

# Supplementary Materials for Event Dependence and Heterogeneity in Duration Models: The Conditional Frailty Model

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Table 1: Event Strata for Obscenity Data

Strata	Frequency of Events	Percent
1	226	56.5
2	107	26.75
3	31	7.75
4	25	6.25
5	10	2.5
6	1	0.25
Total	400	100

Table 2: Maximum Number of Events for Each State

State	Number	State	Number
Alaska	3	Alabama	4
Arkansas	1	Arizona	4
California	5	Colorado	0
Connecticut	4	Delaware	2
Florida	3	Georgia	3
Hawaii	0	Iowa	0
Idaho	0	Illinois	4
Indiana	0	Kansas	0
Kentucky	0	Louisiana	1
Massachusetts	3	Maryland	5
Maine	2	Michigan	3
Minnesota	0	Missouri	0
Mississippi	1	Montana	2
North Carolina	1	North Dakota	1
Nebraska	0	New Hampshire	3
New Jersey	5	New Mexico	2
Nevada	2	New York	1
Ohio	3	Oklahoma	1
Oregon	1	Pennsylvania	2
Rhode Island	2	South Carolina	1
South Dakota	2	Tennessee	4
Texas	1	Utah	1
Virginia	4	Vermont	0
Washington	4	Wisconsin	3
West Virginia	0	Wyoming	0

Table 3: Event Strata for Terrorism Data

Strata	Frequency of Events	Percent
1	578	22.44
2	357	13.86
3	268	10.4
4	182	7.07
5	158	6.13
6	115	4.46
7	93	3.61
8	88	3.42
9	86	3.34
10	77	2.99
11	574	22.28
Total	2,576	100

Table 4: Maximum Number of Terrorist Incidents for Each Country

Country	Number	Country	Number	Country	Number	Country	Number	Country	Number
USA	23	IRE	16	NOR	9	ZAM	9	SRI	11
CAN	14	NTH	20	DEN	15	ZIM	13	NEP	3
HAI	9	FRN	23	ICE	2	MAW	1	THI	15
DOM	3	SWZ	20	MLI	1	SAF	13	LAO	7
JAM	4	SPN	23	SEN	4	NAM	3	MAL	8
TRI	5	POR	16	MAA	1	LES	3	SIN	4
MEX	18	GMY	23	NIR	1	BOT	6	PHI	22
GUA	20	POL	10	CDI	5	SWA	11	INS	8
HON	17	AUS	22	BFO	2	MOR	10	AUL	16
SAL	21	HUN	4	SIE	4	ALG	13	PNG	3
NIC	13	ITA	23	GHA	2	TUN	14	NEW	1
COS	20	ALB	4	TOG	4	IRN	20	FIJ	2
PAN	19	SLV	1	CAO	3	TUR	23		
COL	23	GRC	22	NIG	6	EGY	22		
VEN	22	CYP	20	GAB	3	SYR	16		
GUY	2	BUL	3	CEN	3	JOR	19		
ECU	15	ROM	9	CHA	5	ISR	23		
PER	21	RUS	15	CON	2	SAU	14		
BRA	14	EST	4	KEN	7	KUW	13		
BOL	17	LAT	1	TAZ	4	BAH	5		
PAR	8	LIT	3	BUI	5	CHN	8		
CHL	18	UKR	2	RWA	2	ROK	13		
ARG	20	BLR	5	ETH	18	JPN	16		
URU	8	ARM	4	ANG	19	IND	21		
UKG	23	SWD	15	MZM	14	PAK	22		

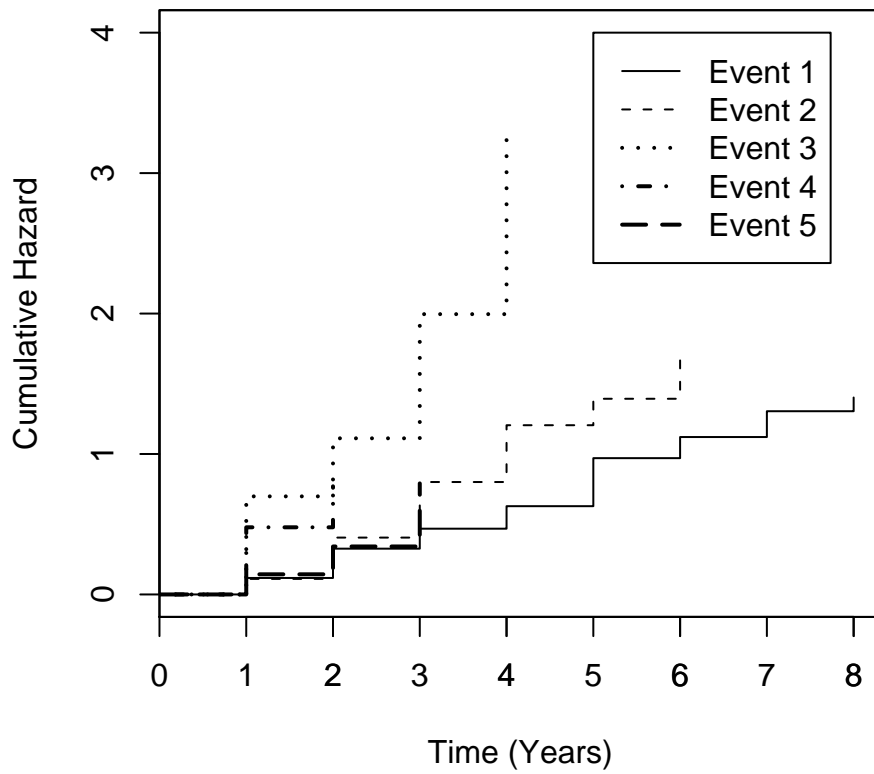


Figure 1: Estimated Cumulative Hazards for Each Event Number for the Conditional Gap Time Model of U.S. State Re(Adoption) of Obscenity Legislation.

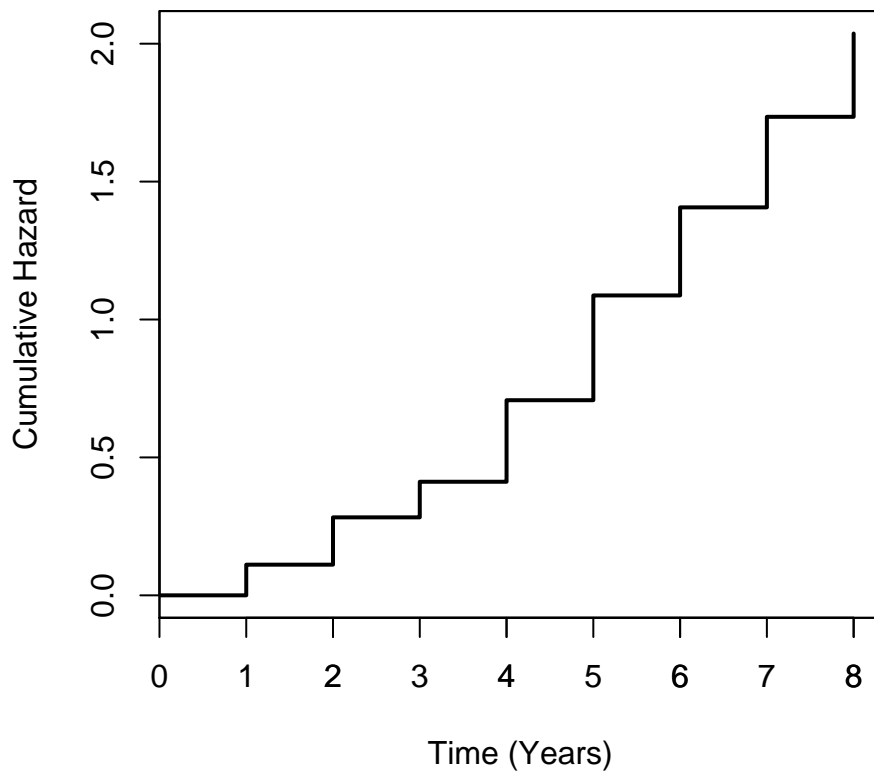


Figure 2: Estimated Cumulative Hazard for the Frailty Model of U.S. State Re(Adoption) of Obscenity Legislation.

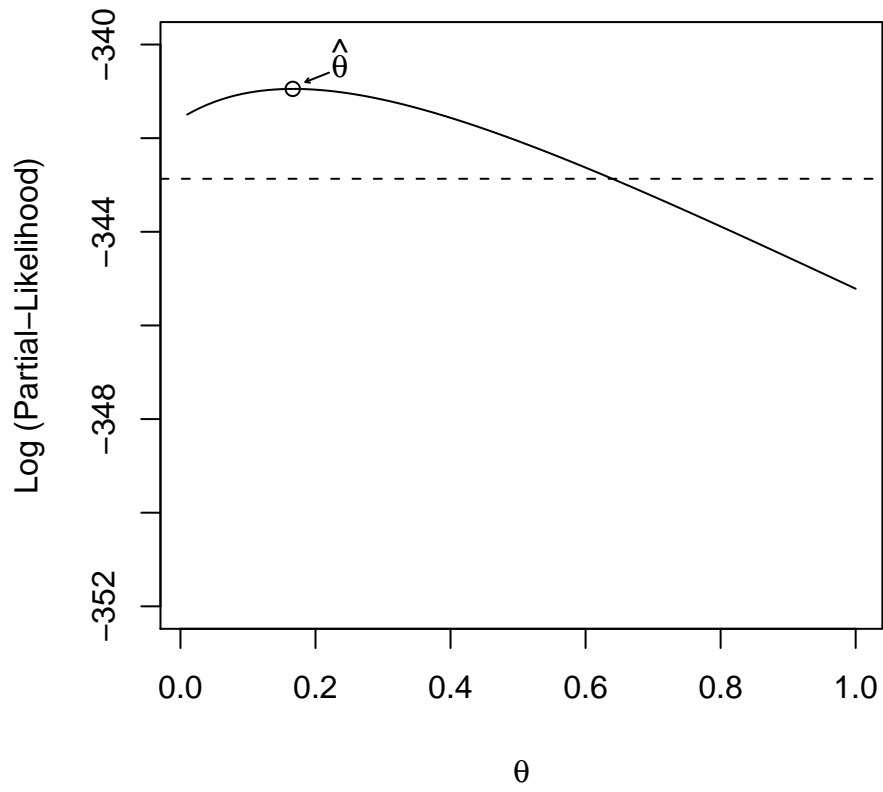


Figure 3: Profile Likelihood of  $\theta$  for the Frailty Model of U.S. State Re(Adoption) of Obscenity Legislation.



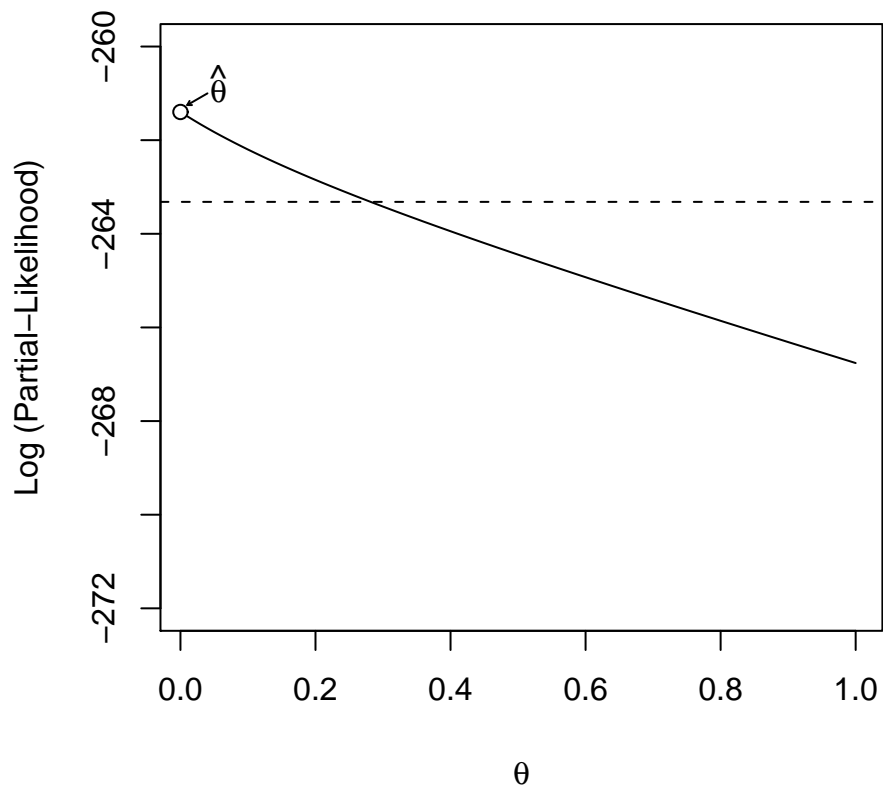


Figure 4: Profile Likelihood of  $\theta$  for the Conditional Frailty Model of U.S. State Re(Adoption) of Obscenity Legislation.

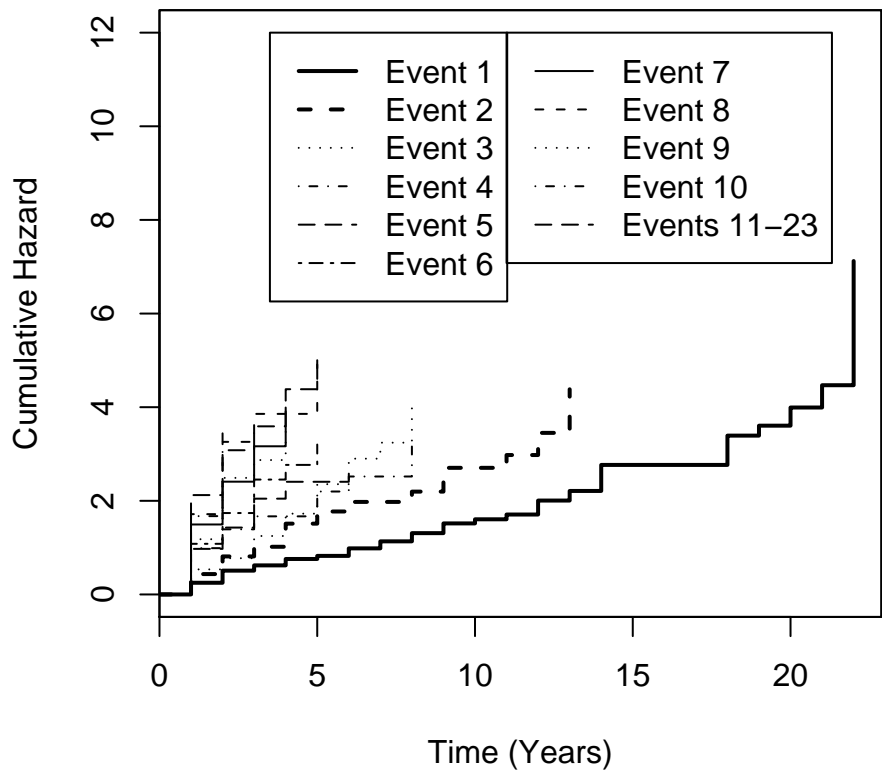


Figure 5: Estimated Cumulative Hazards for Each Event Number for the Conditional Gap Time Model of Re(Occurrence) of Terrorist Attacks.

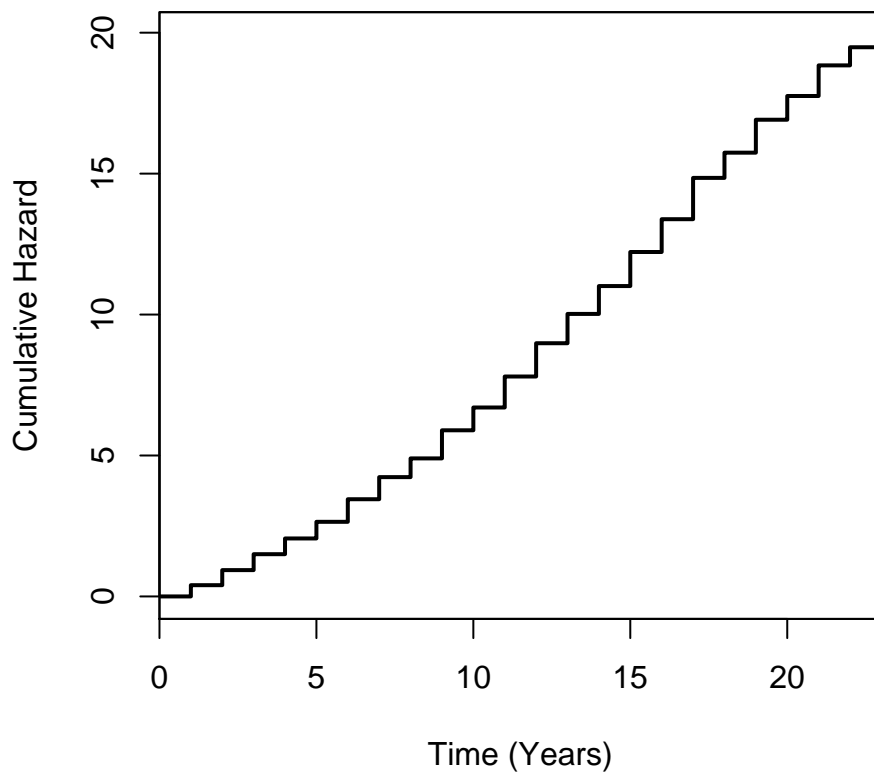


Figure 6: Estimated Cumulative Hazard for the Frailty Model of Re(Occurrence) of Terrorist Attacks.

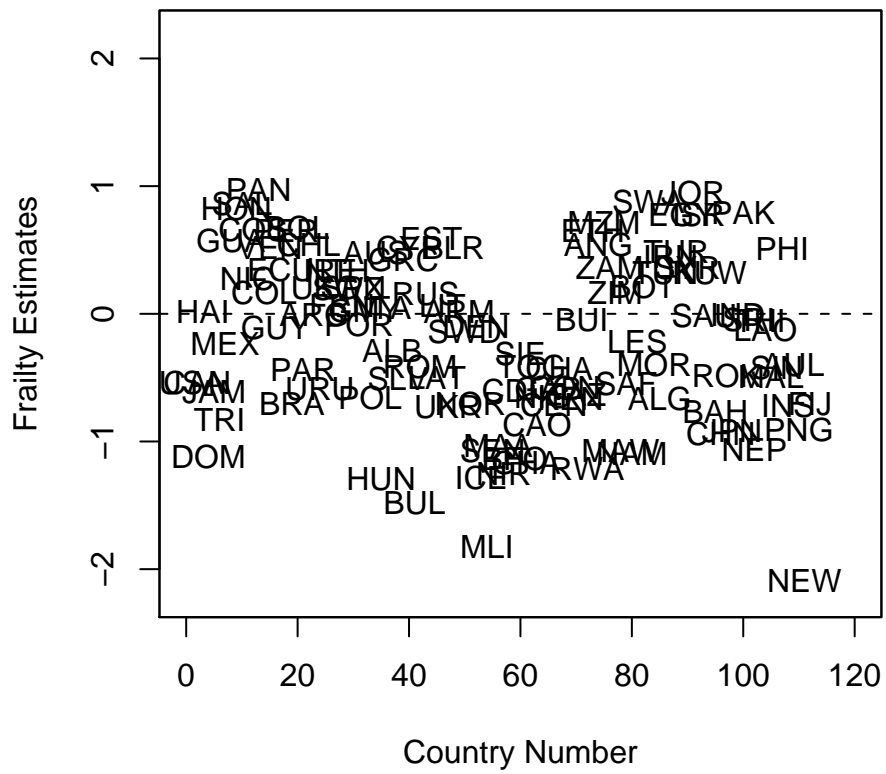


Figure 7: Estimated Frailties for the Frailty Model of  $Re(\text{Occurrence})$  of Terrorist Attacks.

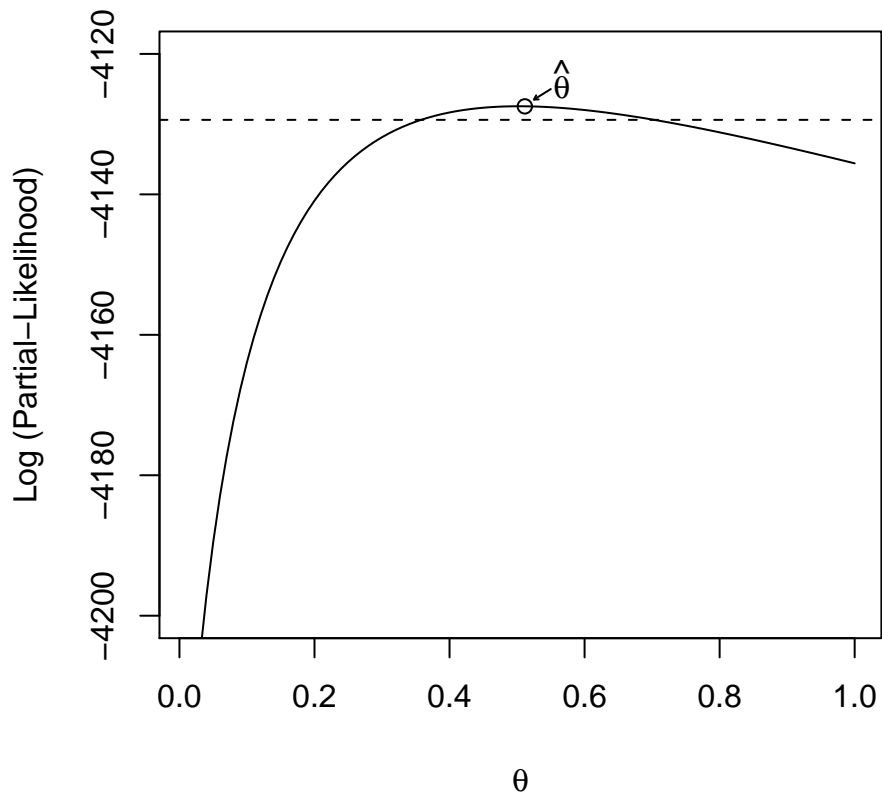


Figure 8: Profile Likelihood of  $\theta$  for the Frailty Model of Re(Occurrence) of Terrorist Attacks.

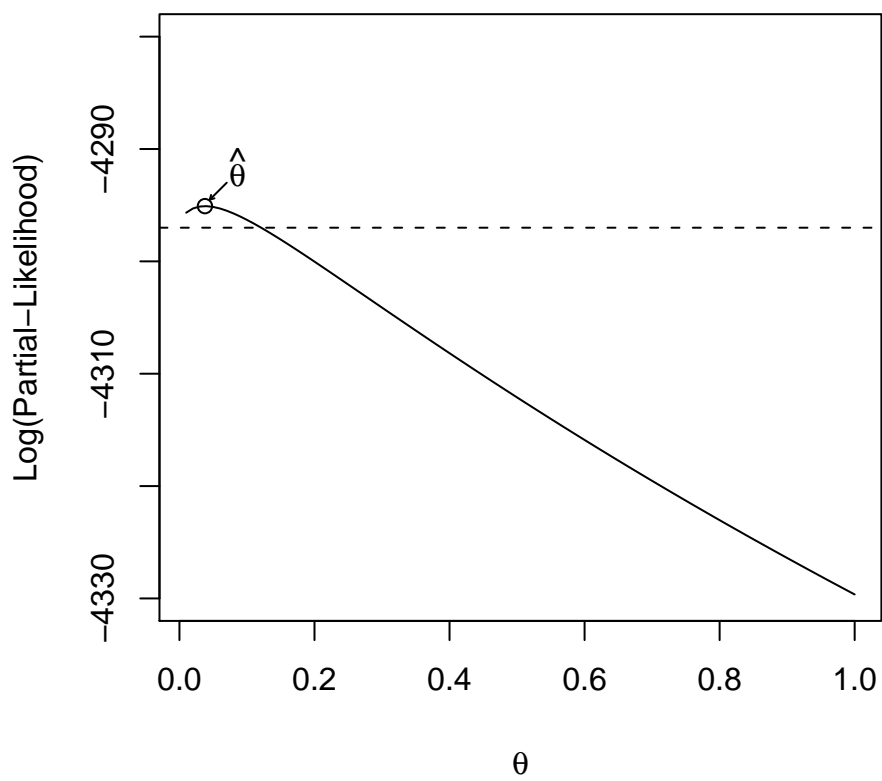


Figure 9: Profile Likelihood of  $\theta$  for the Conditional Frailty Model of Re(Occurrence) of Terrorist Attacks.