APPENDIX for Michael Beckley, "The Power of Nations: Measuring What Matters," *International Security,* Vol. 43, No. 2 (Fall 2018).

Bilateral Militarized Dispute (MID) Outcomes

MID outcomes that GDP x GDP per capita predicted that GDP did not

	dispnum3	styear	state_a	state_b	gdpfrac	gdppcfrac
8.	40	1928	JPN	CHN	.3094629	.6066838
9.	43	1897	GMY	CHN	.4251337	.8083333
21.	129	1931	JPN	CHN	.3111111	.6112469
48.	309	1898	UKG	CHN	.4508816	.8741866
57.	379	1898	FRN	CHN	.3250774	.7063291
133.	1579	1829	GRC	TUR	.2539349	.5199585
156.	1777	1918	JPN	CHN	.2698598	.5363322
182.	2211	1933	JPN	CHN	.3293556	.6458797
183.	2212	1935	JPN	CHN	.3447489	.6726907
184.	2213	1935	JPN	CHN	.3447489	.6726907
206.	3101	1981	ISR	IRQ	.4783446	.7517402
207.	3117	1980	MAL	PHI	.348	.5063613
220.	3247	1871	USR	CHN	.3187184	.5013884
221.	3249	1891	USR	CHN	.360606	.5024613
225.	3258	1914	USR	CHN	.4613687	.6582279
235.	3372	1951	ISR	EGY	.27303	.6800805
243.	3642	1870	USR	CHN	.318569	.5018811
244.	3646	1910	USR	CHN	.4634703	.6744186
245.	3647	1911	USR	CHN	.4641256	.6766169
24.	139	1934	CHN	JPN	.6595744	.3390558
36.	202	1883	CHN	FRN	.7187284	.3972603
136.	1587	1850	BRA	PAR	.7168142	.2281185
236.	3384	1983	EGY	ISR	.5697115	.1301205
274.	4467	2004	CHN	JPN	.5740741	.1534296

MID outcomes that GDP predicted that GDP x GDP per capita did not

	dispnum3	styear	state_a	state_b	gdpfrac	gdppcfrac
93.	1178	1902	BRA	BOL	.720339	.3843725
260.	4100	1995	YUG	CRO	.5941255	.4392265
35.	199	1961	IND	CHN	.4933586	.5775194
65.	510	1920	JPN	USR	.4567785	.6584044
186.	2236	1856	PAR	BRA	.2592593	.7378777
199.	2722	1920	JPN	USR	.4567785	.6584044
222.	3250	1900	USR	CHN	.4188482	.6253968
223.	3254	1912	USR	CHN	.4778761	.6875
234.	3370	1950	ISR	EGY	.260745	.6669446

MID outcomes that GDP x GDP per capita predicted that CINC did not

	dispnum3	styear	state_a	state_b	cincfrac	gdppcfrac
8.	40	1928	JPN	CHN	.2384682	.6066838
21.	129	1931	JPN	CHN	.2469825	.6112469
57.	379	1898	FRN	CHN	.3994765	.7063291

86.	1142	1917	CHN	USR	.4671657	.5078297
92.	1162	1913	COL	PER	.4969643	.5258883
115.	1501	1861	BOL	CHL	.1955762	.9043561
126.	1533	1876	GUA	SAL	.479993	.7815899
131.	1567	1818	USA	SPN	.4507007	.5857605
133.	1579	1829	GRC	TUR	.0187999	.5199585
156.	1777	1918	JPN	CHN	.253694	.5363322
176.	2168	1871	GMY	FRN	.4660228	.5503356
177.	2182	1917	CHN	USR	.4671657	.5078297
182.	2211	1933	JPN	CHN	.286341	.6458797
183.	2212	1935	JPN	CHN	.2968855	.6726907
184.	2213	1935	JPN	CHN	.2968855	.6726907
206.	3101	1981	ISR	IRQ	.3312872	.7517402
207.	3117	1980	MAL	PHI	.3091363	.5063613
217.	3238	1817	USA	SPN	.4577938	.5852843
218.	3239	1816	USA	SPN	.4611131	.5919732
220.	3247	1871	USR	CHN	.3431479	.5013884
221.	3249	1891	USR	CHN	.3943307	.5024613
235.	3372	1951	ISR	EGY	.1857563	.6800805
237.	3400	1950	SYR	ISR	.4641967	.5959596
243.	3642	1870	USR	CHN	.3225083	.5018811
244.	3646	1910	USR	CHN	.4646471	.6744186
249.	3823	1940	HUN	RUM	.3118873	.6766334
257.	4010	1993	HON	SAL	.3952396	.5589124
258.	4031	1995	CAN	SPN	.4826479	.6546525
24.	139	1934	CHN	JPN	.7087024	.3390558
36.	202	1883	CHN	FRN	.5950881	.3972603
106.	1295	1952	BUL	GRC	.5020284	.4589905
136.	1587	1850	BRA	PAR	.9065589	.2281185
236.	3384	1983	EGY	ISR	.707319	.1301205
274.	4467	2004	CHN	JPN	.7888225	.1534296

MID outcomes that CINC predicted that GDP x GDP per capita did not

	dispnum3	styear	state_a	state_b	cincfrac	gdppcfrac
35.	199	1961	IND	CHN	.3170915	.5775194
65.	510	1920	JPN	USR	.2834917	.6584044
186.	2236	1856	PAR	BRA	.0571185	.7378777
199.	2722	1920	JPN	USR	.2834917	.6584044
222.	3250	1900	USR	CHN	.4765747	.6253968
234.	3370	1950	ISR	EGY	.1953821	.6669446
269.	4334	1999	UKG	RUS	.3101227	.880088
71.	1021	1960	INS	NTH	.6519098	.0738169
72.	1022	1961	INS	NTH	.6578724	.0592748
93.	1178	1902	BRA	BOL	.9530668	.3843725
114.	1500	1857	CHL	BOL	.7367975	.0789474
120.	1516	1884	CHL	BOL	.8523641	.3034826
148.	1668	1922	USR	CHN	.5142744	.3853328
165.	2012	1850	ARG	PAR	.8057539	.1391238

185.	2223	1978	USR	USA	.5502009	.1024436
224.	3257	1921	USR	CHN	.5354398	.3738977
226.	3259	1921	USR	CHN	.5354398	.3738977
260.	4100	1995	YUG	CRO	.6807778	.4392265
267.	4297	1996	RUS	JPN	.5317063	.0520591

Bilateral War Outcomes

War outcomes that GDP x GDP per capita predicted that GDP did not

	init_war_name	gdpfrac	gdppcfrac
18.	France-China1884	.2834998	.6020408
31.	Sino-Soviet1929	.444668	.6616379
32.	Manchurian1931-1933	.3293556	.6458797
38.	Arab-Israeli_Egypt_1948-49	.7388017	.3236715
48.	WarofAttrition_1969-70	.512069	.0890891

War outcomes that GDP predicted that GDP x GDP per capita did not

-None-

War outcomes that GDP x GDP per capita predicted that CINC did not

	init_war_name	cincfrac	gdppcfrac
14.	FirstCentralAmerican1876	.479993	.78159
18.	France-China1884	.385621	.6020408
32.	Manchurian1931-1933	.286341	.6458797
33.	SaudiArabia-Yemen1934	.3739313	.7352941
13.	FrancoPrussian_France_1870-1871	.5339772	.4496644
38.	Arab-Israeli_Egypt_1948-49	.8139585	.3236715
48.	WarofAttrition_1969-70	.7789545	.0890891

War outcomes that CINC predicted that GDP x GDP per capita did not

	init_war_name	cincfrac	gdppcfrac
19.	1890CentralAmericanWar	.4239473	.7810944
30.	Greco-Turkish1919-1922	.4343616	.5174513
45.	Sino-Indian1962	.6783925	.3982989

Replicated Studies

Allen, Michael A., and Matthew DiGiuseppe. 2013. "Tightening the Belt: Sovereign Debt and Alliance Formation." *International Studies Quarterly* 57: 647-59.

- Model Replicated: table 4, model 4
- Dependent Variable: alliance formation
- Power Indicator: cinc

Carter, David B., and Paul Poast. 2017. "Why Do States Build Walls? Political Economy, Security, and Border Stability." *Journal of Conflict Resolution* 61: 239-70.

- Model Replicated: table 4, model 1
- Dependent Variable: border wall presence
- Power Indicator: ln(cinc_strong/cinc_weak)

Carter, Jeff, Michael Bernhard, and Glenn Palmer. 2012. "Social Revolution, the State, and War: How Revolutions Affect War-Making Capacity and Interstate War Outcomes." *Journal of Conflict Resolution* 56: 439-66.

- Model Replicated: table 1, model 4
- Dependent Variable: war outcomes
- Power Indicator: cinc_a/(cinc_a+cinc_b)

Clay, K. Chad, and Andrew P. Owsiak. 2015. "The Diffusion of International Border Agreements." *Journal of Politics* 78: 427-42.

- Model Replicated: table 2, model 1
- Dependent Variable: border settlement
- Power Indicator: ln(cinc_weak/cinc_strong)

Colgan, Jeff D., and Jessica L.P. Weeks. 2015. "Revolution, Personalist Dictatorships, and International Conflict." *International Organization* 69.

- Model Replicated: table 1, model 6
- Dependent Variable: MID initiation
- Power Indicator: cinc (lagged one year)

Early, Bryan R. 2012. "Alliances and Trade with Sanctioned States: A Study of U.S. Economic Sanctions, 1950-2000." *Journal of Conflict Resolution* 56: 547-72.

- Model Replicated: table 1, model 1
- Dependent Variable: trade differentials
- Power Indicator: ln(cinc_US/cinc_thirdparty)

Findley, Michael G., James A. Piazza, and Joseph K. Young. 2012. "Games Rivals Play: Terrorism in International Rivalries." *Journal of Politics* 74: 235-48.

- Model Replicated: table 2, model3
- Dependent Variable: terrorist attacks
- Power Indicator: ln(cinc_a/cinc_b)

Fuhrmann, Matthew, and Todd S. Sechser. 2014. "Signaling Alliance Commitments: Hand-Tying and Sunk Costs in Extended Nuclear Deterrence." *American Journal of Political Science* 58: 919-35.

- Model Replicated: table 2, model 3

- Dependent Variable: crisis outcomes
- Power Indicator: cinc_a/(cinc_a+cinc_b)

Grauer, Ryan, and Michael C. Horowitz. 2012. "What Determines Military Victory? Testing the Modern System." *Security Studies* 21: 83-112.
- Model Replicated: table 2, model 4
- Dependent Variable: battle outcomes
- Power Indicator: cinc

Haynes, Kyle. 2012. "Lame Ducks and Coercive Diplomacy: Do Executive Term Limits Reduce the Effectiveness of Democratic Threats?". *Journal of Conflict Resolution* 56: 771-98.
- Model Replicated: table 1, model 1
- Dependent Variable: threat reciprocation
- Power Indicator: cinc_a/(cinc_a+cinc_b)

Horowitz, Michael C., and Allan C. Stam. 2014. "How Prior Military Experience Influences the Future Militarized Behavior of Leaders." *International Organization* 68: 527-59.
- Model Replicated: table 1, model 1
- Dependent Variable: MID initiation
- Power Indicator: cinc

Huth, Paul K., Sarah E. Croco, and Benjamin J. Appel. 2013. "Bringing Law to the Table: Legal Claims, Focal Points, and the Settlement of Territorial Disputes since 1945." *American Journal of Political Science* 57: 90-103.
- Model Replicated: table 4
- Dependent Variable: territorial dispute settlement
- Power Indicator: milex_a/(milex_a+milex_b)

Kinne, Brandon J., and Nikolay Marinov. 2012. "Electoral Authoritarianism and Credible Signaling in International Crises." *Journal of Conflict Resolution* 57: 359-86.
- Model Replicated: table 2, model 1
- Dependent Variable: MID reciprocation
- Power Indicator: cinc_a/(cinc_a+cinc_b)

Kroenig, Matthew. 2013. "Nuclear Superiority and the Balance of Resolve: Explaining Nuclear Crisis Outcomes." *International Organization* 67: 141-71.
- Model Replicated: table 3, model 5
- Dependent Variable: nuclear crises outcomes
- Power Indicator: cinc_a/(cinc_a+cinc_b)

Lupu, Yonatan. 2016. "Why Do States Join Some Universal Treaties but Not Others? An Analysis of Treaty Commitment Preferences." *Journal of Conflict Resolution* 60: 1219-50.
- Model Replicated: table 1, 2000
- Dependent Variable: treaty commitment preferences
- Power Indicator: ln(cinc)

Moon, Chungshik, and Mark Souva. 2016. "Audience Costs, Information, and Credible

Commitment Problems." *Journal of Conflict Resolution* 60: 434-58.
- Model Replicated: table 1, model 2
- Dependent Variable: militarized compellent threat success
- Power Indicator: cinc_a/(cinc_a+cinc_b)

Narang, Vipin, and Caitlin Talmadge. 2017. "Civil-Military Pathologies and Defeat in War: Tests Using New Data." *Journal of Conflict Resolution* forthcoming.
- Model Replicated: table 2, model 5
- Dependent Variable: MID outcomes
- Power Indicator: cinc

Powell, Emilia Justyna 2015. "Islamic Law States and Peaceful Resolution of Territorial Disputes." *International Organization* 69: 777-807.
- Model Replicated: table 3, full model
- Dependent Variable: territorial dispute settlement
- Power Indicator: cinc_strong/(cinc_strong+cinc_weak)

Sechser, Todd S., and Matthew Fuhrmann. 2013. "Crisis Bargaining and Nuclear Blackmail." *International Organization* 67: 173-95.
- Model Replicated: table 1, model 2
- Dependent Variable: militarized compellent threat success
- Power Indicator: cinc_a/(cinc_a+cinc_b)

Shelef, Nadav G. 2016. "Unequal Ground: Homelands and Conflict." *International Organization* 70: 33-63.
- Model Replicated: table 3, all MIDs
- Dependent Variable: MID onset
- Power Indicator: cinc_a/(cinc_a+cinc_b)

Way, Christopher, and Jessica L.P. Weeks. 2014. "Making It Personal: Regime Type and Nuclear Proliferation." *American Journal of Political Science* 58: 705-19.
- Model Replicated: table 1, plus capabilities
- Dependent Variable: pursuit of nuclear weapons
- Power Indicator: cinc

Weeks, Jessica L. 2012. "Strongmen and Straw Men: Authoritarian Regimes and the Initiation of International Conflict." *American Political Science Review* 106: 326-47.
- Model Replicated: table 2, model 4
- Dependent Variable: MID initiation
- Power Indicator: cinc_a/(cinc_a+cinc_b)

Weisiger, Alex, and Keren Yarhi-Milo. 2015. "Revisiting Reputation: How Past Actions Matter in International Politics." *International Organization* 69: 473-95.
- Model Replicated: table 1, model 6
- Dependent Variable: MID initiation
- Power Indicator: cinc_a/(cinc_a+cinc_b)

Wright, Thorin M., and Paul F. Diehl. 2016. "Unpacking Territorial Disputes: Domestic Political Influences and War." *Journal of Conflict Resolution* 60: 645-69.

- Model Replicated: table 2, model 3
- Dependent Variable: war onset
- Power Indicator: cinc_weak/cinc_strong

Table 3: Summary of Replication Analyses Results

Replication	*N*	*CINC AIC*	*GDPxGDPPC AIC*	*GDP AIC*
Allen and DiGiuseppe (2013)	4386	1622	1613	1618
Carter and Poast (2017)	52214	2551	2550	2568
Carter, Bernhard, and Palmer (2012)	238	432	431	433
Clay and Owsiak (2016)	2722	572	563	568
Colgan and Weeks (2015)	5554	6186	6200	6191
Early (2012)	67979	108316	108312	108313
Findley, Piazza, Young (2012)	65538	8075	8057	8061
Fuhrmann and Secheser (2014)	85306	2614	2615	2615
Grauer and Horowitz (2012)	80	45	39	39
Haynes (2012)	212	246	241	243
Horowitz and Stam (2014)	11276	8893	9223	9150
Huth, Croco, and Appel (2013)	78	83	78	83
Kinne and Marinov (2012)	1408	1802	1801	1801
Kroenig (2013)	52	85	84	84
Lupu (2016)	144	29	28	27
Moon and Souva (2016)	211	271	268	271
Narang and Talmadge (2017)	76	91	90	90
Powell (2015)	433	703	712	695
Sechser and Fuhrmann (2013)	236	270	264	268
Shelef (2016)	316	373	373	373
Way and Weeks (2013)	5338	434	414	408
Weeks (2012)	21599	7348	7333	7329
Weisiger and Yarhi-Milo (2015)	71191	15742	15742	15750
Wright and Diehl (2016)	2739	1347	1347	1347