

# **The Role of Success and Failure in Fluid Teams—Evidence from the Motion Picture Industry**

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## Online Appendix

Here, we present additional analyses that supplement the main analysis reported in the paper.

**Table A1: First-Stage Regression Results with Instrumental Variable**

Dependent Variable →	Team History	Team History—Positive		Team History/Budget	Team History/Budget—Positive	
	(1)	(2)	(3)	(4)	(5)	(6)
Average Team History — Rating ( $\beta_1$ )	-10.063*** (3.036)					
Average Team History — Genre ( $\beta_2$ )	-1.041*** (0.286)					
Average Team History—Positive—Rating ( $\beta_3$ )		-9.157*** (2.746)	-9.158*** (2.748)			
Average Team History—Positive—Genre ( $\beta_4$ )		-0.735** (0.238)	-0.736** (0.238)			
Team History—Negative ( $\beta_5$ )		1.283*** (0.170)	1.282*** (0.170)			
Team—CV ( $\beta_6$ )					0.034 (0.088)	
Average Team History/ Budget — Rating ( $\beta_7$ )				-26.107*** (4.916)		
Average Team History/Budget — Genre ( $\beta_8$ )				-2.649*** (0.613)		
Average Team History/Budget—Positive—Rating ( $\beta_9$ )					-25.872*** (4.649)	-25.871*** (4.651)
Average Team History/Budget—Positive—Genre ( $\beta_{10}$ )					-2.618*** (0.603)	-2.619*** (0.603)
Team History/Budget—Negative ( $\beta_{11}$ )					1.203* (0.491)	1.205* (0.491)
Team—CV/ Budget ( $\beta_{12}$ )						-1.238 (2.475)
<b>Controls</b>						
Running Time (minutes)	0.481+ (0.254)	0.406 (0.259)	0.406 (0.259)	-3.067+ (1.720)	-3.196+ (1.717)	-3.194+ (1.717)
Sequel	43.545** (15.397)	41.401** (14.610)	41.391 (14.620)	206.372+ (105.764)	190.498+ (104.998)	190.031+ (105.085)
Opening Weekend Theaters	0.014*** (0.004)	0.013** (0.004)	0.0133 (0.004)	-0.002 (0.028)	-0.004 (0.028)	-0.004 (0.028)
Team Familiarity	5.319*** (1.55)	5.724*** (1.61)	5.7259 (1.61)	14.892 (9.83)	15.828 (9.94)	15.676 (9.94)
Constant	4679.80*** (1367.55)	4978.69*** (1469.57)	4979.60 (1470.34)	28135.88*** (6416.74)	31250.35*** (6167.12)	31250.43*** (6170.44)
<b>Fixed Effects</b>						
Year	Yes	Yes	Yes	Yes	Yes	Yes
Distributor	Yes	Yes	Yes	Yes	Yes	Yes
Genre	Yes	Yes	Yes	Yes	Yes	Yes
Rating	Yes	Yes	Yes	Yes	Yes	Yes
F-Statistic	38.7	31.1	31.1	71.1	67.8	67.8
Adjusted R-Square	0.632	0.714	0.714	0.725	0.737	0.738
Number	2,091	2,091	2,091	2,091	2,091	2,091

+  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . We report coefficient estimates with robust standard errors in parentheses. @ Team History (Team History/ Budget) is instrumented with the average team history (team history/ budget) of other movies produced in the same year with the same rating as the focal movie and the average team history (team history/ budget) of other movies produced in the same year belonging to the same genre as the focal movie. # Team History—Positive (Team History/ Budget—Positive) is instrumented with the average team history (team history/ budget—positive) of other movies produced in the same year with the same rating as the focal movie and the average team history (team history/ budget—positive) of other movies produced in the same year belonging to the same genre as the focal movie.

**Table A2: Regression Results with Non-Normalized Dependent Variable and Normalized Independent Variables**

Dependent Variable →	Movie Profit (million USD)		
	(1)	(2)	(3)
Team History/Budget ( $\beta_1$ )	0.006*** (0.001)		
Team History/Budget—Positive ( $\beta_2$ )		0.007*** (0.001)	0.007*** (0.001)
Team History/Budget—Negative ( $\beta_3$ )		-0.080*** (0.016)	-0.080*** (0.016)
Team CV/ Budget ( $\beta_4$ )			0.119 (0.111)
<b>Controls</b>			
Running Time (minutes)	0.370*** (0.111)	0.404*** (0.112)	0.404*** (0.112)
Sequel	21.122*** (6.181)	21.812*** (6.162)	21.860*** (6.163)
Opening Weekend Theaters	0.011*** (0.002)	0.012*** (0.002)	0.012*** (0.002)
Team Familiarity	1.187* (0.580)	1.201* (0.578)	1.217* (0.577)
Constant	-48.048+ (25.267)	-53.954* (25.382)	-54.063* (25.386)
<b>Fixed Effects</b>			
Year	Yes	Yes	Yes
Distributor	Yes	Yes	Yes
Genre	Yes	Yes	Yes
Rating	Yes	Yes	Yes
Adjusted R-Square	0.104	0.111	0.111
Number	2,091	2,091	2,091

+  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . We report coefficient estimates with robust standard errors in parentheses.

**Table A3: Regression Results with PSM (NN5)**

Dependent Variable →	Movie Profit (million USD)			Movie Profit / Budget (Percent)		
	(1)	(2)	(3)	(4)	(5)	(6)
Team History ( $\beta_1$ )	0.086*** (0.023)					
Team History—Positive ( $\beta_2$ )		0.099*** (0.022)	0.098*** (0.022)			
Team History—Negative ( $\beta_3$ )		-0.413*** (0.056)	-0.414*** (0.056)			
Team CV ( $\beta_4$ )			0.030 (0.034)			
Team History/Budget ( $\beta_5$ )				0.075** (0.024)		
Team History/Budget—Positive ( $\beta_6$ )					0.087*** (0.025)	0.087*** (0.025)
Team History/Budget—Negative ( $\beta_7$ )					-1.093*** (0.263)	-1.092*** (0.263)
Team CV/ Budget ( $\beta_8$ )						-0.445 (0.530)
<b>Controls</b>						
Running Time (minutes)	0.285 (0.273)	0.433 (0.273)	0.433 (0.273)	-2.143 (1.319)	-1.306 (1.164)	-1.325 (1.166)
Sequel	10.543 (7.501)	10.116 (7.257)	10.007 (7.246)	-57.467 (43.766)	-51.484 (42.855)	-49.450 (42.669)
Opening Weekend Theaters	0.015** (0.005)	0.016*** (0.005)	0.016*** (0.005)	-0.027 (0.053)	-0.024 (0.052)	-0.025 (0.052)
Team Familiarity	-0.072 (0.808)	0.070 (0.735)	0.077 (0.734)	-0.636 (3.675)	0.406 (3.887)	-0.468 (3.972)
Constant	-81.153+ (43.288)	-100.991* (42.935)	-100.974* (42.945)	360.074 (254.901)	216.919 (229.002)	219.353 (229.393)
<b>Fixed Effects</b>						
Year	Yes	Yes	Yes	Yes	Yes	Yes
Distributor	Yes	Yes	Yes	Yes	Yes	Yes
Genre	Yes	Yes	Yes	Yes	Yes	Yes
Rating	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-Square	0.227	0.256	0.255	0.037	0.046	0.046
Number	1,526	1,526	1,526	1,526	1,526	1,526

+  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . We report coefficient estimates with robust standard errors in parentheses.

**Table A4: Regression Results with PSM (NN1)**

Dependent Variable →	Movie Profit (million USD)			Movie Profit / Budget (Percent)		
	(1)	(2)	(3)	(4)	(5)	(6)
Team History ( $\beta_1$ )	0.084*** (0.024)					
Team History—Positive ( $\beta_2$ )		0.097*** (0.023)	0.097*** (0.023)			
Team History—Negative ( $\beta_3$ )		-0.423*** (0.058)	-0.424*** (0.058)			
Team CV ( $\beta_4$ )			0.021 (0.036)			
Team History/Budget ( $\beta_5$ )				0.068* (0.030)		
Team History/Budget—Positive ( $\beta_6$ )					0.081** (0.029)	0.081** (0.029)
Team History/Budget—Negative ( $\beta_7$ )					-1.159*** (0.317)	-1.159*** (0.316)
Team CV/ Budget ( $\beta_8$ )						-0.257 (0.552)
<b>Controls</b>						
Running Time (minutes)	0.328 (0.287)	0.492+ (0.287)	0.491+ (0.288)	-2.302 (1.522)	-1.305 (1.300)	-1.314 (1.302)
Sequel	11.170 (7.307)	10.725 (7.120)	10.643 (7.106)	-76.922 (53.392)	-69.363 (52.423)	-68.100 (52.006)
Opening Weekend Theaters	0.015** (0.005)	0.017** (0.005)	0.017** (0.005)	-0.055 (0.081)	-0.050 (0.080)	-0.051 (0.080)
Team Familiarity	-0.250 (0.816)	-0.103 (0.747)	-0.098 (0.747)	-1.156 (4.456)	-0.133 (4.718)	-0.661 (4.815)
Constant	-84.127+ (45.335)	-105.379* (45.019)	-105.349* (45.047)	465.565 (374.795)	301.568 (335.819)	302.891 (336.452)
<b>Fixed Effects</b>						
Year	Yes	Yes	Yes	Yes	Yes	Yes
Distributor	Yes	Yes	Yes	Yes	Yes	Yes
Genre	Yes	Yes	Yes	Yes	Yes	Yes
Rating	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-Square	0.228	0.257	0.257	0.040	0.048	0.047
Number	1,518	1,518	1,518	1,518	1,518	1,518

+  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . We report coefficient estimates with robust standard errors in parentheses.

Table A5: Results for Alternative Definitions of Success and Normalization with Budget

Dependent Variable →	Success if Movie Profit/Budget > 5%			Success if Movie Profit/Budget > 10%			Success if Movie Profit/Budget > 15%			Success if Movie Profit/Budget > 20%		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Team History/Budget ( $\beta_5$ )	0.00034*** (0.00008)			0.00034*** (0.00007)			0.00035*** (0.00007)			0.00038*** (0.00007)		
Team History/Budget—Positive ( $\beta_6$ )		0.00053*** (0.00010)	0.00053*** (0.00010)		0.00053*** (0.00010)	0.00054*** (0.00010)		0.00055*** (0.00010)	0.00055*** (0.00010)		0.00056*** (0.00010)	0.00057*** (0.00010)
Team History/Budget—Negative ( $\beta_7$ )		-0.0048*** (0.00076)	-0.0048*** (0.00076)		-0.0050*** (0.00075)	-0.0050*** (0.00075)		-0.0051*** (0.00075)	-0.0051*** (0.00075)		-0.0049*** (0.00074)	-0.0049*** (0.00074)
Team—CV/ Budget ( $\beta_8$ )			0.008 (0.006)			0.009 (0.006)			0.0099+ (0.006)			0.011+ (0.006)
<b>Controls</b>												
Running Time (minutes)	-0.00160 (0.003)	0.00009 (0.003)	0.00004 (0.003)	-0.00170 (0.003)	0.00007 (0.003)	0.00002 (0.003)	-0.00290 (0.003)	-0.00110 (0.003)	-0.00120 (0.003)	-0.00340 (0.003)	-0.00180 (0.003)	-0.00180 (0.003)
Sequel	0.25 (0.16)	0.29+ (0.16)	0.29+ (0.16)	0.20 (0.15)	0.25 (0.16)	0.26 (0.16)	0.18 (0.15)	0.22 (0.16)	0.23 (0.16)	0.15 (0.15)	0.20 (0.15)	0.20 (0.15)
Opening Weekend Theaters	0.00032*** (0.000059)	0.00033*** (0.000060)	0.00032*** (0.000060)	0.00031*** (0.000059)	0.00032*** (0.000060)	0.00032*** (0.000060)	0.00031*** (0.000061)	0.00032*** (0.000061)	0.00032*** (0.000061)	0.00027*** (0.000060)	0.00028*** (0.000061)	0.00028*** (0.000061)
Team Familiarity	0.057** (0.022)	0.061** (0.023)	0.062** (0.023)	0.053* (0.021)	0.057* (0.022)	0.058* (0.023)	0.058** (0.021)	0.062** (0.022)	0.063** (0.023)	0.056** (0.021)	0.059** (0.022)	0.061** (0.022)
Constant	-0.66 (-0.68)	-0.99 (-0.68)	-1.00 (-0.68)	-0.69 (-0.67)	-1.03 (-0.67)	-1.04 (-0.67)	-0.74 (-0.67)	-1.08 (-0.67)	-1.09 (-0.67)	-0.73 (-0.66)	-1.05 (-0.66)	-1.07 (-0.66)
<b>Fixed Effects</b>												
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Distributor	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Genre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Rating	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Log Likelihood	-1301.7	-1281.5	-1280.8	-1315.6	-1293.2	-1292.4	-1317.0	-1294.1	-1293.0	-1325.5	-1304.8	-1303.5
Number	2,078	2,078	2,078	2,078	2,078	2,078	2,078	2,078	2,078	2,078	2,078	2,078

+  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . We report coefficient estimates with robust standard errors in parentheses.

**Table A6: Regression Results for the Impact of Specific Roles on Movie Profits**

Dependent Variable →	Movie Profit (million USD)		
	(1)	(2)	(3)
Lead Actor—Positive ( $\beta_1$ )	2.818		
–Binary	(3.715)		
Lead Actor History (Role) ( $\beta_2$ )		0.005	
–Million USD		(0.005)	
Lead Actor History (Role)—Positive ( $\beta_3$ )			0.00936+
–Million USD			(0.005)
Lead Actor History (Role)—Negative ( $\beta_4$ )			-0.0561***
–Million USD			(0.015)
Director—Positive ( $\beta_5$ )	-3.476		
–Binary	(2.811)		
Director History (Role) ( $\beta_6$ )		-0.0175*	
–Million USD		(0.009)	
Director History (Role)—Positive ( $\beta_7$ )			-0.014
–Million USD			(0.009)
Director History (Role)—Negative ( $\beta_8$ )			(0.036)
–Million USD			(0.043)
Producer—Positive ( $\beta_9$ )	5.656*		
–Binary	(2.749)		
Producer History (Role) ( $\beta_{10}$ )		0.0565***	
–Million USD		(0.012)	
Producer History (Role)—Positive ( $\beta_{11}$ )			0.0489***
–Million USD			(0.012)
Producer History (Role)—Negative ( $\beta_{12}$ )			-0.144***
–Million USD			(0.030)
Exec. Producer—Positive ( $\beta_{13}$ )	8.913**		
–Binary	(3.102)		
Exec. Producer History (Role) ( $\beta_{14}$ )		0.0286**	
–Million USD		(0.009)	
Exec. Producer History (Role)—Positive ( $\beta_{15}$ )			0.0370***
–Million USD			(0.011)
Exec. Producer History (Role)—Negative ( $\beta_{16}$ )			-0.103**
–Million USD			(0.038)
Screenwriter—Positive ( $\beta_{17}$ )	2.316		
–Binary	(2.772)		
Screenwriter History (Role) ( $\beta_{18}$ )		0.0403+	
–Million USD		(0.023)	
Screenwriter History (Role)—Positive ( $\beta_{19}$ )			0.031
–Million USD			(0.022)
Screenwriter History (Role)—Negative ( $\beta_{20}$ )			-0.114*
–Million USD			(0.054)
<b>Controls</b>			
Running Time (minutes)	0.365**	0.312**	0.407***
	(0.112)	(0.107)	(0.111)
Sequel	22.35***	14.83*	15.61**
	(6.143)	(5.949)	(5.868)
Opening Weekend Theaters	0.0109***	0.00882***	0.00964***
	(0.002)	(0.002)	(0.002)
Team Familiarity	1.222*	0.5100	0.4850
	(0.590)	(0.585)	(0.574)
Constant	-53.84*	(30.680)	-45.71+
	(25.00)	(25.36)	(25.38)
<b>Fixed Effects</b>			
Year, Distributor, Genre, Rating	Yes	Yes	Yes
Adjusted R-Square	0.101	0.151	0.170
Number	2,091	2,091	2,091

+  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . We report coefficient estimates with robust standard errors in parentheses.