REGRESSION RESULTS

Regression analysis for Section 5.1: Equilibrium comparisons

1. Random effects regressions using Period, as discussed in the text

The equation is

$$x_t^i - x^* = \alpha + \beta(t) + \delta d + \varepsilon_t^i$$

where $x_t^i - x^*$ is the difference between the observed number of road users and the equilibrium prediction in period *t* of the treatment condition. *t* = Period and *d* is a Sequence dummy (*d* = 1 if Sequence = 2). The regressions use Session random effects.

	AC16	**AC'16**	**AC10**	**CC10**
Period	0.01	0.10**	-0.03	-0.04*
	(0.03)	(0.04)	(0.02)	(0.02)
Sequence =2	0.45	0.73	0.06	-0.63
(Periods 25-40)	(0.88)	(0.64)	(0.19)	(0.48)
Constant	1.49*	-3.55***	0.57*	0.39
	(0.76)	(0.70)	(0.31)	(0.45)
N	120	120	180	180
*p<0.10, **p<0.05, ***p<0.01				

2. Random effects regressions using 1/Period (see Footnote 15)

The regressions use Session random effects.

	AC16	**AC'16**	**AC10**	**CC10**
1/Period	1.29	-15.56***	5.12*	5.34*
	(4.25)	(5.13)	(2.77)	(2.78)
Sequence = 2	0.45	0.73	0.06	-0.63
(Periods 25-40)	(0.88)	(0.64)	(0.19)	(0.48)
Constant	1.52**	-0.89	-0.30	-0.62
	(0.73)	(0.64)	(0.28)	(0.42)
N	120	120	180	180
*p<0.1, ** p<0.05, ***p<0.01				

3. Random effects regressions using <u>ln(Period)</u> (see Footnote 15)

The regressions use Session random effects.

	AC16	**AC'16**	**AC10**	**CC10**
ln(Period)	0.01	1.34***	-0.45*	-0.50*
	(0.40)	(0.48)	(0.26)	(0.26)
Sequence =2	0.45	0.73	0.06	-0.63
(Periods 25-40)	(0.88)	(0.64)	(0.19)	(0.48)
Constant	1.60	-5.62***	1.27*	1.10
	(1.18)	(1.30)	(0.66)	(0.74)
N	120	120	180	180
*p<0.1, ** p<0.05, ***p<0.01				

4. Regressions with session dummy variables (see Footnote 15)

Treatments with 16 commuters

Session 1 is the excluded dummy variable.

	AC16	**AC'16**
Period	0.01	0.1***
	(0.03)	(0.04)
Sequence = 2	-0.60	-1.13*
(Periods 25-40)	(0.52)	(0.67)
Dumm.Sess.2	0.2	0.33
	(0.50)	(0.65)
Dumm.Sess.3	0.33	1.40**
	(0.49)	(0.62)
Dumm.Sess.4	-0.67	0.73
	(0.45)	(0.63)
Dumm.Sess.5	0.6	-2.53***
	(0.70)	(0.73)
Dumm.Sess.6	3.53***	-0.67
	(0.60)	(0.71)
Dumm.Sess.7	-0.07	-1.80**
	(0.58)	(0.79)
Dumm.Sess.8	0.00	0.00
	(-)	(-)
Constant	1.52***	-2.30***
	(0.47)	(0.71)
N	120	120

*p<0.1,**p<0.05, ***p<0. 01

Treatments with 10 commuters

Session 9 is the excluded dummy variable.

	AC10	**CC10**
Period	-0.03	-0.04
	(0.02)	(0.02)
Sequence = 2	0.27	0.47
(Periods 25-40)	(0.43)	(0.45)
Dumm.Sess.10	0.2	-1.87***
	(0.38)	(0.43)
Dumm.Sess.11	-0.33	-0.93**
	(0.52)	(0.44)
Dumm.Sess.12	0.13	-1.20***
	(0.50)	(0.33)
Dumm.Sess.13	-0.33	0
	(0.51)	(0.47)
Dumm.Sess.14	0.40	0.87**
	(0.54)	(0.40)
Dumm.Sess.15	0.0	0
	(-)	(-)
Dumm.Sess.16	-0.40	-0.47
	(0.44)	(0.40)
Dumm.Sess.17	-0.333	1.07*
	(0.39)	(0.56)
Dumm.Sess.18	-0.20	1.00*
	(0.44)	(0.54)
Dumm.Sess.19	-0.20	1.07**
	(0.38)	(0.47)
Dumm.Sess.20	-0.07	0.80
	(0.37)	(0.50)
Constant	-0.57	-0.20
	(0.44)	(0.46)
N	180	180
*p<0.1, **p<0.05, ***p<0. 01		

Regression analysis for Section 5.2: Comparative statics

1. DT Paradox, Size Hypothesis and Price Hypothesis random effects regressions using Period (as discussed in the text)

Dependent variable = Number of road users

	DT test (AC16 & AC'16)	**Size Hypothesis† (AC10 & AC16)**	**Price Hypothesis (AC10 & CC10)**
Period	0.06**	-0.04	-0.04**
	(0.03)	(0.03)	(0.02)
Sequence = 2	0.59**		-0.29**
(Periods 25-40)	(0.24)		(0.14)
AC'16 dummy	5.23***		
	(0.24)		
AC10 dummy		-1.49***	
		(0.24)	
CC10 dummy			1.36***
			(0.14)
Constant	4.84***	6.08***	4.81***
	(0.49)	(0.40)	(0.27)
N	240	150	360

*p<0.10, **p<0.05, ***p<0.01

†Data from the first sequence only

2. DT Paradox, Size Hypothesis and Price Hypothesis random effects regressions using <u>1/Period</u>

Dependent variable = Number of road users

	DT test (AC16 & AC'16)	**Size Hypothesis† (AC10 & AC16)**	**Price Hypothesis (AC10 & CC10)**
1/Period	-7.14**	5.50	5.23**
	(3.52)	(3.46)	(2.04)
Sequence = 2	0.59**		-0.29**
(Periods 25-40)	(0.24)		(0.14)
AC'16 dummy	5.26***		
	(0.24)		
AC10 dummy		-1.49***	
		(0.24)	
CC10 dummy			1.36***
			(0.14)
Constant	6.19***	5.15***	3.86***
	(0.45)	(0.36)	(0.24)
N	240	150	360

*p<0.10, **p<0.05, ***p<0.01
†Data from the first sequence only

3. DT Paradox, Size Hypothesis and Price Hypothesis random effects regressions using <u>ln(Period)</u>

Dependent variable = Number of road users

	DT test (AC16 & AC'16)	**Size Hypothesis† (AC10 & AC16)**	**Price Hypothesis (AC10 & CC10)**
ln(Period)	0.68**	-0.46	-0.48**
	(0.33)	(0.33)	(0.19)
Sequence = 2	0.59**		-0.29**
(Periods 25-40)	(0.24)		(0.14)
AC'16 dummy	5.26***		
	(0.24)		
AC10 dummy		-1.49***	
		(0.24)	
CC10 dummy			1.36***
			(0.14)
Constant	3.86***	6.80***	5.51***
	(0.89)	(0.83)	(0.51)
N	240	150	360

*p<0.10, **p<0.05, ***p<0.01
†Data from the first sequence only

4. DT Paradox, Size Hypothesis and Price Hypothesis random effects regressions using <u>Period</u> (as discussed in the text)

Dependent variable = Average travel cost

	DT test (AC16 & AC'16)	**Size Hypothesis† (AC10 & AC16)**	**Price Hypothesis (AC10 & CC10)**
Period	0.49	-0.37	-0.33***
	(0.32)	(0.27)	(0.11)
Sequence = 2	9.23***		-2.13**
(Periods 25-40)	(2.76)		(0.92)
AC'16 dummy	40.07***		
	(2.76)		
AC10 dummy		-9.16***	
		(2.36)	
CC10 dummy			23.81***
			(0.92)
Constant	156.42***	167.23***	158.24***
	(5.94)	(3.93)	(1.72)
N	240	150	360

*p<0.10, **p<0.05, ***p<0.01

†Data from the first sequence only

5. DT Paradox, Size Hypothesis and Price Hypothesis random effects regressions using <u>1/Period</u>

Dependent variable = Average travel cost

	DT test (AC16 & AC'16)	**Size Hypothesis† (AC10 & AC16)**	**Price Hypothesis (AC10 & CC10)**
1/Period	-66.54*	55.96*	45.45***
	(40.44)	(33.88)	(13.40)
Sequence = 2	9.234***		-2.13**
(Periods 25-40)	(2.76)		(0.91)
AC'16 dummy	40.07***		
	(2.75)		
AC10 dummy		-9.16***	
		(2.36)	
CC10 dummy			23.81***
			(0.91)
Constant	168.66***	157.54***	150.02***
	(5.54)	(3.48)	(1.56)
N	240	150	360

*p<0.10, **p<0.05, ***p<0.01

†Data from the first sequence only

6. DT Paradox, Size Hypothesis and Price Hypothesis random effects regressions using <u>ln(Period)</u>

Dependent variable = Average travel cost

	DT test (AC16 & AC'16)	**Size Hypothesis† (AC10 & AC16)**	**Price Hypothesis (AC10 & CC10)**
ln(Period)	6.16	-4.81	-4.09***
	(3.80)	(3.18)	(1.26)
Sequence = 2	9.23***		-2.13**
(Periods 25-40)	(2.75)		(0.91)
AC'16 dummy	40.07***		
	(2.75)		
AC10 dummy		-9.16***	
		(2.36)	
CC10 dummy			23.81***
			(0.91)
Constant	147.41***	174.49***	164.25***
	(10.41)	(8.18)	(3.32)
N	240	150	360

*p<0.10, **p<0.05, ***p<0.01

†Data from the first sequence only