDP/capita (percentage change)		-0.024* (0.014)	-0.039** (0.018)
Alliance strength		0.397 (1.122)	2.335 (1.474)
Nuclear weapons State		-1.215 (1.169)	0.263 (1.830)
Polity score		0.047 (0.043)	0.054 (0.111)
Polity score squared		-0.017** (0.009)	-0.026** (0.013)
Years in decline	0.365** (0.060)	0.449** (0.132)	0.828** (0.206)
Years in decline squared	-0.024** (0.004)	-0.027** (0.010)	-0.039** (0.011)
Years in decline cubed	0.000** (0.000)	0.000** (0.000)	0.000** (0.000)
Constant	-3.360** (0.257)	-3.198 (2.702)	-3.821 (2.621)
Observations	359	332	332
Country fixed effects	No	No	Yes
Countries	8	8	8
Log likelihood	-86.93	-75.60	-65.86
Akaike information criterion	183.87	165.20	145.73

Entries are logit coefficients, with standard errors clustered by country in parentheses. Fixed effects have been omitted to save space. \* $p < 0.10$ ; \*\* $p < 0.05$ , two-tailed tests.

probability of failure as a function of time using cubic polynomials of the time since the beginning of the period of decline (Carter and Signorino, 2010). Because some countries never experience decline, both sets of models omit observations on some countries.

We begin by discussing the results of our models that employ the one year recovery threshold (see Table 2). Model 1 estimates the probability of recovery solely as a function of a state's change in military expenditures. Model 2 introduces the control variables discussed above, and Model 3 introduces fixed effects for each country (i.e., unit-specific intercepts) to control for unobserved heterogeneity induced by including repeated measures on the same units. Taken together, these results provide modest support for the argument that retrenchment helps a state recover their previous standing during periods of decline. Although the coefficient on changes in military expenditures is insignificant in Model 1 and 2, controlling for unobserved heterogeneity in Model 3 reveals that increases in military expenditures have a negative and

**Figure 1.** Effect of change in military expenditures on recovery.

significant effect (at the 0.1 level) on the probability of recovery. Put otherwise, states that decrease their military spending in a given year are less likely to experience recovery in the following year.

To illustrate the substantive significance of this effect, Figure 1 plots the predicted probability of recovery as a function of changes in military expenditures with all other variables held at their observed values. The probability of recovery is highest after states make significant cuts in their military spending. This probability steadily decreases from 0.239 to 0.018 at the high end of military expenditures, indicating that states which make sharp increases in their military spending have almost no chance of recovery.

Table 3 presents the results of our models using the five year recovery threshold. Although the coefficients are in the predicted direction, our military expenditures variable is not significant in any of the three models. In addition, including fixed effects in the model requires dropping a number of cases, since several states never experience our more restrictive coding of recovery. As such, it is difficult to draw firm conclusions on the basis of these models. In sum, we find some evidence that retrenchment facilitates recovery, although this is sensitive to both measurement and model specification.

## Predation models

H2 predicts that states in periods of decline may be subject to increased attacks by enemy states. To test this argument, we use binomial logistic regression to model the probability that a great power is attacked by another state. Our dependent variable is a measure of whether another state initiated a militarized interstate dispute (MID) against a state in a given year (Palmer et al., 2015). Because we care about whether other states actually attack declining great powers, we restrict our analysis to MIDs that involve fatalities. Our primary independent variables are our indicator of whether a

**Table 3.** Effects of retrenchment on recovery (five year threshold).

	(1)	(2)	(3)
Military Expenditures (percentage change)	-0.095 (0.097)	-0.059 (0.071)	-0.067 (0.130)
Gross domestic product (GDP)/capita change)		-0.152 (0.820)	-0.721 (2.135)
GDP/capita (percentage change)		-0.054 (0.059)	-0.055 (0.091)
Alliance strength		-1.010 (1.612)	12.669* (6.532)
Nuclear weapons State		0.061 (1.265)	5.966** (1.615)
Polity score		0.128 (0.143)	0.023 (0.084)
Polity score squared		-0.020 (0.019)	-0.032 (0.020)
Years in decline	-0.061 (0.087)	-0.049 (0.097)	0.732** (0.300)
Years in decline squared	0.001 (0.002)	0.001 (0.002)	-0.028** (0.013)
Years in decline cubed	-0.000 (0.000)	-0.000 (0.000)	0.000** (0.000)
Constant	-3.782** (0.430)	-1.444 (5.599)	-15.504 (21.676)
Country fixed effects	No	No	Yes
Observations	643	610	289
Countries	8	8	4
Log likelihood	-32.918	-30.884	-20.078
Akaike information criterion	75.84	75.77	46.16

Entries are logit coefficients, with standard errors clustered by country in parentheses. Fixed effects have been omitted to save space. \* $p < 0.10$ ; \*\* $p < 0.05$ , two-tailed tests.

state is in decline and our measure of retrenchment. Since the choice of recovery threshold determines how long a state is coded as in decline, we run models using both our one year and five year coding schemes. We present the models using our one year threshold here. Models using the five year threshold are included in the Supplementary Online Appendix. These models include the same control variables discussed in the previous section as well as cubic polynomials of the number of years since the last MID initiation.

Table 4 presents the results of these models. Model 1 includes only our measures of decline and retrenchment, Model 2 introduces control variables, and Model 3 introduces fixed effects for each country year. Our results provide modest support for the argument that states experiencing relative decline are subject to opportunistic attacks by challengers. Although this effect does not reach conventional levels of statistical significance in Model 1, it becomes significant after introducing control variables (Model 2) and fixed effects (Model 3). Holding all other variables constant at their observed values, the predicted

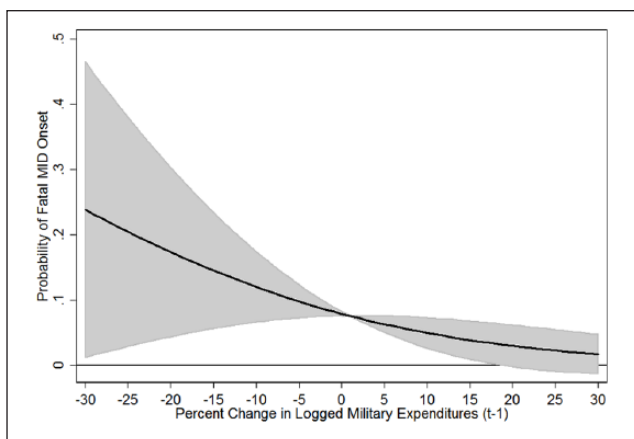
**Table 4.** Effects of decline and retrenchment on fatal militarized interstate dispute onset.

	(1)	(2)	(3)
Relative decline	0.452 (0.349)	0.775** (0.247)	0.786** (0.247)
Military Expenditures (percentage change)	0.045* (0.025)	0.041 (0.036)	0.052* (0.031)
Gross domestic product (GDP)/capita change)		1.044** (0.229)	1.040** (0.312)
GDP/capita (percentage change)		-0.015 (0.012)	-0.011 (0.011)
Alliance strength		0.959 (1.138)	0.215 (1.358)
Nuclear weapons State		-0.449 (0.338)	-0.871* (0.478)
Polity score		-0.025 (0.030)	-0.086** (0.042)
Polity score squared		0.000 (0.006)	-0.010 (0.008)
Peace years		-0.242** (0.098)	-0.254** (0.122)
Peace years squared		0.021** (0.007)	0.021** (0.009)
Peace years cubed		-0.000** (0.000)	-0.000** (0.000)
Constant	-3.552** (0.319)	-12.818** (2.013)	-12.365** (2.991)
Observations	944	905	804
Country fixed effects	No	No	Yes
Countries	9	9	7
Log likelihood	-141.611	-126.128	-120.350
Akaike information criterion	289.22	268.26	252.70

Entries are logit coefficients, with standard errors clustered by country in parentheses. Fixed effects have been omitted to save space. \* $p < 0.10$ ; \*\* $p < 0.05$ , two-tailed tests.

probability of fatal MID onset in a given year is 0.063 for states in periods of decline and 0.031 for states that are not. As such, great powers in periods of decline are effectively twice as likely to be attacked by another state in a given year. This provides support for the argument that great powers may be subject to opportunistic attacks by challengers during periods of weakness.

We also find modest support for the proposition that great powers that retrench may be able to avoid predatory attacks by challengers. The coefficient for change in military expenditures is positive and significant at the 0.1 level in two of our three models. This indicates that increases in military spending are associated with an increased risk of predatory attacks. This effect is also substantively significant. To provide some intuition of the size of the effect, Figure 2 plots the predicted probability of fatal MID onset using Model 3 across the observed range of our Retrenchment variable with all other variables held at their



**Figure 2.** Effect of change in military expenditures on fatal militarized interstate dispute (MID) onset.

observed values. The predicted probability of fatal MID onset increases from 0.008 at the minimum to 0.146 at its maximum. This provides modest support for the position of retrenchment optimists. Although great powers do appear to be subject to attack during periods of relative decline, our results suggest that states that decrease their military expenditures may be less prone to this type of behavior.

On the whole, our results are relatively robust. In general, the predicted values of both sets of models track well with the observed data.<sup>6</sup> Both our models of recovery and predation are robust to changes in the coding of our decline variable using both one and five year thresholds for our recovery variable. However, our results are somewhat sensitive to measurement and model specification, which points to the need for further testing before drawing firm conclusions. In particular, the fixed effects model performs well in all of our analyses. We believe this is the theoretically most appropriate model, since it controls for unit-effects and corrects for the violations of the assumption that observations are measured independently. Nonetheless, this speaks to the need for further testing before drawing firm conclusions on the basis of our results. Additional studies that employ alternate measures of power and retrenchment would be especially useful in this regard.

## Conclusion

In this paper, we have assessed the outcomes of great power retrenchment using a dataset of all great powers from 1870–2007. Counter to the expectations of the skeptics, we have found that retrenchment has led to relatively successful outcomes. Declining states that choose to retrench experience shorter periods of relative economic decline and are less likely to be the targets of predation than declining states that choose not to retrench. While these findings are suggestive, more research needs to be done to fully assess

the outcomes of retrenchment. Among other topics, future work should explore the impact that retrenchment has on the credibility of the international commitments that the declining state chooses to maintain. Additionally, our data contain a number of instances of declining states that chose not to retrench and subsequently experienced prolonged economic problems and predation. Our findings suggest that retrenchment would have mitigated some of the negative effects of decline. Of these cases, post-World War II France represents an interesting instance of a declining power that chose not to retrench (Spruyt, 2005). Future research should employ quantitative counterfactual analyses, such as synthetic control, to explore how retrenchment could have changed France's fortunes.

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## Notes

1. 1870 is the earliest year for which reliable gross national product data are available for most of the countries in our sample. 2007 is the latest year covered by the National Military Capabilities Data.
2. Our data come from MacDonald and Parent (2011), who construct an updated version of Angus Maddison's (1995) data using Maddison's industry of origin method to fill in missing observations. Gross domestic product is measured in real values in millions of 1990 international Geary–Khamis dollars. Additional missing data have been imputed using draws from a multivariate normal distribution.
3. Military expenditures are measured in British pounds from 1870–1913 and US dollars afterwards. Because we care about relative differences in military spending rather than overall levels, this change should not substantially affect our results.
4. Since our measure of gross domestic product (GDP) per capita is adjusted for inflation and our military expenditures data are not, we choose not to normalize military expenditures according to GDP. This should not influence our results, since we care about changes in a state's military posture, not the overall level of spending relative to a state's budget.
5. Descriptive statistics for all variables are included in the Supplementary Online Appendix.
6. A brief discussion of model fit is provided in the Supplementary Online Appendix.

### Supplementary material

The online appendix is available at: <http://journals.sagepub.com/doi/suppl/10.1177/2053168016682888>.

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