Logistic regression: Positive Delay Rate – QuickPay (2009-2012)

Jan 22, 2023

1 Logistic Regressions (Positive Delay)

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## NOTE: 242,688 observations removed because of NA values (LHS: 242,688).
## NOTE: 266,784 observations removed because of NA values (LHS: 242,688, RHS: 266,784).
## NOTE: 266,784 observations removed because of NA values (LHS: 242,688, RHS: 266,784).
## NOTES: 266,784 observations removed because of NA values (LHS: 242,688, RHS: 266,784).
## 42/0 fixed-effects (2,333 observations) removed because of only 0 (or only 1) outcomes.
## NOTES: 266,784 observations removed because of NA values (LHS: 242,688, RHS: 266,784).
## 1/442/0 fixed-effects (2,377 observations) removed because of only 0 (or only 1) outcomes.
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Table 1: Logit model: Effect of QuickPay

Dependent Variable:	$I(Delay_{it} > 0)$				
Model:	(1)	(2)	(3)	(4)	(5)
Variables					
Constant	-1.97***	2.74***			
	(0.02)	(0.12)			
$Treat_i$	-0.46***	-0.12***	-0.14***	-0.18***	-0.20***
	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)
$Post_t$	0.09***	-1.38***			
	(0.02)	(0.13)			
$Treat_i \times Post_t$	0.21***	0.18***	0.19***	0.21***	0.22***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Controls		Yes	Yes	Yes	Yes
Controls $\times Post_t$		Yes	Yes	Yes	Yes
Fixed-effects					
Time			Yes	Yes	Yes
Task code				Yes	Yes
NAICS code					Yes
Fit statistics					
Observations	260,211	236,115	$236,\!115$	233,782	233,738
Squared Correlation	0.004	0.27	0.27	0.31	0.31
Pseudo \mathbb{R}^2	0.005	0.26	0.26	0.32	0.32
BIC	180,911.3	129,642.5	129,558.3	130,818.1	130,983.6

Clustered (Project ID) standard-errors in parentheses

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

2 Logistic Regressions (Positive Delay) – One type

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## NOTE: 154,236 observations removed because of NA values (LHS: 154,236).

## NOTE: 171,267 observations removed because of NA values (LHS: 154,236, RHS: 171,267).

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## NOTES: 171,267 observations removed because of NA values (LHS: 154,236, RHS: 171,267).

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## NOTES: 171,267 observations removed because of NA values (LHS: 154,236, RHS: 171,267).

## NOTES: 10/427/0 fixed-effects (2,032 observations) removed because of only 0 (or only 1) outcomes.
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Table 2: Logit model: Effect of QuickPay

Dependent Variable:	$I(Delay_{it} > 0)$					
Model:	(1)	(2)	(3)	(4)	(5)	
Variables						
Constant	-1.99***	3.23***				
	(0.02)	(0.13)				
$Treat_i$	-0.17***	-0.01	-0.04	-0.13***	-0.14***	
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	
$Post_t$	0.10^{***}	-1.33***				
	(0.02)	(0.15)				
$Treat_i \times Post_t$	0.20***	0.18***	0.20***	0.21***	0.21***	
	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	
Controls		Yes	Yes	Yes	Yes	
Controls $\times Post_t$		Yes	Yes	Yes	Yes	
Fixed-effects						
Time			Yes	Yes	Yes	
Task code				Yes	Yes	
NAICS code					Yes	
Fit statistics						
Observations	174,306	$157,\!275$	$157,\!275$	$155,\!267$	155,243	
Squared Correlation	0.001	0.24	0.24	0.28	0.28	
Pseudo \mathbb{R}^2	0.002	0.22	0.23	0.28	0.28	
BIC	131,157.5	98,119.7	98,054.8	100,636.0	100,926.5	

Clustered (Project ID) standard-errors in parentheses Signif. Codes: ***: 0.01, **: 0.05, *: 0.1

3 Logistic Regression (Positive delay) – Clean Time Independent Control

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## NOTE: 279,526 observations removed because of NA values (LHS: 242,688, RHS: 70,154).
## NOTE: 301,032 observations removed because of NA values (LHS: 242,688, RHS: 301,032).
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## NOTES: 301,032 observations removed because of NA values (LHS: 242,688, RHS: 301,032).
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## NOTES: 301,032 observations removed because of NA values (LHS: 242,688, RHS: 301,032).
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Table 3: Logit model: Effect of QuickPay

Dependent Variable:	$I(Delay_{it} > 0)$				
Model:	(1)	(2)	(3)	(4)	(5)
Variables					
Constant	-1.99***	3.07^{***}			
	(0.02)	(0.13)			
$Treat_i$	-0.44***	-0.21***	-0.23***	-0.21***	-0.22***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
$Post_t$	0.10***	-1.41***			
	(0.02)	(0.15)			
$Treat_i \times Post_t$	0.21***	0.22***	0.24***	0.24***	0.24***
	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)
Controls		Yes	Yes	Yes	Yes
Controls $\times Post_t$		Yes	Yes	Yes	Yes
Fixed-effects					
Time			Yes	Yes	Yes
Task code				Yes	Yes
NAICS code					Yes
Fit statistics					
Observations	223,373	201,867	201,867	$199,\!508$	199,470
Squared Correlation	0.003	0.24	0.24	0.28	0.29
Pseudo \mathbb{R}^2	0.005	0.24	0.24	0.30	0.30
BIC	152,027.7	112,248.2	112,168.8	113,622.3	113,836.6

Clustered (Project ID) standard-errors in parentheses Signif. Codes: ***: 0.01, **: 0.05, *: 0.1