

**ARE THE LIFE AND DEATH OF
AN EARLY STAGE VENTURE
INDEED IN THE POWER OF THE
TONGUE?
LESSONS FROM ONLINE
CROWDFUNDING PITCHES**

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MOTIVATION

- Interesting Question
 - Financial Economics Literature: Horse versus jockey dilemma and the definition of the firm / project
 - Real World
 - *“I invest in people, not ideas”* - Arthur Rock
 - Don Valentine, stated that in Sequoia they were looking for large growing markets first, and for the team later
- Crowdfunding
 - Kickstarter
 - Interesting Lab
 - Leading crowdfunding platform
 - Over 20,000 projects
 - All or nothing – clear definition of success
- Seed Financing
 - life or death of a venture
- Text Mining Approach



RESEARCH QUESTIONS

1. Do entrepreneurs design the emphasis on the entrepreneur/ venture differently in their fundraising pitch?
 - How to quantify it?
 - What may affect their choices?
2. Does pitch design affect investors and change the fundraising success ?
 - The probability of success? Overall or certain types of projects?
 - How many investors invest in the venture?



OUTLINE

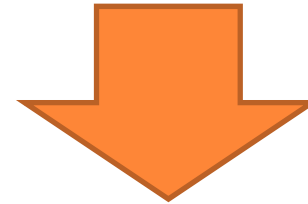
- Crowdfunding
- Kickstarter
- Our Data
- Estimation method
- Results
- Robustness tests
- Conclusion



Entrepreneurship

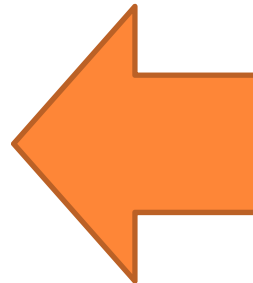


Literature



Boundaries of
the firm

e.g Rajan and
Zingales (2001)
and Penrose
(1959)



Horse versus Jokey
Dilemma

Kaplan, Sensoy, and
Stromberg (2009)
Marom (2012)



CROWDFUNDING

- A funding mechanism, which leverages the internet and social networks, in order to raise small amount of funds from a large number of investors
- Massolution, a research company that specializes in crowdfunding, indicated that as of April 2012, there were 452 crowdfunding platforms active worldwide.
- Massolution collected data from about 170 platforms during 2011, and they collectively raised 1.5 billion dollars and funded more than one million campaigns
- Massolution indicated that during 2012 worldwide crowdfunding volume reached \$2.7B raised from over 1.1M campaigns



CROWDFUNDING

- (1) The reward model
- (2) The pre-purchase model
- (3) The lending model
- (4) The equity model
- (5) The donation model



CROWDFUNDING

(1) The reward model

(2) The pre-purchase model

(3) The lending model

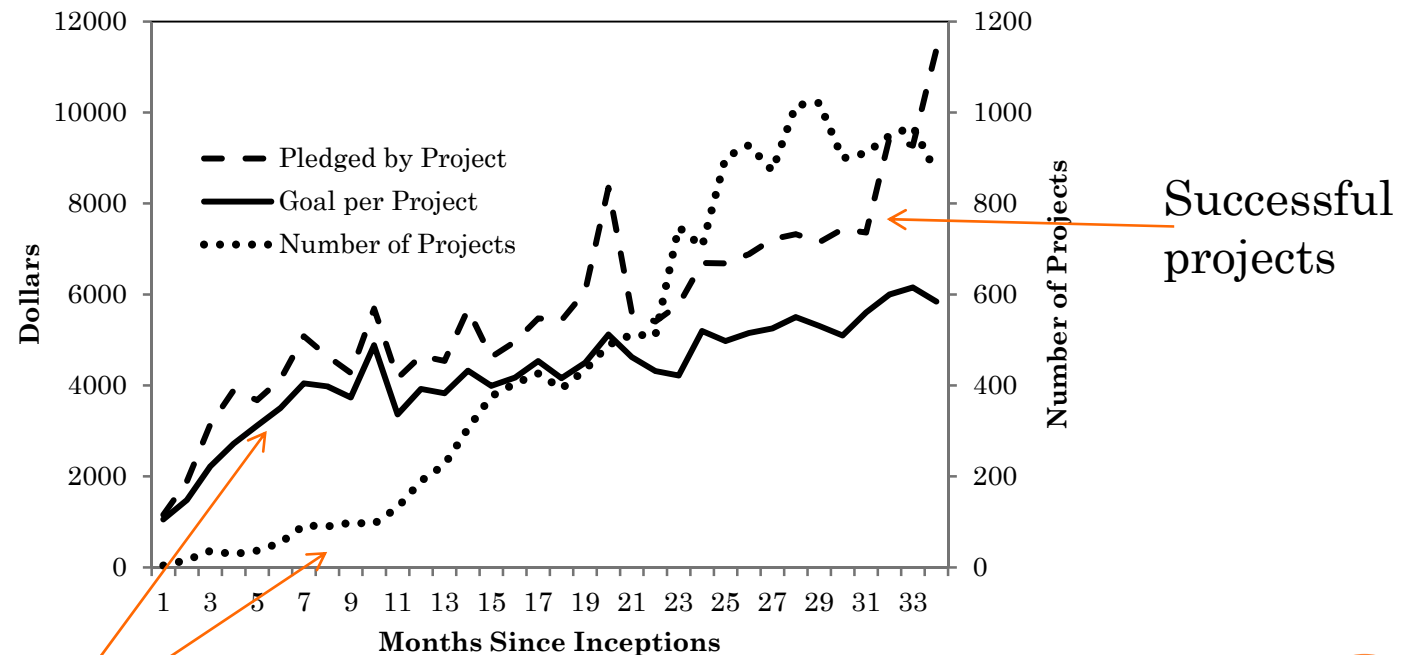
(4) The equity model

(5) The donation model



KICKSTARTER

- Leading crowdfunding platform
- <http://www.kickstarter.com/>



Overall



DATA

- **KICKSTARTER** (April 2009-March 2012):
 - 16,641 successful projects
 - 4,128 failed projects (***)
 - 22,274 entrepreneurs
 - 1,108,233 investors
 - Investments that sum to more than 120 million dollars.



DESCRIPTIVE STATISTICS

Main Category	# of projects	%	Pledged per project	% of total pledged
Art	19,001	92%	5,226	79%
Games	584	3%	4,910	4%
Technology	1059	5%	21,492	17%



Table 1

Descriptive Statistics: Projects, Goals, and Sum Pledged, by Categories

Descriptive statistics about sub categories and main-categories, regarding the number of projects, the average goal set per project, the sum of the goals set by all projects in the category, average of the money pledged per project, and the sum of the total money pledged by category.

Category	Projects	Pct.	Goal per Project	Sum of Goal	Pct.	Pledged per Project	Total Pledged	Pct.
Art	1,728	8.4%	4,851.6	8,383,641	5.0%	3,751.8	6,483,062	5.2%
Comics	533	2.6%	4,304.7	2,294,406	1.4%	7,064.2	3,765,226	3.0%
Dance	490	2.4%	3,302.5	1,618,217	1.0%	3,109.3	1,523,576	1.2%
Fashion	381	1.8%	5,321.0	2,027,320	1.2%	4,433.7	1,689,226	1.3%
Film & Video	6,158	29.8%	10,767.0	66,303,420	39.9%	6,925.5	42,647,420	33.9%
Food	581	2.8%	10,338.4	6,006,623	3.6%	7,442.4	4,324,043	3.4%
Music	5,132	24.9%	4,291.9	22,026,216	13.3%	4,535.4	23,275,832	18.5%
Photography	760	3.7%	4,624.5	3,514,590	2.1%	3,986.1	3,029,404	2.4%
Publishing	1,626	7.9%	5,147.8	8,370,289	5.0%	4,073.2	6,623,020	5.3%
Theater	1,612	7.8%	3,937.8	6,347,704	3.8%	3,680.9	5,933,620	4.7%
<i>Total of artistic categories</i>	<i>19,001</i>	<i>92.0%</i>	<i>6,678.2</i>	<i>126,892,426</i>	<i>76.4%</i>	<i>5,225.7</i>	<i>99,294,429</i>	<i>79.0%</i>
Games	584	2.8%	43,910.2	25,643,556	15.4%	8,407.5	4,909,963	3.9%
<i>Total of gaming category</i>	<i>584</i>	<i>2.8%</i>	<i>43,910.2</i>	<i>25,643,556</i>	<i>15.4%</i>	<i>8,407.5</i>	<i>4,909,963</i>	<i>3.9%</i>
Design	739	3.6%	12,078.3	8,925,840	5.4%	20,738.9	15,326,014	12.2%
Technology	320	1.6%	14,419.7	4,614,315	2.8%	19,268.0	6,165,759	4.9%
<i>Total of technological categories</i>	<i>1,059</i>	<i>5.1%</i>	<i>12,785.8</i>	<i>13,540,155</i>	<i>8.2%</i>	<i>20,294.4</i>	<i>21,491,773</i>	<i>17.1%</i>

QUANTIFYING METHOD


- How to quantify the “Horse versus Jokey” dilemma?

KICKSTARTER Discover great projects Start your project

Daniel Johnston's "Infinite Comic Book of Musical Greatness"

A Comics project in Waller, TX by [Daniel Johnston](#) · send message

PROJECT HOME UPDATES 12 BACKERS 433 COMMENTS 30



433 BACKERS
\$26,364
PLEGGED OF \$10,000 GOAL
0 SECONDS TO GO

FUNDING SUCCESSFUL
This project successfully raised its funding goal on March 6, 2011.

PLEDGE \$10 OR MORE
58 BACKERS
Receive online access to the interactive version of the [Daniel Johnston](#) comic book plus a special access code to download the accompanying music MP3s.

PLEDGE \$25 OR MORE
200 BACKERS • Limited Reward (47 of 250 remaining)
Receive a first-printing edition of the comic book including a special access code to download the accompanying music MP3s.

PLEDGE \$50 OR MORE
164 BACKERS • Limited Reward (46 of 200 remaining)

ABOUT THIS PROJECT

We're bringing the long awaited first full-length comic book by legendary musician and artist [Daniel Johnston](#) to his loyal fans. Donations will fund the creation, production, and manufacture of "Daniel Johnston's Infinite Comic Book of Musical Greatness."

The project will be much more than just a standard comic book...although a standard comic book by [Daniel Johnston](#) would be anything but standard and certainly worth funding. The "Infinite Comic Book of Musical Greatness" will combine the unique and brilliant characters, images and words of [Daniel Johnston](#) along with Daniel's amazing music, and the musical and artistic contributions of fans, to create a one-of-a-kind interactive comic book

KICKSTARTER Discover great projects Start your project

Zombies Vs. (A Graphic Novel)

A Comics project in Jacksonville, NC by [Richard Ankney](#) · send message

PROJECT HOME UPDATES 10 BACKERS 74 COMMENTS 18



74 BACKERS
\$4,077
PLEGGED OF \$1,500 GOAL
0 SECONDS TO GO

FUNDING SUCCESSFUL
This project successfully raised its funding goal on February 5.

PLEDGE \$1 OR MORE
0 BACKERS
This is the I love the Idea Pledge, by pledging here you will be given a world wide thank you posted on the [Zombies Vs.](#) fan page.
Estimated Delivery: Jul 2012

PLEDGE \$2 OR MORE
14 BACKERS
Do me Digital pledge!! This is the pledge for all you tech savvy types. For just a 2.00 nod!! You will get the shout out and when the comic releases you will get a digital copy direct to you!! some people say this is the way of the future I say..Why not!! so please send a nod...
Estimated Delivery: Jul 2012

ABOUT THIS PROJECT

"Zombies Vs." is a graphic novel that will in the first (hopefully of many more to come) book tell four stories depicting Zombies fighting others in a multitude of genre, within its pages you will get a good tale. Maybe even a modern history lesson! But, you will absolutely be entertained! So please help us make this awesome Graphic Novel become a reality by showing some love, even if its just one dollar. We thank you for reading this and know that a video is on its way!!

This First book will contain four distinct stories. The first story in the book as depicted will be "Zombies Vs. Naval Special Warfare" only because I cant use "Seal Team 6" but you get the idea!!! This is my telling of... well lets just say a mission that just might make you go..HMMM? if I disclose too much it could take away the surprise!!

TEXT MINING

- What we count?
 - (1) Name of the entrepreneur if single, or (2) first name if group, or (3) organization name (band, company, group etc)
 - Robustness test
- According to what do we count?
 - Number of mentions of the entrepreneur name in the “About” section
 - Number of mentions in the first 100 words
 - Title of the project



ADVANTAGES AND DISADVANTAGES

Advantages:

- VERY LARGE scale estimation (20K+ pitches)

Disadvantages (potential biases):

- May overlook cases such as: “I”, “He”, “We”
 - Does not take sentence interpretation into account (long paragraphs versus short)
 - Large number of counts does not necessarily mean that the project’s idea is not thoroughly described as well
-
- Next: Results + Robustness tests



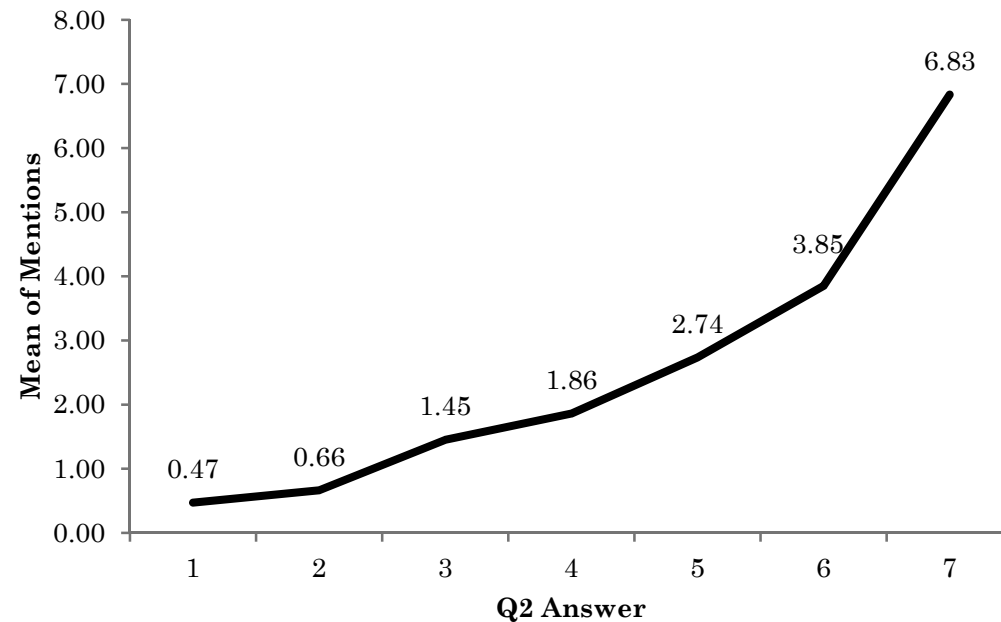
ROBUSTNESS TEST - HUMAN

- 100 technology oriented workers and managers from a large high tech organization
 - 62% men
 - More than half had an MBA degree
- 100 entrepreneurial pitches
 - 50 Technology and 50 Art (dance)
 - Random projects from top and bottom quadrants
 - Each rated 5 pitches – total 500 evaluations
- Similar in its spirit to Ravina (2008) and Duate et al (2012)



ROBUSTNESS TEST - HUMAN

2. Please rate the degree of emphasis on the creator in the project page.							
1	2	3	4	5	6	7	
Not emphasized at all						Very emphasized	



Clear positive significant correlation

ROBUSTNESS TEST - HUMAN

- Negative correlation with the degree of emphasis on the project

3. Please rate the degree of emphasis on the project in the project page.						
1	2	3	4	5	6	7
Not emphasized at all						Very emphasized

- Results hold for Art and for Technology separately



WHAT MAY AFFECT MENTIONS

- Reputation
 - Experience
 - Success
- Industry
 - 13 separate categories -> 3 industries: Art, Game and Technology
- Funding Goal
- Video
- Patents
- US based



	<i>About Section</i>	<i>First 100 Words</i>	<i>Title</i>	<i>About Section</i>	<i>First 100 Words</i>	<i>Title</i>	<i>About Section</i>	<i>First 100 Words</i>	<i>Title</i>
Technological Main-Category	-0.303*** (0.043)	-0.115*** (0.019)	-0.782*** (0.068)	-0.302*** (0.044)	-0.114*** (0.019)	-0.783*** (0.068)	-0.305*** (0.044)	-0.115*** (0.019)	-0.776*** (0.068)
Log(Goal)	0.045*** (0.009)	0.006 (0.004)	0.034*** (0.009)	0.040*** (0.009)	0.002 (0.004)	0.030*** (0.009)	0.039*** (0.009)	0.001 (0.004)	0.027*** (0.009)
Previous Successes of Entrepreneur	0.147*** (0.018)	0.109*** (0.008)	0.0329* (0.018)						
Success in Last Project Dummy				0.207*** (0.054)	0.093*** (0.024)	-0.178*** (0.064)			
Kickstarter Experience Dummy							0.076* (0.040)	0.026 (0.018)	-0.281*** (0.050)
Video on The Project Page	0.109*** (0.026)	0.034*** (0.011)	0.193*** (0.029)	0.111*** (0.026)	0.034*** (0.011)	0.191*** (0.029)	0.110*** (0.026)	0.034*** (0.011)	0.184*** (0.030)
Log(Total Words in the About Section)	0.297*** (0.014)			0.298*** (0.014)			0.299*** (0.014)		
Available Links to Websites by the Entrepre	-0.097*** (0.020)	-0.040*** (0.009)	-0.160*** (0.0216)	-0.089*** (0.020)	-0.030*** (0.009)	-0.145*** (0.022)	-0.085*** (0.020)	-0.028*** (0.009)	-0.130*** (0.022)
US Based Project	0.138*** (0.042)	0.090*** (0.018)	0.530*** (0.056)	0.139*** (0.042)	0.089*** (0.019)	0.529*** (0.056)	0.138*** (0.042)	0.089*** (0.019)	0.530*** (0.056)
Constant	-1.521*** (0.101)	0.142*** (0.034)	-1.761*** (0.093)	-0.495*** (0.102)	1.174*** (0.034)	-1.730*** (0.093)	-0.490*** (0.102)	1.178*** (0.034)	-1.697*** (0.093)
R ² / Pseudo R ²	0.034	0.013	0.0204	0.032	0.005	0.0206	0.031	0.004	0.022
Observations	20,057	20,059	20,059	20,057	20,059	20,059	20,057	20,059	20,059

MEASURING AND ESTIMATING SUCCESS

- What is considered a “success”?
 1. Reaching the funding goal
 2. % pledged
 3. # Investors
- What may affect “success”?
 - Industry
 - Funding goal
 - Video
 - Reputation
 - Patent
 - Number of mentions



Table 11**Effects of the Project Presentation Variables on Fundraising Success**

This table presents the OLS Regression Results for Effects of Antecedents on Funding Measures. The dependent variable is reaching the funding goal, and the independent variables are the entrepreneurial presentation measures, (self-mentions, video, links) and project attributes (goal, main category, location).

	<i>Reaching The Goal</i>	<i>% Pledged</i>	<i># of Investors</i>
Technological Main-Category	-0.350*** (0.0435)	-0.120*** (0.0406)	0.230*** (0.034)
More than Two Mentions	0.388*** (0.0494)	0.166*** (0.0359)	0.205*** (0.030)
Log(Goal)	-0.280*** (0.0100)		0.367*** (0.007)
Previous Successes of Entrepreneur	0.00272 (0.0216)	0.128*** (0.0167)	0.052*** (0.014)
Video on The Project Page	0.539*** (0.0285)	0.185*** (0.0242)	0.389*** (0.021)
Log(Total Words in the About Section)	0.141*** (0.0157)	0.0356*** (0.0132)	0.163*** (0.011)
Available Links to Websites by the Entrepreneur	-0.768*** (0.0228)	-0.539*** (0.0185)	-0.202*** (0.016)
US Based Project	-0.129*** (0.0488)	-0.0474 (0.0393)	-0.032 (0.033)
Constant	2.460*** (0.115)	-0.337*** (0.0866)	-0.454*** (0.080)
R ² / Pseudo R ²	0.1344	0.047	0.219
Observations	20,057	19,635	19,635



TECHNOLOGY VERSUS ART

Table 12
Predictions of Project Success by Main-Categories

This table presents three OLS Regressions Results – dependent variables are the three success measures while we compare the two main categories (artistic and technological) by different pitch attributes.

	<i>Dependent variable: Success in Reaching the Goal</i>	
	Artistic	Technological
More than Two Mentions	0.407*** (0.0516)	0.151 (0.180)
Log(Goal)	-0.277*** (0.0105)	-0.325*** (0.0355)
Previous Successes of Entrepreneur	0.0003 (0.0224)	0.0317 (0.0832)
Video on The Project Page	0.532*** (0.0293)	0.647*** (0.125)
Log(Total Words in the About Section)	0.139*** (0.0163)	0.152** (0.0595)
Available Links to Websites by the Entrepreneur	-0.779*** (0.0235)	-0.601*** (0.0940)
US Based Project	-0.0909* (0.0504)	-0.603*** (0.188)
Constant	2.417*** (0.120)	2.694*** (0.442)
Pseudo R ²	0.128	0.1232
Observations	18,998	1,059

FAMILY, FRIENDS AND SERIAL INVESTORS

- Less sensitive to mentions?
- How to quantify family and friends?
 - Family – the same last name as the entrepreneur
 - Early investors – the first 20 that fund the project

Same last name	Not
0.508	0.709

First 20	Not
0.782	0.892

- Serial investors care less about mentions



LARGE PROJECTS, SMALL PROJECTS AND SOCIAL NETWORK

- Top 10% of goal set – less emotional decisions
 - Our results hold
- Bottom projects (low 80%, 90% etc) – is it really the number of mentions or the entrepreneur?
 - Our results hold
- Self-mentioning is highly correlated with the entrepreneurs' reputation (outside of Kickstarter)?
 - Subsample (500): Facebook, Twitter
 - No relation



TO SUM

- Crowdfunding
- Kickstarter
- Textmining approach with human validation
- Mentions matter – Especially for “Art projects”



Thank You!



Table 2**The Three Mentioning Measures of the Business Pitch**

Table 2 reports basic descriptive statistics for the three mentioning measures in three different levels for each: The full sample, the successful projects sample, and the failed projects sample. For each one, the number of observations, mean number of mentions, standard deviation, median, and 90% of the sample are provided. We learn that in all three measures the average of mentions is higher for the successful projects than the failed ones.

	Obs.	Mean	Std Dev.	Median	90%
<i>All of the About Section</i>					
Number of mentions	20,644	0.714	1.407	0	2
Number of mentions for successful projects	16,530	0.767	1.443	0	2
Number of mentions for failed projects	4,114	0.501	1.228	0	1
<i>First 100 words of the About Section</i>					
Number of mentions	20,644	0.280	0.602	0	1
Number of mentions for successful projects	16,530	0.302	0.621	0	1
Number of mentions for failed projects	4,114	0.192	0.513	0	1
<i>Project Title</i>					
A Mention in the Title	20,644	0.174	0.379	0	1
A mention for successful projects	16,530	0.197	0.398	0	1
A Mention failed projects	4,114	0.083	0.276	0	0

Table 13
Multinomial Regression of Success Vs. Pitch Attributes

This table presents the estimated coefficients of multinomial regression of antecedents on funding outcomes

	Artistic	Technological
<i>(0 = Fail is the base outcome)</i>		
<i>1=Successful Pledge up to 110% of the Goal</i>	(1)	(2)
More than Two Mentions	0.689*** (0.103)	0.028 (0.415)
Goal	-0.000*** (0.000)	-0.000*** (0.000)
Previous Successes of Entrepreneur	0.035 (0.047)	-0.591 (0.493)
Video on The Project Page	0.814*** (0.054)	0.382 (0.250)
Total Words in the About Section	0.000 (0.000)	0.000 (0.000)
Available Links to Websites by the Entrepreneur	-1.512*** (0.046)	-1.161*** (0.205)
US Based Project	-0.154 (0.097)	-0.764* (0.419)
Constant	1.285*** (0.111)	0.709 (0.481)
<i>2=Success over 110%</i>	(3)	(4)
More than Two Mentions	0.804*** (0.103)	0.123 (0.311)
Goal	-0.000*** (0.000)	-0.000*** (0.000)
Previous Successes of Entrepreneur	0.103** (0.044)	0.188 (0.158)
Video on The Project Page	0.771*** (0.054)	0.850*** (0.207)
Total Words in the About Section	0.001*** (0.000)	0.001** (0.000)
Available Links to Websites by the Entrepreneur	-1.342*** (0.047)	-1.054*** (0.165)
US Based Project	-0.163* (0.098)	-0.948*** (0.329)
Constant	1.282*** (0.112)	1.255*** (0.384)
Pseudo R ²	0.063	0.070
Observations	19,001	1,059