

## Contents

<b>1</b>	<b>Regression Results</b>	<b>3</b>
1.1	Linear Models . . . . .	3
1.2	Square Models . . . . .	8
1.3	Cubic Models . . . . .	12
<b>2</b>	<b>Summary Statistics</b>	<b>15</b>
2.1	Households Electricity Consumption . . . . .	15
2.2	Distribution of Observations . . . . .	16
<b>3</b>	<b>Plots</b>	<b>18</b>

## List of Tables

1	Regression Results: RD Design, Linear Models with 2% Bandwidth . . . . .	3
2	Regression Results: RD Design, Linear Models with 5% Bandwidth . . . . .	4
3	Regression Results: RD Design, Linear Models with 10% Bandwidth . . . . .	5
4	Regression Results: RD Design, Linear Models with 20% Bandwidth . . . . .	6
5	Regression Results: RD Design, Linear Models with 50% Bandwidth . . . . .	7
6	Regression Results: RD Design, Square Models with 2% Bandwidth . . . . .	8
7	Regression Results: RD Design, Square Models with 5% Bandwidth . . . . .	9
8	Regression Results: RD Design, Square Models with 10% Bandwidth . . . . .	10
9	Regression Results: RD Design, Square Models with 20% Bandwidth . . . . .	11
10	Regression Results: RD Design, Cubic Models with 2% Bandwidth . . . . .	12
11	Regression Results: RD Design, Cubic Models with 5% Bandwidth . . . . .	13
12	Regression Results: RD Design, Cubic Models with 10% Bandwidth . . . . .	14
13	Household Electricity Consumption: Summary Statistics . . . . .	15
14	Household Electricity Consumption: Quantiles . . . . .	15
15	Distribution by Bandwidth: Control and Treatment Groups . . . . .	16
16	Distribution by Bandwidth: Billing Year-Month . . . . .	17

## List of Figures

1	Mean of Daily Average Consumption by Ranges of Normalized Consumption in Period 0 (%) . . . . .	18
2	Scatter Plots with Spline Fits . . . . .	19
3	Scatter Plot by Treatment Status . . . . .	20
4	Estimated Treatment Effects by Bandwidth, Linear Models . . . . .	21

## Regression Discontinuity (RD) Design: Regression Results and Plots

**Jinmahn Jo (ID#: 915528897)**

# 1 Regression Results

## 1.1 Linear Models

Table 1: Regression Results: RD Design, Linear Models with 2% Bandwidth

Model:	Daily Average Consumption in Period 1 (kWh/Day)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Variables</u>										
1[Treated]	0.1746*** (0.0331)	0.1597*** (0.0316)	0.1006*** (0.0280)	0.0935*** (0.0340)	0.0503* (0.0262)	0.1774*** (0.0333)	0.1719*** (0.0319)	0.1072*** (0.0282)	0.0970*** (0.0344)	0.0535** (0.0264)
NC0	0.1084*** (0.0141)	0.1016*** (0.0135)	0.0557*** (0.0119)	0.1587*** (0.0134)	0.1192*** (0.0112)	0.1181*** (0.0189)	0.1433*** (0.0181)	0.0785*** (0.0160)	0.1708*** (0.0173)	0.1302*** (0.0150)
1[Treated] × NC0						-0.0216 (0.0284)	-0.0928*** (0.0271)	-0.0506** (0.0240)	-0.0269 (0.0264)	-0.0243 (0.0224)
Daily Average CDDs	0.7652*** (0.0026)	1.067*** (0.0029)	1.267*** (0.0934)	1.239*** (0.0075)		0.7653*** (0.0026)	1.067*** (0.0029)	1.267*** (0.0934)	1.239*** (0.0075)	
Daily Average HDDs	0.2990*** (0.0018)	0.4010*** (0.0020)	0.5368*** (0.0792)	0.4901*** (0.0053)		0.2990*** (0.0018)	0.4010*** (0.0020)	0.5368*** (0.0792)	0.4900*** (0.0053)	
Bandwidth	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
<u>Fixed-effects</u>										
FEs: Account-Premise IDs			Yes		Yes		Yes		Yes	
FEs: Billing Year-Month				Yes	Yes			Yes		Yes
<u>Fit statistics</u>										
Observations	964,508	964,508	964,508	964,508	964,508	964,508	964,508	964,508	964,508	964,508
R <sup>2</sup>	0.00065	0.08497	0.69117	0.25163	0.73033	0.00065	0.08498	0.69117	0.25163	0.73033
Adjusted R <sup>2</sup>	0.00065	0.08497	0.53118	0.25154	0.59055	0.00065	0.08498	0.53118	0.25154	0.59055

Signif. Codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

Notes: NC0 means Normalized Consumption in period 0 relative to Base Usage Qty (%). Standard errors are clustered by Account-Premise IDs or Billing Year-Month.

## Regression Discontinuity (RD) Design: Regression Results and Plots

**Jinmahn Jo (ID#: 915528897)**

Table 2: Regression Results: RD Design, Linear Models with 5% Bandwidth

Model:	Daily Average Consumption in Period 1 (kWh/Day)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Variables</u>										
1[Treated]	0.0117 (0.0210)	0.0012 (0.0201)	0.0588*** (0.0160)	-0.0055 (0.0203)	0.0327** (0.0150)	0.0197 (0.0210)	0.0091 (0.0201)	0.0613*** (0.0160)	-0.0002 (0.0203)	0.0341** (0.0150)
NC0	0.1950*** (0.0036)	0.1856*** (0.0034)	0.0845*** (0.0027)	0.2127*** (0.0045)	0.1348*** (0.0026)	0.2185*** (0.0048)	0.2092*** (0.0046)	0.0919*** (0.0037)	0.2283*** (0.0057)	0.1389*** (0.0035)
1[Treated] × NC0						-0.0500*** (0.0072)	-0.0499*** (0.0069)	-0.0157*** (0.0055)	-0.0330*** (0.0075)	-0.0088* (0.0051)
Daily Average CDDs	0.7657*** (0.0016)	1.086*** (0.0019)	1.272*** (0.0935)	1.267*** (0.0046)		0.7657*** (0.0016)	1.086*** (0.0019)	1.272*** (0.0935)	1.267*** (0.0046)	
Daily Average HDDs	0.2982*** (0.0012)	0.4125*** (0.0013)	0.5348*** (0.0795)	0.4970*** (0.0034)		0.2982*** (0.0012)	0.4125*** (0.0013)	0.5348*** (0.0794)	0.4970*** (0.0034)	
Bandwidth	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
<u>Fixed-effects</u>										
FEs: Account-Premise IDs			Yes		Yes		Yes		Yes	
FEs: Billing Year-Month				Yes	Yes				Yes	Yes
<u>Fit statistics</u>										
Observations	2,397,899	2,397,899	2,397,899	2,397,899	2,397,899	2,397,899	2,397,899	2,397,899	2,397,899	2,397,899
R <sup>2</sup>	0.00497	0.08841	0.60191	0.25394	0.65217	0.00499	0.08843	0.60191	0.25394	0.65217
Adjusted R <sup>2</sup>	0.00497	0.08841	0.51964	0.2539	0.58027	0.00499	0.08843	0.51964	0.25391	0.58027

Signif. Codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

Notes: NC0 means Normalized Consumption in period 0 relative to Base Usage Qty (%). Standard errors are clustered by Account-Premise IDs or Billing Year-Month.

## Regression Discontinuity (RD) Design: Regression Results and Plots

**Jinmahn Jo (ID#: 915528897)**

Table 3: Regression Results: RD Design, Linear Models with 10% Bandwidth

Model:	Daily Average Consumption in Period 1 (kWh/Day)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Variables</u>										
1[Treated]	-0.0818*** (0.0149)	-0.0963*** (0.0143)	0.0105 (0.0110)	-0.0612*** (0.0143)	0.0050 (0.0103)	-0.0790*** (0.0150)	-0.0936*** (0.0144)	0.0096 (0.0110)	-0.0580*** (0.0143)	0.0059 (0.0103)
NC0	0.2134*** (0.0013)	0.2048*** (0.0012)	0.0940*** (0.0010)	0.2235*** (0.0035)	0.1400*** (0.0009)	0.2174*** (0.0017)	0.2088*** (0.0016)	0.0927*** (0.0013)	0.2280*** (0.0037)	0.1414*** (0.0012)
1[Treated] × NC0						-0.0088*** (0.0026)	-0.0085*** (0.0025)	0.0027 (0.0019)	-0.0099*** (0.0026)	-0.0029 (0.0018)
Daily Average CDDs	0.7672*** (0.0012)	1.093*** (0.0015)	1.269*** (0.0930)	1.28*** (0.0034)		0.7672*** (0.0012)	1.093*** (0.0015)	1.269*** (0.0930)	1.28*** (0.0034)	
Daily Average HDDs	0.2996*** (0.0008)	0.4187*** (0.0011)	0.5354*** (0.0786)	0.5055*** (0.0026)		0.2996*** (0.0008)	0.4187*** (0.0011)	0.5354*** (0.0786)	0.5055*** (0.0026)	
Bandwidth	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
<u>Fixed-effects</u>										
FEs: Account-Premise IDs			Yes		Yes		Yes		Yes	Yes
FEs: Billing Year-Month				Yes	Yes			Yes	Yes	
<u>Fit statistics</u>										
Observations	4,719,361	4,719,361	4,719,361	4,719,361	4,719,361	4,719,361	4,719,361	4,719,361	4,719,361	4,719,361
R <sup>2</sup>	0.0211	0.10346	0.56299	0.26521	0.61794	0.02111	0.10346	0.56299	0.26521	0.61794
Adjusted R <sup>2</sup>	0.0211	0.10346	0.51752	0.26519	0.57818	0.02111	0.10346	0.51752	0.2652	0.57818

Signif. Codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

Notes: NC0 means Normalized Consumption in period 0 relative to Base Usage Qty (%). Standard errors are clustered by Account-Premise IDs or Billing Year-Month.

## Regression Discontinuity (RD) Design: Regression Results and Plots

**Jinmahn Jo (ID#: 915528897)**

Table 4: Regression Results: RD Design, Linear Models with 20% Bandwidth

Model:	Daily Average Consumption in Period 1 (kWh/Day)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Variables</u>										
1[Treated]	-0.0755*** (0.0106)	-0.0866*** (0.0101)	-0.0076 (0.0077)	-0.0620*** (0.0116)	-0.0140* (0.0072)	-0.0686*** (0.0106)	-0.0791*** (0.0102)	-0.0093 (0.0078)	-0.0556*** (0.0113)	-0.0113 (0.0072)
NC0	0.2112*** (0.0005)	0.2023*** (0.0004)	0.0980*** (0.0004)	0.2225*** (0.0034)	0.1433*** (0.0004)	0.2161*** (0.0006)	0.2076*** (0.0006)	0.0968*** (0.0005)	0.2270*** (0.0035)	0.1453*** (0.0004)
1[Treated] × NC0						-0.0106*** (0.0009)	-0.0116*** (0.0009)	0.0027*** (0.0007)	-0.0099*** (0.0014)	-0.0043*** (0.0007)
Daily Average CDDs	0.7706*** (0.0008)	1.083*** (0.0012)	1.27*** (0.0921)	1.287*** (0.0026)		0.7707*** (0.0008)	1.084*** (0.0012)	1.27*** (0.0921)	1.287*** (0.0026)	
Daily Average HDDs	0.3031*** (0.0006)	0.4176*** (0.0009)	0.5370*** (0.0777)	0.5152*** (0.0022)		0.3031*** (0.0006)	0.4176*** (0.0009)	0.5370*** (0.0776)	0.5151*** (0.0022)	
Bandwidth	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
<u>Fixed-effects</u>										
FEs: Account-Premise IDs			Yes		Yes		Yes		Yes	
FEs: Billing Year-Month				Yes	Yes			Yes		Yes
<u>Fit statistics</u>										
Observations	9,301,301	9,301,301	9,301,301	9,301,301	9,301,301	9,301,301	9,301,301	9,301,301	9,301,301	9,301,301
R <sup>2</sup>	0.07956	0.1578	0.55634	0.30708	0.61241	0.07957	0.15781	0.55634	0.3071	0.61241
Adjusted R <sup>2</sup>	0.07956	0.1578	0.53313	0.30708	0.59214	0.07957	0.15781	0.53314	0.30709	0.59214

Signif. Codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

Notes: NC0 means Normalized Consumption in period 0 relative to Base Usage Qty (%). Standard errors are clustered by Account-Premise IDs or Billing Year-Month.

## Regression Discontinuity (RD) Design: Regression Results and Plots

**Jinmahn Jo (ID#: 915528897)**

Table 5: Regression Results: RD Design, Linear Models with 50% Bandwidth

Dependent Variable:	Daily Average Consumption in Period 1 (kWh/Day)									
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Variables</u>										
1[Treated]	-0.0235*** (0.0069)	-0.0300*** (0.0066)	-0.0607*** (0.0058)	-0.0238 (0.0159)	-0.0768*** (0.0052)	$-6.234 \times 10^{-5}$ (0.0070)	-0.0019 (0.0067)	-0.0659*** (0.0058)	0.0056 (0.0125)	-0.0609*** (0.0052)
NC0	0.2084*** (0.0001)	0.1991*** (0.0001)	0.1101*** (0.0002)	0.2196*** (0.0035)	0.1508*** (0.0002)	0.2126*** (0.0001)	0.2042*** (0.0001)	0.1087*** (0.0002)	0.2249*** (0.0037)	0.1552*** (0.0002)
1[Treated] × NC0						-0.0098*** (0.0003)	-0.0121*** (0.0003)	0.0031*** (0.0003)	-0.0124*** (0.0023)	-0.0094*** (0.0003)
Daily Average CDDs		0.7762*** (0.0006)	1.03*** (0.0010)	1.255*** (0.0892)	1.271*** (0.0019)		0.7763*** (0.0006)	1.031*** (0.0010)	1.255*** (0.0891)	1.271*** (0.0019)
Daily Average HDDs		0.3145*** (0.0004)	0.4062*** (0.0008)	0.5333*** (0.0702)	0.5138*** (0.0016)		0.3144*** (0.0004)	0.4063*** (0.0008)	0.5332*** (0.0702)	0.5137*** (0.0016)
Bandwidth	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
<u>Fixed-effects</u>										
FEs: Account-Premise IDs			Yes		Yes			Yes		Yes
FEs: Billing Year-Month				Yes	Yes				Yes	Yes
<u>Fit statistics</u>										
Observations	20,536,093	20,536,093	20,536,093	20,536,093	20,536,093	20,536,093	20,536,093	20,536,093	20,536,093	20,536,093
R <sup>2</sup>	0.32076	0.37862	0.63999	0.47925	0.6847	0.32081	0.37869	0.64	0.47933	0.68474
Adjusted R <sup>2</sup>	0.32076	0.37862	0.63153	0.47925	0.67728	0.32081	0.37869	0.63153	0.47932	0.67732

Signif. Codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

Notes: NC0 means Normalized Consumption in period 0 relative to Base Usage Qty (%). Standard errors are clustered by Account-Premise IDs or Billing Year-Month.

## Regression Discontinuity (RD) Design: Regression Results and Plots

**Jinmahn Jo (ID#: 915528897)**

### 1.2 Square Models

Table 6: Regression Results: RD Design, Square Models with 2% Bandwidth

Model:	Daily Average Consumption in Period 1 (kWh/Day)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Variables</u>										
1[Treated]	0.1762*** (0.0332)	0.1695*** (0.0317)	0.1054*** (0.0281)	0.0960*** (0.0343)	0.0523** (0.0262)	0.5423*** (0.0511)	0.5272*** (0.0489)	0.3014*** (0.0431)	0.2958*** (0.0629)	0.1533*** (0.0404)
NC0	0.1077*** (0.0142)	0.0977*** (0.0135)	0.0539*** (0.0120)	0.1577*** (0.0135)	0.1185*** (0.0112)	-0.2944*** (0.0712)	-0.4579*** (0.0679)	-0.1939*** (0.0600)	-0.0824 (0.0683)	0.0236 (0.0562)
1[Treated] × NC0						-0.2563** (0.1151)	0.0449 (0.1101)	-0.0788 (0.0974)	-0.1023 (0.0914)	-0.1001 (0.0912)
NC0 <sup>2</sup>	-0.0045 (0.0068)	-0.0267*** (0.0065)	-0.0129** (0.0057)	-0.0067 (0.0064)	-0.0053 (0.0054)	-0.2092*** (0.0350)	-0.3049*** (0.0334)	-0.1383*** (0.0295)	-0.1284*** (0.0333)	-0.0541* (0.0277)
1[Treated] × NC0 <sup>2</sup>						0.5187*** (0.0546)	0.5266*** (0.0522)	0.2821*** (0.0459)	0.2855*** (0.0624)	0.1414*** (0.0429)
Daily Average CDDs	0.7653*** (0.0026)	1.067*** (0.0029)	1.267*** (0.0934)	1.239*** (0.0075)		0.7654*** (0.0026)	1.067*** (0.0029)	1.267*** (0.0934)	1.239*** (0.0075)	
Daily Average HDDs	0.2989*** (0.0018)	0.4010*** (0.0020)	0.5368*** (0.0792)	0.4900*** (0.0053)		0.2990*** (0.0018)	0.4010*** (0.0020)	0.5367*** (0.0792)	0.4900*** (0.0053)	
Bandwidth	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
<u>Fixed-effects</u>										
FEs: Account-Premise IDs			Yes		Yes		Yes		Yes	
FEs: Billing Year-Month				Yes	Yes			Yes	Yes	
<u>Fit statistics</u>										
Observations	964,508	964,508	964,508	964,508	964,508	964,508	964,508	964,508	964,508	964,508
R <sup>2</sup>	0.00065	0.08499	0.69117	0.25163	0.73033	0.00074	0.08509	0.69119	0.25166	0.73033
Adjusted R <sup>2</sup>	0.00065	0.08498	0.53118	0.25154	0.59055	0.00074	0.08508	0.53121	0.25157	0.59056

Signif. Codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

Notes: NC0 means Normalized Consumption in period 0 relative to Base Usage Qty (%). Standard errors are clustered by Account-Premise IDs or Billing Year-Month.

## Regression Discontinuity (RD) Design: Regression Results and Plots

**Jinmahn Jo (ID#: 915528897)**

Table 7: Regression Results: RD Design, Square Models with 5% Bandwidth

Model:	Daily Average Consumption in Period 1 (kWh/Day)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Variables</u>										
1[Treated]	0.0194 (0.0210)	0.0088 (0.0201)	0.0613*** (0.0160)	-0.0006 (0.0204)	0.0340** (0.0150)	0.1247*** (0.0316)	0.1158*** (0.0303)	0.1115*** (0.0242)	0.0514 (0.0316)	0.0478** (0.0226)
NC0	0.1935*** (0.0036)	0.1842*** (0.0034)	0.0840*** (0.0028)	0.2118*** (0.0045)	0.1345*** (0.0026)	0.0433** (0.0190)	0.0348* (0.0182)	0.0247* (0.0146)	0.1293*** (0.0196)	0.1125*** (0.0137)
1[Treated] × NC0						0.1689*** (0.0288)	0.1655*** (0.0276)	0.0568*** (0.0220)	0.0994*** (0.0297)	0.0267 (0.0206)
NC0 <sup>2</sup>	-0.0061*** (0.0007)	-0.0060*** (0.0007)	-0.0019*** (0.0005)	-0.0039*** (0.0007)	-0.0010** (0.0005)	-0.0350*** (0.0037)	-0.0348*** (0.0035)	-0.0134*** (0.0028)	-0.0198*** (0.0037)	-0.0053** (0.0026)
1[Treated] × NC0 <sup>2</sup>						0.0264*** (0.0055)	0.0268*** (0.0053)	0.0124*** (0.0042)	0.0132*** (0.0050)	0.0035 (0.0039)
Daily Average CDDs	0.7657*** (0.0016)	1.086*** (0.0019)	1.272*** (0.0935)	1.267*** (0.0046)		0.7657*** (0.0016)	1.086*** (0.0019)	1.272*** (0.0935)	1.267*** (0.0046)	
Daily Average HDDs	0.2982*** (0.0012)	0.4125*** (0.0013)	0.5348*** (0.0794)	0.4970*** (0.0034)		0.2982*** (0.0012)	0.4125*** (0.0013)	0.5348*** (0.0794)	0.4970*** (0.0034)	
Bandwidth	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
<u>Fixed-effects</u>										
FEs: Account-Premise IDs			Yes		Yes		Yes		Yes	
FEs: Billing Year-Month				Yes	Yes			Yes		Yes
<u>Fit statistics</u>										
Observations	2,397,899	2,397,899	2,397,899	2,397,899	2,397,899	2,397,899	2,397,899	2,397,899	2,397,899	2,397,899
R <sup>2</sup>	0.005	0.08845	0.60191	0.25395	0.65217	0.00502	0.08847	0.60192	0.25396	0.65218
Adjusted R <sup>2</sup>	0.005	0.08844	0.51964	0.25391	0.58027	0.00502	0.08847	0.51964	0.25392	0.58027

Signif. Codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

Notes: NC0 means Normalized Consumption in period 0 relative to Base Usage Qty (%). Standard errors are clustered by Account-Premise IDs or Billing Year-Month.

## Regression Discontinuity (RD) Design: Regression Results and Plots

**Jinmahn Jo (ID#: 915528897)**

Table 8: Regression Results: RD Design, Square Models with 10% Bandwidth

Model:	Daily Average Consumption in Period 1 (kWh/Day)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Variables</u>										
1[Treated]	-0.0792*** (0.0150)	-0.0938*** (0.0144)	0.0095 (0.0110)	-0.0582*** (0.0143)	0.0059 (0.0103)	0.0764*** (0.0225)	0.0671*** (0.0215)	0.0818*** (0.0165)	0.0316 (0.0222)	0.0377** (0.0155)
NC0	0.2130*** (0.0013)	0.2045*** (0.0013)	0.0941*** (0.0010)	0.2231*** (0.0035)	0.1399*** (0.0009)	0.1783*** (0.0068)	0.1666*** (0.0065)	0.0760*** (0.0050)	0.2047*** (0.0074)	0.1329*** (0.0047)
1[Treated] × NC0						-0.0238** (0.0104)	-0.0207** (0.0100)	-0.0071 (0.0077)	-0.0171* (0.0094)	-0.0052 (0.0072)
NC0 <sup>2</sup>	-0.0004*** (0.0001)	-0.0004*** (0.0001)	0.0001 $(9.358 \times 10^{-5})$	-0.0005*** (0.0001)	-0.0001 $(8.744 \times 10^{-5})$	-0.0039*** (0.0007)	-0.0042*** (0.0006)	-0.0017*** (0.0005)	-0.0023*** (0.0006)	-0.0008* (0.0005)
1[Treated] × NC0 <sup>2</sup>						0.0094*** (0.0010)	0.0097*** (0.0010)	0.0043*** (0.0007)	0.0054*** (0.0010)	0.0019*** (0.0007)
Daily Average CDDs	0.7672*** (0.0012)	1.093*** (0.0015)	1.269*** (0.0930)	1.28*** (0.0034)		0.7672*** (0.0012)	1.093*** (0.0015)	1.269*** (0.0930)	1.28*** (0.0034)	
Daily Average HDDs	0.2996*** (0.0008)	0.4187*** (0.0011)	0.5354*** (0.0786)	0.5055*** (0.0026)		0.2996*** (0.0008)	0.4187*** (0.0011)	0.5354*** (0.0786)	0.5055*** (0.0026)	
Bandwidth	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
<u>Fixed-effects</u>										
FEs: Account-Premise IDs			Yes		Yes		Yes		Yes	
FEs: Billing Year-Month				Yes	Yes			Yes	Yes	
<u>Fit statistics</u>										
Observations	4,719,361	4,719,361	4,719,361	4,719,361	4,719,361	4,719,361	4,719,361	4,719,361	4,719,361	4,719,361
R <sup>2</sup>	0.02111	0.10346	0.56299	0.26521	0.61794	0.02112	0.10348	0.56299	0.26522	0.61794
Adjusted R <sup>2</sup>	0.02111	0.10346	0.51752	0.2652	0.57818	0.02112	0.10348	0.51753	0.2652	0.57818

Signif. Codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

Notes: NC0 means Normalized Consumption in period 0 relative to Base Usage Qty (%). Standard errors are clustered by Account-Premise IDs or Billing Year-Month.

## Regression Discontinuity (RD) Design: Regression Results and Plots

**Jinmahn Jo (ID#: 915528897)**

Table 9: Regression Results: RD Design, Square Models with 20% Bandwidth

Dependent Variable: Model:	Daily Average Consumption in Period 1 (kWh/Day)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<b>Variables</b>										
1[Treated]	-0.0678*** (0.0107)	-0.0781*** (0.0102)	-0.0094 (0.0078)	-0.0550*** (0.0113)	-0.0111 (0.0073)	-0.0454*** (0.0159)	-0.0603*** (0.0152)	0.0252** (0.0115)	-0.0417*** (0.0156)	0.0085 (0.0108)
NC0	0.2107*** (0.0005)	0.2017*** (0.0004)	0.0981*** (0.0004)	0.2220*** (0.0034)	0.1432*** (0.0004)	0.2053*** (0.0024)	0.1969*** (0.0023)	0.0921*** (0.0018)	0.2204*** (0.0039)	0.1410*** (0.0016)
1[Treated] × NC0						0.0040 (0.0037)	0.0044 (0.0035)	0.0016 (0.0027)	-0.0008 (0.0034)	-0.0015 (0.0025)
NC0 <sup>2</sup>	-0.0003*** (2.271 × 10 <sup>-5</sup> )	-0.0003*** (2.171 × 10 <sup>-5</sup> )	6.414 × 10 <sup>-5***</sup> (1.744 × 10 <sup>-5</sup> )	-0.0002*** (3.402 × 10 <sup>-5</sup> )	-0.0001*** (1.608 × 10 <sup>-5</sup> )	-0.0005*** (0.0001)	-0.0005*** (0.0001)	-0.0002*** (8.333 × 10 <sup>-5</sup> )	-0.0003*** (9.803 × 10 <sup>-5</sup> )	-0.0002*** (7.792 × 10 <sup>-5</sup> )
1[Treated] × NC0 <sup>2</sup>						0.0003* (0.0002)	0.0003 (0.0002)	0.0005*** (0.0001)	0.0002 (0.0001)	0.0003** (0.0001)
Daily Average CDDs	0.7707*** (0.0008)	1.084*** (0.0012)	1.27*** (0.0921)	1.287*** (0.0026)		0.7707*** (0.0008)	1.084*** (0.0012)	1.27*** (0.0921)	1.287*** (0.0026)	
Daily Average HDDs	0.3031*** (0.0006)	0.4176*** (0.0009)	0.5370*** (0.0776)	0.5151*** (0.0022)		0.3031*** (0.0006)	0.4176*** (0.0009)	0.5370*** (0.0776)	0.5151*** (0.0022)	
Bandwidth	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
<b>Fixed-effects</b>										
FEs: Account-Premise IDs		Yes		Yes		Yes		Yes		Yes
FEs: Billing Year-Month			Yes	Yes			Yes		Yes	Yes
<b>Fit statistics</b>										
Observations	9,301,301	9,301,301	9,301,301	9,301,301	9,301,301	9,301,301	9,301,301	9,301,301	9,301,301	9,301,301
R <sup>2</sup>	0.07957	0.15781	0.55634	0.3071	0.61241	0.07957	0.15782	0.55634	0.3071	0.61241
Adjusted R <sup>2</sup>	0.07957	0.15781	0.53314	0.30709	0.59214	0.07957	0.15781	0.53314	0.30709	0.59214

Signif. Codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

Notes: NC0 means Normalized Consumption in period 0 relative to Base Usage Qty (%). Standard errors are clustered by Account-Premise IDs or Billing Year-Month.

## Regression Discontinuity (RD) Design: Regression Results and Plots

**Jinmahn Jo (ID#: 915528897)**

### 1.3 Cubic Models

Table 10: Regression Results: RD Design, Cubic Models with 2% Bandwidth

Model:	Dependent Variable: Daily Average Consumption in Period 1 (kWh/Day)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Variables</u>										
1[Treated]	0.3770*** (0.0441)	0.3856*** (0.0421)	0.2313*** (0.0372)	0.2007*** (0.0522)	0.1146*** (0.0349)	1.247*** (0.0721)	1.332*** (0.0691)	0.5714*** (0.0610)	0.7719*** (0.0939)	0.2606*** (0.0572)
NC0	-0.1155*** (0.0352)	-0.1425*** (0.0337)	-0.0862*** (0.0296)	0.0413 (0.0403)	0.0491* (0.0277)	-1.54*** (0.1639)	-1.295*** (0.1558)	-0.4243*** (0.1393)	-0.8580*** (0.1603)	-0.1098 (0.1300)
1[Treated] × NC0						-1.685*** (0.2982)	-2.579*** (0.2854)	-1.045*** (0.2524)	-1.179*** (0.2621)	-0.4134* (0.2363)
NC0 <sup>2</sup>	-0.0069 (0.0068)	-0.0294*** (0.0065)	-0.0145** (0.0057)	-0.0080 (0.0064)	-0.0061 (0.0054)	-1.84*** (0.1985)	-1.4*** (0.1889)	-0.4401*** (0.1689)	-1.143*** (0.1828)	-0.2288 (0.1576)
1[Treated] × NC0 <sup>2</sup>						5.253*** (0.3360)	5.638*** (0.3210)	1.973*** (0.2857)	3.45*** (0.3697)	0.8346*** (0.2674)
NC0 <sup>3</sup>	0.0602*** (0.0087)	0.0648*** (0.0083)	0.0378*** (0.0073)	0.0314*** (0.0094)	0.0187*** (0.0069)	-0.5512*** (0.0665)	-0.3701*** (0.0632)	-0.1021* (0.0566)	-0.3430*** (0.0600)	-0.0591 (0.0529)
1[Treated] × NC0 <sup>3</sup>						-0.4375*** (0.1080)	-0.9094*** (0.1030)	-0.3407*** (0.0916)	-0.3418*** (0.0890)	-0.1062 (0.0857)
Daily Average CDDs	0.7654*** (0.0026)	1.067*** (0.0029)	1.267*** (0.0934)	1.239*** (0.0075)		0.7657*** (0.0026)	1.068*** (0.0029)	1.267*** (0.0934)	1.239*** (0.0075)	
Daily Average HDDs	0.2990*** (0.0018)	0.4010*** (0.0020)	0.5367*** (0.0792)	0.4900*** (0.0053)		0.2989*** (0.0018)	0.4009*** (0.0020)	0.5365*** (0.0791)	0.4900*** (0.0053)	
Bandwidth	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
<u>Fixed-effects</u>										
FEs: Account-Premise IDs			Yes		Yes		Yes		Yes	Yes
FEs: Billing Year-Month				Yes	Yes			Yes	Yes	
<u>Fit statistics</u>										
Observations	964,508	964,508	964,508	964,508	964,508	964,508	964,508	964,508	964,508	964,508
R <sup>2</sup>	7e-04	0.08504	0.69118	0.25164	0.73033	0.00096	0.08536	0.69121	0.25176	0.73033
Adjusted R <sup>2</sup>	0.00069	0.08504	0.5312	0.25156	0.59056	0.00095	0.08535	0.53124	0.25167	0.59056

Signif. Codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

Notes: NC0 means Normalized Consumption in period 0 relative to Base Usage Qty (%). Standard errors are clustered by Account-Premise IDs or Billing Year-Month.

## Regression Discontinuity (RD) Design: Regression Results and Plots

**Jinmahn Jo (ID#: 915528897)**

Table 11: Regression Results: RD Design, Cubic Models with 5% Bandwidth

Model:	Daily Average Consumption in Period 1 (kWh/Day)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Variables</u>										
1[Treated]	0.0939*** (0.0279)	0.0832*** (0.0267)	0.0975*** (0.0214)	0.0330 (0.0276)	0.0424** (0.0200)	0.3604*** (0.0425)	0.3622*** (0.0407)	0.2023*** (0.0325)	0.2136*** (0.0491)	0.1007*** (0.0304)
NC0	0.1603*** (0.0089)	0.1511*** (0.0086)	0.0679*** (0.0068)	0.1968*** (0.0090)	0.1308*** (0.0064)	0.0434 (0.0461)	0.0295 (0.0440)	0.0595* (0.0353)	0.1115*** (0.0404)	0.1275*** (0.0330)
1[Treated] × NC0						-0.3551*** (0.0725)	-0.3722*** (0.0694)	-0.2100*** (0.0553)	-0.2276*** (0.0671)	-0.1190** (0.0517)
NC0 <sup>2</sup>	-0.0061*** (0.0007)	-0.0061*** (0.0007)	-0.0020*** (0.0005)	-0.0039*** (0.0007)	-0.0010** (0.0005)	-0.0349 (0.0215)	-0.0375* (0.0205)	0.0042 (0.0164)	-0.0288 (0.0178)	0.0023 (0.0154)
1[Treated] × NC0 <sup>2</sup>						0.2797*** (0.0331)	0.2921*** (0.0317)	0.1071*** (0.0253)	0.1890*** (0.0328)	0.0591** (0.0237)
NC0 <sup>3</sup>	0.0014*** (0.0004)	0.0014*** (0.0003)	0.0007*** (0.0003)	0.0006** (0.0003)	0.0002 (0.0003)	1.173 × 10 <sup>-5</sup> (0.0028)	-0.0004 (0.0027)	0.0023 (0.0022)	-0.0012 (0.0023)	0.0010 (0.0020)
1[Treated] × NC0 <sup>3</sup>						-0.0330*** (0.0043)	-0.0339*** (0.0041)	-0.0170*** (0.0033)	-0.0205*** (0.0041)	-0.0093*** (0.0031)
Daily Average CDDs	0.7657*** (0.0016)	1.086*** (0.0019)	1.272*** (0.0935)	1.267*** (0.0046)		0.7658*** (0.0016)	1.086*** (0.0019)	1.272*** (0.0934)	1.267*** (0.0046)	
Daily Average HDDs	0.2982*** (0.0012)	0.4125*** (0.0013)	0.5348*** (0.0794)	0.4970*** (0.0034)		0.2982*** (0.0012)	0.4125*** (0.0013)	0.5348*** (0.0794)	0.4969*** (0.0034)	
Bandwidth	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
<u>Fixed-effects</u>										
FEs: Account-Premise IDs		Yes		Yes			Yes		Yes	
FEs: Billing Year-Month			Yes	Yes				Yes	Yes	
<u>Fit statistics</u>										
Observations	2,397,899	2,397,899	2,397,899	2,397,899	2,397,899	2,397,899	2,397,899	2,397,899	2,397,899	2,397,899
R <sup>2</sup>	0.00501	0.08845	0.60191	0.25395	0.65218	0.00507	0.08852	0.60192	0.25398	0.65218
Adjusted R <sup>2</sup>	0.005	0.08845	0.51964	0.25391	0.58027	0.00507	0.08852	0.51965	0.25394	0.58027

Signif. Codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

Notes: NC0 means Normalized Consumption in period 0 relative to Base Usage Qty (%). Standard errors are clustered by Account-Premise IDs or Billing Year-Month.

## Regression Discontinuity (RD) Design: Regression Results and Plots

**Jinmahn Jo (ID#: 915528897)**

Table 12: Regression Results: RD Design, Cubic Models with 10% Bandwidth

Model:	Daily Average Consumption in Period 1 (kWh/Day)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Variables</u>										
1[Treated]	0.0394** (0.0199)	0.0294 (0.0191)	0.0646*** (0.0146)	0.0099 (0.0194)	0.0293** (0.0137)	0.0653** (0.0300)	0.0561* (0.0288)	0.0816*** (0.0222)	0.0233 (0.0302)	0.0419** (0.0207)
NC0	0.1863*** (0.0032)	0.1767*** (0.0031)	0.0817*** (0.0024)	0.2077*** (0.0044)	0.1346*** (0.0022)	0.1670*** (0.0169)	0.1600*** (0.0162)	0.0711*** (0.0125)	0.1964*** (0.0161)	0.1242*** (0.0117)
1[Treated] × NC0						0.0112 (0.0261)	0.0051 (0.0250)	0.0025 (0.0193)	0.0089 (0.0259)	0.0070 (0.0181)
NC0 <sup>2</sup>	-0.0003*** (0.0001)	-0.0003*** (0.0001)	0.0002* (9.395 × 10 <sup>-5</sup> )	-0.0004*** (0.0001)	-0.0001 (8.779 × 10 <sup>-5</sup> )	-0.0067* (0.0039)	-0.0059 (0.0037)	-0.0029 (0.0029)	-0.0044 (0.0037)	-0.0030 (0.0027)
1[Treated] × NC0 <sup>2</sup>						0.0062 (0.0061)	0.0065 (0.0058)	0.0044 (0.0045)	0.0031 (0.0050)	0.0032 (0.0042)
NC0 <sup>3</sup>	0.0003*** (3.299 × 10 <sup>-5</sup> )	0.0003*** (3.157 × 10 <sup>-5</sup> )	0.0001*** (2.435 × 10 <sup>-5</sup> )	0.0002*** (3.08 × 10 <sup>-5</sup> )	5.894 × 10 <sup>-5</sup> *** (2.276 × 10 <sup>-5</sup> )	-0.0002 (0.0003)	-0.0001 (0.0002)	-8.073 × 10 <sup>-5</sup> (0.0002)	-0.0001 (0.0002)	-0.0001 (0.0002)
1[Treated] × NC0 <sup>3</sup>						0.0006 (0.0004)	0.0004 (0.0004)	0.0002 (0.0003)	0.0004 (0.0004)	0.0002 (0.0003)
Daily Average CDDs	0.7672*** (0.0012)	1.093*** (0.0015)	1.269*** (0.0930)	1.28*** (0.0034)		0.7672*** (0.0012)	1.093*** (0.0015)	1.269*** (0.0930)	1.28*** (0.0034)	
Daily Average HDDs	0.2996*** (0.0008)	0.4187*** (0.0011)	0.5354*** (0.0786)	0.5055*** (0.0026)		0.2996*** (0.0008)	0.4187*** (0.0011)	0.5354*** (0.0786)	0.5055*** (0.0026)	
Bandwidth	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
<u>Fixed-effects</u>										
FEs: Account-Premise IDs		Yes		Yes		Yes		Yes		Yes
FEs: Billing Year-Month			Yes	Yes			Yes		Yes	Yes
<u>Fit statistics</u>										
Observations	4,719,361	4,719,361	4,719,361	4,719,361	4,719,361	4,719,361	4,719,361	4,719,361	4,719,361	4,719,361
R <sup>2</sup>	0.02112	0.10348	0.56299	0.26522	0.61794	0.02112	0.10348	0.56299	0.26522	0.61794
Adjusted R <sup>2</sup>	0.02112	0.10347	0.51753	0.2652	0.57818	0.02112	0.10348	0.51753	0.2652	0.57818

Signif. Codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

Notes: NC0 means Normalized Consumption in period 0 relative to Base Usage Qty (%). Standard errors are clustered by Account-Premise IDs or Billing Year-Month.

## 2 Summary Statistics

### 2.1 Households Electricity Consumption

Table 13: Household Electricity Consumption: Summary Statistics

Statistic	Daily Average Consumption (kWh/Day)	Normalized Monthly Consumption (%)
Mean	26.29	9.24
Std. Dev.	15.08	59.46
Min.	0.00	-99.93
Median	23.14	-1.45
Max.	3,196.83	15,986.45

Table 14: Household Electricity Consumption: Quantiles

Quantile	Daily Average Consumption		Normalized Monthly Consumption	
	Value (kWh/Day)	N	Value (%)	N
0%	0.00	7,695	-99.93	12
25%	16.28	7,319,969	-30.57	7,328,091
50%	23.14	14,640,475	-1.45	14,644,598
75%	32.68	21,957,481	36.31	21,955,636
100%	3,196.83	29,274,169	15,986.45	29,274,169

## 2.2 Distribution of Observations

Table 15: Distribution by Bandwidth: Control and Treatment Groups

Bandwidth	Households	Billing Year-Month	Observations		
			Control	Treatment	Total
1%	250,074	108	264,424	232,279	496,703
2%	329,141	108	501,178	463,330	964,508
3%	369,565	108	739,173	692,357	1,431,530
4%	393,713	108	978,819	919,605	1,898,424
5%	410,688	108	1,237,733	1,160,166	2,397,899
6%	421,604	108	1,481,203	1,382,597	2,863,800
7%	429,723	108	1,725,674	1,602,078	3,327,752
8%	435,981	108	1,970,903	1,819,539	3,790,442
9%	440,725	108	2,218,088	2,021,787	4,239,875
10%	444,697	108	2,484,295	2,235,066	4,719,361
11%	447,999	108	2,733,358	2,458,394	5,191,752
12%	450,661	108	2,982,861	2,665,992	5,648,853
13%	452,909	108	3,234,507	2,881,655	6,116,162
14%	454,857	108	3,483,616	3,083,349	6,566,965
15%	456,576	108	3,752,820	3,296,711	7,049,531
16%	457,988	108	4,004,455	3,493,567	7,498,022
17%	459,273	108	4,256,797	3,687,549	7,944,346
18%	460,323	108	4,509,864	3,879,319	8,389,183
19%	461,266	108	4,762,162	4,068,749	8,830,911
20%	462,220	108	5,033,860	4,267,441	9,301,301
30%	467,761	108	7,555,568	6,001,907	13,557,475
40%	470,507	108	9,886,353	7,468,218	17,354,571
50%	471,999	108	11,841,095	8,694,998	20,536,093
60%	472,838	108	13,283,115	9,711,052	22,994,167
70%	473,370	108	14,181,169	10,548,144	24,729,313
80%	473,736	108	14,643,361	11,232,297	25,875,658
90%	474,009	108	14,868,645	11,791,334	26,659,979
100%	474,176	108	15,002,795	12,246,829	27,249,624
200%	474,339	108	15,002,795	13,968,803	28,971,598
300%	474,367	108	15,002,795	14,202,727	29,205,522
400%	474,373	108	15,002,795	14,247,241	29,250,036
500%	474,375	108	15,002,795	14,260,355	29,263,150
N/A	474,376	108	15,002,795	14,271,374	29,274,169

**Regression Discontinuity (RD) Design: Regression Results and Plots**

**Jinmahn Jo (ID#: 915528897)**

Table 16: Distribution by Bandwidth: Billing Year-Month

Bandwidth	N	Mean	Std. Dev.	P0	P25	P50	P75	P100
1%	108	0.92593%	0.12546%	0.34246%	0.88725%	0.94060%	1.00130%	1.12824%
2%	108	0.92593%	0.12625%	0.33426%	0.88436%	0.94250%	1.00367%	1.13571%
3%	108	0.92593%	0.12658%	0.32972%	0.88440%	0.94371%	1.00199%	1.14255%
4%	108	0.92593%	0.12626%	0.32991%	0.88284%	0.94531%	1.00392%	1.13594%
5%	108	0.92593%	0.12859%	0.33992%	0.87621%	0.94262%	1.00263%	1.15063%
6%	108	0.92593%	0.12870%	0.33606%	0.87875%	0.94462%	1.00214%	1.14516%
7%	108	0.92593%	0.12840%	0.33686%	0.88049%	0.94439%	1.00056%	1.14393%
8%	108	0.92593%	0.12869%	0.33600%	0.88019%	0.94589%	1.00087%	1.14153%
9%	108	0.92593%	0.12983%	0.33650%	0.87866%	0.94493%	1.00217%	1.14409%
10%	108	0.92593%	0.13062%	0.33733%	0.87787%	0.94424%	1.00220%	1.14844%
11%	108	0.92593%	0.13103%	0.33788%	0.87818%	0.94444%	1.00251%	1.14788%
12%	108	0.92593%	0.13097%	0.33764%	0.88059%	0.94578%	1.00233%	1.14685%
13%	108	0.92593%	0.13017%	0.33704%	0.88287%	0.94267%	1.00403%	1.14573%
14%	108	0.92593%	0.13017%	0.33655%	0.88335%	0.94326%	1.00408%	1.14538%
15%	108	0.92593%	0.13118%	0.33816%	0.88148%	0.94439%	1.00198%	1.14986%
16%	108	0.92593%	0.13122%	0.33796%	0.88224%	0.94364%	1.00299%	1.14964%
17%	108	0.92593%	0.13129%	0.33828%	0.88275%	0.94396%	1.00392%	1.15033%
18%	108	0.92593%	0.13145%	0.33779%	0.88313%	0.94304%	1.00390%	1.14934%
19%	108	0.92593%	0.13146%	0.33813%	0.88307%	0.94265%	1.00542%	1.14721%
20%	108	0.92593%	0.13226%	0.33873%	0.88105%	0.94333%	1.00278%	1.15118%
30%	108	0.92593%	0.13453%	0.34188%	0.88083%	0.94215%	1.00832%	1.14768%
40%	108	0.92593%	0.13697%	0.34312%	0.87542%	0.93997%	1.01322%	1.13398%
50%	108	0.92593%	0.13884%	0.34341%	0.87257%	0.93663%	1.02177%	1.15761%
60%	108	0.92593%	0.13888%	0.33995%	0.86632%	0.93216%	1.02691%	1.17772%
70%	108	0.92593%	0.13599%	0.33524%	0.86417%	0.93054%	1.01840%	1.18867%
80%	108	0.92593%	0.13076%	0.33004%	0.87165%	0.92914%	1.00923%	1.18737%
90%	108	0.92593%	0.12500%	0.32560%	0.87620%	0.93333%	1.00632%	1.17613%
100%	108	0.92593%	0.12034%	0.32155%	0.87914%	0.93459%	1.00058%	1.16380%
200%	108	0.92593%	0.10851%	0.30736%	0.88433%	0.94215%	0.98965%	1.11096%
300%	108	0.92593%	0.10853%	0.30550%	0.88342%	0.94333%	0.99037%	1.10401%
400%	108	0.92593%	0.10855%	0.30530%	0.88296%	0.94294%	0.99137%	1.10275%
500%	108	0.92593%	0.10851%	0.30540%	0.88305%	0.94289%	0.99151%	1.10239%
N/A	108	0.92593%	0.10839%	0.30577%	0.88321%	0.94283%	0.99144%	1.10213%

### 3 Plots

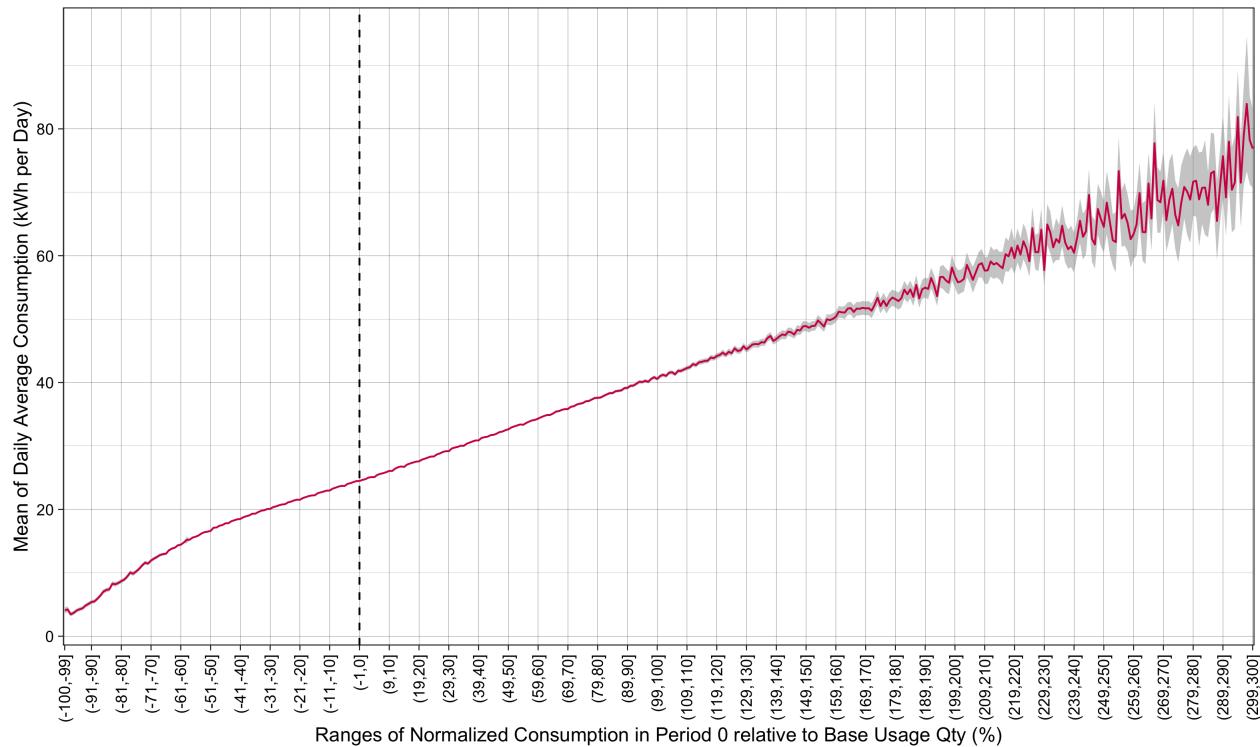


Figure 1: Mean of Daily Average Consumption by Ranges of Normalized Consumption in Period 0 (%)

## Regression Discontinuity (RD) Design: Regression Results and Plots

Jinmahn Jo (ID#: 915528897)

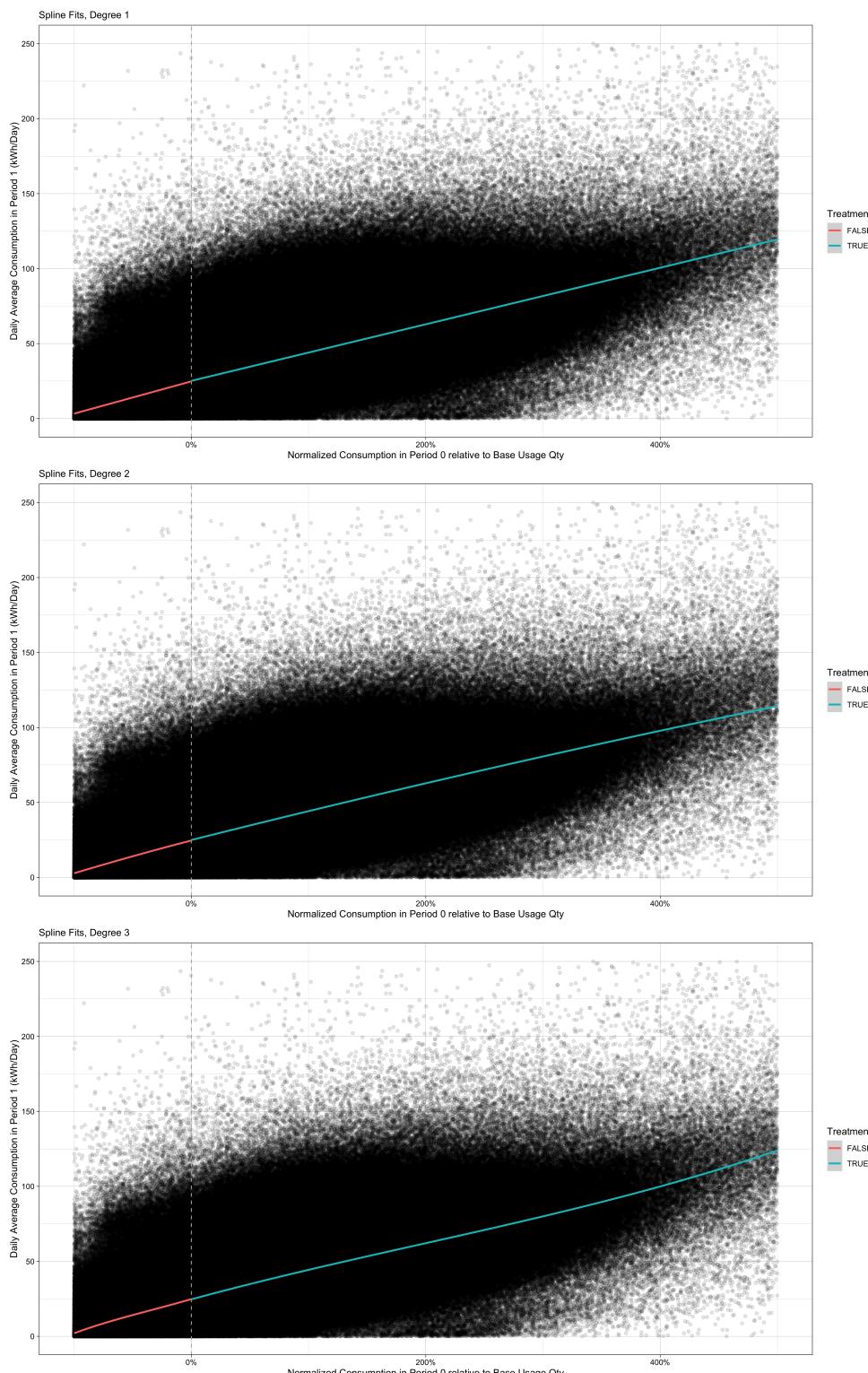


Figure 2: Scatter Plots with Spline Fits

Notes: Horizontal axis is normalized consumption in period 0 relative to Base Usage Qty(%).

**Regression Discontinuity (RD) Design: Regression Results and Plots**

**Jinmahn Jo (ID#: 915528897)**

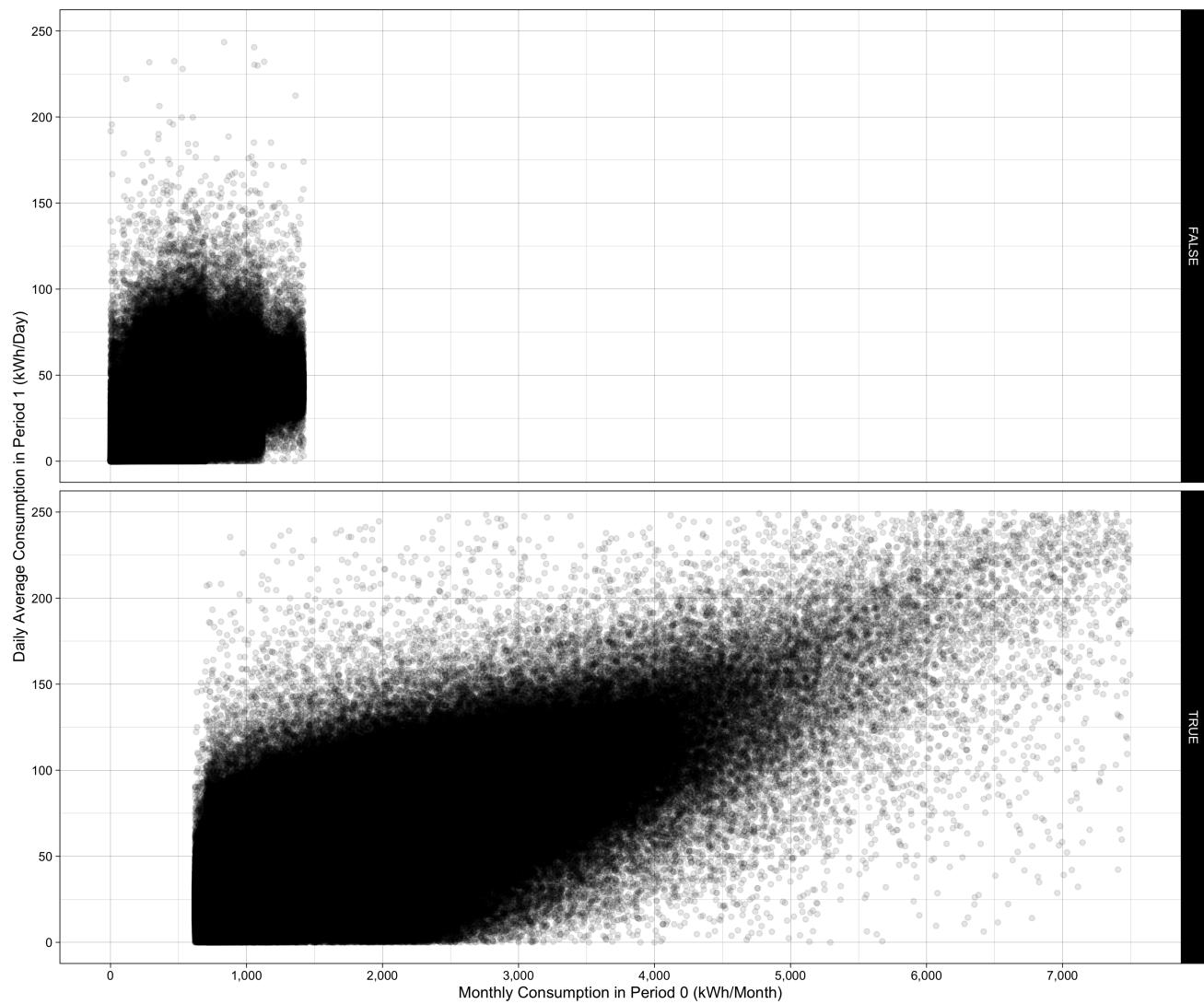


Figure 3: Scatter Plot by Treatment Status

Notes: Horizontal axis is monthly consumption in Period 0 (kWh/Month).

## Regression Discontinuity (RD) Design: Regression Results and Plots

Jinmahn Jo (ID#: 915528897)

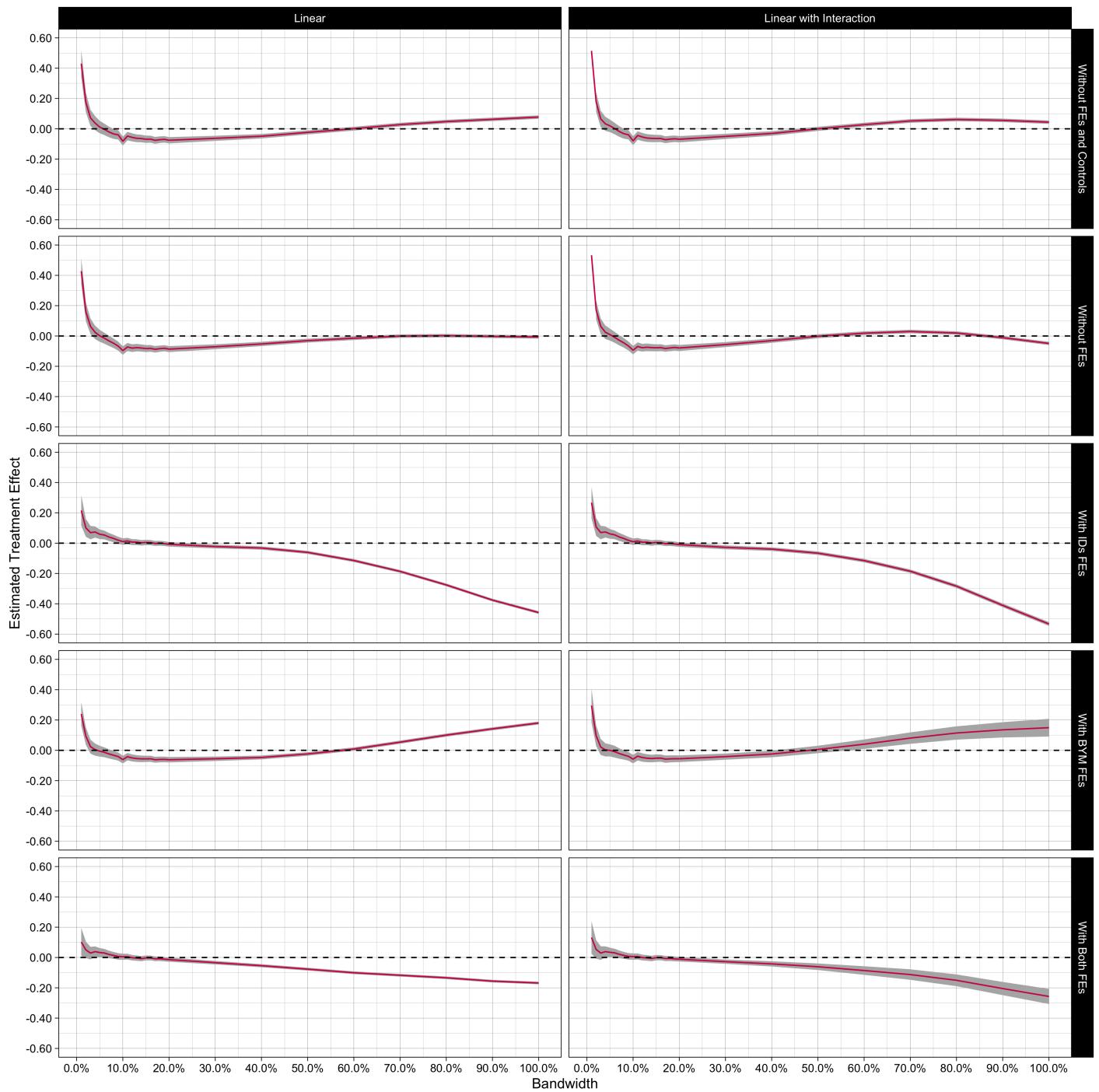


Figure 4: Estimated Treatment Effects by Bandwidth, Linear Models

*Notes:* Standard errors are clustered by Account-Premise IDs or Billing Year-Month. Grey area in each panel indicates the 95% confidence interval.