

Table 1
Census Day Enrollment

	Number of Students		
	2013-2014	2014-2015	2015-2016
Non-Charter	516,995	−0.002	1.155*
	(1.22)	(2.22)	(0.56)
Constant	0.025*	−0.002	1.155*
	(1.22)	(2.22)	(0.56)
Log(assets) ^a	0.025*	−0.002	1.155*
	(1.22)	(2.22)	(0.56)

Note: each variable ...

Source: Authors' calculations ...

Table 2
Using Average Seconds per Dribble as the Dependent Variable

	<i>Dependent variable:</i>
	Average Seconds per Dribble
Contract Year	0.011*** (0.004)
Average Minutes Played	0.033 (0.029)
Current Salary	0.060* (0.035)
salary_current	−0.000 (0.000)
Constant	5.117*** (0.664)
Player Fixed Effects	Yes
Year Fixed Effects	Yes
Observations	1,057
R ²	0.974
Adjusted R ²	0.952
Residual Std. Error	1.609 (df = 569)
F Statistic	44.244*** (df = 487; 569)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 3
Using Average Seconds per Touch as the Dependent Variable

	<i>Dependent variable:</i>
	Average Seconds per Touch
Contract Year	0.012*** (0.003)
Average Minutes Played	0.010 (0.026)
Current Salary	0.061* (0.031)
salary_current	-0.000 (0.000)
Constant	5.218*** (0.601)
Player Fixed Effects	Yes
Year Fixed Effects	Yes
Observations	1,057
R ²	0.970
Adjusted R ²	0.944
Residual Std. Error	1.456 (df = 569)
F Statistic	37.358*** (df = 487; 569)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 4
Using Box Outs as the Dependent Variables

	<i>Dependent variable:</i>		
	Defensive Box Outs	Offensive Box Outs	Box Outs
	(1)	(2)	(3)
Contract Year	0.067*** (0.007)	0.014*** (0.003)	0.081*** (0.009)
Average Minutes Played	-0.224*** (0.056)	-0.148*** (0.027)	-0.376*** (0.071)
Current Salary	-1.003*** (0.067)	-0.292*** (0.032)	-1.307*** (0.085)
salary_current	0.000 (0.000)	-0.000** (0.000)	-0.000 (0.000)
Constant	-0.239 (1.279)	-0.034 (0.617)	-0.285 (1.628)
Player Fixed Effects	Yes		
Year Fixed Effects	Yes		
Observations	1,057	1,057	1,057
R ²	0.918	0.840	0.917
Adjusted R ²	0.847	0.704	0.845
Residual Std. Error (df = 569)	3.099	1.494	3.946
F Statistic (df = 487; 569)	13.047***	6.145***	12.834***
<i>Note:</i>			
*p<0.1; **p<0.05; ***p<0.01			

Table 5
Using Distance as the Dependent Variable

	<i>Dependent variable:</i>		
	Distance: Defensive	Distance: Offensive	Distance
	(1)	(2)	(3)
Contract Year	0.033*** (0.0002)	0.038*** (0.0003)	375.995*** (1.987)
Average Minutes Played	-0.028 (0.021)	-0.019 (0.024)	-232.420 (167.408)
Position	-0.007 (0.007)	-0.006 (0.008)	-60.354 (55.758)
Current Salary	0.009 (0.050)	-0.001 (0.058)	105.262 (403.686)
posPF-SF	0.038* (0.020)	0.012 (0.023)	287.761* (159.295)
posPG	-0.026** (0.012)	0.006 (0.014)	-105.444 (97.853)
posSF	-0.011 (0.009)	0.001 (0.011)	-41.964 (73.945)
posSF-PF	-0.020 (0.083)	-0.019 (0.096)	-171.840 (671.448)
posSF-SG	0.017 (0.015)	0.038** (0.017)	284.066** (121.953)
posSG	-0.011 (0.011)	-0.009 (0.012)	-95.964 (86.236)
posSG-PF	-0.034 (0.032)	0.035 (0.037)	-22.958 (258.428)
posSG-SF	-0.001 (0.034)	-0.004 (0.040)	-41.108 (276.733)
as.factor(season)2018	0.014*** (0.002)	0.014*** (0.003)	147.431*** (19.657)
as.factor(season)2019	0.042*** (0.003)	0.066*** (0.003)	572.759*** (21.383)
as.factor(season)2020	0.032*** (0.003)	0.045*** (0.003)	404.702*** (22.963)
salary_current	-0.000 (0.000)	0.000*** (0.000)	0.00000** (0.00000)
Constant	0.015 (0.034)	-0.020 (0.040)	-38.408 (280.617)
Player Fixed Effects	Yes		
Year Fixed Effects	Yes		
Observations	1,133	1,133	1,133
R ²	0.994	0.994	0.997
Adjusted R ²	0.989	0.990	0.995
Residual Std. Error (df = 676)	0.114	0.138	963.488
F Statistic (df = 456; 676)	233.024***	242.760***	466.797***

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 6
Using Win Shares as the Dependent Variable

	<i>Dependent variable:</i>			
	Defensive Win Shares	Offensive Win Shares	Win Shares	Win Shares per 48 minutes
	(1)	(2)	(3)	(4)
Contract Year	0.062*** (0.006)	0.134*** (0.012)	0.196*** (0.015)	0.002*** (0.0004)
Average Minutes Played	-0.090 (0.520)	0.098 (0.971)	0.019 (1.252)	-0.001 (0.030)
Position	-0.170 (0.173)	-0.755** (0.323)	-0.922** (0.417)	-0.027*** (0.010)
Current Salary	-0.026 (1.253)	-0.893 (2.341)	-0.931 (3.018)	-0.053 (0.072)
posPF-SF	-0.193 (0.494)	-1.192 (0.924)	-1.352 (1.191)	-0.026 (0.028)
posPG	-0.416 (0.304)	-1.530*** (0.567)	-1.926*** (0.732)	-0.046*** (0.017)
posSF	-0.392* (0.229)	-1.315*** (0.429)	-1.677*** (0.553)	-0.034** (0.013)
posSF-PF	0.175 (2.084)	-0.412 (3.893)	-0.339 (5.021)	-0.085 (0.120)
posSF-SG	-0.460 (0.378)	-1.375* (0.707)	-1.784* (0.912)	-0.040* (0.022)
posSG	-0.496* (0.268)	-1.411*** (0.500)	-1.875*** (0.645)	-0.042*** (0.015)
posSG-PF	-0.191 (0.802)	-1.751 (1.498)	-1.930 (1.932)	-0.059 (0.046)
posSG-SF	-0.364 (0.859)	-1.529 (1.605)	-1.852 (2.069)	-0.065 (0.049)
as.factor(season)2018	-0.067 (0.061)	-0.042 (0.114)	-0.107 (0.147)	0.002 (0.004)
as.factor(season)2019	-0.124* (0.066)	-0.235* (0.124)	-0.362** (0.160)	-0.001 (0.004)
as.factor(season)2020	-0.471*** (0.071)	-0.565*** (0.133)	-1.036*** (0.172)	0.001 (0.004)
salary_current	-0.000 (0.000)	-0.00000*** (0.000)	-0.00000*** (0.000)	-0.000** (0.000)
Constant	-0.008 (0.871)	-0.450 (1.627)	-0.494 (2.098)	0.033 (0.050)
Player Fixed Effects	Yes			
Year Fixed Effects	Yes			
Observations	1,133	1,133	1,133	1,133
R ²	0.791	0.827	0.840	0.798
Adjusted R ²	0.650	0.710	0.731	0.661
Residual Std. Error (df = 676)	2.990	5.586	7.204	0.172
F Statistic (df = 456; 676)	5.605***	7.072***	7.756***	5.840***

Note: *p<0.1; **p<0.05; ***p<0.01

Table 7
Using Speed Metrics as the Dependent Variable

	<i>Dependent variable:</i>		
	Average Speed	Offensive Speed	Defensive Speed
	(1)	(2)	(3)
Contract Year	−0.005*** (0.001)	−0.005*** (0.001)	−0.007*** (0.001)
Average Minutes Played	−0.022 (0.062)	0.080 (0.106)	−0.125 (0.081)
Position	−0.034 (0.021)	−0.055 (0.035)	−0.010 (0.027)
Current Salary	0.057 (0.149)	0.109 (0.256)	0.061 (0.194)
posPF-SF	0.065 (0.059)	0.074 (0.101)	0.068 (0.077)
posPG	−0.060 (0.036)	−0.082 (0.062)	−0.035 (0.047)
posSF	−0.024 (0.027)	−0.051 (0.047)	0.005 (0.036)
posSF-PF	−0.096 (0.249)	−0.001 (0.425)	−0.206 (0.323)
posSF-SG	0.051 (0.045)	0.079 (0.077)	0.026 (0.059)
posSG	−0.058* (0.032)	−0.090* (0.055)	−0.019 (0.042)
posSG-PF	0.033 (0.096)	0.098 (0.164)	−0.042 (0.124)
posSG-SF	−0.001 (0.102)	−0.123 (0.175)	0.109 (0.133)
as.factor(season)2018	0.077*** (0.007)	0.079*** (0.012)	0.076*** (0.009)
as.factor(season)2019	−0.037*** (0.008)	0.004 (0.014)	−0.070*** (0.010)
as.factor(season)2020	−0.104*** (0.009)	−0.080*** (0.015)	−0.111*** (0.011)
salary_current	−0.000 (0.000)	0.000 (0.000)	−0.000*** (0.000)
Constant	4.275*** (0.104)	4.508*** (0.178)	4.069*** (0.135)
Player Fixed Effects	Yes		
Year Fixed Effects	Yes		
Observations	1,133	1,133	1,133
R ²	0.922	0.860	0.877
Adjusted R ²	0.870	0.766	0.794
Residual Std. Error (df = 676)	0.356	0.610	0.464
F Statistic (df = 456; 676)	17.572***	9.105***	10.575***

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 8
Usage Rate

	<i>Dependent variable:</i>
	Usage Rate
Contract Year	0.093*** (0.023)
Average Minutes Played	0.514 (1.975)
Position	-0.181 (0.658)
Current Salary	-2.686 (4.762)
posPF-SF	-2.598 (1.879)
posPG	0.551 (1.154)
posSF	-0.074 (0.872)
posSF-PF	-4.793 (7.920)
posSF-SG	-0.516 (1.439)
posSG	0.683 (1.017)
posSG-PF	3.761 (3.048)
posSG-SF	-0.006 (3.264)
as.factor(season)2018	-0.318 (0.232)
as.factor(season)2019	-0.776*** (0.252)
as.factor(season)2020	-0.699** (0.271)
salary_current	0.00000* (0.00000)
Constant	17.201*** (3.310)
Player Fixed Effects	Yes
Year Fixed Effects	Yes
Observations	1,133
R ²	0.889
Adjusted R ²	0.814
Residual Std. Error	11.365 (df = 676)
F Statistic	711.846*** (df = 456; 676)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 9
Using Average Seconds per Dribble as the Dependent Variable

	<i>Dependent variable:</i>
	Average Seconds per Dribble
Contract Year	-0.298 (0.310)
Average Minutes Played	0.039 (0.023)
Current Salary	0.000 (0.00000)
Constant	0.869* (0.477)
Team Fixed Effects	Yes
Year Fixed Effects	Yes
Observations	90
R ²	0.448
Adjusted R ²	0.106
Residual Std. Error	1.443 (df = 55)
F Statistic	1.312 (df = 34; 55)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 10
Using Average Seconds per Touch as the Dependent Variable

	<i>Dependent variable:</i>
	Average Seconds per Touch
Contract Year	-0.257 (0.267)
Average Minutes Played	0.033 (0.020)
Current Salary	0.000 (0.00000)
Constant	1.795*** (0.410)
Team Fixed Effects	Yes
Year Fixed Effects	Yes
Observations	90
R ²	0.450
Adjusted R ²	0.110
Residual Std. Error	1.240 (df = 55)
F Statistic	1.323 (df = 34; 55)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 11
Using Box Outs as the Dependent Variables

	<i>Dependent variable:</i>		
	Defensive Box Outs	Offensive Box Outs	Box Outs
	(1)	(2)	(3)
Contract Year	0.064 (0.276)	−0.003 (0.116)	0.077 (0.358)
Average Minutes Played	0.056*** (0.021)	0.017** (0.009)	0.073*** (0.027)
Current Salary	0.00000 (0.00000)	−0.000 (0.000)	0.000 (0.00000)
Constant	1.138*** (0.424)	0.255 (0.178)	1.399** (0.550)
Team Fixed Effects	Yes		
Year Fixed Effects	Yes		
Observations	90	90	90
R ²	0.796	0.736	0.793
Adjusted R ²	0.669	0.574	0.666
Residual Std. Error (df = 55)	1.284	0.539	1.665
F Statistic (df = 34; 55)	6.294***	4.521***	6.213***
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01	

Table 12
Using Distance as the Dependent Variable

	<i>Dependent variable:</i>		
	Distance: Defensive	Distance: Offensive	Distance
	(1)	(2)	(3)
Contract Year	−0.046 (0.048)	−0.037 (0.058)	−434.186 (551.864)
Average Minutes Played	0.032*** (0.004)	0.039*** (0.005)	375.872*** (48.451)
Position	0.000 (0.000)	−0.000 (0.000)	0.00001 (0.00004)
Current Salary	−0.085 (0.092)	−0.146 (0.110)	−1,225.332 (1,051.393)
Team Fixed Effects	Yes		
Year Fixed Effects	Yes		
Observations	120	120	120
R ²	0.691	0.698	0.695
Adjusted R ²	0.562	0.572	0.567
Residual Std. Error (df = 84)	0.320	0.383	3,673.441
F Statistic (df = 35; 84)	5.365***	5.545***	5.457***
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01	

Table 13
Using Win Shares as the Dependent Variable

	<i>Dependent variable:</i>			
	Defensive Win Shares	Offensive Win Shares	Win Shares	Win Shares per 48 minutes
	(1)	(2)	(3)	(4)
Contract Year	0.476 (0.361)	1.017* (0.574)	1.513* (0.782)	0.020 (0.018)
Average Minutes Played	-0.043 (0.032)	0.054 (0.050)	0.012 (0.069)	-0.002 (0.002)
Position	0.00000*** (0.00000)	0.00000*** (0.00000)	0.00000*** (0.00000)	0.000*** (0.000)
Current Salary	1.591** (0.688)	-1.044 (1.094)	0.519 (1.490)	0.069** (0.034)
Team Fixed Effects	Yes			
Year Fixed Effects	Yes			
Observations	120	120	120	120
R ²	0.619	0.652	0.653	0.516
Adjusted R ²	0.461	0.507	0.508	0.314
Residual Std. Error (df = 84)	2.405	3.822	5.206	0.119
F Statistic (df = 35; 84)	3.906***	4.493***	4.512***	2.555***

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 14
Using Speed Metrics as the Dependent Variable

	<i>Dependent variable:</i>		
	Average Speed	Offensive Speed	Defensive Speed
	(1)	(2)	(3)
Contract Year	-0.044 (0.049)	-0.009 (0.081)	-0.037 (0.054)
Average Minutes Played	-0.011** (0.004)	-0.010 (0.007)	-0.015*** (0.005)
Position	-0.000** (0.000)	-0.00000*** (0.000)	0.000 (0.000)
Current Salary	4.593*** (0.094)	4.957*** (0.155)	4.313*** (0.103)
Team Fixed Effects	Yes		
Year Fixed Effects	Yes		
Observations	120	120	120
R ²	0.731	0.618	0.655
Adjusted R ²	0.619	0.459	0.512
Residual Std. Error (df = 84)	0.329	0.542	0.359
F Statistic (df = 35; 84)	6.529***	3.887***	4.563***

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 15
Usage Rate

	<i>Dependent variable:</i>
	Usage Rate
Contract Year	0.423 (1.031)
Average Minutes Played	0.130 (0.091)
Position	0.00000** (0.00000)
Current Salary	14.958*** (1.965)
Team Fixed Effects	Yes
Year Fixed Effects	Yes
Observations	120
R ²	0.607
Adjusted R ²	0.443
Residual Std. Error	6.865 (df = 84)
F Statistic	3.708*** (df = 35; 84)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 16
A Few Summary Statistics on the Data

	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
Win Shares	-1.7	1	2.6	3.29	4.9	15.4
Offensive Win Shares	-2.8	0.2	1.2	1.795	2.6	11.6
Defensive Win Shares	-0.5	0.6	1.3	1.50	2.1	5.9
Age	19	23	25	25.79	29	42
Average Minutes Per Game	0.8	15.9	23.3	22.4	29.8	36.9
Salary	25000	1620480	5e+06	8017976	1.2e+07	35654150
Usage Percentage	6.4	15.2	18.4	19.28	22.5	42.9
Contract Year	0	0	0	0.24	0	1