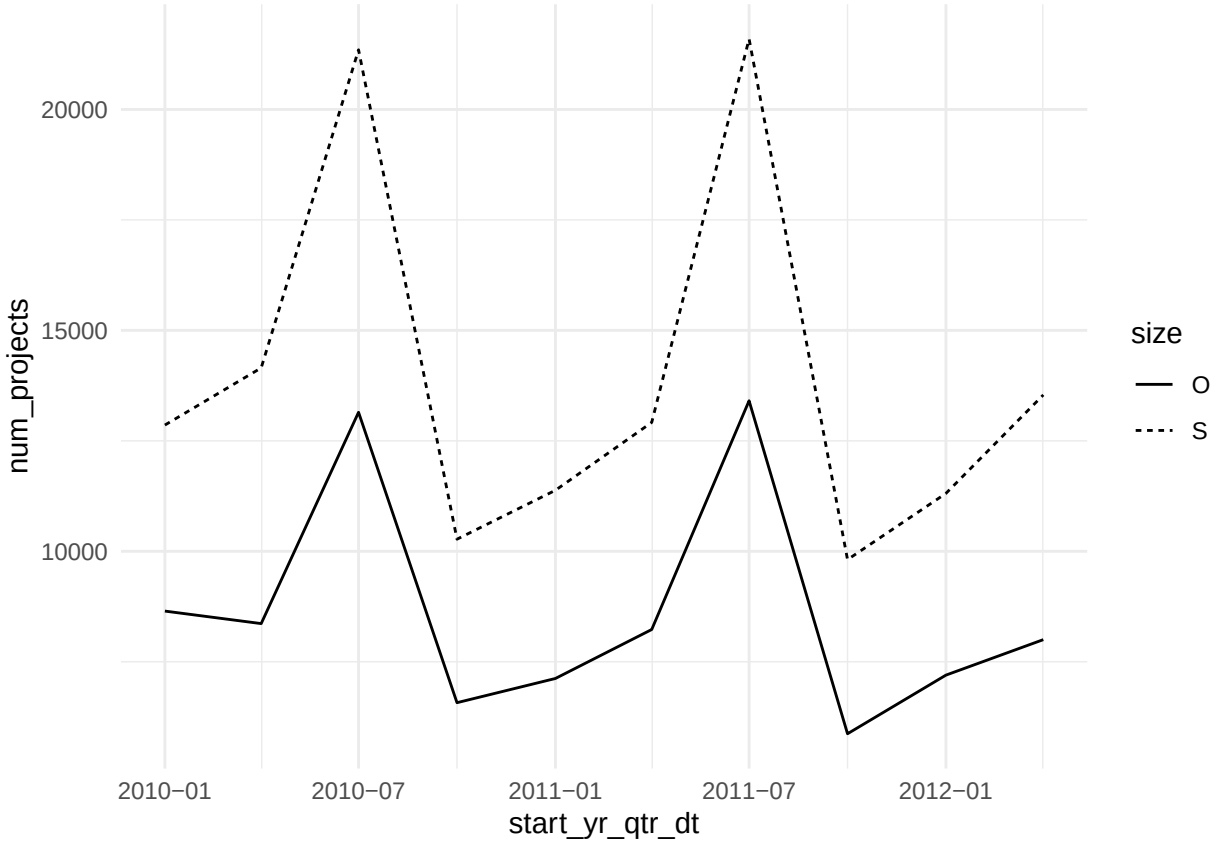
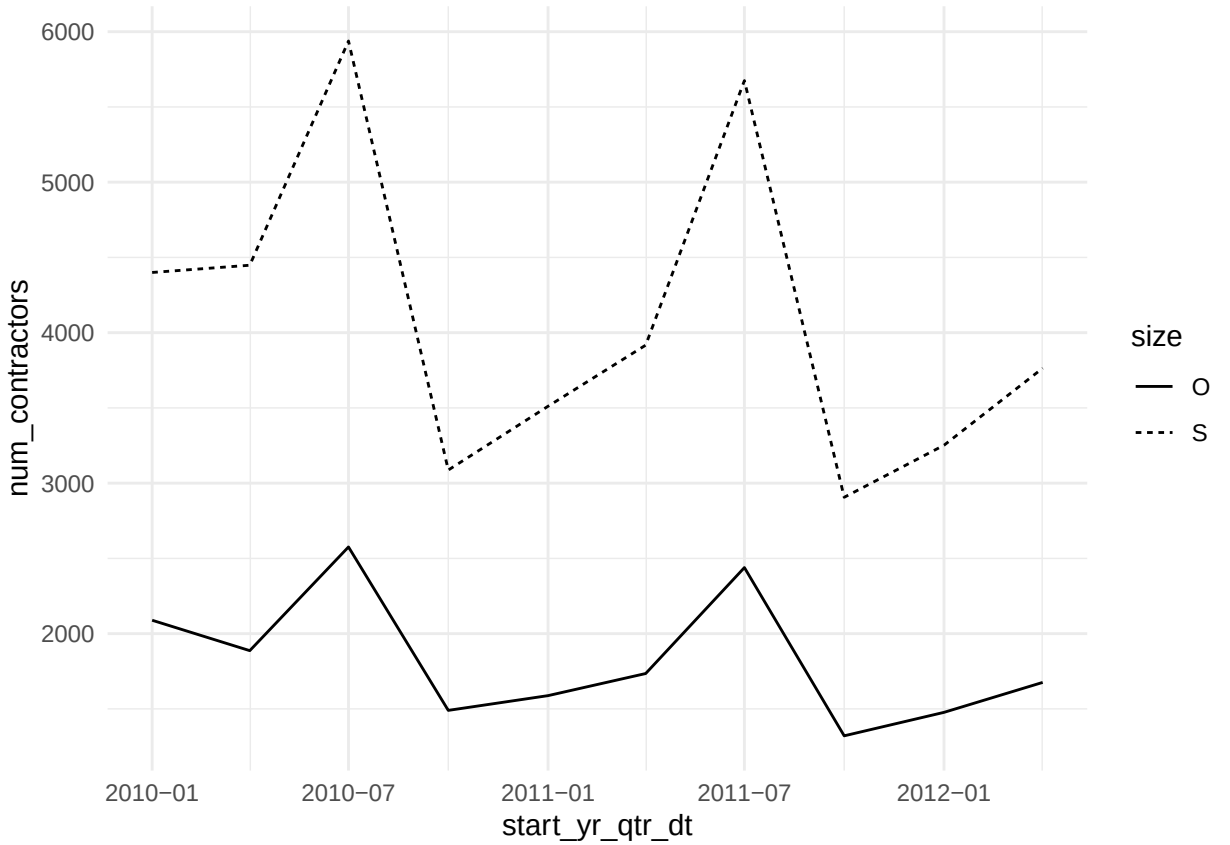
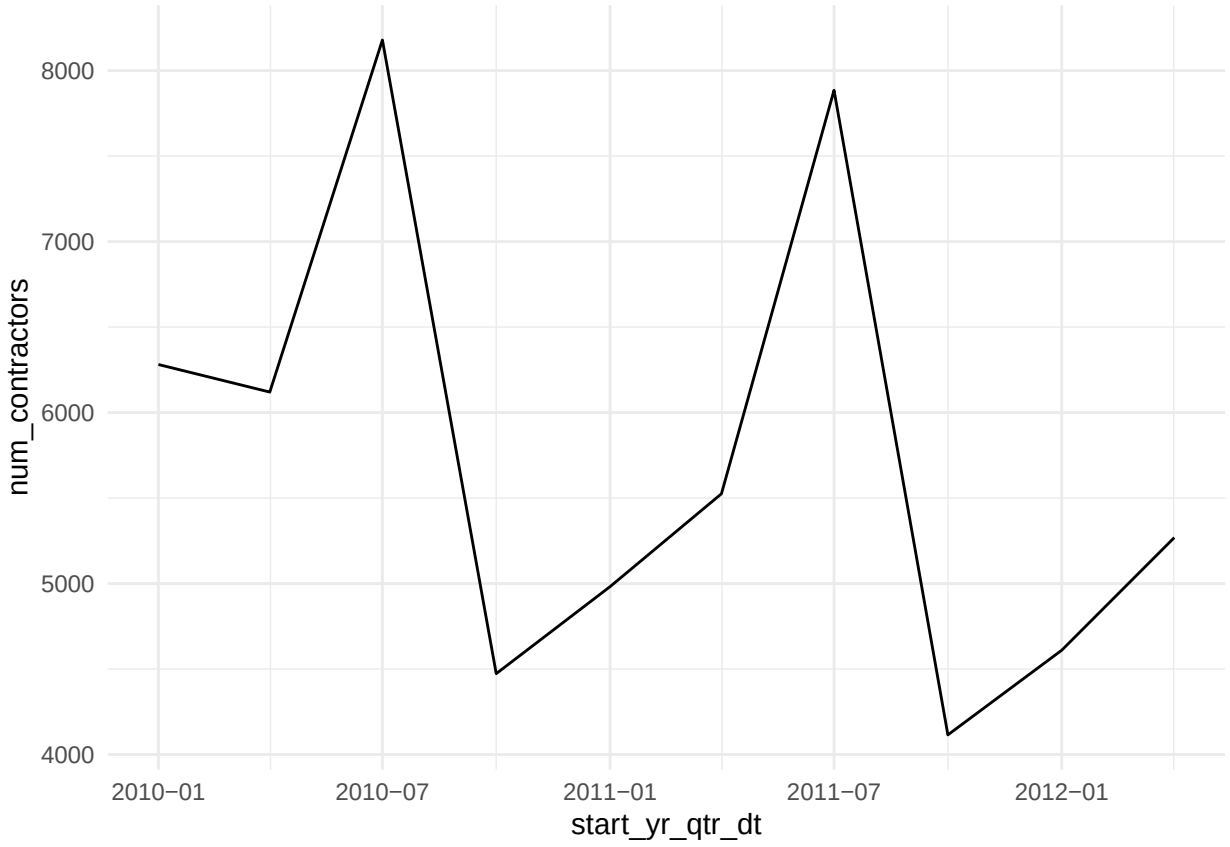
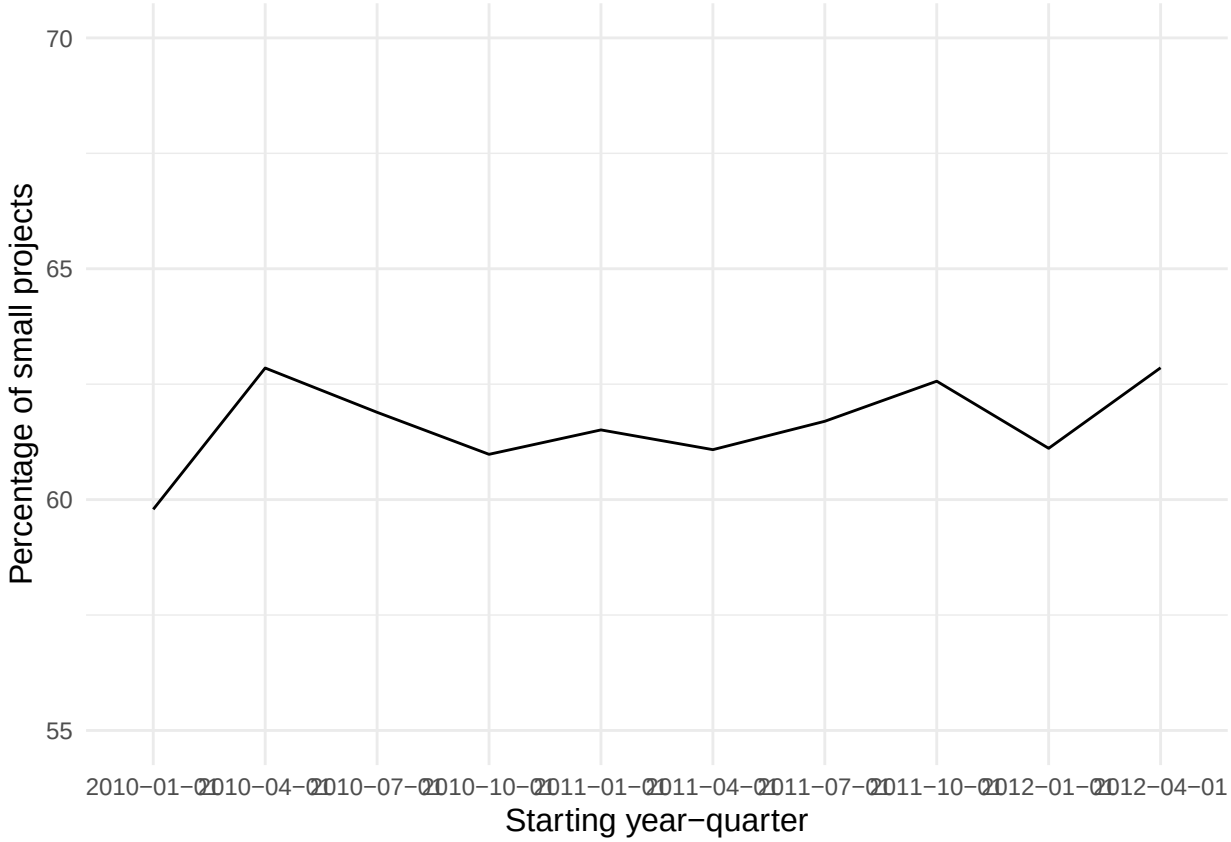
Project level delays

2023-11-29




6000
5000
4000
3000
2000
num_contractors
2010−01
2010−07
2011−01
2011−07
2012−01
start_yr_qtr_dt
size
O
S


8000
7000
6000
5000
4000
num_contractors
2010−01
2010−07
2011−01
2011−07
2012−01
start_yr_qtr_dt


70
65
60
55
Percentage of small projects
2010−01−01
2010−04−01
2010−07−01
2010−10−01
2011−01−01
2011−04−01
2011−07−01
2011−10−01
2012−01−01
2012−04−01
Starting year−quarter

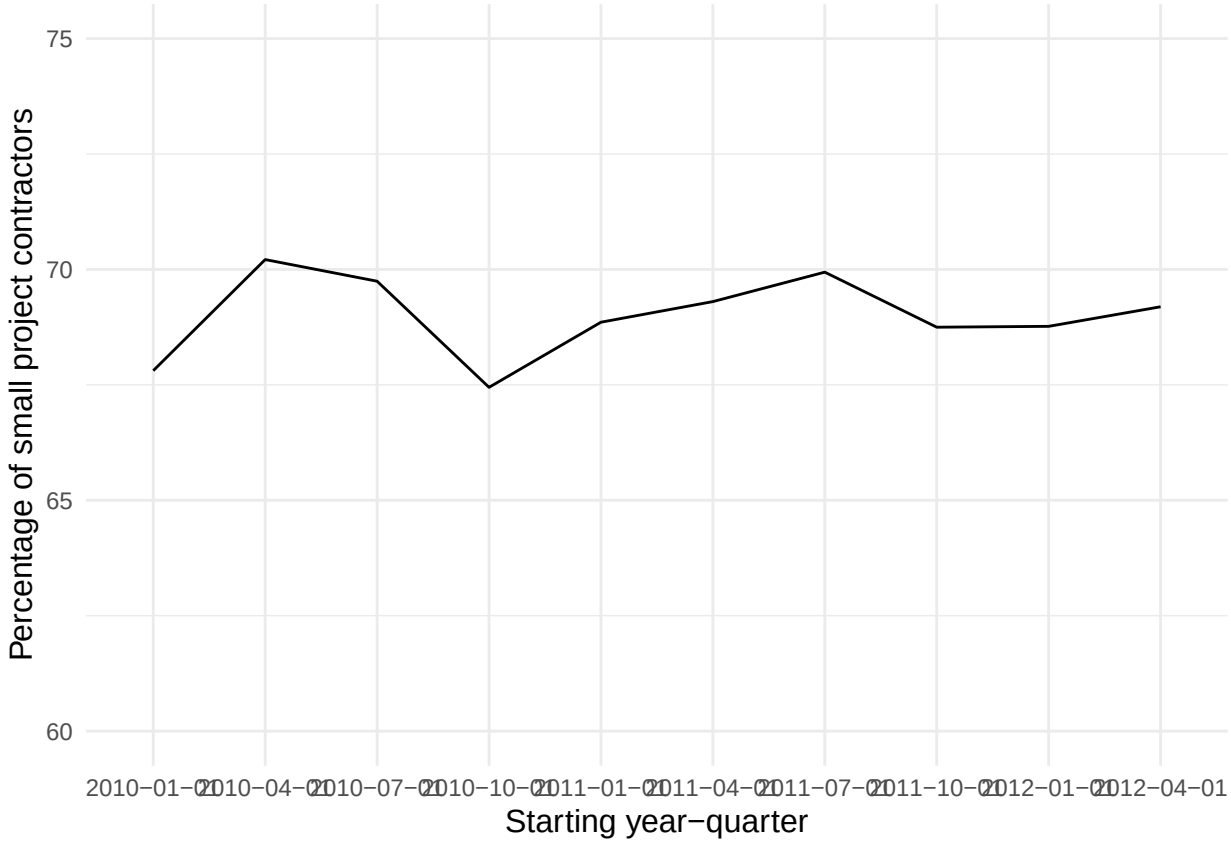

75
70
65
60
Percentage of small project contractors
2010−01−01
2010−04−01
2010−07−01
2010−10−01
2011−01−01
2011−04−01
2011−07−01
2011−10−01
2012−01−01
2012−04−01
Starting year−quarter

Table 1: Full sample

Dependent Variables:	Delay days	Delay/Initial duration	I(Delay>0)	I(Delay<0)
Model:	(1)	(2)	(3)	(4)
	OLS	OLS	Logit	Logit
Variables				
Treat	-8.83***	-2.16***	-0.38***	0.14
	(1.03)	(0.26)	(0.03)	(0.10)
Post	9.72*	-1.40**	0.46***	0.27
	(5.17)	(0.59)	(0.15)	(0.19)
Treat × Post	8.67***	1.54***	0.23***	-0.24**
	(0.96)	(0.30)	(0.04)	(0.12)
Controls	Yes	Yes	Yes	Yes
Fixed-effects				
Start Year-Quarter	Yes	Yes	Yes	Yes
Task	Yes	Yes	Yes	Yes
NAICS	Yes	Yes	Yes	Yes
Sub-agency	Yes	Yes	Yes	Yes
Fit statistics				
Observations	229,081	224,338	226,059	209,905
Squared Correlation	0.14024	0.19161	0.17044	0.05128
Pseudo R^2	0.01361	0.03201	0.20140	0.15201
BIC	2,530,299.3	1,464,360.5	137,594.8	29,230.1

Clustered (Start Year-Quarter) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table 2: Clean control group

Dependent Variables:	Delay days	Delay/Initial duration	I(Delay>0)	I(Delay<0)
Model:	(1)	(2)	(3)	(4)
	OLS	OLS	Logit	Logit
Variables				
Treat	-7.28***	-0.73***	-0.27***	0.01
	(1.43)	(0.22)	(0.03)	(0.16)
Post	9.90*	-0.74**	0.49***	0.17
	(5.28)	(0.35)	(0.15)	(0.24)
Treat × Post	7.81***	0.60**	0.17***	-0.09
	(1.49)	(0.22)	(0.05)	(0.19)
Controls	Yes	Yes	Yes	Yes
Fixed-effects				
Start Year-Quarter	Yes	Yes	Yes	Yes
Task	Yes	Yes	Yes	Yes
NAICS	Yes	Yes	Yes	Yes
Sub-agency	Yes	Yes	Yes	Yes
Fit statistics				
Observations	195,138	192,054	191,971	177,316
Squared Correlation	0.13588	0.05823	0.16090	0.05129
Pseudo R^2	0.01324	0.01052	0.19518	0.15150
BIC	2,144,079.8	1,103,808.9	115,771.3	25,252.5

Clustered (Start Year-Quarter) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table 3: Action type = M or N/A

Dependent Variable:	Delay days	
	All	Clean control
Model:	(1)	(2)
Variables		
Treat	-8.73***	-7.20***
	(0.99)	(1.38)
Post	9.66*	9.82*
	(5.20)	(5.30)
Treat × Post	8.39***	7.56***
	(0.92)	(1.44)
Controls	Yes	Yes
Fixed-effects		
Start Year-Quarter	Yes	Yes
Task	Yes	Yes
NAICS	Yes	Yes
Sub-agency	Yes	Yes
Fit statistics		
Observations	225,298	191,680
R^2	0.13967	0.13546
Within R^2	0.01986	0.02163

Clustered (Start Year-Quarter) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table 4: No set aside used

Dependent Variable:	Delay days	
	All	Clean control
Model:	(1)	(2)
Variables		
Treat	-8.85***	-8.61***
	(1.50)	(1.82)
Post	9.50*	9.30*
	(4.69)	(4.78)
Treat × Post	9.81***	9.00***
	(1.36)	(1.87)
Controls	Yes	Yes
Fixed-effects		
Start Year-Quarter	Yes	Yes
Task	Yes	Yes
NAICS	Yes	Yes
Sub-agency	Yes	Yes
Fit statistics		
Observations	169,716	135,825
R^2	0.15349	0.14790
Within R^2	0.01793	0.02012

Clustered (Start Year-Quarter) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table 5: Projects that started before QuickPay

Dependent Variable:	Delay days	
	All	Clean control
Model:	(1)	(2)
Variables		
Treat	-6.34***	-4.37***
	(0.42)	(0.86)
Post	-1.92	-1.49
	(3.90)	(4.47)
Treat × Post	7.31***	5.53***
	(0.98)	(1.51)
Controls	Yes	Yes
Fixed-effects		
Start Year-Quarter	Yes	Yes
Task	Yes	Yes
NAICS	Yes	Yes
Sub-agency	Yes	Yes
Fit statistics		
Observations	124,681	106,233
R^2	0.17970	0.17644
Within R^2	0.02801	0.03050

Clustered (Start Year-Quarter) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table 6: Projects that had a positive delay only

Dependent Variable:	Delay days	
	All	Clean control
Model:	(1)	(2)
Variables		
Treat	-16.31***	-10.54**
	(2.48)	(4.28)
Post	2.21	1.06
	(14.45)	(15.89)
Treat × Post	23.71***	21.73***
	(2.87)	(5.07)
Controls	Yes	Yes
Fixed-effects		
Start Year-Quarter	Yes	Yes
Task	Yes	Yes
NAICS	Yes	Yes
Sub-agency	Yes	Yes
Fit statistics		
Observations	24,917	20,300
R^2	0.25326	0.26326
Within R^2	0.02019	0.02124

Clustered (Start Year-Quarter) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table 7: Matching

Dependent Variable:	Delay days	
	CEM	PSM with 0.2 caliper
Model:	(1)	(2)
Variables		
Treat	-1.57***	-2.64***
	(0.23)	(0.32)
Post	3.61**	4.71**
	(1.35)	(1.99)
Treat × Post	1.10**	1.83***
	(0.44)	(0.34)
Controls	Yes	Yes
Fixed-effects		
Start Year-Quarter	Yes	Yes
Task	Yes	Yes
NAICS	Yes	Yes
Sub-agency	Yes	Yes
Fit statistics		
Observations	124,817	39,786
R^2	0.15075	0.15916
Within R^2	0.01716	0.01394

Clustered (Start Year-Quarter) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*