Survival Analysis of Corporal Punishment Bans

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18 May 2021 19:19:57

# Get The Data

. use "../CPBans.dta"  
(Written by R. )

NB This isn't actually the 100% correct data since the correct *risk set* would include *all countries*, not just *countries that eventually ban corporal punishment*.

# stset The Data

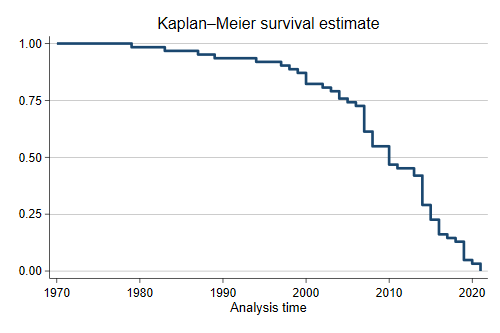
. stset year\_of\_prohibition // stset the data  
  
Survival-time data settings  
  
 Failure event: (assumed to fail at time=year\_of\_prohibition)  
Observed time interval: (0, year\_of\_prohibition]  
 Exit on or before: failure  
  
──────────────────────────────────────────────────────────────────────────  
 62 total observations  
 0 exclusions  
──────────────────────────────────────────────────────────────────────────  
 62 observations remaining, representing  
 62 failures in single-record/single-failure data  
 124,546 total analysis time at risk and under observation  
 At risk from t = 0  
 Earliest observed entry t = 0  
 Last observed exit t = 2,021

# Graphs

## Survival Function

. sts graph, scheme(michigan) tmin(1970) // Kaplan-Meier Survivor Function  
  
 Failure \_d: 1 (meaning all fail)  
 Analysis time \_t: year\_of\_prohibition

. graph export mysurvival.png, width(500) replace  
file mysurvival.png saved as PNG format

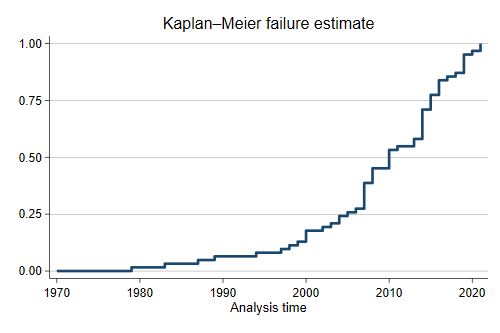


Kaplan-Meier Survivor Function

## Failure Function

. sts graph, failure scheme(michigan) tmin(1970) // Kaplan-Meier Failure Function  
  
 Failure \_d: 1 (meaning all fail)  
 Analysis time \_t: year\_of\_prohibition

. graph export myfailure.png, width(500) replace  
file myfailure.png saved as PNG format



Kaplan-Meier Failure Function

# Survival Analysis

Needs Covariates in the Data

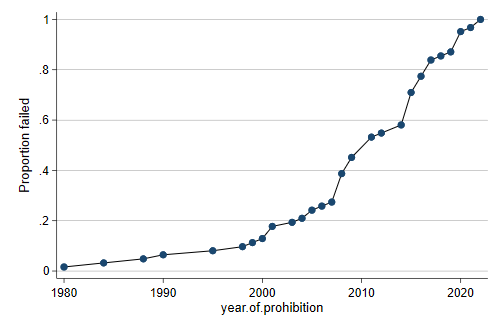
## Parametric Survival Model

## Cox Proportional Hazards Model

# Life Table

. ltable year\_of\_prohibition, graph failure scheme(michigan) // lifetable  
  
 Beg. Cum. Std.  
 Interval Total Deaths Lost Failure Error [95% Conf. Int.]  
───────────────────────────────────────────────────────────────────────────────  
 1979 1980 62 1 0 0.0161 0.0160 0.0023 0.1090  
 1983 1984 61 1 0 0.0323 0.0224 0.0082 0.1229  
 1987 1988 60 1 0 0.0484 0.0273 0.0159 0.1426  
 1989 1990 59 1 0 0.0645 0.0312 0.0247 0.1628  
 1994 1995 58 1 0 0.0806 0.0346 0.0344 0.1830  
 1997 1998 57 1 0 0.0968 0.0375 0.0447 0.2028  
 1998 1999 56 1 0 0.1129 0.0402 0.0555 0.2223  
 1999 2000 55 1 0 0.1290 0.0426 0.0667 0.2415  
 2000 2001 54 3 0 0.1774 0.0485 0.1024 0.2974  
 2002 2003 51 1 0 0.1935 0.0502 0.1149 0.3156  
 2003 2004 50 1 0 0.2097 0.0517 0.1276 0.3335  
 2004 2005 49 2 0 0.2419 0.0544 0.1536 0.3688  
 2005 2006 47 1 0 0.2581 0.0556 0.1668 0.3862  
 2006 2007 46 1 0 0.2742 0.0567 0.1803 0.4034  
 2007 2008 45 7 0 0.3871 0.0619 0.2788 0.5197  
 2008 2009 38 4 0 0.4516 0.0632 0.3380 0.5831  
 2010 2011 34 5 0 0.5323 0.0634 0.4148 0.6596  
 2011 2012 29 1 0 0.5484 0.0632 0.4305 0.6745  
 2013 2014 28 2 0 0.5806 0.0627 0.4623 0.7040  
 2014 2015 26 8 0 0.7097 0.0576 0.5946 0.8162  
 2015 2016 18 4 0 0.7742 0.0531 0.6644 0.8684  
 2016 2017 14 4 0 0.8387 0.0467 0.7373 0.9171  
 2017 2018 10 1 0 0.8548 0.0447 0.7562 0.9286  
 2018 2019 9 1 0 0.8710 0.0426 0.7753 0.9397  
 2019 2020 8 5 0 0.9516 0.0273 0.8780 0.9872  
 2020 2021 3 1 0 0.9677 0.0224 0.9006 0.9939  
 2021 2022 2 2 0 1.0000 . . .  
───────────────────────────────────────────────────────────────────────────────

. graph export myltable.png, width(500) replace  
file myltable.png saved as PNG format



Graph Of Life Table