

# 1 Non-Parametric Estimation: The Kaplan-Meier Product Limit Estimator

Figure 1: Duration of Unemployment Spells: 1988 - 2006

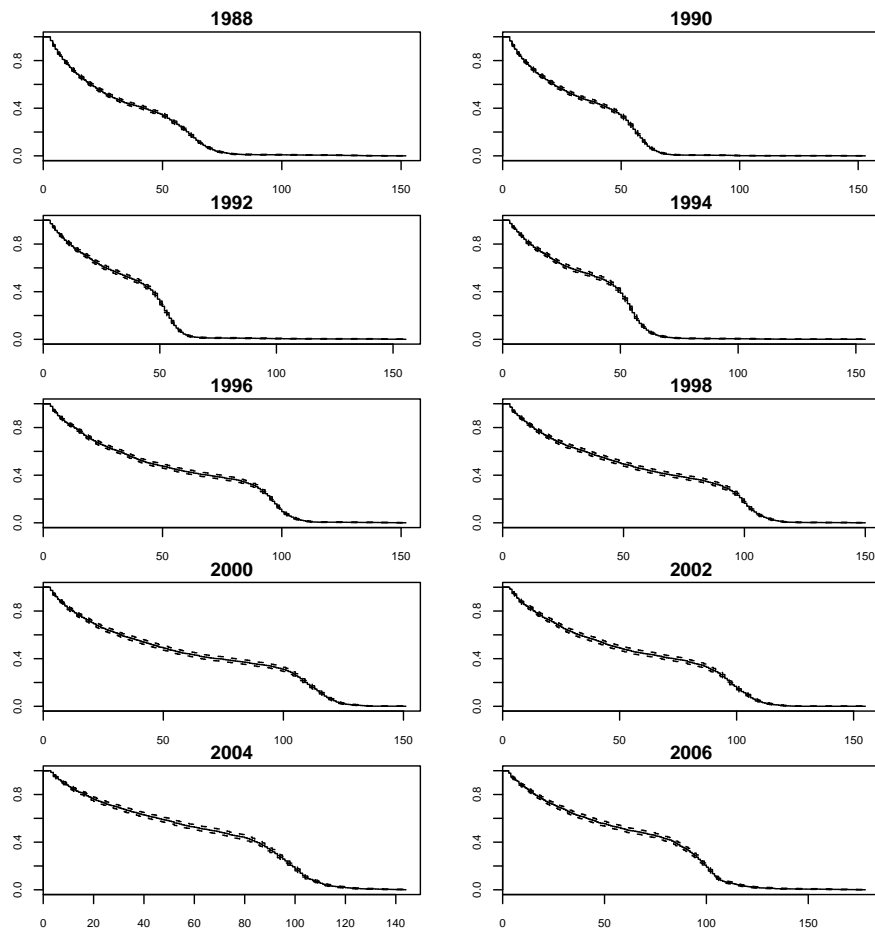
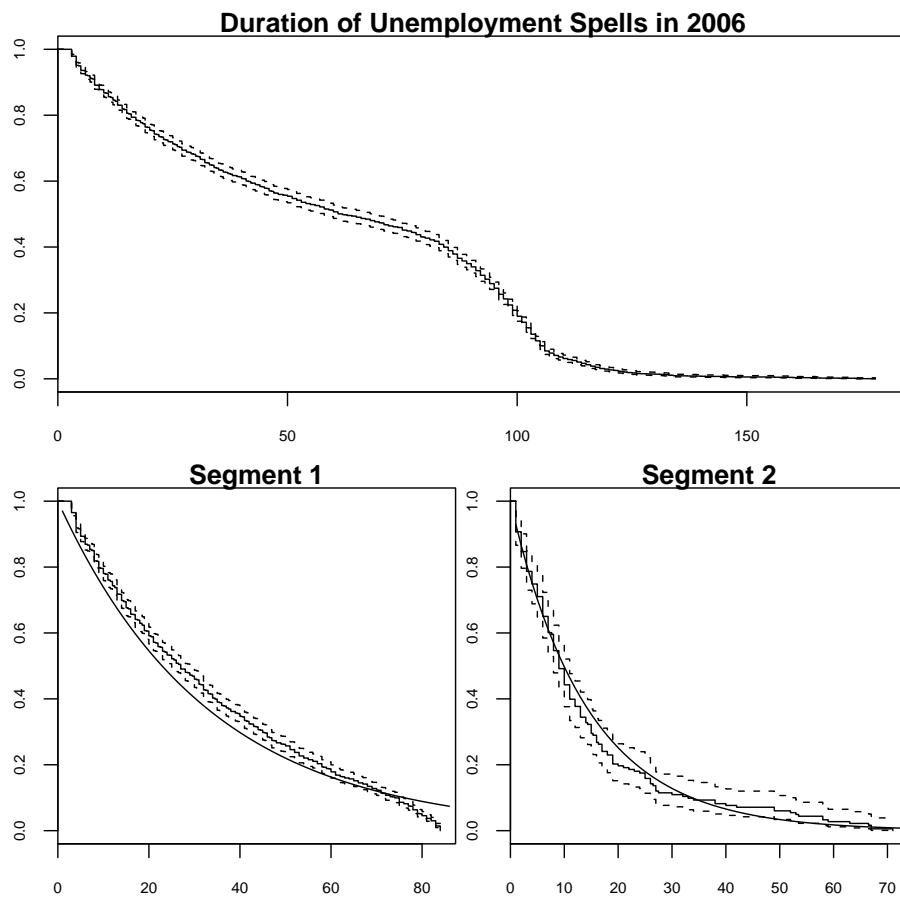


Figure 2: Duration Subsections



## 2 Sample Selection Bias: Heckman Two-Step Survival Model

### 2.1 Discrete Choice Probit Model

	Marginal effects	Estimate	Std. Error	z value	$Pr(>  z )$	
Intercept		19.0111	5.4647	3.4790	0.0005	***
White	0.0630	0.1739	0.0114	15.2200	0.0000	***
Black	-0.0601	-0.1657	0.0126	-13.1250	0.0000	***
Military Sample	0.0518	0.1430	0.0206	6.9250	0.0000	***
West	-0.0421	-0.1162	0.0147	-7.8960	0.0000	***
Over 40	0.0313	0.0863	0.0184	4.7020	0.0000	***
Currently in School	-0.0090	-0.0250	0.0035	-7.2110	0.0000	***
GDP Growth Rate	-0.0045	-0.0124	0.0033	-3.7970	0.0001	***
Time Trend		-0.0109	0.0029	-3.7540	0.0002	***
Minimum Wage	0.0315	0.0870	0.0275	3.1660	0.0015	**
Replacement Rate	0.0207	0.0571	0.0194	2.9490	0.0032	**
North Central	0.0003	0.0009	0.0142	0.0640	0.9492	
South	0.0052	0.0144	0.0129	1.1170	0.2638	

Table 1: Discrete Choice Probability Model: Probit

$$M = \frac{\psi(X\beta)}{\Psi(X\beta)}$$

## 2.2 The Cox Proportional Hazards Model

	coef*	exp(coef)*	coef	exp(coef)	se(coef)	z	p
Black	0.1997	1.2210	0.2008	1.222	0.0335	6.00	0.0000
West	0.2310	1.2599	0.1591	1.172	0.0246	6.47	0.0000
White	-0.3043	0.7376	-0.1540	0.857	0.0327	-4.71	0.0000
Minimum Wage	-0.1339	0.8747	-0.1467	0.864	0.0221	-6.64	0.0000
Military Sample	-	-	-0.1082	0.897	0.0327	-3.31	0.0009
Over 40	-0.1714	0.8425	-0.0939	0.91	0.0122	-7.72	0.0000
Replacement Rate	-0.1012	0.9037	-0.0691	0.933	0.0151	-4.58	0.0000
Currently in School	0.0141	1.0142	0.0333	1.034	0.0054	6.13	0.0000
North Central	-0.0562	0.9454	0.02858	1.029	0.0108	2.65	0.0081
South	-0.0396	0.9612	0.01572	1.016	0.01015	1.55	0.1200
GDP Growth Rate	0.0038	1.0038	-0.0040	0.996	0.0035	-1.15	0.2500
Inverse Mills Ratio	-4.9559	0.0070	-3.2448	0.039	0.3504	-9.26	0.0000
* denotes the fixed effects model							

Table 2: Cox Proportional Hazard: Corrected for Sample Selection Bias