Figure 1: ROC score distribution for selection model

Out of Sample AUC: 0.72
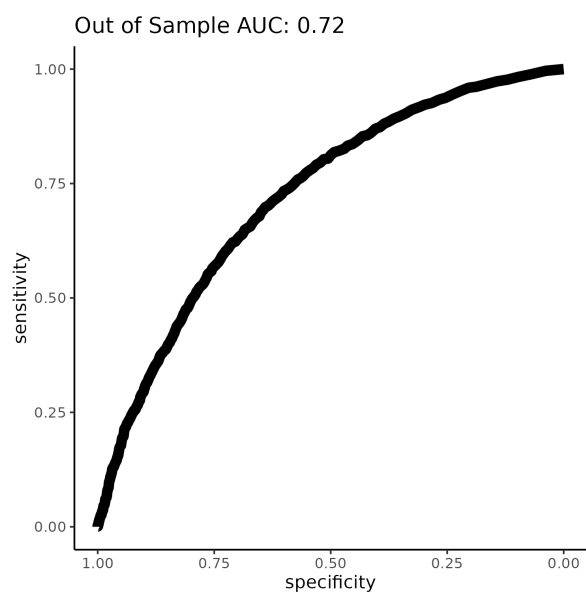
Notes: This figure reports the out of sample ROC score of a random forest model using a set of high dimensional startup observables to predict the probability that a venture capitalist has funded a startup's early stage round, in a sample of startups that received early stage financing.

Figure 2: Histogram of Predictions
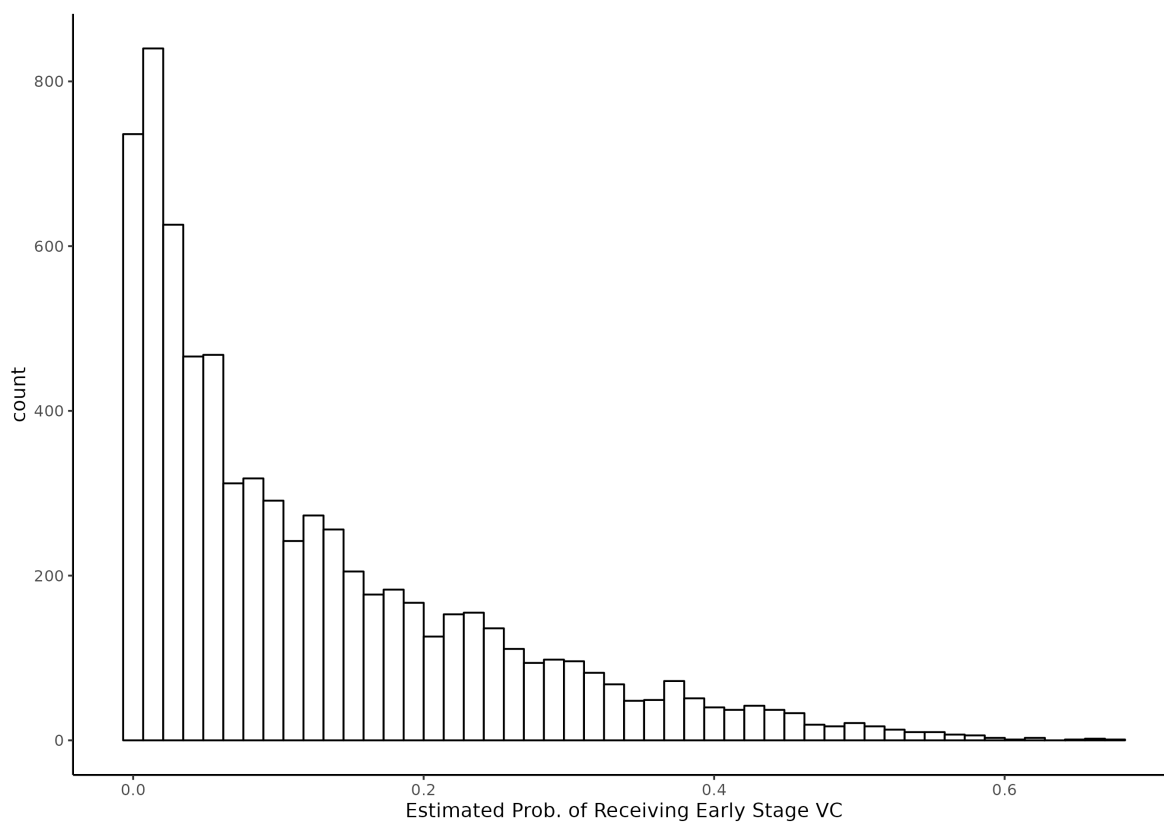
Notes: This figure reports the histogram of out of sample predicted probability of receiving venture capital financing from a random forest model using a set of high dimensional startup observables, in a sample consisting only of startups that received early stage financing.

Figure 3: Binned scatterplot for outcomes across predicted distribution

A. Early Stage VC

C. Series A Financing

D. Series B Financing

B. Equity Growth

E. Acquired

F. IPO
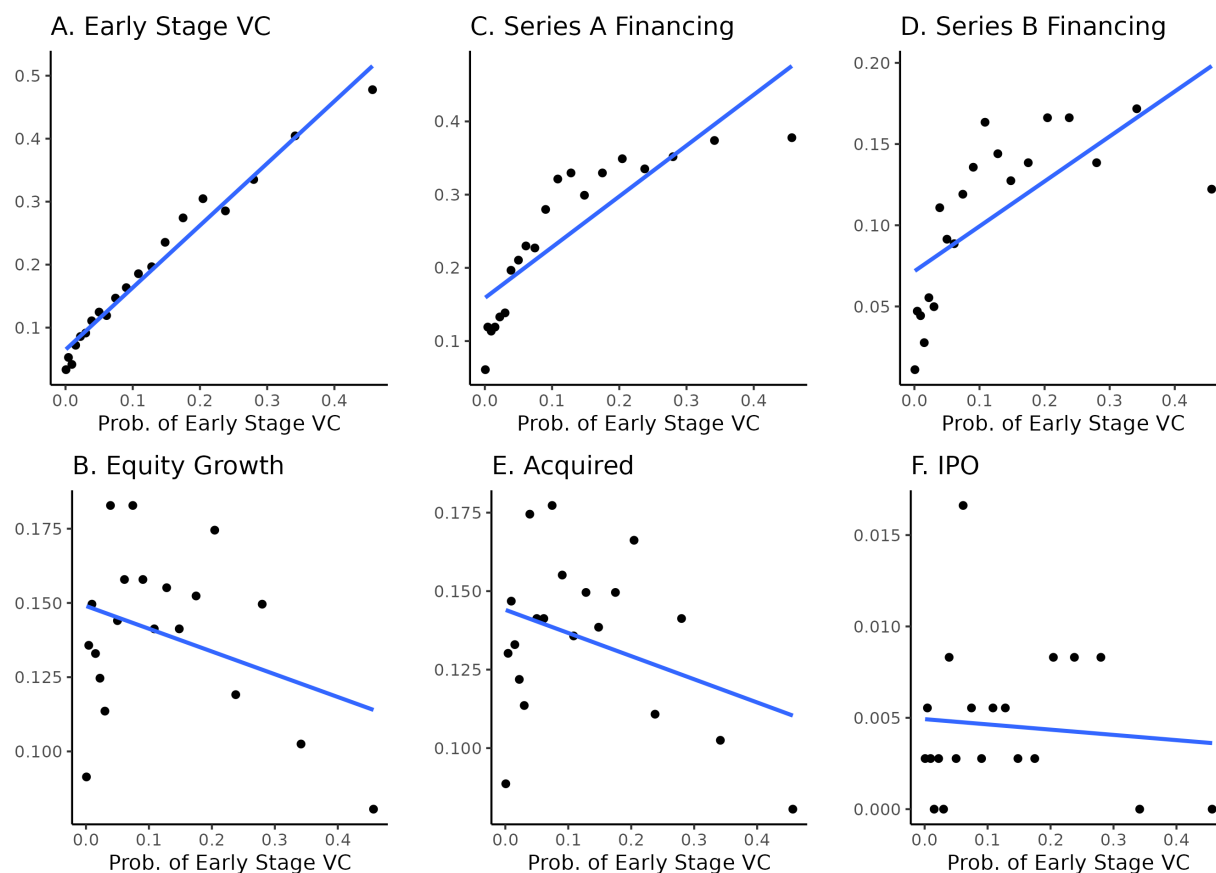
Figure 4: Distribution of treatment effects

A. Histogram of Equity Growth
Total Treatment Effect

B. Histogram of Series B
Total Treatment Effect

C. Histogram of Equity Growth
Strategic Treatment Effect Only

D. Histogram of Series B
Strategic Treatment Effect Only
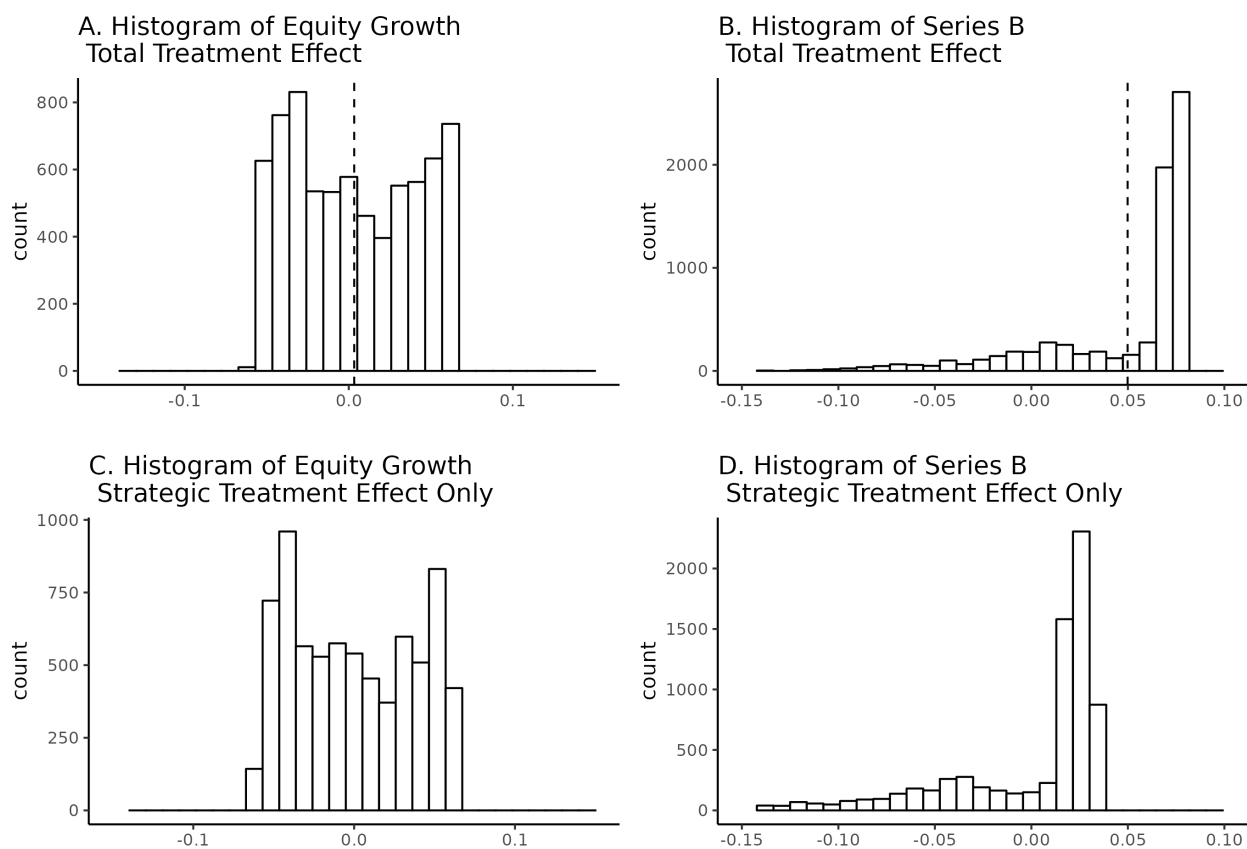
Table 1: Summary Statistics

Statistic	Mean	St. Dev.
Amount Raised Total	11,592,973.000	71,123,260.000
Seed Amount Raised	1,309,721.000	1,512,657.000
Angel Funding Amount Raised	114,929.200	452,395.500
Early Stage Amount Raised	1,593,344.000	1,608,507.000
Series A Amount Raised	1,923,141.000	4,852,012.000
Series B Amount Raised	2,150,582.000	8,973,669.000
Seed VC	0.199	0.399
Early Stage VC	0.187	0.390
Equity Growth	0.139	0.346
IPO	0.005	0.067
Acquisition	0.135	0.342

Table 2: Feature importance of random forest into who gets VC

rank	Variable	Mean Decrease Accuracy
1	Early Stage Financing Bin	36.826
2	City: SanFrancisco x Industry: Biotechnology	12.544
3	School: Universityof x Industry: ArtificialIntelligence	9.205
4	City: NewYork X Harvard	8.887
5	City: Portland x Industry: EnterpriseSoftware	8.877
6	City: Austin x Industry: MachineLearning	8.799
7	City: Boulder x Industry: Software	8.730
9	City: NewYork x Industry: PredictiveAnalytics	7.755
10	Industry: OpenSource	7.612
11	City: Boston x Industry: FinTech	7.554
12	Industry: MachineLearning	7.323
13	Industry: EdTech	6.988
14	City: Austin x Industry: ArtificialIntelligence	6.632
15	School: Stanford x Industry: Analytics	6.322
16	Industry: 3DTechnology	6.136
17	School: Stanford x Industry: ArtificialIntelligence	5.845
18	State: Michigan	5.727
19	City: MountainView x Industry: ECommerce	5.705
20	City: NewYork X Stanford	5.573
21	School: Harvard	5.549
22	City: SanFrancisco x Industry: Retail	5.539
23	City: SanFrancisco x Industry: HealthDiagnostics	5.454
24	City: Boulder x Industry: SaaS	5.416
25	Industry: ArtificialIntelligence	5.382
26	City: SanFrancisco x Industry: InformationTechnology	5.226
27	School: Stanford	5.226
28	City: Boston X Harvard	5.042
30	City: Atlanta x Industry: InformationTechnology	4.933
31	School: Universityof	4.933
32	Industry: SalesAutomation	4.850
33	City: SanJose X Universityof	4.829
34	School: Stanford x Industry: HealthCare	4.779
35	City: SanFrancisco x Industry: Education	4.721
36	City: Chicago X KelloggSchool	4.560
38	Industry: ComputerVision	4.460
39	School: MIT x Industry: Analytics	4.378
40	City: SanFrancisco x Industry: CloudComputing	4.335
41	City: Austin X Berkeley	4.299
42	City: SanFrancisco x Industry: Robotics	4.265
44	City: NewYork x Industry: VirtualReality	4.145

Table 3: Strategic Determinant Function: Top Features for Equity Growth Treatment Effect

	Variable	Coefficient	Coefficient/ATE	variable
Panel A: Most Positive Features				
1	Icity_Miami_X_Harvard	0.023	6.890	Icity_Miami_X_Harvard
2	Icity_Seattle_X_WhartonSchool	0.021	6.490	Icity_Seattle_X_Wharton Sch
3	Icity_Boulder_X_NYU	0.011	3.350	Icity_Boulder_X_NYU
4	Iyear_2	0.009	2.720	Iyear_2
5	X_Icity_SantaMonica_Iind_SocialMedia	0.009	2.660	X_Icity_Santa Monica_Iind_Socia
6	Icity_SanFrancisco_X_Stanford	0.009	2.630	Icity_San Francisco_X_Stanfo
7	Icity_SantaMonica_X_Harvard	0.009	2.600	Icity_Santa Monica_X_Harva
8	Icity_SanFrancisco_X_MIT	0.008	2.540	Icity_San Francisco_X_MIT
9	Icity_SanMateo_X_Columbia	0.008	2.450	Icity_San Mateo_X_Columb
10	Icity_MountainView_X_Harvard	0.008	2.420	Icity_Mountain View_X_Harv
11	Icity_Cambridge_X_Universityof	0.008	2.390	Icity_Cambridge_X_Universit
12	Iyear_5	0.008	2.300	Iyear_5
13	X_Icity_SanFrancisco_Iind_Music	0.007	2.080	X_Icity_San Francisco_Iind_M
14	X_Icity_SanFrancisco_Iind_CloudInfrastructure	0.006	1.900	X_Icity_San Francisco_Iind_Cloud In
15	X_Icity_SanFrancisco_Iind_OpenSource	0.006	1.840	X_Icity_San Francisco_Iind_Open
16	X_Icity_SantaMonica_Iind_Advertising	0.006	1.750	X_Icity_Santa Monica_Iind_Adve
17	X_ed_Stanford_Iind_SaaS	0.005	1.600	X_ed_Stanford_Iind_Saa S
18	X_Icity_MountainView_Iind_SaaS	0.005	1.600	X_Icity_Mountain View_Iind_S
19	X_Icity_NewYork_Iind_Photography	0.005	1.570	X_Icity_New York_Iind_Photog
20	X_Icity_SanFrancisco_Iind_Social	0.005	1.540	X_Icity_San Francisco_Iind_So
Panel B: Most Negative Features				
605	Iind_Database	-0.020	-6.040	Iind_Database
606	X_Icity_Atlanta_Iind_InformationTechnology	-0.020	-6.040	X_Icity_Atlanta_Iind_Information Te
607	Iind_Pet	-0.021	-6.340	Iind_Pet
608	X_Icity_Brooklyn_Iind_ECommerce	-0.021	-6.460	X_Icity_Brooklyn_Iind_EComm
609	X_Icity_Austin_Iind_ArtificialIntelligence	-0.021	-6.490	X_Icity_Austin_Iind_Artificial Inte
610	X_Icity_NewYork_Iind_PredictiveAnalytics	-0.022	-6.700	X_Icity_New York_Iind_Predictive
611	Iind_CloudInfrastructure	-0.022	-6.770	Iind_Cloud Infrastructure
612	Icity_Berkeley_X_Berkeley	-0.022	-6.800	Icity_Berkeley_X_Berkeley
613	Icity_Chicago_X_KelloggSchool	-0.024	-7.220	Icity_Chicago_X_Kellogg Sch
614	X_Icity_Boston_Iind_FinTech	-0.024	-7.370	X_Icity_Boston_Iind_Fin Te
615	X_Icity_SantaMonica_Iind_Internet	-0.025	-7.460	X_Icity_Santa Monica_Iind_Int
616	X_Icity_Portland_Iind_EnterpriseSoftware	-0.025	-7.550	X_Icity_Portland_Iind_Enterprise S
617	X_Icity_Philadelphia_Iind_HealthCare	-0.025	-7.700	X_Icity_Philadelphia_Iind_Healt
618	Iind_Aerospace	-0.026	-7.730	Iind_Aerospace
619	Icity_LosAngeles_X_WhartonSchool	-0.027	-8.250	Icity_Los Angeles_X_Wharton S
620	X_Icity_Brooklyn_Iind_Software	-0.028	-8.340	X_Icity_Brooklyn_Iind_Softw
621	Iind_OpenSource	-0.030	-9.030	Iind_Open Source
622	X_Icity_Brooklyn_Iind_SocialMedia	-0.033	-10	X_Icity_Brooklyn_Iind_Social M
623	X_Icity_SantaMonica_Iind_Software	-0.035	-10.660	X_Icity_Santa Monica_Iind_Sof
624	X_Icity_Boulder_Iind_Software	-0.036	-10.900	X_Icity_Boulder_Iind_Softwa
625	X_Icity_MountainView_Iind_ECommerce	-0.051	-15.280	X_Icity_Mountain View_Iind_ECo

Table 4: Strategic Determinant Function: Top Features for Series B Treatment Effect

	Variable	Coefficient	Coefficient/ATE	variable
Panel A: Most Positive Features				
1	Icity_NewYork_X_Berkeley	0.010	0.200	Icity_New York_X_
2	X_Icity_SanFrancisco_Iind_SocialMedia	0.007	0.140	X_Icity_San Francisco_Iir
3	Iyear_5	0.005	0.110	Iyear_5
4	Iind_Mobile	0.005	0.090	Iind_Mobile
5	X_Icity_SanFrancisco_Iind_Music	0.004	0.080	X_Icity_San Francisco_
6	X_Icity_NewYork_Iind_AdvertisingPlatforms	0.003	0.060	X_Icity_New York_Iind_Adv
7	X_Icity_SanFrancisco_X_Stanford_Iind_ECommerce	0.003	0.050	X_Icity_San Francisco_X_Stanf
8	Iyear_2	0.003	0.050	Iyear_2
9	Iyear_8	0.002	0.050	Iyear_8
10	Iyear_7	0.002	0.050	Iyear_7
11	Iind_Automotive	0.002	0.030	Iind_Automot
12	X_Icity_MountainView_Iind_Mobile	0.001	0.030	X_Icity_Mountain View
13	Iind_Advertising	0.001	0.020	Iind_Advertis
14	X_Icity_SanFrancisco_Iind_Apps	0.001	0.020	X_Icity_San Francisco
15	X_Icity_SanFrancisco_Iind_Mobile	0.001	0.020	X_Icity_San Francisco_
16	X_Icity_NewYork_Iind_DigitalMedia	0.001	0.020	X_Icity_New York_Iind_
17	Icity_Miami_X_Harvard	0.001	0.020	Icity_Miami_X_H
18	Iyear_6	0.001	0.010	Iyear_6
19	Iregion_Florida	0.0005	0.010	Iregion_Flori
20	Iregion_Texas	0.0005	0.010	Iregion_Texa
Panel B: Most Negative Features				
316	X_Icity_SanFrancisco_Iind_HealthDiagnostics	-0.033	-0.650	X_Icity_San Francisco_Iind_
317	X_Icity_SanMateo_Iind_Analytics	-0.033	-0.660	X_Icity_San Mateo_Iir
318	Icity_SanJose_X_Universityof	-0.033	-0.670	Icity_San Jose_X_Ur
319	X_Icity_NewYork_Iind_PredictiveAnalytics	-0.035	-0.700	X_Icity_New York_Iind_Pre
320	Iind_OpenSource	-0.036	-0.720	Iind_Open Sou
321	X_Icity_Boston_Iind_FinTech	-0.036	-0.730	X_Icity_Boston_Iind
322	X_Icity_PaloAlto_Iind_ArtificialIntelligence	-0.037	-0.750	X_Icity_Palo Alto_Iind_Art
323	X_Icity_SanFrancisco_Iind_Robotics	-0.041	-0.820	X_Icity_San Francisco_
324	Icity_NewYork_X_Stanford	-0.041	-0.830	Icity_New York_X_
325	Icity_LosAngeles_X_Columbia	-0.043	-0.860	Icity_Los Angeles_X_
326	X_Icity_Austin_Iind_ArtificialIntelligence	-0.043	-0.860	X_Icity_Austin_Iind_Artifi
327	X_Icity_Boulder_Iind_SaaS	-0.044	-0.890	X_Icity_Boulder_Ii
328	X_Icity_SanFrancisco_Iind_FoodandBeverage	-0.047	-0.930	X_Icity_San Francisco_Iind_
329	X_ed_Universityof_Iind_ArtificialIntelligence	-0.048	-0.960	X_ed_Universityof_Iind_Art
330	X_Icity_Boulder_Iind_Software	-0.057	-1.150	X_Icity_Boulder_Iinc
331	X_Icity_Austin_Iind_MachineLearning	-0.058	-1.150	X_Icity_Austin_Iind_Ma
332	Icity_NewYork_X_Harvard	-0.063	-1.260	Icity_New York_X_
333	X_Icity_Portland_Iind_EnterpriseSoftware	-0.066	-1.320	X_Icity_Portland_Iind_Ent
334	Icity_MountainView_X_Columbia	-0.069	-1.380	Icity_Mountain View_)
335	X_Icity_MountainView_Iind_ECommerce	-0.071	-1.420	X_Icity_Mountain View_Ii
336	X_Icity_SanFrancisco_Iind_Biotechnology	-0.094	-1.890	X_Icity_San Francisco_Iinc

Table 5: Estimates of the Importance of Coherence

Statistic	Equity Growth Model	Series B Model
R Square Full Model	0.771	0.732
R Square Non Interacted Model	0.723	0.608
Value of Coherence	0.067	0.204