

Table C1. Bandwidths

Variables	Bandwidth	Upper Bound	Interpretation	Variables By Type	Bandwidth	Upper Bound	Interpretation
IA. Levels Model: Homogenous Goods (Liberal Definition)				IIA. Log-Linear Model: Homogeneous Goods (Liberal Definition)			
Currency Union Dummy	0.5000	0.5000	irrelevant	Currency Union Dummy	0.5000	0.5000	irrelevant
Country <i>i</i> Effects	0.9916	0.9928	most likely irrelevant	Country <i>i</i> Effects	0.9916	0.9928	most likely irrelevant
Country <i>j</i> Effects	0.6818	0.9928	relevant	Country <i>j</i> Effects	0.5268	0.9928	relevant
Common Language Dummy	0.0662	0.5000	relevant	Common Language Dummy	0.5000	0.5000	irrelevant
Regional Trade Agreement	0.0112	0.5000	relevant	Regional Trade Agreement	0.1217	0.5000	relevant
Adjacent Dummy	0.1138	0.5000	relevant	Adjacent Dummy	0.3441	0.5000	relevant
Number Landlocked	0.8922	1.0000	relevant	Number Landlocked	0.1532	1.0000	relevant
Number Islands	0.6462	1.0000	relevant	Number Islands	0.4794	1.0000	relevant
ln(Distance)	1.80E+10	∞	most likely linear	ln(Distance)	6.18E+06	∞	most likely linear
IB. Levels Model: Homogenous Goods (Conservative Definition)				IIB. Log-Linear Model: Homogeneous Goods (Conservative Definition)			
Currency Union Dummy	0.5000	0.5000	irrelevant	Currency Union Dummy	0.5000	0.5000	irrelevant
Country <i>i</i> Effects	0.9912	0.9928	most likely irrelevant	Country <i>i</i> Effects	0.9912	0.9928	most likely irrelevant
Country <i>j</i> Effects	0.6536	0.9928	relevant	Country <i>j</i> Effects	0.5952	0.9928	relevant
Common Language Dummy	0.5000	0.5000	irrelevant	Common Language Dummy	0.5000	0.5000	irrelevant
Regional Trade Agreement	0.0050	0.5000	relevant	Regional Trade Agreement	0.1153	0.5000	relevant
Adjacent Dummy	0.5000	0.5000	irrelevant	Adjacent Dummy	0.3163	0.5000	relevant
Number Landlocked	0.9503	1.0000	most likely irrelevant	Number Landlocked	0.2300	1.0000	relevant
Number Islands	1.0000	1.0000	most likely irrelevant	Number Islands	0.6527	1.0000	relevant
ln(Distance)	1.42E+10	∞	most likely linear	ln(Distance)	3.34E+06	∞	most likely linear
IC. Levels Model: Differentiated Goods (Liberal Definition)				IIIC. Log-Linear Model: Differentiated Goods (Liberal Definition)			
Currency Union Dummy	0.5000	0.5000	irrelevant	Currency Union Dummy	0.1076	0.5000	relevant
Country <i>i</i> Effects	0.7824	0.9928	relevant	Country <i>i</i> Effects	0.9922	0.9928	most likely irrelevant
Country <i>j</i> Effects	0.9352	0.9928	most likely irrelevant	Country <i>j</i> Effects	0.4373	0.9928	relevant
Common Language Dummy	0.0000	0.5000	0/1 weight	Common Language Dummy	0.1809	0.5000	relevant
Regional Trade Agreement	0.5000	0.5000	irrelevant	Regional Trade Agreement	0.1218	0.5000	relevant
Adjacent Dummy	0.0000	0.5000	0/1 weight	Adjacent Dummy	0.3147	0.5000	relevant
Number Landlocked	1.0000	1.0000	irrelevant	Number Landlocked	0.1651	1.0000	relevant
Number Islands	0.0022	1.0000	0/1 weight	Number Islands	1.0000	1.0000	irrelevant
ln(Distance)	1.39E+10	∞	most likely linear	ln(Distance)	2.04E+06	∞	most likely linear
ID. Levels Model: Differentiated Goods (Conservative Definition)				IIID. Log-Linear Model: Differentiated Goods (Conservative Definition)			
Currency Union Dummy	0.5000	0.5000	irrelevant	Currency Union Dummy	0.1036	0.5000	relevant
Country <i>i</i> Effects	0.7904	0.9928	relevant	Country <i>i</i> Effects	0.9922	0.9928	most likely irrelevant
Country <i>j</i> Effects	0.9337	0.9928	most likely irrelevant	Country <i>j</i> Effects	0.4339	0.9928	relevant
Common Language Dummy	0.0000	0.5000	0/1 weight	Common Language Dummy	0.1892	0.5000	relevant
Regional Trade Agreement	0.5000	0.5000	irrelevant	Regional Trade Agreement	0.1215	0.5000	relevant
Adjacent Dummy	0.0000	0.5000	0/1 weight	Adjacent Dummy	0.3154	0.5000	relevant
Number Landlocked	1.0000	1.0000	irrelevant	Number Landlocked	0.1469	1.0000	relevant
Number Islands	1.85E-03	1.0000	0/1 weight	Number Islands	1.0000	1.0000	irrelevant
ln(Distance)	7.78E+09	∞	most likely linear	ln(Distance)	3.88E+06	∞	most likely linear

Table C2. Quartile Estimates for the Continuous Regressors (Elasticities)

Variable	Mean	Q1	Q2	Q3	Parametric
IA. Levels Model: Homogenous Goods (Liberal Definition)					
ln(Distance)	-0.7143 (0.2297)	-0.7803 (0.2231)	-0.3530 (0.4104)	-0.1073 (0.0630)	-0.5511 (0.1068)
IB. Levels Model: Homogenous Goods (Conservative Definition)					
ln(Distance)	-0.7453 (0.1674)	-0.7437 (0.1719)	-0.4389 (0.1650)	-0.2553 (0.1367)	-0.5931 (0.1141)
IC. Levels Model: Differentiated Goods (Liberal Definition)					
ln(Distance)	-0.7533 (0.9746)	-0.7567 (0.9794)	-0.1533 (0.0746)	0.0382 (0.0948)	-1.1812 (0.1111)
ID. Levels Model: Differentiated Goods (Consevative Definition)					
ln(Distance)	-0.7852 (0.8557)	-0.7839 (0.8046)	-0.1591 (0.0557)	0.0389 (0.0998)	-1.1858 (0.1102)
IIA. Log-Linear Model: Homogenous Goods (Liberal Definition)					
ln(Distance)	-0.6694 (0.2228)	-1.0044 (0.1251)	-0.5383 (0.3070)	-0.2350 (0.3910)	-1.1784 (0.0987)
IIB. Log-Linear Model: Homogenous Goods (Conservative Definition)					
ln(Distance)	-0.6014 (0.1547)	-0.9328 (0.2175)	-0.4737 (0.1950)	-0.1776 (0.3688)	-1.1444 (0.1103)
IIC. Log-Linear Model: Differentiated Goods (Liberal Definition)					
ln(Distance)	-0.7586 (0.2981)	-1.2228 (0.4027)	-0.7233 (0.3079)	-0.2511 (0.3457)	-1.3378 (0.0766)
IID. Log-Linear Model: Differentiated Goods (Consevative Definition)					
ln(Distance)	-0.7709 (0.4384)	-1.2620 (0.3948)	-0.7154 (0.2780)	-0.2425 (0.3318)	-1.3209 (0.0763)

NOTES: Standard errors in parentheses obtained via bootstrapping except for the parametric model.

Table C3. Li Tests for Equality of Distributions

IA. Levels Model: Homogenous Goods (Liberal Definition)		IIA. Log-Linear Model: Homogenous Goods (Liberal Definition)	
<i>Actual vs Predicted (Nonparametric)</i>		<i>Actual vs Predicted (Nonparametric)</i>	
Test statistic:	97.5731	Test statistic:	326.2652
P-value:	0.0000	P-value:	0.0000
<i>Actual vs Predicted (Parametric)</i>		<i>Actual vs Predicted (Parametric)</i>	
Test statistic:	0.5572	Test statistic:	36.6561
P-value:	0.2895	P-value:	0.0000
<i>Predicted (Nonparametric) vs Predicted (Parametric)</i>		<i>Predicted (Nonparametric) vs Predicted (Parametric)</i>	
Test statistic:	88.9493	Test statistic:	88.1810
P-value:	0.0000	P-value:	0.0000
IB. Levels Model: Homogenous Goods (Conservative Definition)		IIB. Log-Linear Model: Homogenous Goods (Conservative Definition)	
<i>Actual vs Predicted (Nonparametric)</i>		<i>Actual vs Predicted (Nonparametric)</i>	
Test statistic:	167.8317	Test statistic:	311.3336
P-value:	0.0000	P-value:	0.0000
<i>Actual vs Predicted (Parametric)</i>		<i>Actual vs Predicted (Parametric)</i>	
Test statistic:	-0.4447	Test statistic:	33.2429
P-value:	0.3278	P-value:	0.0000
<i>Predicted (Nonparametric) vs Predicted (Parametric)</i>		<i>Predicted (Nonparametric) vs Predicted (Parametric)</i>	
Test statistic:	116.8073	Test statistic:	78.1214
P-value:	0.0000	P-value:	0.0000
IC. Levels Model: Differentiated Goods (Liberal Definition)		IIC. Log-Linear Model: Differentiated Goods (Liberal Definition)	
<i>Actual vs Predicted (Nonparametric)</i>		<i>Actual vs Predicted (Nonparametric)</i>	
Test statistic:	-2.7594	Test statistic:	282.7217
P-value:	0.0028	P-value:	0.0000
<i>Actual vs Predicted (Parametric)</i>		<i>Actual vs Predicted (Parametric)</i>	
Test statistic:	0.1291	Test statistic:	31.4584
P-value:	0.4552	P-value:	0.0000
<i>Predicted (Nonparametric) vs Predicted (Parametric)</i>		<i>Predicted (Nonparametric) vs Predicted (Parametric)</i>	
Test statistic:	2.2876	Test statistic:	91.0722
P-value:	0.0130	P-value:	0.0000
ID. Levels Model: Differentiated Goods (Consevative Definition)		IID. Log-Linear Model: Differentiated Goods (Consevative Definition)	
<i>Actual vs Predicted (Nonparametric)</i>		<i>Actual vs Predicted (Nonparametric)</i>	
Test statistic:	-2.7836	Test statistic:	267.6759
P-value:	0.0027	P-value:	0.0000
<i>Actual vs Predicted (Parametric)</i>		<i>Actual vs Predicted (Parametric)</i>	
Test statistic:	0.1796	Test statistic:	30.8707
P-value:	0.4282	P-value:	0.0000
<i>Predicted (Nonparametric) vs Predicted (Parametric)</i>		<i>Predicted (Nonparametric) vs Predicted (Parametric)</i>	
Test statistic:	2.4985482	Test statistic:	87.2996
P-value:	0.0064	P-value:	0.0000

Note: P-values based on asymptotic normal approximation.

Table C4. Forecasting Accuracy

Model	Squared Correlation	Mean Squared Error	Mean Absolute Error	Mean Absolute Percentage Error	Model	Squared Correlation	Mean Squared Error	Mean Absolute Error	Mean Absolute Percentage Error
IA. Levels Model: Homogenous Goods (Liberal Definition)					IIA. Log-Linear Model: Homogenous Goods (Liberal Definition)				
<i>In-Sample</i>					<i>In-Sample</i>				
Parametric	0.7319	1.35E+10	42287	11.0756	Parametric	0.6522	1.8800	1.0619	0.1365
Nonparametric	0.4613	2.86E+10	72146	46.0448	Nonparametric	0.4427	3.3331	1.5024	0.1952
<i>Hold-out-Sample</i>					<i>Hold-out-Sample</i>				
Parametric	0.2658	7.69E+10	87509	17.6019	Parametric	0.3848	3.7024	1.5137	0.1955
Nonparametric	0.0411	9.84E+10	105408	51.9628	Nonparametric	0.2444	4.1460	4.1460	1.6786
IB. Levels Model: Homogenous Goods (Conservative Definition)					IIB. Log-Linear Model: Homogenous Goods (Conservative Definition)				
<i>In-Sample</i>					<i>In-Sample</i>				
Parametric	0.8471	1.36E+10	44354	14.3238	Parametric	0.6796	1.7895	1.0233	0.1295
Nonparametric	0.3757	5.86E+10	91227	53.5541	Nonparametric	0.4231	3.5012	1.5359	0.1991
<i>Hold-out-Sample</i>					<i>Hold-out-Sample</i>				
Parametric	0.1400	1.24E+11	83654	16.4932	Parametric	0.3582	3.7149	1.5311	0.1973
Nonparametric	0.1070	4.61E+10	93623	61.6659	Nonparametric	0.1592	4.3670	1.7408	0.2288
IC. Levels Model: Differentiated Goods (Liberal Definition)					IIC. Log-Linear Model: Differentiated Goods (Liberal Definition)				
<i>In-Sample</i>					<i>In-Sample</i>				
Parametric	0.9849	9.22E+09	28408	6.0466	Parametric	0.8130	1.0471	0.7781	0.1028
Nonparametric	0.9705	8.44E+10	70979	50.6437	Nonparametric	0.5168	2.9344	1.4012	0.1886
<i>Hold-out-Sample</i>					<i>Hold-out-Sample</i>				
Parametric	0.2443	3.61E+12	120360	8.4363	Parametric	0.6035	2.1506	1.1454	0.1542
Nonparametric	0.0423	4.71E+12	219262	111.5988	Nonparametric	0.2998	3.7085	1.5778	0.2131
ID. Levels Model: Differentiated Goods (Consevative Definition)					IID. Log-Linear Model: Differentiated Goods (Consevative Definition)				
<i>In-Sample</i>					<i>In-Sample</i>				
Parametric	0.9990	5.98E+09	25287	5.8491	Parametric	0.7671	1.2156	0.8365	0.1106
Nonparametric	0.9978	1.20E+10	36886	22.3674	Nonparametric	0.5150	2.7714	1.3493	0.1809
<i>Hold-out-Sample</i>					<i>Hold-out-Sample</i>				
Parametric	0.3276	1.90E+12	128887	8.3195	Parametric	0.6427	2.1016	1.1356	0.1518
Nonparametric	0.0508	1.12E+12	203173	51.2902	Nonparametric	0.3236	3.9254	1.6554	0.2193

Table C5. Li Tests for Equality of Distributions: Forecasting

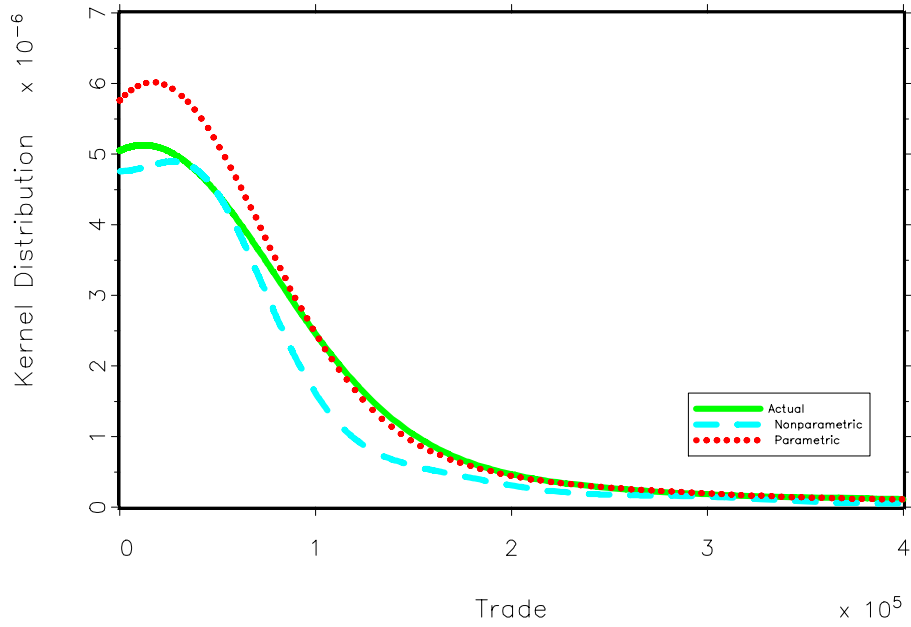
	In-Sample	Hold-Out-Sample		In-Sample	Hold-Out-Sample
IA. Levels Model: Homogenous Goods (Liberal Definition)			IIA. Log-Linear Model: Homogenous Goods (Liberal Definition)		
<i>Actual vs Predicted (Nonparametric)</i>			<i>Actual vs Predicted (Nonparametric)</i>		
Test statistic:	67.8419	50.2455	Test statistic:	-42.2957	-510.6731
P-value:	0.0000	0.0000	P-value:	0.0000	0.0000
<i>Actual vs Predicted (Parametric)</i>			<i>Actual vs Predicted (Parametric)</i>		
Test statistic:	0.2939	-4.0611	Test statistic:	0.0913	1.7922
P-value:	0.3841	0.0000	P-value:	0.4621	0.0368
<i>Predicted (Nonparametric) vs Predicted (Parametric)</i>			<i>Predicted (Nonparametric) vs Predicted (Parametric)</i>		
Test statistic:	57.6413	46.1661	Test statistic:	-21.6588	-42.4896
P-value:	0.0000	0.0000	P-value:	0.0000	0.0000
IB. Levels Model: Homogenous Goods (Conservative Definition)			IIIB. Log-Linear Model: Homogenous Goods (Conservative Definition)		
<i>Actual vs Predicted (Nonparametric)</i>			<i>Actual vs Predicted (Nonparametric)</i>		
Test statistic:	207.9572	201.2351	Test statistic:	166.7035	175.4701
P-value:	0.0000	0.0000	P-value:	0.0000	0.0000
<i>Actual vs Predicted (Parametric)</i>			<i>Actual vs Predicted (Parametric)</i>		
Test statistic:	13.7600	11.3839	Test statistic:	9.3195	13.6620
P-value:	0.0000	0.0000	P-value:	0.0000	0.0000
<i>Predicted (Nonparametric) vs Predicted (Parametric)</i>			<i>Predicted (Nonparametric) vs Predicted (Parametric)</i>		
Test statistic:	54.7101	50.9772	Test statistic:	56.5950	58.7027
P-value:	0.0000	0.0000	P-value:	0.0000	0.0000
IC. Levels Model: Differentiated Goods (Liberal Definition)			IIIC. Log-Linear Model: Differentiated Goods (Liberal Definition)		
<i>Actual vs Predicted (Nonparametric)</i>			<i>Actual vs Predicted (Nonparametric)</i>		
Test statistic:	92.5985	171.3675	Test statistic:	1.8407	-3.0739
P-value:	0.0000	0.0000	P-value:	0.0325	0.0001
<i>Actual vs Predicted (Parametric)</i>			<i>Actual vs Predicted (Parametric)</i>		
Test statistic:	0.0086	6.1338	Test statistic:	0.0200	0.3389
P-value:	0.4991	0.0000	P-value:	0.4989	0.3681
<i>Predicted (Nonparametric) vs Predicted (Parametric)</i>			<i>Predicted (Nonparametric) vs Predicted (Parametric)</i>		
Test statistic:	51.6743	32.4495	Test statistic:	1.5499	-7.8276
P-value:	0.0000	0.0000	P-value:	0.0611	0.0000
ID. Levels Model: Differentiated Goods (Consevative Definition)			IIID. Log-Linear Model: Differentiated Goods (Consevative Definition)		
<i>Actual vs Predicted (Nonparametric)</i>			<i>Actual vs Predicted (Nonparametric)</i>		
Test statistic:	193.8227	201.4041	Test statistic:	182.6392	208.9896
P-value:	0.0000	0.0000	P-value:	0.0000	0.0000
<i>Actual vs Predicted (Parametric)</i>			<i>Actual vs Predicted (Parametric)</i>		
Test statistic:	11.0777	10.3740	Test statistic:	11.6600	17.0784
P-value:	0.0000	0.0000	P-value:	0.0000	0.0000
<i>Predicted (Nonparametric) vs Predicted (Parametric)</i>			<i>Predicted (Nonparametric) vs Predicted (Parametric)</i>		
Test statistic:	51.7448	53.3728	Test statistic:	64.3746	55.5282
P-value:	0.0000	0.0000	P-value:	0.0000	0.0000

Table C6. Hsiao et al. Tests for Correct Functional Form

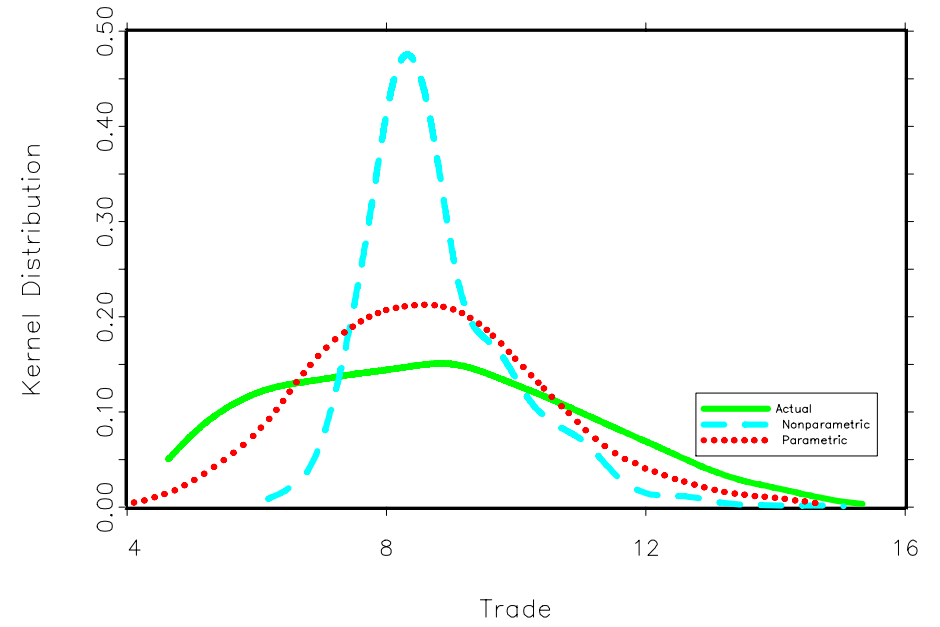
IA. Levels Model: Homogenous Goods (Liberal Definition)	
Test Statistic:	-0.6642
P-Value:	0.8376
IB. Levels Model: Homogenous Goods (Conservative Definition)	
Test Statistic:	0.3795
P-Value:	0.0981
IC. Levels Model: Differentiated Goods (Liberal Definition)	
Test Statistic:	-0.2259
P-Value:	0.6251
ID. Levels Model: Differentiated Goods (Consevative Definition)	
Test Statistic:	0.0733
P-Value:	0.2464
IIA. Log-Linear Model: Homogenous Goods (Liberal Definition)	
Test Statistic:	-0.9330
P-Value:	0.8980
IIB. Log-Linear Model: Homogenous Goods (Conservative Definition)	
Test Statistic:	0.4745
P-Value:	0.2321
IIC. Log-Linear Model: Differentiated Goods (Liberal Definition)	
Test Statistic:	-1.0121
P-Value:	0.9259
IID. Log-Linear Model: Differentiated Goods (Consevative Definition)	
Test Statistic:	0.2384
P-Value:	0.5855

Figure C1: Homogenous Goods

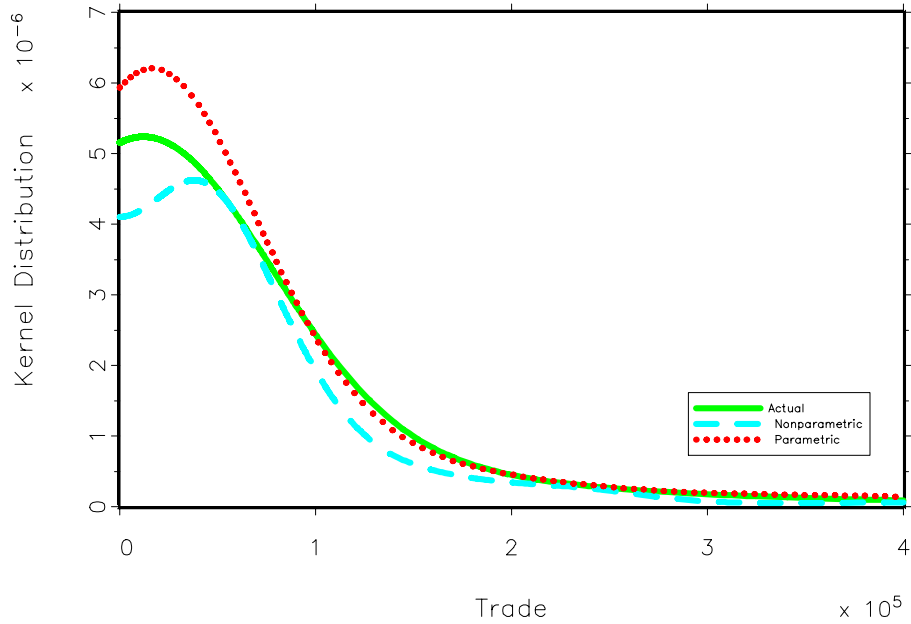
(a) Liberal Definition – Levels



(b) Liberal Definition – Logs



(c) Conservative Definition – Levels



(d) Conservative Definition – Logs

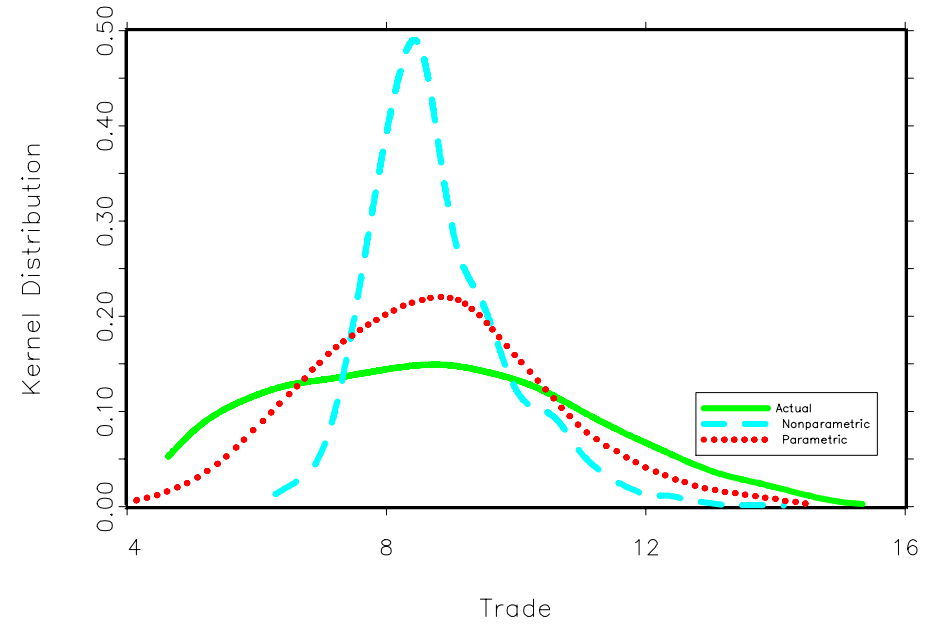
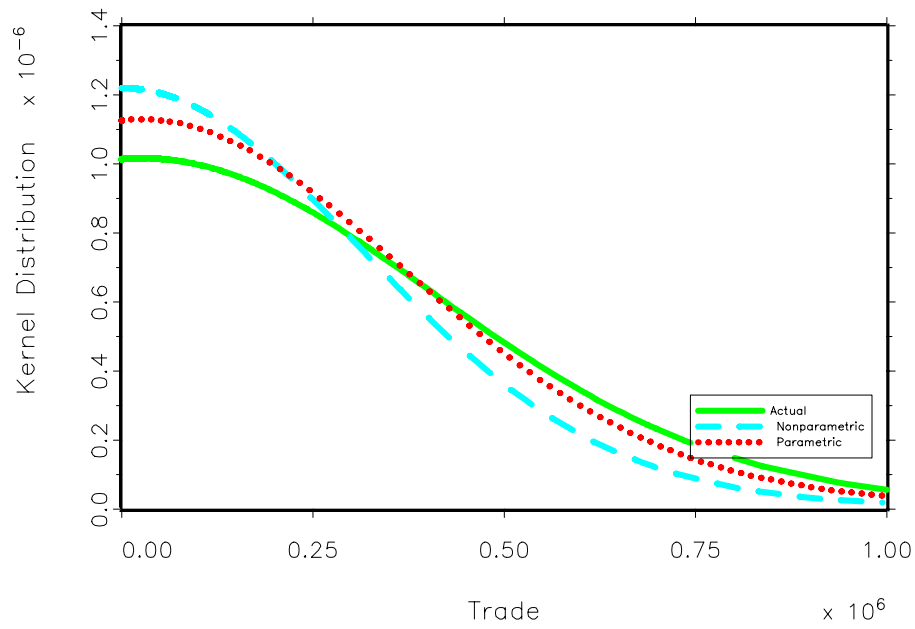
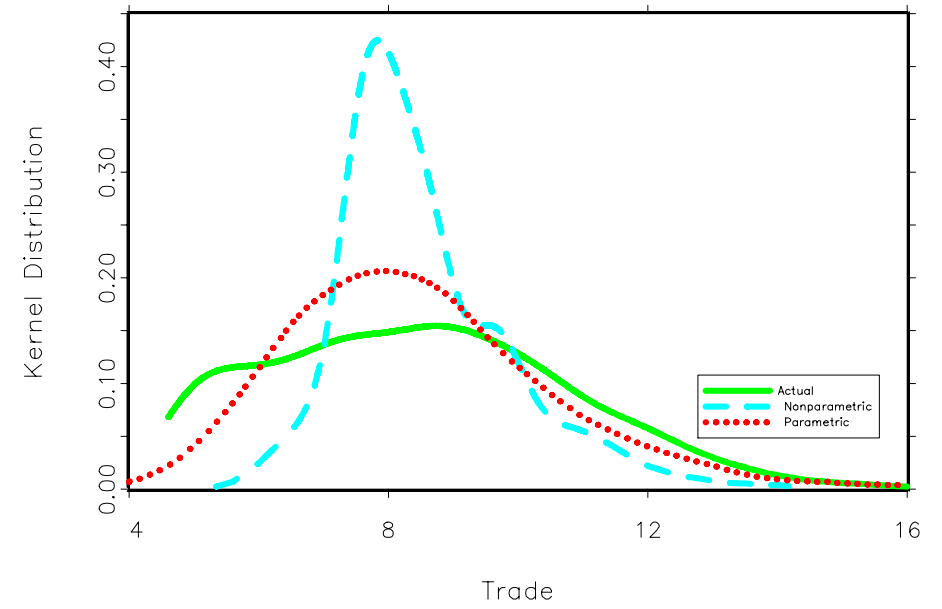


Figure C2: Differentiated Goods

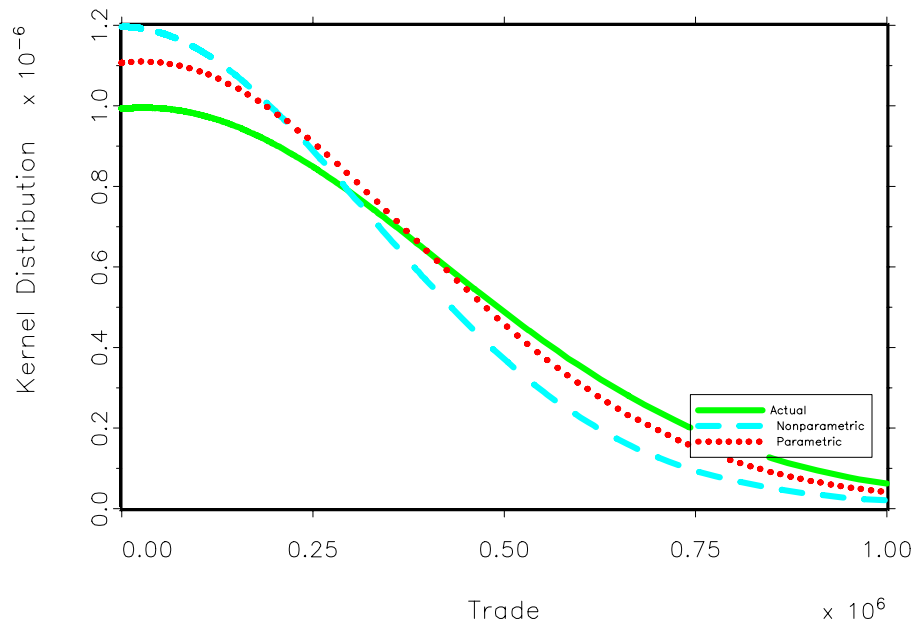
(a) Liberal Definition – Levels



(c) Liberal Definition – Logs



(c) Conservative Definition – Levels



(d) Conservative Definition – Logs

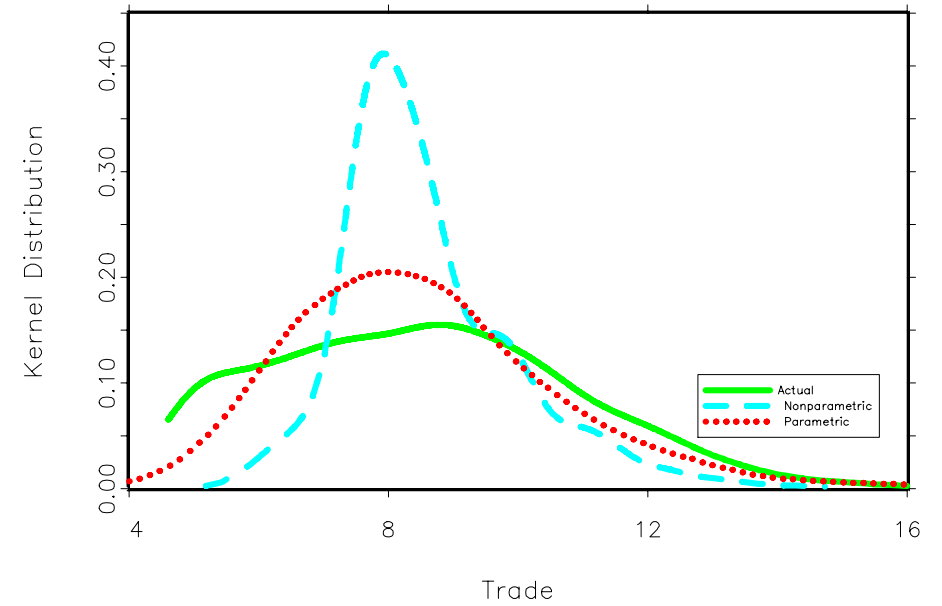
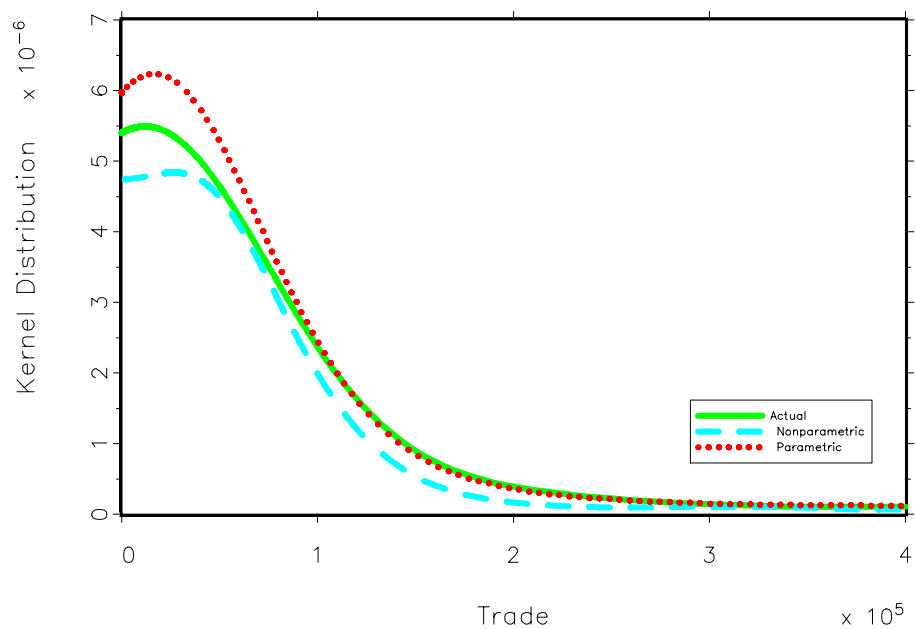
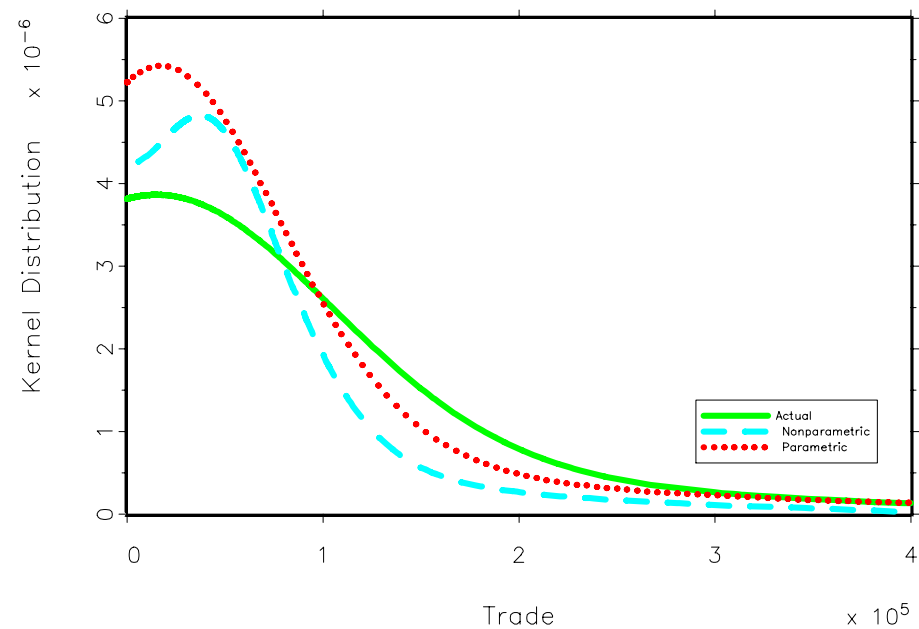


Figure C3: Homogenous Goods – Liberal Definition

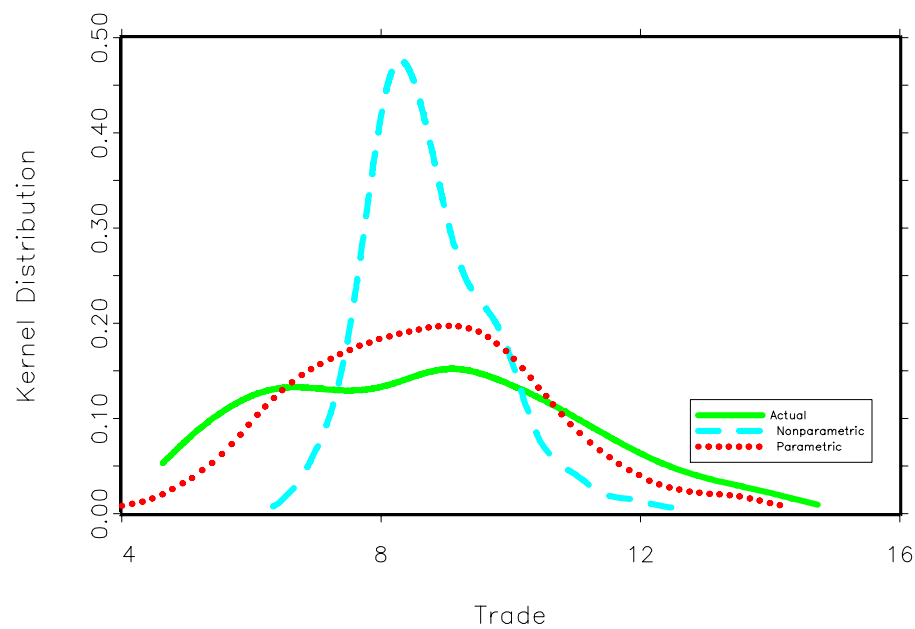
(a) In Sample – Levels



(b) Out of Sample – Levels



(c) In Sample – Logs



(d) Out of Sample – Logs

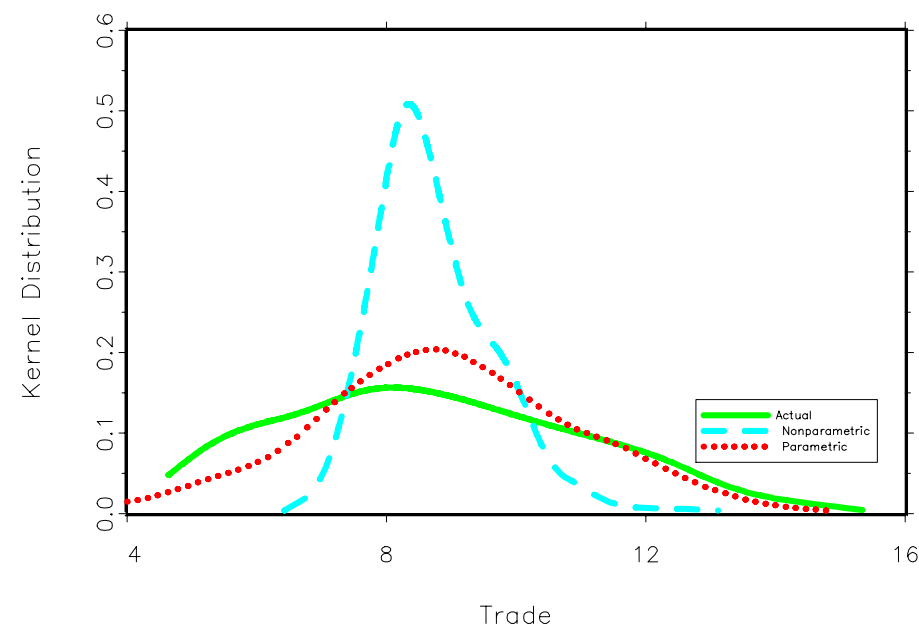
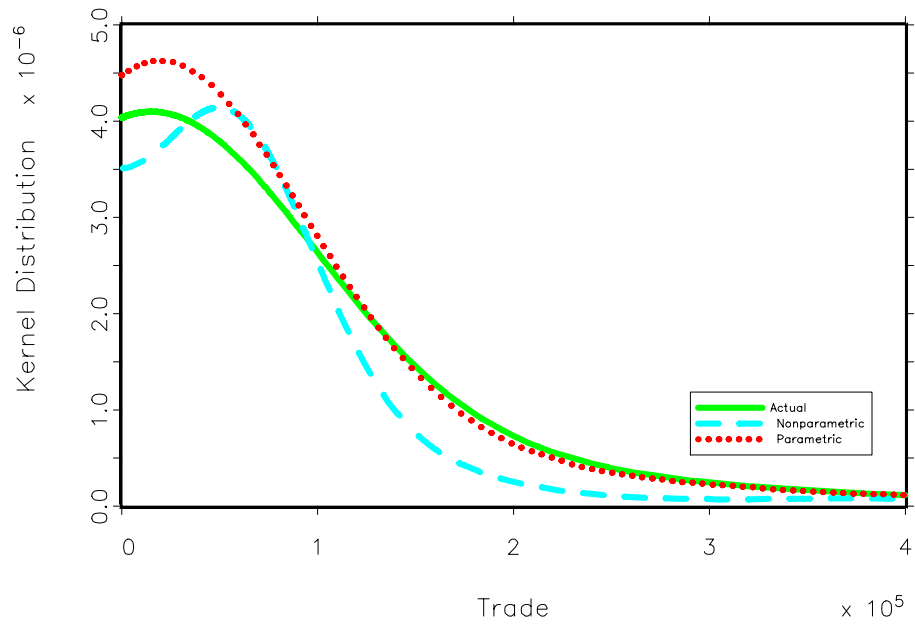
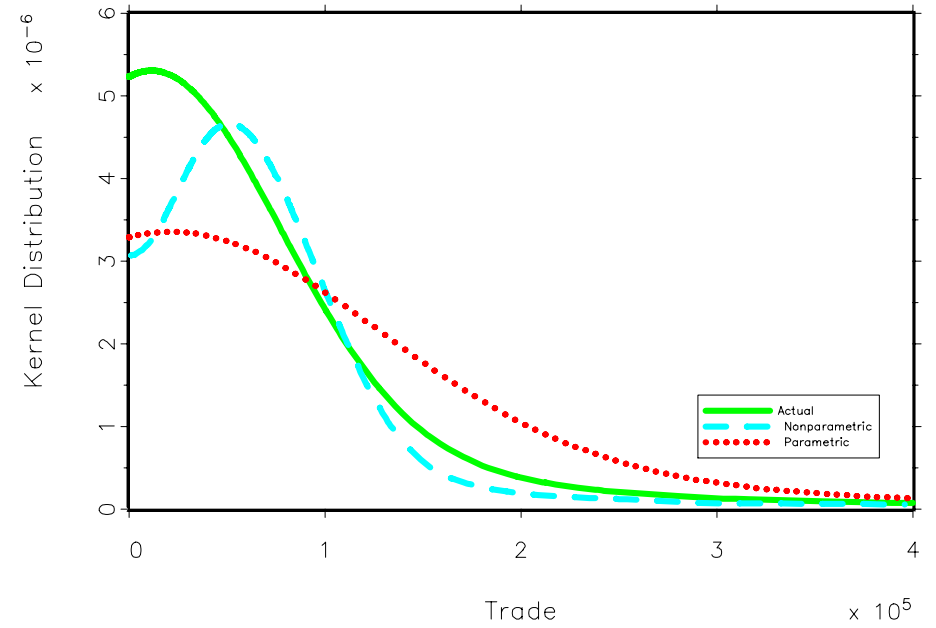


Figure C4: Homogenous Goods – Conservative Definition

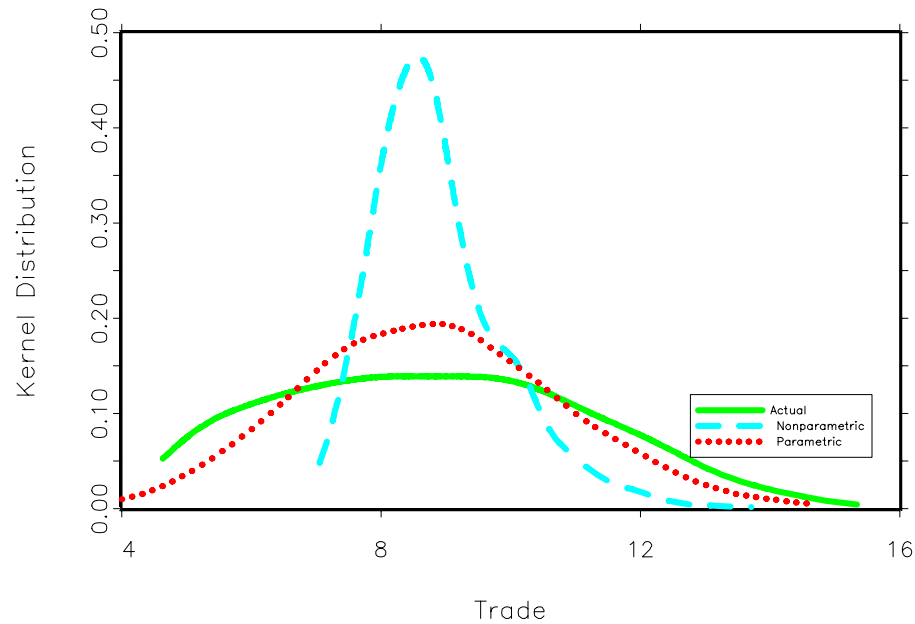
(a) In Sample – Levels



(b) Out of Sample – Levels



(c) In Sample – Logs



(d) Out of Sample – Logs

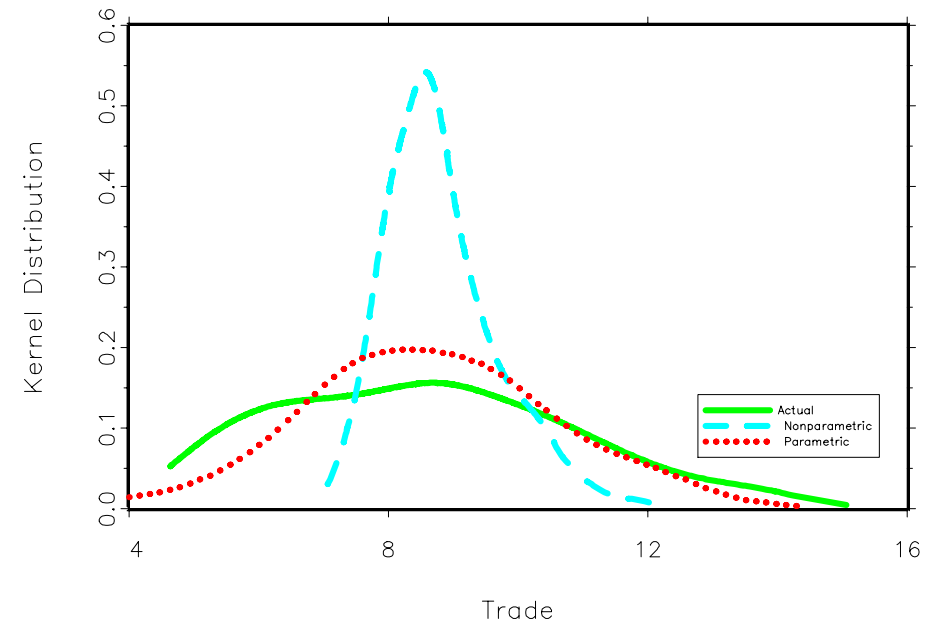
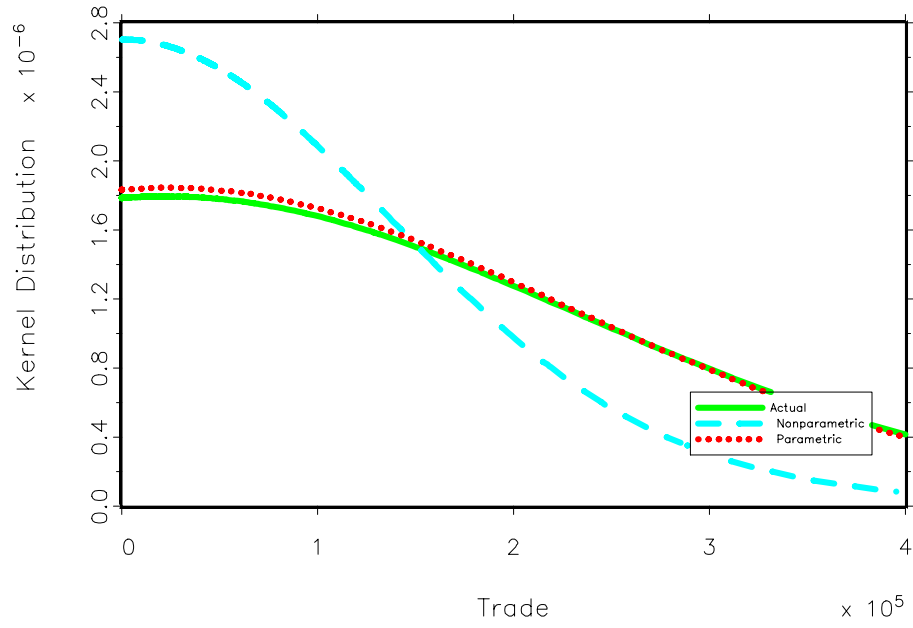
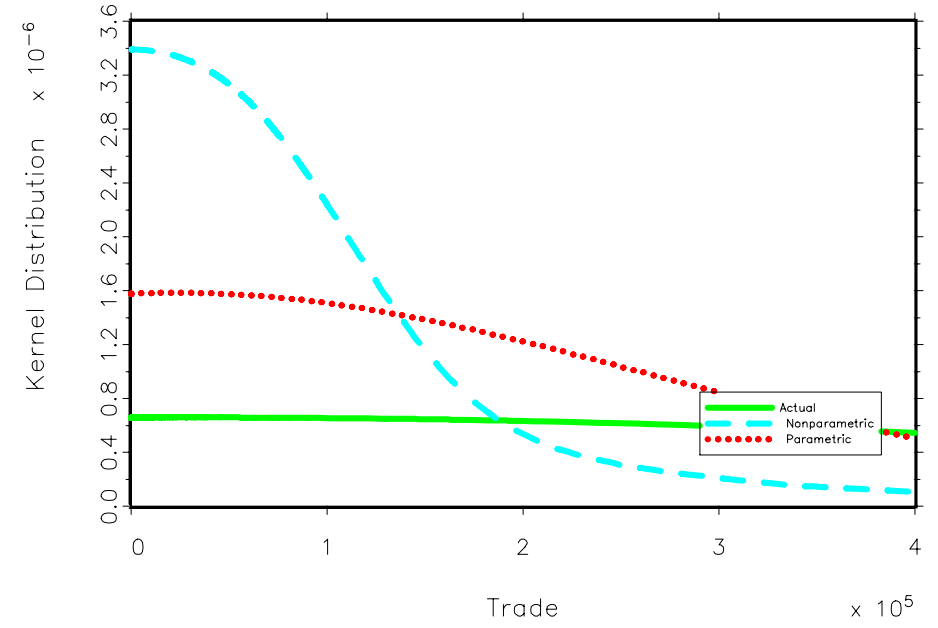


Figure C5: Differentiated Goods – Liberal Definition

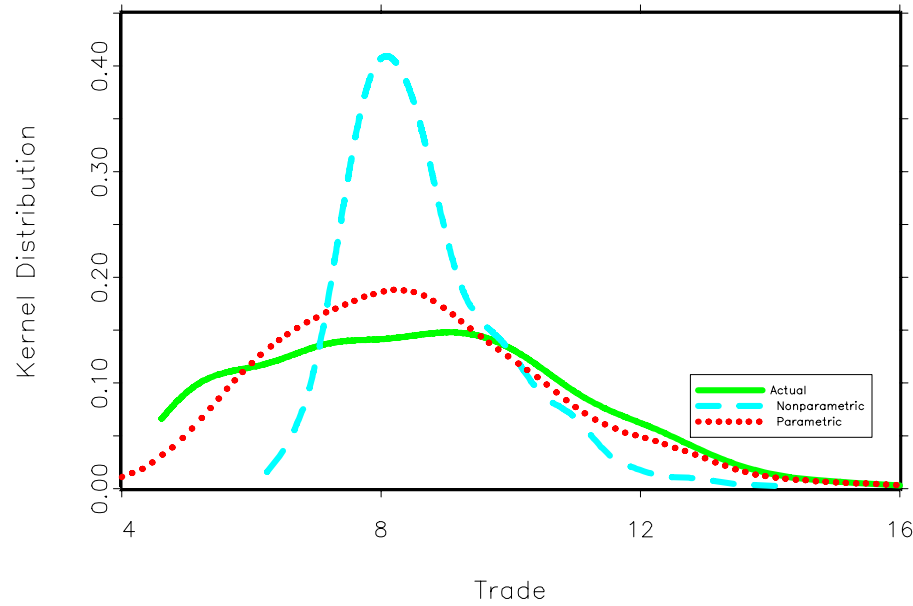
(a) In Sample – Levels



(b) Out of Sample – Levels



(c) In Sample – Logs



(d) Out of Sample – Logs

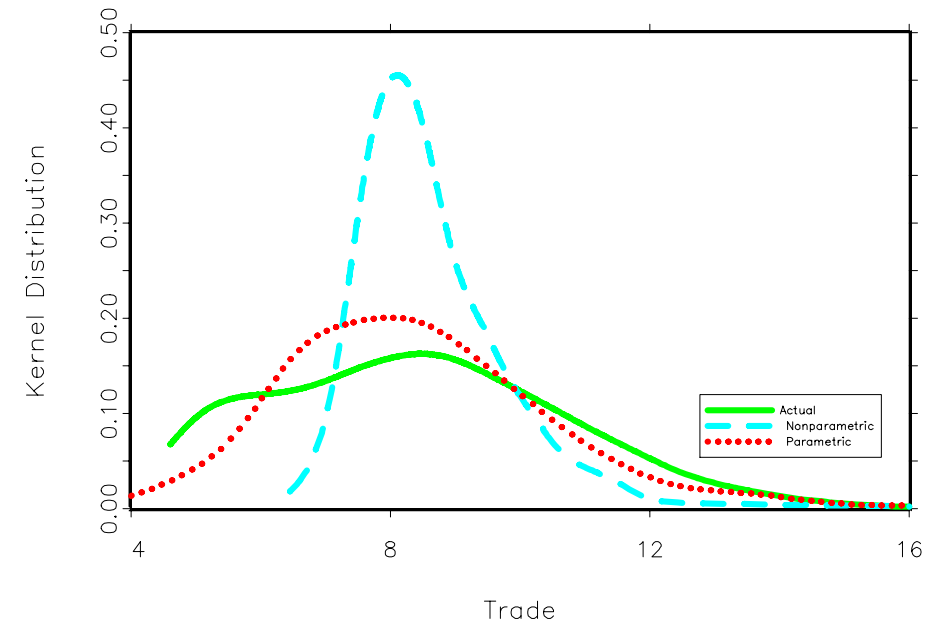
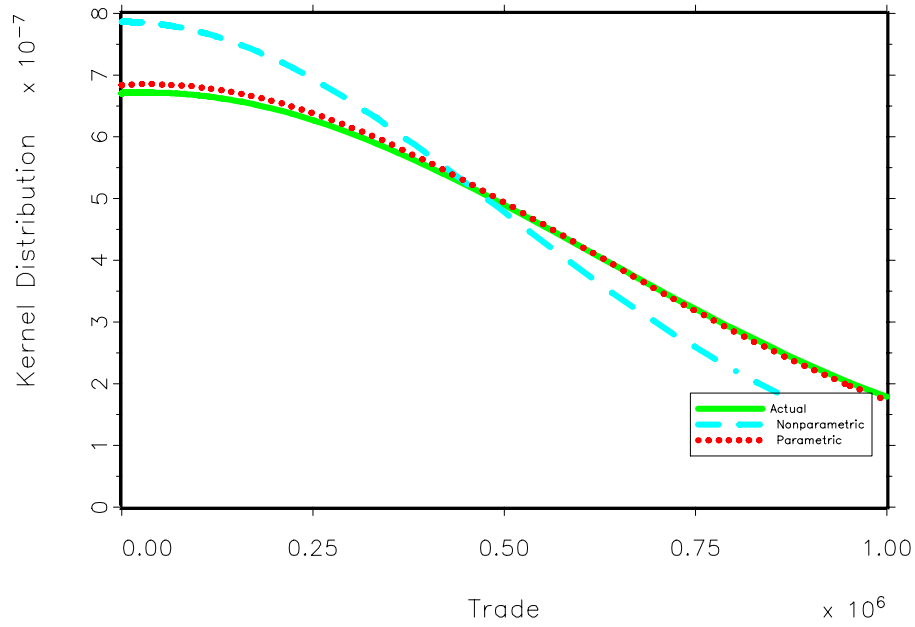
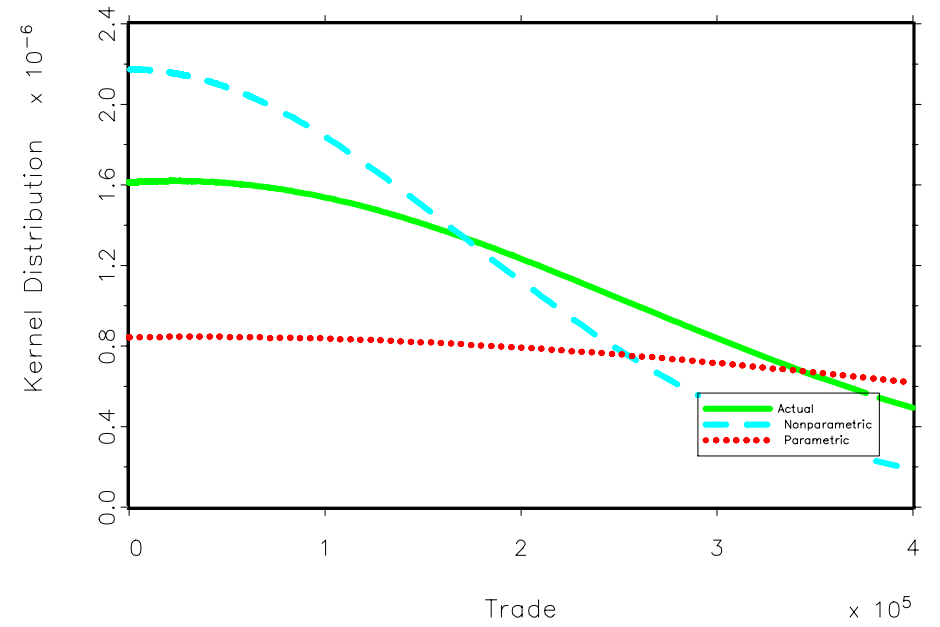


Figure C6: Differentiated Goods – Conservative Definition

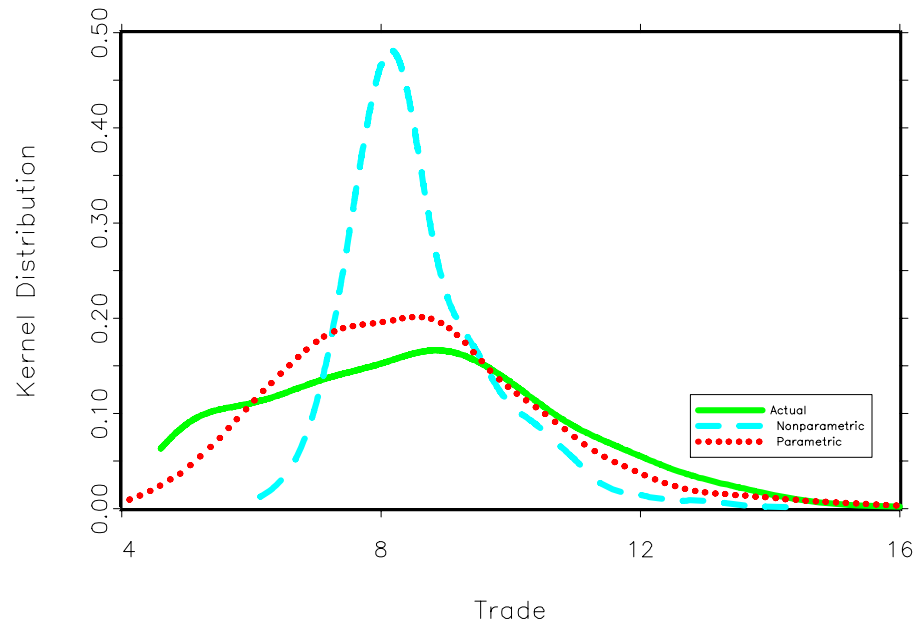
(a) In Sample – Levels



(b) Out of Sample – Levels



(c) In Sample – Logs



(d) Out of Sample – Logs

