

NBA Regression Analysis New

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5/30/2022

Wald test:

Chi-squared test: $X^2 = 265.5$, $df = 113$, $P(> X^2) = 2.7e-14$ The Wald Statistic for Testing that all the deviations of player fixed effects from the average were zero was $W_stat = 265.5$ and $k = 113$. The amount of variation explained by the presence of clutch time is 0.578154425612053.

```
stargazer(fixed_lm,
          font.size = "small",
          align = TRUE,
          no.space = TRUE)
```

% Table created by stargazer v.5.2.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harvard.edu % Date and time: Mon, May 30, 2022
- 8:33:25 PM % Requires LaTeX packages: dcolumn

===== Dependent variable:

----- PER_adj ----- term -5.723 (6.915)

estimate -5.282 (7.718)

std.error -1.424 (7.377)

statistic 2.968 (7.013)

p.value -3.795 (7.719)

player_on_courtAndre Roberson -7.680 (7.379)

player_on_courtAndrew Wiggins -3.295 (7.010)

player_on_courtBen Simmons -4.931 (8.503)

player_on_courtBlake Griffin 4.624 (7.944)

player_on_courtBojan Bogdanovic -2.609 (7.373)

player_on_courtBradley Beal 7.529 (6.307)

Table 1:

	<i>Dependent variable:</i>
	PER_adj
player_on_courtAl-Farouq Aminu	-6.787 (6.941)
player_on_courtAl Horford	-5.633 (7.748)
player_on_courtAllen Crabbe	-2.550 (7.407)
player_on_courtAndre Drummond	3.484 (7.037)
player_on_courtAndre Iguodala	-3.365 (7.748)
player_on_courtAndre Roberson	-8.642 (7.407)
player_on_courtAndrew Wiggins	-3.605 (7.037)
player_on_courtBen Simmons	-3.037 (8.522)
player_on_courtBlake Griffin	5.285 (7.962)
player_on_courtBojan Bogdanovic	-2.967 (7.406)
player_on_courtBradley Beal	7.029 (6.333)
player_on_courtBrandon Jennings	-11.568 (8.524)
player_on_courtBrook Lopez	2.503 (7.406)
player_on_courtCarmelo Anthony	-0.622 (7.748)
player_on_courtChris Paul	14.404 (9.384)
player_on_courtCJ McCollum	5.371 (6.940)
player_on_courtCollin Sexton	11.511 (10.020)
player_on_courtCourtney Lee	1.968 (10.018)
player_on_courtDamian Lillard	5.969 (6.852)
player_on_courtDanny Green	-5.237 (7.565)
player_on_courtDario Saric	-3.515 (6.940)
player_on_courtDeAndre Jordan	-2.435 (8.222)

player_on_courtBrandon Jennings -10.337 (8.494)
 player_on_courtBrook Lopez 2.243 (7.377)
 player_on_courtCarmelo Anthony -0.775 (7.714)
 player_on_courtChris Paul 12.951 (9.347)
 player_on_courtCJ McCollum 5.997 (6.911)
 player_on_courtCollin Sexton 8.633 (10.003)
 player_on_courtCourtney Lee 3.030 (9.977)
 player_on_courtDamian Lillard 6.594 (6.826)
 player_on_courtDanny Green -5.965 (7.541)
 player_on_courtDario Saric -3.047 (6.916)
 player_on_courtDeAndre Jordan -3.243 (8.189)
 player_on_courtDelon Wright 2.277 (7.945)
 player_on_courtDeMar DeRozan 11.060 (7.007)
 player_on_courtDeMarre Carroll 1.458 (8.184)
 player_on_courtDennis Schroder -0.616 (7.534)
 player_on_courtDerrick Rose 3.946 (7.724)
 player_on_courtDevin Booker -2.500 (8.180)
 player_on_courtDraymond Green -7.153 (8.486)
 player_on_courtElfrid Payton -0.619 (7.714)
 player_on_courtEric Bledsoe 5.795 (8.188)
 player_on_courtEric Gordon 4.733 (8.877)
 player_on_courtEvan Fournier -1.405 (7.236)
 player_on_courtGary Harris -7.053 (9.359)
 player_on_courtGiannis Antetokounmpo 5.035 (7.373)
 player_on_courtGoran Dragic -0.091 (7.242)
 player_on_courtHarrison Barnes 2.820 (7.382)
 player_on_courtHassan Whiteside 1.498 (7.715)
 player_on_courtJabari Parker 2.967 (8.496)
 player_on_courtJae Crowder -0.242 (7.715)
 player_on_courtJamal Murray -1.051 (7.008)
 player_on_courtJames Harden 13.678* (7.541)
 player_on_courtJarrett Allen 3.155 (8.501)
 player_on_courtJayson Tatum 1.408 (7.946)
 player_on_courtJeff Green -5.381 (6.749)
 player_on_courtJeff Teague 5.943 (7.534)
 player_on_courtJerami Grant 1.660 (7.237)
 player_on_courtJimmy Butler 9.449 (7.718)
 player_on_courtJJ Redick -3.076 (8.498)
 player_on_courtJoe Harris -4.394 (7.379)

player_on_courtJoe Ingles -4.845 (7.717)
 player_on_courtJoel Embiid 7.554 (7.723)
 player_on_courtJohn Wall 6.276 (6.827)
 player_on_courtJosh Richardson -6.275 (7.722)
 player_on_courtJustin Holiday -4.392 (7.115)
 player_on_courtJustise Winslow -9.403 (7.244)
 player_on_courtKarl-Anthony Towns 10.684 (6.748)
 player_on_courtKelly Oubre Jr. -3.856 (6.825)
 player_on_courtKent Bazemore -7.194 (7.535)
 player_on_courtKentavious Caldwell-Pope -4.989 (7.119)
 player_on_courtKevin Durant 12.844* (7.534)
 player_on_courtKevin Love 3.826 (8.485)
 player_on_courtKhris Middleton -1.318 (7.933)
 player_on_courtKlay Thompson -8.343 (8.185)
 player_on_courtKyle Kuzma 3.449 (7.550)
 player_on_courtKyle Lowry 3.190 (7.936)
 player_on_courtKyrie Irving 6.486 (7.380)
 player_on_courtLaMarcus Aldridge 5.098 (7.716)
 player_on_courtLauri Markkanen 3.023 (8.879)
 player_on_courtLeBron James 11.529 (7.535)
 player_on_courtMarc Gasol -0.232 (7.014)
 player_on_courtMarcin Gortat -2.759 (6.675)
 player_on_courtMarcus Morris -4.480 (7.542)
 player_on_courtMarcus Smart -4.093 (7.536)
 player_on_courtMarkieff Morris -2.357 (6.441)
 player_on_courtMason Plumlee -0.525 (7.236)
 player_on_courtMatthew Dellavedova -7.635 (9.344)
 player_on_courtMaurice Harkless -4.663 (7.244)
 player_on_courtMike Conley 3.806 (7.940)
 player_on_courtMyles Turner 0.772 (7.531)
 player_on_courtNikola Jokic 9.157 (6.912)
 player_on_courtNikola Vucevic 3.658 (7.375)
 player_on_courtOtto Porter Jr. 1.133 (6.490)
 player_on_courtPatty Mills -1.378 (7.543)
 player_on_courtPaul George 2.900 (8.186)
 player_on_courtPaul Millsap 0.550 (7.012)
 player_on_courtPJ Tucker -3.697 (8.491)
 player_on_courtReggie Jackson 5.184 (8.878)
 player_on_courtRicky Rubio 4.317 (7.237)

player_on_courtRobert Covington 4.795 (7.716)
 player_on_courtRobin Lopez -1.122 (7.534)
 player_on_courtRudy Gay 4.762 (7.936)
 player_on_courtRudy Gobert 0.902 (8.182)
 player_on_courtRussell Westbrook 9.378 (6.743)
 player_on_courtSerge Ibaka -1.124 (7.381)
 player_on_courtStephen Curry 11.345 (8.484)
 player_on_courtSteven Adams -5.959 (7.011)
 player_on_courtTerrence Ross -1.567 (7.716)
 player_on_courtThaddeus Young 0.190 (7.374)
 player_on_courtTim Hardaway Jr. 0.654 (9.342)
 player_on_courtTobias Harris 0.798 (7.929)
 player_on_courtTomas Satoransky -2.531 (6.913)
 player_on_courtTony Snell -11.683 (8.875)
 player_on_courtTrae Young 11.036 (8.509)
 player_on_courtTrevor Ariza -3.012 (7.941)
 player_on_courtTyler Johnson 2.596 (7.245)
 player_on_courtVictor Oladipo 0.746 (7.382)
 player_on_courtVince Carter 2.890 (8.500)
 player_on_courtWesley Matthews -4.768 (7.932)
 player_on_courtWill Barton -2.207 (7.543)
 player_on_courtWillie Cauley-Stein -2.996 (8.185)
 player_on_courtZach LaVine 4.993 (8.193)
 player_on_courtZach Randolph 5.548 (8.198)
 clutch_time 3.593 (10.867)
 DRtg_minus_Avg 0.343* (0.183)
 Season2017-18 1.736 (1.218)
 Season2018-19 0.208 (1.208)
 Season2020-21 5.800*** (1.384)
 player_on_courtAl-Farouq Aminu:clutch_time 4.786 (13.275)
 player_on_courtAl Horford:clutch_time 6.217 (13.860)
 player_on_courtAllen Crabbe:clutch_time -8.478 (15.419)
 player_on_courtAndre Drummond:clutch_time 4.112 (13.336)
 player_on_courtAndre Iguodala:clutch_time -0.019 (14.578)
 player_on_courtAndre Roberson:clutch_time 6.253 (13.854)
 player_on_courtAndrew Wiggins:clutch_time 14.341 (13.197)
 player_on_courtBen Simmons:clutch_time 2.260 (14.994)
 player_on_courtBlake Griffin:clutch_time -15.788 (15.694)
 player_on_courtBojan Bogdanovic:clutch_time -7.816 (15.420)

player_on_courtBradley Beal:clutch_time -6.575 (12.374)
 player_on_courtBrandon Jennings:clutch_time -0.151 (18.653)
 player_on_courtBrook Lopez:clutch_time -6.244 (15.436)
 player_on_courtCarmelo Anthony:clutch_time -5.706 (14.040)
 player_on_courtChris Paul:clutch_time 4.485 (16.461)
 player_on_courtCJ McCollum:clutch_time 0.913 (12.748)
 player_on_courtCollin Sexton:clutch_time 19.512 (16.823)
 player_on_courtCourtney Lee:clutch_time -16.264 (17.719)
 player_on_courtDamian Lillard:clutch_time 2.194 (12.701)
 player_on_courtDanny Green:clutch_time 13.333 (14.176)
 player_on_courtDario Saric:clutch_time 8.344 (15.209)
 player_on_courtDeAndre Jordan:clutch_time 14.903 (15.235)
 player_on_courtDelon Wright:clutch_time 3.861 (16.634)
 player_on_courtDeMar DeRozan:clutch_time -8.551 (12.928)
 player_on_courtDeMarre Carroll:clutch_time -12.176 (15.236)
 player_on_courtDennis Schroder:clutch_time -0.777 (13.615)
 player_on_courtDerrick Rose:clutch_time -9.010 (15.005)
 player_on_courtDevin Booker:clutch_time 6.362 (14.307)
 player_on_courtDraymond Green:clutch_time 27.190* (14.705)
 player_on_courtElfrid Payton:clutch_time -3.115 (13.861)
 player_on_courtEric Bledsoe:clutch_time 11.083 (14.125)
 player_on_courtEric Gordon:clutch_time 15.864 (17.131)
 player_on_courtEvan Fournier:clutch_time 34.762** (13.605)
 player_on_courtGary Harris:clutch_time -4.362 (17.364)
 player_on_courtGiannis Antetokounmpo:clutch_time 8.266 (13.678)
 player_on_courtGoran Dragic:clutch_time 15.450 (14.746)
 player_on_courtHarrison Barnes:clutch_time 21.016 (13.676)
 player_on_courtHassan Whiteside:clutch_time 9.748 (14.273)
 player_on_courtJabari Parker:clutch_time -1.832 (18.630)
 player_on_courtJae Crowder:clutch_time -3.282 (15.602)
 player_on_courtJamal Murray:clutch_time 2.520 (13.906)
 player_on_courtJames Harden:clutch_time 1.598 (13.612)
 player_on_courtJarrett Allen:clutch_time -19.229 (15.404)
 player_on_courtJayson Tatum:clutch_time 12.959 (14.394)
 player_on_courtJeff Green:clutch_time 14.571 (13.779)
 player_on_courtJeff Teague:clutch_time 16.676 (13.613)
 player_on_courtJerami Grant:clutch_time 11.979 (13.450)
 player_on_courtJimmy Butler:clutch_time 6.129 (13.711)
 player_on_courtJJ Redick:clutch_time 19.383 (15.409)

player_on_courtJoe Harris:clutch_time -8.766 (14.096)
 player_on_courtJoe Ingles:clutch_time 6.057 (14.990)
 player_on_courtJoel Embiid:clutch_time 26.778* (14.571)
 player_on_courtJohn Wall:clutch_time 0.731 (13.105)
 player_on_courtJosh Richardson:clutch_time 14.445 (14.278)
 player_on_courtJustin Holiday:clutch_time 9.123 (13.960)
 player_on_courtJustise Winslow:clutch_time 0.559 (14.022)
 player_on_courtKarl-Anthony Towns:clutch_time -7.156 (13.346)
 player_on_courtKelly Oubre Jr.:clutch_time 14.151 (13.232)
 player_on_courtKent Bazemore:clutch_time 15.234 (14.897)
 player_on_courtKentavious Caldwell-Pope:clutch_time 7.072 (13.262)
 player_on_courtKevin Durant:clutch_time -1.124 (14.477)
 player_on_courtKevin Love:clutch_time 12.614 (14.706)
 player_on_courtKhris Middleton:clutch_time -6.809 (14.162)
 player_on_courtKlay Thompson:clutch_time 12.236 (15.822)
 player_on_courtKyle Kuzma:clutch_time -9.264 (14.177)
 player_on_courtKyle Lowry:clutch_time 2.026 (13.980)
 player_on_courtKyrie Irving:clutch_time 24.902* (13.208)
 player_on_courtLaMarcus Aldridge:clutch_time -0.137 (15.003)
 player_on_courtLauri Markkanen:clutch_time 0.230 (15.215)
 player_on_courtLeBron James:clutch_time 6.279 (13.610)
 player_on_courtMarc Gasol:clutch_time 13.942 (13.331)
 player_on_courtMarcin Gortat:clutch_time 6.067 (13.312)
 player_on_courtMarcus Morris:clutch_time -6.105 (14.893)
 player_on_courtMarcus Smart:clutch_time -8.968 (14.484)
 player_on_courtMarkieff Morris:clutch_time 13.172 (12.907)
 player_on_courtMason Plumlee:clutch_time 7.191 (13.794)
 player_on_courtMatthew Dellavedova:clutch_time -6.310 (19.049)
 player_on_courtMaurice Harkless:clutch_time 0.500 (14.342)
 player_on_courtMike Conley:clutch_time 8.496 (14.156)
 player_on_courtMyles Turner:clutch_time 14.749 (13.768)
 player_on_courtNikola Jokic:clutch_time -1.372 (12.874)
 player_on_courtNikola Vucevic:clutch_time -8.000 (14.100)
 player_on_courtOtto Porter Jr.:clutch_time 2.173 (12.823)
 player_on_courtPatty Mills:clutch_time 2.346 (13.489)
 player_on_courtPaul George:clutch_time 8.409 (14.125)
 player_on_courtPaul Millsap:clutch_time 0.537 (13.206)
 player_on_courtPJ Tucker:clutch_time 11.562 (16.925)
 player_on_courtReggie Jackson:clutch_time 0.992 (14.926)

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player_on_courtRicky Rubio:clutch_time 5.257 (14.037)
player_on_courtRobert Covington:clutch_time -11.553 (13.856)
player_on_courtRobin Lopez:clutch_time 5.792 (14.891)
player_on_courtRudy Gay:clutch_time -9.947 (14.399)
player_on_courtRudy Gobert:clutch_time 16.234 (14.829)
player_on_courtRussell Westbrook:clutch_time 9.717 (12.722)
player_on_courtSerge Ibaka:clutch_time -4.995 (14.400)
player_on_courtStephen Curry:clutch_time 6.076 (15.402)
player_on_courtSteven Adams:clutch_time 2.112 (13.327)
player_on_courtTerrence Ross:clutch_time -0.799 (14.039)
player_on_courtThaddeus Young:clutch_time 3.841 (14.819)
player_on_courtTim Hardaway Jr.:clutch_time -11.808 (23.427)
player_on_courtTobias Harris:clutch_time -14.413 (14.388)
player_on_courtTomas Satoransky:clutch_time -6.146 (14.604)
player_on_courtTony Snell:clutch_time 8.998 (18.824)
player_on_courtTrae Young:clutch_time 2.323 (14.702)
player_on_courtTrevor Ariza:clutch_time -5.522 (14.698)
player_on_courtTyler Johnson:clutch_time 110.477*** (14.027)
player_on_courtVictor Oladipo:clutch_time 1.911 (13.403)
player_on_courtVince Carter:clutch_time -6.306 (16.905)
player_on_courtWesley Matthews:clutch_time -3.645 (16.634)
player_on_courtWill Barton:clutch_time 8.144 (13.942)
player_on_courtWillie Cauley-Stein:clutch_time 1.131 (15.235)
player_on_courtZach LaVine:clutch_time -4.079 (14.125)
player_on_courtZach Randolph:clutch_time 14.894 (15.233)
Constant -19.834 (20.572)

```

----- Observations 2,204

R2 0.274

Adjusted R2 0.189

Residual Std. Error 19.141 (df = 1972)

F Statistic 3.218*** (df = 231; 1972) =====

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