

How Initiators End Their Wars?*

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*As quickly as possible or else.

REGIME TYPE AND WAR OUTCOME

We know that

A) Democracies are more likely to win

(Bennett & Stam 1998, Reiter & Stam 2002, Clark & Reed 2003)

But also that

B) Regime does not affect settlement terms

(Werner 1998)

Q: How do we reconcile these findings?

A: Theory of endogenous war termination.

ENDOGENOUS WAR TERMINATION

- War as a coercive learning process:

(Filson & Werner 2002, Powell n.d., Slantchev 2003b, Smith & Stam n.d.)

- ◇ War aim is to persuade opponent to settle

- ◇ War is a method for influencing expectations

- Both sides transmit and interpret information to form expectations

- Information from strategically manipulable (diplomacy) and non-manipulable (battlefield) sources

Outcomes endogenous to fighting and diplomacy because these provide new information.

⇒ *Duration should help explain the outcome.*

HYPOTHESES FOR TODAY

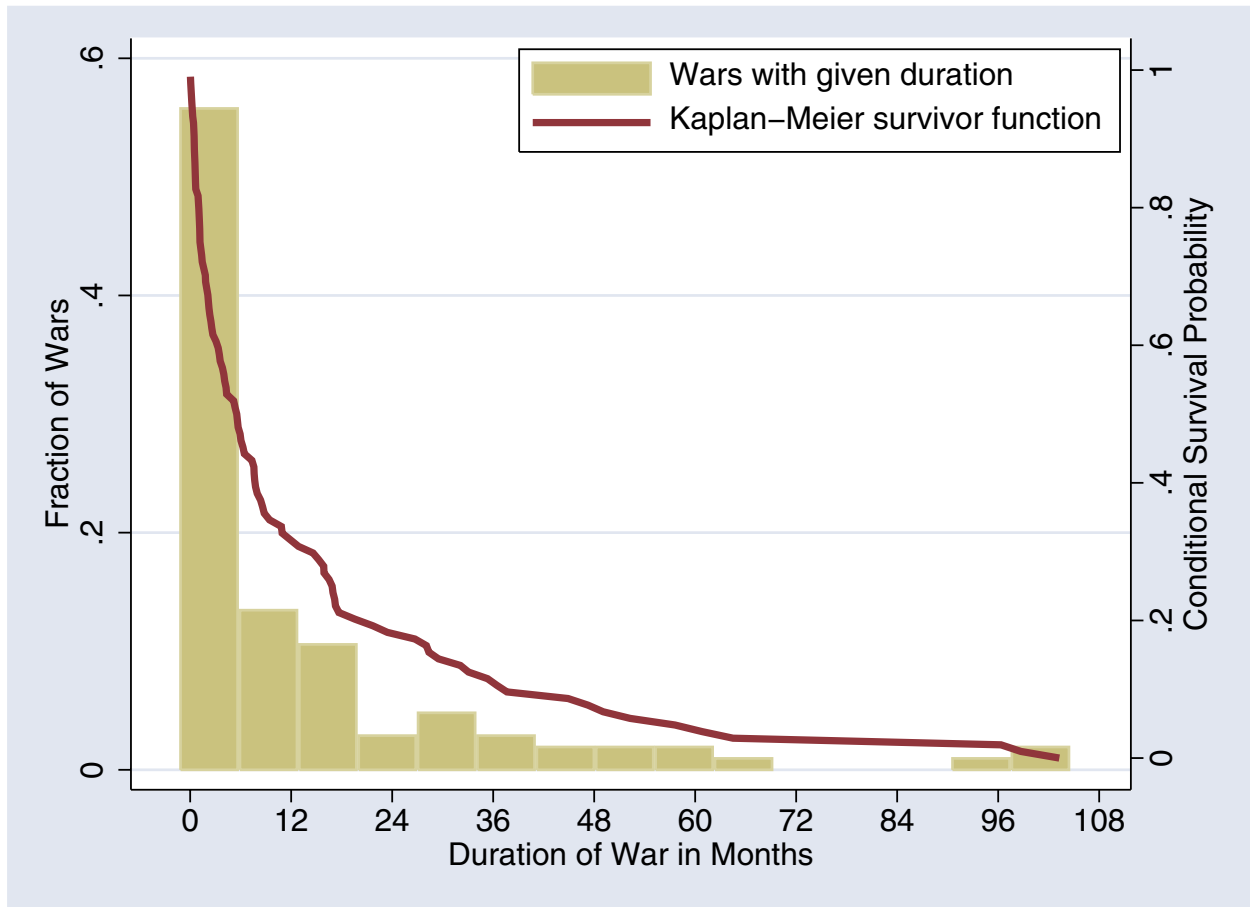
- (H1) More uncertainty \Rightarrow Longer wars

Uncertainty about military/resource capabilities. Without “sufficient” uncertainty, there is no incentive to delay settlement for better terms.

- (H2) Longer war \Rightarrow Worse outcome for initiator

Initiator gradually learns it will have to offer better terms as its opponent has stayed in conflict that long.

EMPIRICAL DURATION OF WAR



- 104 interstate wars, one observation per war
- mean duration: 14 months
- median duration: 5.6 months

RESEARCH DESIGN

- To predict *duration*: accelerated-time failure log-logistic hazard model with robust standard errors.

This produces estimates for duration, which we then plug into the outcome model.

- To predict *outcome*: ordered probit model with bootstrapped standard errors.

Because estimates are not data, we have to account for error, so we use bootstrapping.

- Monte Carlo Simulations: estimation and fundamental uncertainty.

MAIN VARIABLES: DURATION MODEL

This model predicts the expected duration of war based on pre-war indicators.

- Military Parity:

$$1 - \frac{|\text{MILPER}_1 - \text{MILPER}_2|}{\text{MILPER}_1 + \text{MILPER}_2}$$

Range: 0 (severe asymmetry) to 1 (parity)

- Resource Parity
- Democratic Initiator

MAIN VARIABLES: OUTCOME MODEL

This model predicts expected outcome using predicted duration, pre-war indicators, and new intrawar information.

- Outcome: ordered categorical
Defeat (11), Concessions (30), Gains (37), Victory (26)
- Predicted Duration of War
from duration model
- Relative Rate of Loss: fraction of military personnel divided by total rate of loss for both
Range: .0001 (favor initiator) to .98 (opponent)
- Balance of Reserves: population ratio
Range: .03 (favor opponent) to .98 (favor initiator)
- Democratic Initiator
- Democratic Initiator Losses

ANALYSIS OF WAR DURATION

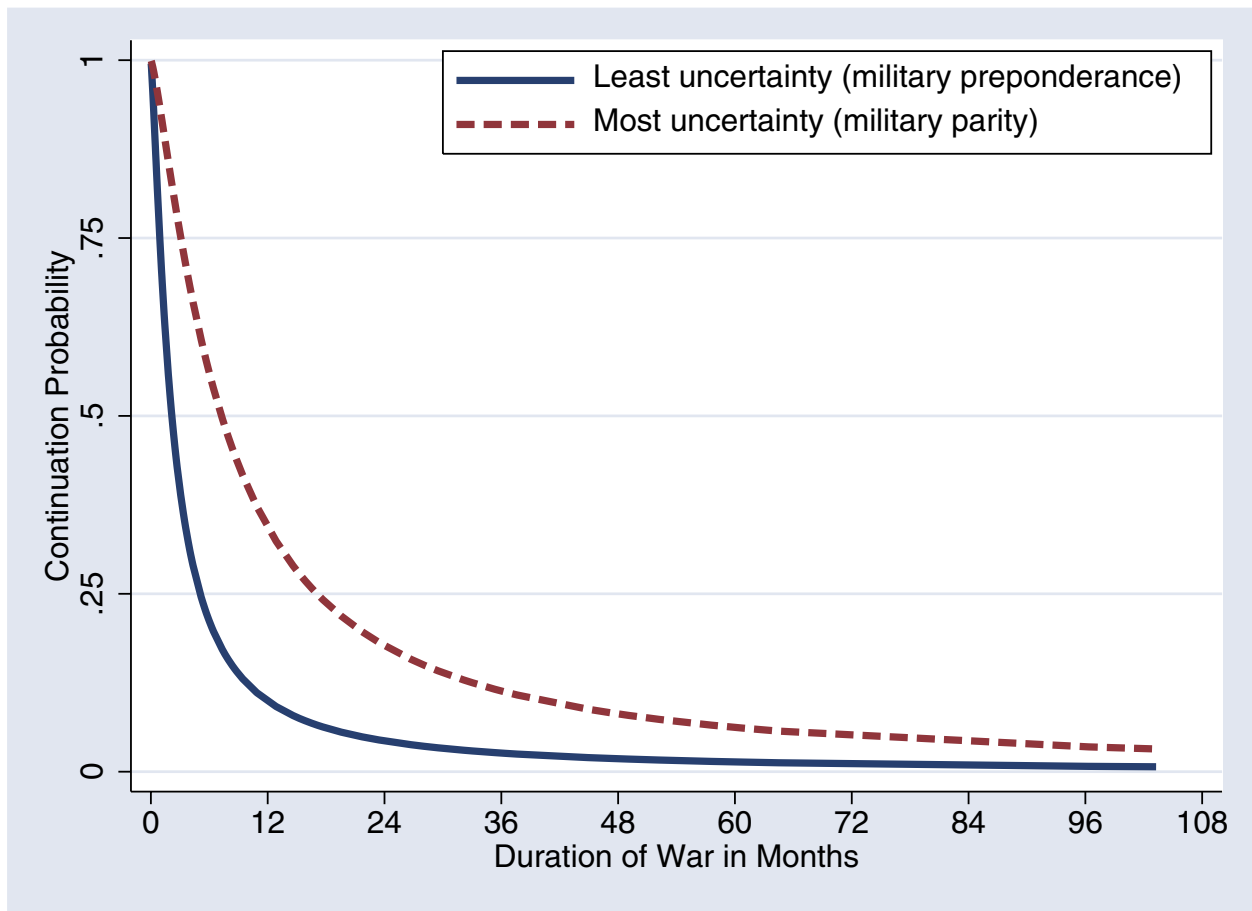
	<i>Coeff.</i>	<i>Std.Err.</i>
Military parity	1.17**	(.54)
Reserve parity	-.68	(.53)
Terrain	3.37***	(.72)
Contiguity	.26***	(.07)
Number of states	.14**	(.07)
Total population reserves	-.60	(.69)
Total military personnel	.00	(.00)
Democratic initiator	-.76**	(.32)
constant	-1.76**	(.71)
gamma	.76	(.05)
<i>N</i>	104	
Wald χ^2	94.11	
DF	8	
Prob. > χ^2	<.0001	
Log likelihood	-176.72	

*** $p < .01$; ** $p < .05$; * $p < .10$

GOODNESS OF FIT OF DURATION MODEL

	Mean	Median	Std.Dev	Min	Max
Observed	13.94	5.62	20.94	.03	103.27
Predicted	8.55	4.79	10.22	.40	52.38
Error	-5.39	-.41	18.99	-93.78	36.08
Absolute Error	10.34	3.78	16.79	.03	93.78
<i>Benchmark: Bennett & Stam 1996 (17 variables)</i>					
Absolute Error	13.00	5.1			

EFFECT OF UNCERTAINTY ON DURATION



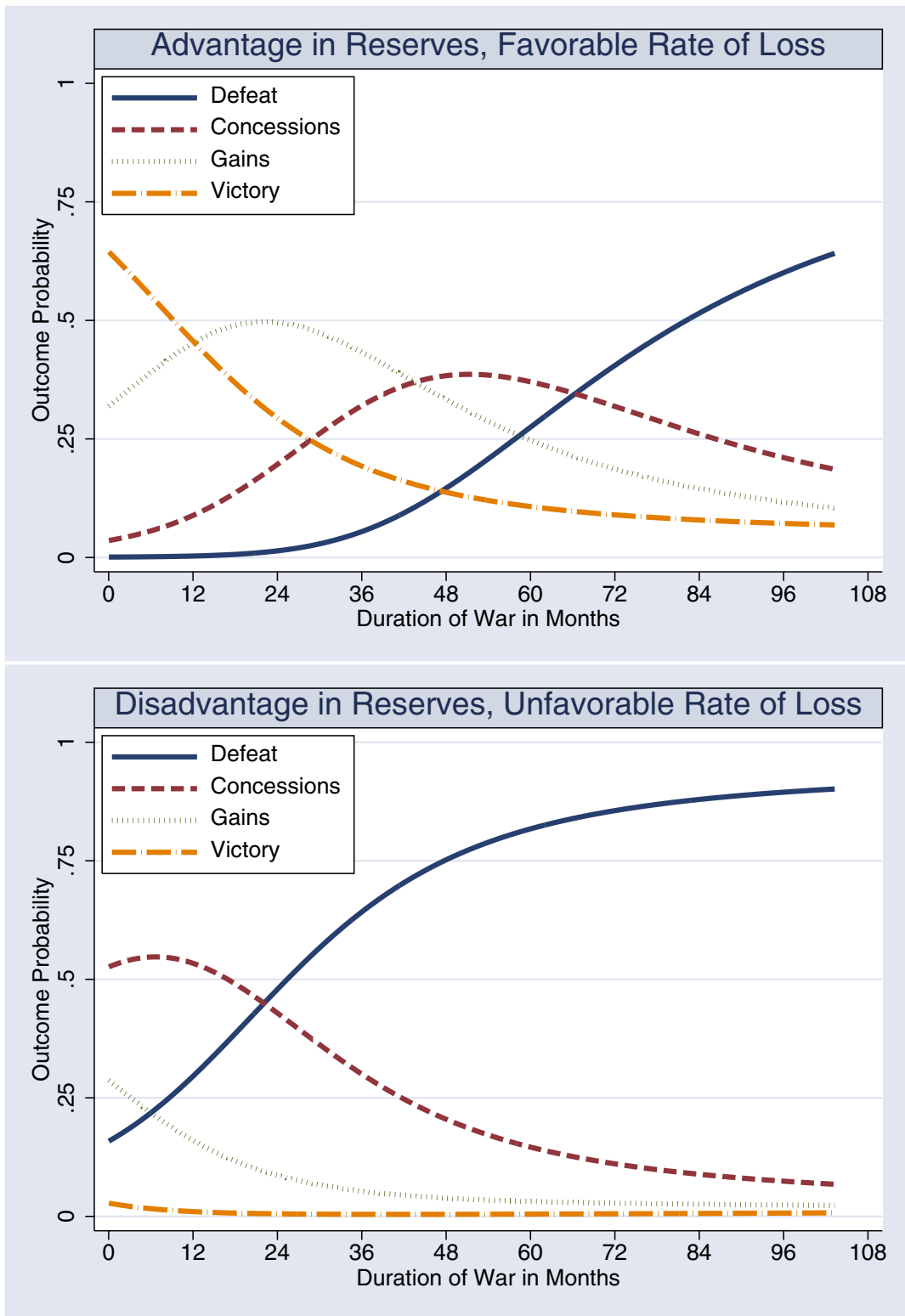
ANALYSIS OF WAR OUTCOMES

	<i>Coeff.</i>	<i>95% Conf. Int.</i>
Predicted war duration	-0.04	(-0.08, -0.01)
Prewar reserves balance	2.08	(1.06, 3.22)
Prewar military balance	-2.32	(-4.01, -0.80)
Rate of loss	-2.58	(-3.86, -1.35)
Issue salience	-0.49	(-0.93, -0.10)
Pre-armistice negotiations	-0.37	(-0.87, 0.07)
Democratic initiator	-0.05	(-0.55, 0.50)
Democratic initiator losses	-0.01	(-0.09, 0.02)
<i>cut point 1</i>	-3.93	(-5.39, -2.61)
<i>cut point 2</i>	-2.35	(-3.63, -1.21)
<i>cut point 3</i>	-0.82	(-2.03, 0.32)

GOODNESS OF FIT OF OUTCOME MODEL

Observed	Predicted				Total
	Defeat	Conc.	Gains	Victory	
Defeat	4	5	2	0	11
Concessions	3	17	9	1	30
Gains	0	7	24	6	37
Victory	0	0	9	17	26
Total	7	29	44	24	104
Correct	63 (61%)				
Modal	37 (36%)				
Error reduction	39%				

EFFECT OF DURATION ON OUTCOME



CONCLUSIONS

- More uncertainty \Rightarrow longer wars
- **Long wars \Rightarrow bad outcome for initiator**
- Even though:
 - ◇ More resources \Rightarrow better outcomes
 - ◇ Favorable new info \Rightarrow better outcomes

New info more important:

- ◇ More resources + bad info \Rightarrow bad outcome
- ◇ Less resources + good info \Rightarrow good outcome
- Democracies initiate short wars,
but in short wars initiators do well in general.

**Democratic initiators will generally win,
but regime type would not influence terms.**