# **Lending**Club

- Lending Club: an online peer-to-peer (P2P) marketplace connecting the borrowers and investors.
- The biggest feature: application of technology in the online community so that to leverage the cost advantage and provide borrowers with affordable credit.
- Sustainable competitive advantage
- Risks

Therefore, I hope to have more detailed understanding about Lending Club's business over years BY

- > Numerical analysis
- > Textual analysis

- Lending Club
  It posts and keeps updating abundant information about the loans, rejections and borrowers' information, since 2007 to 2018 Q1. <a href="https://www.lendingclub.com/info/download-data.action">https://www.lendingclub.com/info/download-data.action</a>
- Reuters News Archive I scraped 3,279,343 Reuters Historical news from 2007 to 2018.

Total size of around 13GB contain humongous information in form of numerical data and text data.

Lending Club formally started its co-borrower policy since March 1st, 2015, after its one-year successful testing.

- (1) How borrowers' behaviors changed
- (2) How option of co-borrow affected the interested rate of borrowers and the borrowers' grades assigned by Lending Club.

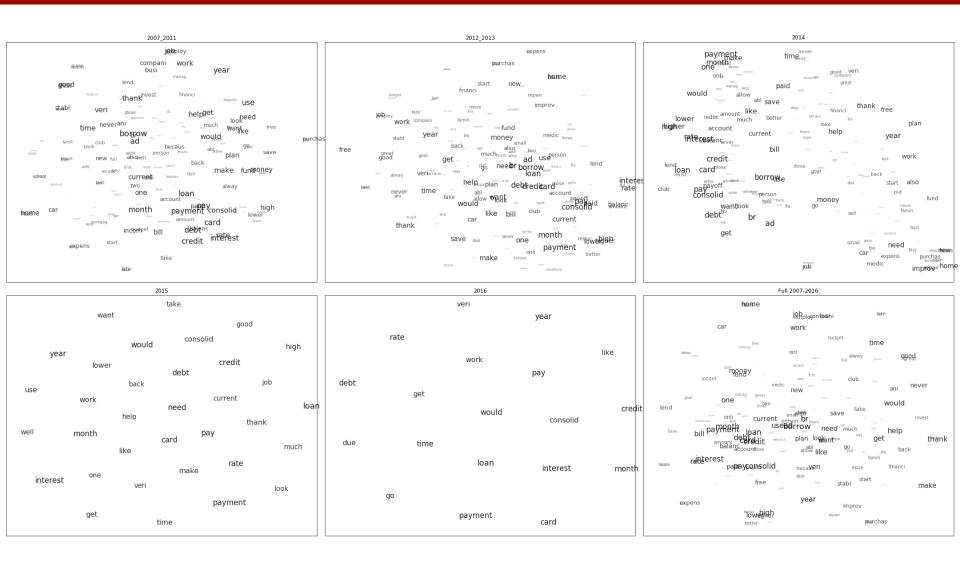


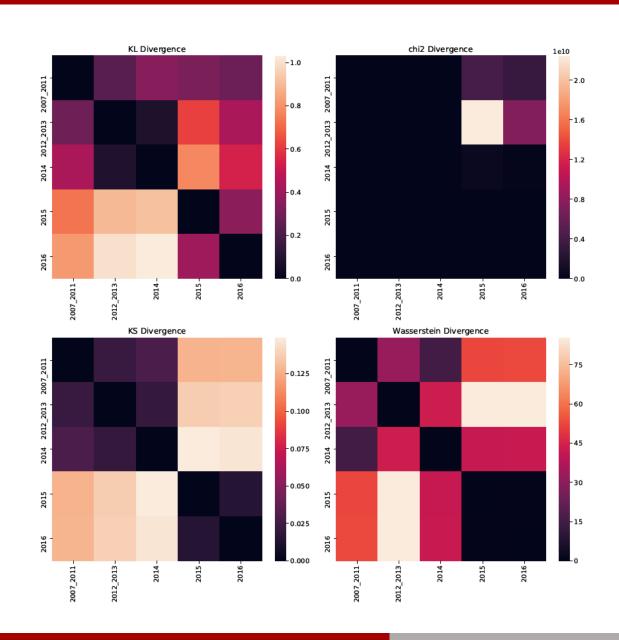












			Dependent	variable:					
	Interest Rate				Grade				
	Co-Borrower Bas	sic	Co-Borrower Full		Co-Borrower B	Basic	Co-Borrower Full		
avg_cur_bal			-0.00001***	(0.00000)			0.00000***	(0.00000)	
chargeoff_within_12_mths		(	0.790***	(0.280)			-0.184***	(0.064)	
delinq_acc_2yrs			0.418***	(0.033)			-0.098***	(0.007)	
delinq_acc_now			0.485	(0.515)			-0.091	(0.117	
delinq_amnt			0.00003	(0.0001)			-0.00001	(0.00001	
delinq_nvr_rate			-0.063****	(0.003)			0.015***	(0.001)	
demo_emp_length	0.009	(0.006)	0.001	(0.006)	-0.003**	(0.001)	-0.001	(0.001)	
demo_income	-0.00000****	(0.00000)	-0.00000	(0.00000)	-0.00000.0-	(0.00000)	-0.00000	(0.00000)	
demo_tax_liens	0.645***	(0.095)	0.347***	(0.088)	-0.152***	(0.022)	-0.084***	(0.020)	
dti			-0.001**	(0.001)			0.0003*	(0.0002	
mort_acc			-0.417***	(0.051)			0.089***	(0.012	
num_actv_bc_tl			0.252***	(0.020)			-0.058***	(0.005	
num_bc_sats			-0.191***	(0.027)			0.045***	(0.006	
num_bc_tl			-0.005	(0.017)			0.0002	(0.004	
num_il_tl			-0.135****	(0.047)			0.024***	(0.011	
num_op_rev_tl			0.266****	(0.018)			-0.061***	(0.004	
num_rev_accts			-0.215****	(0.048)			0.043***	(0.011	
num_sats		(	-0.585***	(0.149)			0.136***	(0.034	
open_acc			0.499***	(0.150)			-0.116***	(0.034	
percent_bc_gt_75			0.041***	(0.001)			-0.009***	(0.0002	
revol_bal			-0.00002***	(0.00000)			0.00000****	(0.00000	
tot_cur_bal			0.00000****	(0.00000)			-0.00000*****	(0.00000	
total_acc			0.136***	(0.047)			-0.025***	(0.011	
total_bal_ex_mort			0.00000***	(0.00000)			-0.00000*****	(0.00000)	
co_borr_revo_acc	-0.047****	(0.003)	-0.021****	(0.003)	0.010***	(0.001)	0.004***	(0.001	
co_borr_mort_acc	-0.241***	(0.015)	-0.007	(0.019)	0.052***	(0.003)	-0.0004	(0.004	
co_borr_income	-0.00000***	(0.00000)	-0.00000***	(0.00000)	0.00000***	(0.00000)	0.00000***	(0.00000	
co_borr_dti	0.152***	(0.003)	0.126***	(0.004)	-0.034***	(0.001)	-0.028***	(0.001)	
co_borr_chargeoff	0.377***	(0.059)	0.352***	(0.054)	-0.079***	(0.013)	-0.074***	(0.012)	
Observations	46,192		46,192		46,192		46,192		
R2	0.106		0.242		0.101		0.236		
Adjusted R2	0.105		0.240		0.099		0.235		
Residual Std. Error	5.135 (df = 46128	4.730 (df = 46	730 (df = 46091) $1.168$ (df = 46128)		128)	1.076 (df = 46091)			