

Estimaciones y regresiones

Lo que resta hacer es implementar un algoritmo donde se pueda hacer el siguiente modelo para todas las estadísticas deportiva de acuerdo a si el jugador es defensivo u ofensivo:

$$Y_t(\cdot) = \beta_0 X_t + \beta_1 \text{Controles}_t + u_t$$

donde

- *Controles_t*:
 - Equipo.
 - Edad.
 - Año.

Estimaciones directas - Identificación

Pooling

Bateadores

Se obtendrán las estimaciones de las variables referentes a estadísticas deportivas sin controles

Bateadores: Modelo Pooling

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.006** (0.003)	-0.006** (0.003)	-0.006** (0.002)	-0.006** (0.003)	-0.006** (0.003)	-0.006** (0.003)
Años contratot	0.001 (0.004)	-0.001 (0.004)	0.001 (0.004)	-0.001 (0.004)	-0.0003 (0.003)	-0.001 (0.003)
Equipot	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
XABt	-0.001 (0.001)					
XABt-1	-0.001 (0.001)					
XAB2t		-0.00002 (0.00004)				
XAB2t-1		-0.00000 (0.00003)				

XHt				-0.002*		
				(0.001)		
XHt-1				0.0003		
				(0.001)		
XH2t				-0.0001		
				(0.0001)		
XH2t-1				0.0001		
				(0.0001)		
XBA _t					-0.031	
					(0.020)	
XBA _{t-1}					0.020	
					(0.017)	
XBA2 _t						-0.046
						(0.029)
XBA2 _{t-1}						0.005
						(0.017)
Agent _t	0.162*	0.157*	0.149*	0.153*	0.152*	0.149*
	(0.085)	(0.081)	(0.081)	(0.086)	(0.085)	(0.085)

=====

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

Bateadores: Modelo Pooling

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.006**	-0.006**	-0.006**	-0.006**	-0.006**	-0.006**
	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Años contratot	0.001	-0.001	-0.002	-0.001	0.001	-0.001
	(0.004)	(0.004)	(0.003)	(0.003)	(0.004)	(0.004)
Equipot	0.001	0.001	0.001	0.001	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
XD _t	-0.004					
	(0.003)					
XD _{t-1}	-0.001					
	(0.003)					
XD2 _t		-0.0004				
		(0.001)				
XD2 _{t-1}		0.001				
		(0.001)				
XHR _t			-0.001			
			(0.004)			
XHR _{t-1}			0.003			
			(0.002)			
XHR2 _t				-0.001		
				(0.001)		
XHR2 _{t-1}				-0.0001		
				(0.0004)		
XGSt					-0.002	
					(0.001)	
XGSt-1					-0.001	

XGS2t					(0.001)	-0.0001
						(0.0002)
XGS2t-1						0.00005
						(0.0001)
Agentet	0.150*	0.155*	0.158*	0.160*	0.161*	0.158*
	(0.080)	(0.083)	(0.083)	(0.083)	(0.084)	(0.081)

=====

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

Bateadores: Modelo Pooling

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.006**	-0.005**	-0.006**	-0.005**	-0.006**	-0.006**
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Años contratot	-0.0004	0.0001	-0.001	-0.0002	0.0002	0.0002
	(0.003)	(0.004)	(0.003)	(0.003)	(0.003)	(0.004)
Equipot	0.001	0.001	0.001	0.001	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
XOPSt	-0.021					
	(0.014)					
XOPSt-1	-0.001					
	(0.013)					
XOPS2t		-0.026**				
		(0.013)				
XOPS2t-1		0.008				
		(0.011)				
XOBPt			-0.043**			
			(0.022)			
XOBPt-1			0.020			
			(0.019)			
XOBP2t				-0.049*		
				(0.028)		
XOBP2t-1				0.006		
				(0.020)		
XSLGt					-0.018	
					(0.019)	
XSLGt-1					-0.023	
					(0.017)	
XSLG2t						-0.040*
						(0.022)
XSLG2t-1						0.014
						(0.018)
Agentet	0.160*	0.142*	0.156*	0.144*	0.167**	0.148*
	(0.085)	(0.086)	(0.083)	(0.083)	(0.082)	(0.085)

=====

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

Bateadores: Modelo Pooling

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.006** (0.003)	-0.006** (0.003)	-0.006** (0.003)	-0.006** (0.003)	-0.007*** (0.002)	-0.006** (0.002)
Años contratot	0.0004 (0.004)	-0.002 (0.004)	-0.001 (0.003)	-0.001 (0.003)	-0.005 (0.004)	-0.002 (0.003)
Eqipot	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
XRBI	-0.003** (0.001)					
XRBI	0.001 (0.002)					
XRBI2		0.0001 (0.0002)				
XRBI2		0.0001 (0.0002)				
XT			-0.010 (0.008)			
XT			0.011** (0.005)			
XT2				-0.003 (0.004)		
XT2				0.001 (0.001)		
XWAR					0.016** (0.007)	
XWAR					0.013** (0.006)	
XWAR2						0.005 (0.004)
XWAR2						0.005** (0.002)
Agentet	0.149* (0.082)	0.165* (0.084)	0.156* (0.084)	0.156* (0.084)	0.205** (0.081)	0.180** (0.079)

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

Starting pitcher

Lanzadores Iniciales: Modelo Pooling

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.008* (0.003)	-0.009** (0.003)	-0.009** (0.003)	-0.009** (0.003)	-0.008** (0.002)	-0.008** (0.002)

	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Años contratot	-0.007	-0.010	-0.011	-0.011	-0.009	-0.010
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)
Equipot	0.003*	0.003*	0.003*	0.003*	0.003*	0.003*
	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.002)
XH2t	-0.0001					
	(0.0001)					
XH2t-1	-0.00005					
	(0.0001)					
XHt		-0.0005				
		(0.002)				
XHt-1		0.00002				
		(0.001)				
XR2t			0.00002			
			(0.0002)			
XR2t-1			-0.0001			
			(0.0001)			
XER2t				0.0001		
				(0.0002)		
XER2t-1				-0.0002		
				(0.0001)		
XERt					-0.002	
					(0.002)	
XERt-1					-0.001	
					(0.001)	
XRt						-0.001
						(0.002)
XRt-1						-0.001
						(0.001)
Agentet	0.227*	0.252**	0.257**	0.261**	0.243*	0.247**
	(0.121)	(0.123)	(0.124)	(0.129)	(0.125)	(0.124)

=====

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

Lanzadores Iniciales: Modelo Pooling

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.008**	-0.009**	-0.009**	-0.008**	-0.007*	-0.006
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Años contratot	-0.010	-0.010	-0.010	-0.011	-0.011	-0.011
	(0.007)	(0.008)	(0.007)	(0.007)	(0.007)	(0.007)
Equipot	0.003*	0.003*	0.003**	0.003*	0.003**	0.003*
	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)
XComando2t	-0.001					
	(0.006)					
XComando2t-1	-0.00001					
	(0.00001)					
XComandot		-0.002				
		(0.012)				

XComandot-1	-0.001					
	(0.001)					
XControl2t	-0.061					
	(0.043)					
XControl2t-1	-0.122***					
	(0.033)					
ControlHt	0.042					
	(0.030)					
XControlt-1	-0.076**					
	(0.031)					
XDominio2t	-0.009					
	(0.023)					
XDominio2t-1	0.048**					
	(0.020)					
XDominiot	-0.015					
	(0.019)					
XDominiot-1	0.052***					
	(0.018)					
Agentet	0.244**	0.245**	0.241**	0.218*	0.191	0.195
	(0.119)	(0.120)	(0.119)	(0.118)	(0.122)	(0.126)

=====

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

Lanzadores Iniciales: Modelo Pooling

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.008**	-0.008**	-0.008**	-0.008**	-0.008*	-0.008**
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Años contratot	-0.010	-0.012	-0.007	-0.010	-0.011	-0.010
	(0.008)	(0.008)	(0.007)	(0.008)	(0.007)	(0.007)
Equipot	0.003*	0.003*	0.003*	0.003*	0.003*	0.003*
	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
XERA2t	-0.001					
	(0.003)					
XERA2t-1	-0.006**					
	(0.003)					
XERAt		-0.012*				
		(0.006)				
XERAt-1		-0.020***				
		(0.006)				
XIP2t			-0.0001			
			(0.0001)			
XIP2t-1			-0.00001			
			(0.0001)			
XIPt				-0.0005		
				(0.001)		
XIPt-1				-0.0002		
				(0.001)		
XL2t					-0.002	

XL2t-1					(0.002)	
					-0.001	
					(0.001)	
XLt						-0.004
						(0.006)
XLt-1						-0.004
						(0.004)
Agentet	0.236*	0.234**	0.234*	0.247*	0.241*	0.248**
	(0.125)	(0.113)	(0.120)	(0.130)	(0.127)	(0.125)

=====

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

Lanzadores Iniciales: Modelo Pooling

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.010**	-0.010**	-0.009**	-0.009**	-0.009**	-0.010**
	(0.005)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)
Años contratot	-0.012	-0.012	-0.009	-0.012	-0.011	-0.015**
	(0.008)	(0.008)	(0.008)	(0.008)	(0.007)	(0.007)
Equipot	0.003*	0.003*	0.003*	0.003*	0.003*	0.003*
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
XS2t	0.087					
	(0.080)					
XS2t-1	0.023**					
	(0.009)					
XSt		0.051				
		(0.051)				
XSt-1		0.064**				
		(0.030)				
XS02t			-0.0001			
			(0.0001)			
XS02t-1			0.0001			
			(0.0001)			
XS0t				0.0004		
				(0.001)		
XS0t-1				-0.00002		
				(0.001)		
XWAR2t					0.003	
					(0.004)	
XWAR2t-1					-0.001	
					(0.005)	
XWArt						0.013
						(0.009)
XWArt-1						0.008
						(0.011)
Agentet	0.288**	0.303**	0.257**	0.263**	0.262**	0.290**
	(0.144)	(0.146)	(0.119)	(0.126)	(0.119)	(0.124)

Note:

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

Lanzadores Iniciales: Modelo Pooling

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.007* (0.004)	-0.009** (0.004)	-0.009** (0.004)	-0.009** (0.004)	-0.009** (0.004)	-0.008* (0.004)
Años contratot	-0.013 (0.008)	-0.014* (0.008)	-0.011 (0.007)	-0.012 (0.007)	-0.012 (0.007)	-0.008 (0.007)
Eqipot	0.003** (0.001)	0.003** (0.001)	0.003* (0.002)	0.003* (0.001)	0.003* (0.002)	0.003* (0.001)
XWHIP2t	-0.008 (0.011)					
XWHIP2t-1	-0.043*** (0.011)					
XWHIPt		-0.007 (0.010)				
XWHIPt-1		-0.036*** (0.011)				
XBB2t			-0.0002 (0.0004)			
XBB2t-1			0.0001 (0.0003)			
XBBt				0.001 (0.003)		
XBBt-1				-0.002 (0.002)		
XW2t					0.001 (0.001)	
XW2t-1					0.0001 (0.001)	
XWt						-0.005 (0.006)
XWt-1						0.0002 (0.005)
Agentet	0.174 (0.112)	0.266** (0.115)	0.256** (0.122)	0.265** (0.130)	0.262** (0.122)	0.233* (0.130)

Note:

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

Efectos fijos

Bateadores

Se obtendrán las estimaciones de las variables referentes a estadísticas deportivas sin controles

Bateadores: Estimador Within

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.003 (0.006)	-0.004 (0.006)	-0.004 (0.006)	-0.004 (0.005)	-0.004 (0.005)	-0.004 (0.005)
Años contratot	-0.032*** (0.012)	-0.032** (0.013)	-0.032** (0.012)	-0.031** (0.012)	-0.031** (0.012)	-0.032*** (0.012)
Equipot	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
XABt	0.001 (0.001)					
XABt-1	0.0003 (0.001)					
XAB2t		0.00000 (0.00004)				
XAB2t-1		0.00000 (0.00004)				
XHt			-0.0005 (0.002)			
XHt-1			-0.0001 (0.002)			
XH2t				-0.0002 (0.0002)		
XH2t-1				-0.0001 (0.0002)		
XBAt					-0.004 (0.030)	
XBAt-1					0.034 (0.028)	
XBA2t						0.010 (0.046)
XBA2t-1						0.011 (0.024)

=====

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

Bateadores: Estimador Within

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.004 (0.005)	-0.004 (0.005)	-0.003 (0.005)	-0.004 (0.005)	-0.003 (0.006)	-0.003 (0.006)
Años contratot	-0.032*** (0.012)	-0.032** (0.012)	-0.034*** (0.012)	-0.034*** (0.013)	-0.032*** (0.012)	-0.032** (0.012)
Equipot	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
XDt	0.001 (0.005)					

XDt-1	-0.001 (0.003)				
XD2t	0.00000 (0.001)				
XD2t-1	-0.0004 (0.001)				
XHRt		0.005 (0.005)			
XHRt-1		0.001 (0.004)			
XHR2t			0.001 (0.001)		
XHR2t-1			-0.0002 (0.001)		
XGSt				0.001 (0.002)	
XGSt-1				0.0004 (0.002)	
XGS2t					0.0001 (0.0002)
XGS2t-1					0.00002 (0.0002)

=====

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

Bateadores: Estimador Within

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.004 (0.005)	-0.004 (0.005)	-0.004 (0.005)	-0.004 (0.005)	-0.004 (0.005)	-0.004 (0.005)
Años contratot	-0.031** (0.012)	-0.032** (0.012)	-0.031** (0.012)	-0.033*** (0.012)	-0.030** (0.013)	-0.033*** (0.012)
Equipot	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.002 (0.001)	0.001 (0.001)	0.001 (0.001)
XOPSt	-0.013 (0.020)					
XOPSt-1	-0.002 (0.018)					
XOPS2t		0.002 (0.021)				
XOPS2t-1		-0.003 (0.016)				
XOBPt			-0.002 (0.040)			
XOBPt-1			0.029 (0.032)			
XOBP2t				0.054 (0.045)		
XOBP2t-1				0.025		

	(0.027)	
XSLGt	-0.015	
	(0.026)	
XSLGt-1	-0.026	
	(0.030)	
XSLG2t		0.019
		(0.030)
XSLG2t-1		-0.016
		(0.029)

=====

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

Bateadores: Estimador Within

	Dependent variable:					
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.003 (0.006)	-0.004 (0.005)	-0.002 (0.005)	-0.003 (0.006)	-0.006 (0.005)	-0.004 (0.005)
Años contratot	-0.033*** (0.013)	-0.032*** (0.012)	-0.034*** (0.013)	-0.032** (0.013)	-0.039*** (0.012)	-0.035*** (0.013)
Equipot	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
XRBI	0.001 (0.002)					
XRBI-1	0.001 (0.002)					
XRBI2t		0.0001 (0.0004)				
XRBI2t-1		-0.0002 (0.0003)				
XTt			-0.021 (0.014)			
XTt-1			0.001 (0.014)			
XT2t				-0.002 (0.005)		
XT2t-1				0.001 (0.004)		
XWARt					0.035*** (0.009)	
XWARt-1					0.003 (0.008)	
XWAR2t						0.011 (0.008)
XWAR2t-1						-0.0001 (0.003)

=====

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

Starting pitcher

Lanzadores Iniciales: Estimador Within

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.031** (0.015)	-0.030** (0.014)	-0.031* (0.015)	-0.031** (0.015)	-0.028* (0.015)	-0.028* (0.014)
Años contratot	-0.021 (0.019)	-0.037* (0.020)	-0.028 (0.019)	-0.025 (0.017)	-0.032 (0.020)	-0.034* (0.020)
Eqipot	0.003 (0.002)	0.004* (0.002)	0.004* (0.002)	0.004 (0.002)	0.004* (0.002)	0.004* (0.002)
XH2t	-0.0001 (0.0002)					
XH2t-1	-0.0001 (0.0001)					
XHt		0.004 (0.002)				
XHt-1		-0.001 (0.002)				
XR2t			0.0002 (0.0003)			
XR2t-1			-0.0003 (0.0002)			
XER2t				-0.0002 (0.0004)		
XER2t-1				-0.0004 (0.0002)		
XERt					0.003 (0.002)	
XERt-1					-0.0003 (0.002)	
XRt						0.004* (0.002)
XRt-1						0.001 (0.002)

Note:

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

Lanzadores Iniciales: Estimador Within

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.029** (0.014)	-0.029** (0.014)	-0.027* (0.016)	-0.025* (0.015)	-0.029* (0.015)	-0.028* (0.014)
Años contratot	-0.026 (0.020)	-0.027 (0.022)	-0.025 (0.020)	-0.027 (0.020)	-0.024 (0.020)	-0.028 (0.019)

Equipot	0.004*	0.004	0.004	0.004**	0.004*	0.003
	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)	(0.002)
XComando2t	-0.013*					
	(0.008)					
XComando2t-1	0.00001**					
	(0.00000)					
XComandot		-0.004				
		(0.022)				
XComandot-1		0.001				
		(0.001)				
XControl2t			0.004			
			(0.088)			
XControl2t-1			-0.027			
			(0.050)			
ControlHt				0.025		
				(0.063)		
XControlt-1				-0.061		
				(0.053)		
XDominio2t					-0.025	
					(0.029)	
XDominio2t-1					0.010	
					(0.030)	
XDominiot						0.011
						(0.025)
XDominiot-1						0.009
						(0.030)

=====

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

Lanzadores Iniciales: Estimador Within

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.023	-0.022	-0.029*	-0.030*	-0.030**	-0.029**
	(0.015)	(0.013)	(0.015)	(0.015)	(0.015)	(0.014)
Años contratot	-0.018	-0.023	-0.024	-0.030	-0.027	-0.028
	(0.019)	(0.019)	(0.018)	(0.022)	(0.018)	(0.019)
Equipot	0.003	0.003	0.004	0.004	0.004*	0.004*
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
XERA2t	0.006					
	(0.005)					
XERA2t-1	-0.003					
	(0.005)					
XERAt		0.003				
		(0.013)				
XERAt-1		-0.023**				
		(0.011)				
XIP2t			-0.00003			
			(0.0002)			
XIP2t-1			-0.0001			

	(0.0001)	
XIPt	0.001	
	(0.002)	
XIPt-1	-0.001	
	(0.002)	
XL2t	-0.001	
	(0.003)	
XL2t-1	-0.001	
	(0.001)	
XLt		0.004
		(0.009)
XLt-1		-0.008
		(0.006)

=====

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

Lanzadores Iniciales: Estimador Within

	Dependent variable:					
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.029**	-0.029**	-0.028**	-0.028*	-0.027**	-0.029*
	(0.015)	(0.015)	(0.014)	(0.015)	(0.014)	(0.015)
Años contratot	-0.027	-0.027	-0.030	-0.035*	-0.022	-0.026
	(0.019)	(0.020)	(0.019)	(0.021)	(0.022)	(0.023)
Eqipot	0.004	0.004*	0.004*	0.004	0.004*	0.004
	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)
XS2t	0.098***					
	(0.004)					
XS2t-1	0.040**					
	(0.018)					
XSt		0.069***				
		(0.010)				
XSt-1		0.057				
		(0.035)				
XS02t			-0.00003			
			(0.0001)			
XS02t-1			0.0003*			
			(0.0002)			
XS0t				0.002		
				(0.002)		
XS0t-1				0.001		
				(0.002)		
XWAR2t					-0.001	
					(0.003)	
XWAR2t-1					-0.007**	
					(0.003)	
XWArt						0.001
						(0.012)
XWArt-1						-0.004
						(0.018)

=====

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

Lanzadores Iniciales: Estimador Within

=====

	Dependent variable:					
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.022 (0.014)	-0.026* (0.015)	-0.028** (0.014)	-0.027* (0.014)	-0.030* (0.016)	-0.029* (0.015)
Años contratot	-0.018 (0.018)	-0.021 (0.018)	-0.028 (0.018)	-0.027 (0.018)	-0.029 (0.020)	-0.024 (0.018)
Eqipot	0.004 (0.002)	0.004 (0.002)	0.004 (0.002)	0.004* (0.002)	0.004 (0.002)	0.004 (0.002)
XWHIP2t	0.024 (0.019)					
XWHIP2t-1	-0.017 (0.015)					
XWHIPt		0.020 (0.021)				
XWHIPt-1		-0.015 (0.020)				
XBB2t			0.0002 (0.001)			
XBB2t-1			0.0002 (0.0004)			
XBBt				0.0002 (0.003)		
XBBt-1				0.002 (0.003)		
XW2t					0.001 (0.002)	
XW2t-1					-0.001 (0.001)	
XWt						-0.002 (0.006)
XWt-1						-0.003 (0.006)

=====

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

Efectos aleatorios

Bateadores

Se obtendrán las estimaciones de las variables referentes a estadísticas deportivas sin controles

Bateadores: Efectos Aleatorios

=====

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.006** (0.003)	-0.005** (0.003)	-0.005** (0.003)	-0.005** (0.003)	-0.005** (0.003)	-0.005** (0.003)
Años contratot	-0.002 (0.004)	-0.003 (0.004)	-0.002 (0.004)	-0.003 (0.004)	-0.003 (0.004)	-0.003 (0.004)
Equipot	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
XABt	-0.0002 (0.001)					
XABt-1	-0.0004 (0.001)					
XAB2t		-0.00001 (0.00003)				
XAB2t-1		-0.00000 (0.00002)				
XHt			-0.001 (0.001)			
XHt-1			0.0002 (0.001)			
XH2t				-0.0001 (0.0001)		
XH2t-1				0.00005 (0.0001)		
XBAt					-0.024 (0.018)	
XBAt-1					0.019 (0.016)	
XBA2t						-0.036 (0.027)
XBA2t-1						0.005 (0.016)
Agentet	0.155* (0.087)	0.148* (0.083)	0.145* (0.083)	0.142* (0.085)	0.142* (0.086)	0.140* (0.084)

=====

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

Bateadores: Efectos Aleatorios

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.005** (0.003)	-0.005** (0.003)	-0.005** (0.003)	-0.005** (0.003)	-0.006** (0.003)	-0.005** (0.003)
Años contratot	-0.002 (0.004)	-0.003 (0.004)	-0.004 (0.004)	-0.003 (0.004)	-0.002 (0.004)	-0.004 (0.004)
Equipot	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)

XDt	-0.003					
	(0.003)					
XDt-1	-0.001					
	(0.002)					
XD2t	-0.0003					
	(0.0005)					
XD2t-1	0.0003					
	(0.0004)					
XHRt		0.0003				
		(0.003)				
XHRt-1		0.002				
		(0.002)				
XHR2t			-0.0004			
			(0.001)			
XHR2t-1			-0.00001			
			(0.0003)			
XGSt				-0.001		
				(0.001)		
XGSt-1				-0.001		
				(0.001)		
XGS2t					-0.00001	
					(0.0001)	
XGS2t-1					0.00004	
					(0.0001)	
Agentet	0.143*	0.146*	0.145*	0.147*	0.155*	0.147*
	(0.081)	(0.084)	(0.084)	(0.084)	(0.086)	(0.083)

=====

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

Bateadores: Efectos Aleatorios

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.005**	-0.005*	-0.005**	-0.005**	-0.005**	-0.005*
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Años contratot	-0.003	-0.002	-0.003	-0.003	-0.002	-0.002
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Equipot	0.001	0.001	0.001	0.001	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
XOPSt	-0.019					
	(0.013)					
XOPSt-1	-0.002					
	(0.012)					
XOPS2t		-0.019*				
		(0.011)				
XOPS2t-1		0.006				
		(0.010)				
XOBPt			-0.034			
			(0.021)			
XOBPt-1			0.018			

			(0.018)			
XOBP2t				-0.030		
				(0.026)		
XOBP2t-1				0.006		
				(0.018)		
XSLGt				-0.015		
				(0.016)		
XSLGt-1				-0.024		
				(0.015)		
XSLG2t					-0.026	
					(0.019)	
XSLG2t-1					0.008	
					(0.017)	
Agentet	0.152*	0.135	0.148*	0.140*	0.159*	0.143*
	(0.086)	(0.086)	(0.084)	(0.083)	(0.083)	(0.086)

=====

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

Bateadores: Efectos Aleatorios

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.005**	-0.005**	-0.005**	-0.005**	-0.006**	-0.006**
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)
Años contratot	-0.002	-0.004	-0.004	-0.003	-0.008**	-0.004
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Equipot	0.001	0.001	0.001	0.001	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
XRBI	-0.002					
	(0.001)					
XRBI-1	0.001					
	(0.002)					
XRBI2t		0.0001				
		(0.0002)				
XRBI2t-1		0.00005				
		(0.0002)				
XTt			-0.010			
			(0.008)			
XTt-1			0.010*			
			(0.005)			
XT2t				-0.002		
				(0.003)		
XT2t-1				0.001		
				(0.001)		
XWARt					0.019***	
					(0.006)	
XWARt-1					0.010*	
					(0.005)	
XWAR2t						0.005
						(0.003)

XWAR2t-1						0.003*
						(0.002)
Agentet	0.145*	0.152*	0.144*	0.145*	0.197**	0.165**
	(0.084)	(0.083)	(0.084)	(0.085)	(0.084)	(0.080)

=====

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

Starting pitcher

Lanzadores Iniciales: Efectos Aleatorios

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.010**	-0.011**	-0.011**	-0.011**	-0.010**	-0.011**
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Años contratot	-0.007	-0.012	-0.011	-0.011	-0.010	-0.011
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Equipot	0.003*	0.003**	0.003**	0.003*	0.003**	0.003**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
XH2t	-0.0001					
	(0.0001)					
XH2t-1	-0.00003					
	(0.0001)					
XHt		0.0004				
		(0.002)				
XHt-1		-0.0001				
		(0.001)				
XR2t			0.0001			
			(0.0002)			
XR2t-1			-0.0001			
			(0.0001)			
XER2t				0.0001		
				(0.0002)		
XER2t-1				-0.0002		
				(0.0001)		
XERt					-0.001	
					(0.002)	
XERt-1					-0.001	
					(0.001)	
XRt						0.0001
						(0.002)
XRt-1						-0.001
						(0.001)
Agentet	0.290*	0.328**	0.324**	0.327**	0.311**	0.316**
	(0.150)	(0.152)	(0.153)	(0.160)	(0.154)	(0.154)

=====

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

Lanzadores Iniciales: Efectos Aleatorios

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.010** (0.005)	-0.010** (0.005)	-0.010** (0.005)	-0.009** (0.005)	-0.009** (0.005)	-0.009* (0.005)
Años contratot	-0.010 (0.007)	-0.010 (0.008)	-0.010 (0.007)	-0.012* (0.007)	-0.011 (0.007)	-0.012 (0.007)
Eqipot	0.003* (0.001)	0.003* (0.002)	0.003** (0.001)	0.003* (0.001)	0.003** (0.001)	0.003* (0.001)
XComando2t	-0.002 (0.006)					
XComando2t-1	-0.00000 (0.00000)					
XComandot		-0.003 (0.013)				
XComandot-1		-0.0004 (0.001)				
XControl2t			-0.057 (0.042)			
XControl2t-1			-0.106*** (0.030)			
ControlHt				0.030 (0.028)		
XControlt-1				-0.072** (0.032)		
XDominio2t					-0.012 (0.020)	
XDominio2t-1					0.042** (0.019)	
XDominiot						-0.010 (0.018)
XDominiot-1						0.044*** (0.017)
Agentet	0.306** (0.147)	0.307** (0.145)	0.279* (0.147)	0.268* (0.145)	0.277* (0.143)	0.272* (0.145)

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

Lanzadores Iniciales: Efectos Aleatorios

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.010** (0.005)	-0.010** (0.004)	-0.010** (0.005)	-0.011** (0.005)	-0.010** (0.005)	-0.010** (0.005)
Años contratot	-0.010 (0.008)	-0.012 (0.008)	-0.008 (0.007)	-0.011 (0.008)	-0.011 (0.007)	-0.010 (0.007)

Equipot	0.003*	0.003*	0.003*	0.003**	0.003**	0.003**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
XERA2t	-0.0004					
	(0.002)					
XERA2t-1	-0.006**					
	(0.003)					
XERAt		-0.009				
		(0.007)				
XERAt-1		-0.021***				
		(0.006)				
XIP2t			-0.0001			
			(0.0001)			
XIP2t-1			-0.00000			
			(0.0001)			
XIPt				-0.0002		
				(0.001)		
XIPt-1				-0.0001		
				(0.001)		
XL2t					-0.001	
					(0.002)	
XL2t-1					-0.001	
					(0.001)	
XLt						-0.003
						(0.006)
XLt-1						-0.005
						(0.004)
Agentet	0.291*	0.292**	0.294**	0.315*	0.309**	0.309**
	(0.152)	(0.139)	(0.148)	(0.163)	(0.154)	(0.155)

=====

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

Lanzadores Iniciales: Efectos Aleatorios

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.011**	-0.012**	-0.011**	-0.011**	-0.011**	-0.011**
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Años contratot	-0.012	-0.012*	-0.009	-0.013*	-0.011	-0.014*
	(0.007)	(0.007)	(0.007)	(0.008)	(0.007)	(0.008)
Equipot	0.003**	0.003**	0.003**	0.003*	0.003**	0.003**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
XS2t	0.104***					
	(0.033)					
XS2t-1	0.024***					
	(0.008)					
XSt		0.067***				
		(0.025)				
XSt-1		0.060**				
		(0.026)				
XS02t			-0.0001			

				(0.0001)			
XS02t-1				0.0001			
				(0.0001)			
XS0t				0.001			
				(0.001)			
XS0t-1				0.0002			
				(0.001)			
XWAR2t				0.001			
				(0.004)			
XWAR2t-1				-0.002			
				(0.004)			
XWARt					0.010		
					(0.009)		
XWARt-1					0.007		
					(0.011)		
Agentet	0.342**	0.353**	0.317**	0.335**	0.319**	0.351**	
	(0.155)	(0.157)	(0.148)	(0.156)	(0.143)	(0.146)	

=====

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

Lanzadores Iniciales: Efectos Aleatorios

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.008*	-0.011**	-0.011**	-0.011**	-0.011**	-0.010**
	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)
Años contratot	-0.013	-0.013*	-0.010	-0.012	-0.012*	-0.009
	(0.008)	(0.008)	(0.007)	(0.007)	(0.007)	(0.007)
Equipot	0.003**	0.003**	0.003**	0.003*	0.003**	0.003**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
XWHIP2t	-0.006					
	(0.011)					
XWHIP2t-1	-0.039***					
	(0.010)					
XWHIPt		-0.005				
		(0.010)				
XWHIPt-1		-0.032***				
		(0.011)				
XBB2t			-0.0002			
			(0.0003)			
XBB2t-1			0.0001			
			(0.0003)			
XBBt				0.001		
				(0.002)		
XBBt-1				-0.001		
				(0.002)		
XW2t					0.001	
					(0.001)	
XW2t-1					0.0002	
					(0.001)	

XWt						-0.004
						(0.005)
XWt-1						0.001
						(0.004)
Agentet	0.222	0.317**	0.314**	0.326**	0.326**	0.295*
	(0.136)	(0.141)	(0.149)	(0.156)	(0.150)	(0.161)
=====						
=====						
Note:				*p<0.1; **p<0.05; ***p<0.01		

First Differences

Bateadores

Se obtendrán las estimaciones de las variables referentes a estadísticas deportivas sin controles

Bateadores: Primeras Diferencias

=====						
Dependent variable:						

	(1)	(2)	(3)	(4)	(5)	(6)

Edadt	-0.011***	-0.011***	-0.011***	-0.012***	-0.012***	-0.011***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Años contratot	-0.045***	-0.045***	-0.045***	-0.043***	-0.044***	-0.044***
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
Eqipot	0.002***	0.002***	0.002***	0.002***	0.002***	0.002***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
XABt	-0.0001					
	(0.0004)					
XABt-1	0.001***					
	(0.0003)					
XAB2t		-0.00002				
		(0.00001)				
XAB2t-1		0.00001				
		(0.00003)				
XHt			-0.001*			
			(0.001)			
XHt-1			0.001			
			(0.001)			
XH2t				-0.0001***		
				(0.0001)		
XH2t-1				-0.0002*		
				(0.0001)		
XBAt					0.0001	
					(0.012)	
XBAt-1					0.039***	
					(0.010)	
XBA2t						-0.004
						(0.021)
XBA2t-1						0.030***
						(0.009)

Note:

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

Bateadores: Primeras Diferencias

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.011*** (0.002)	-0.011*** (0.002)	-0.011*** (0.002)	-0.012*** (0.002)	-0.011*** (0.002)	-0.011*** (0.002)
Años contratot	-0.045*** (0.009)	-0.045*** (0.009)	-0.047*** (0.010)	-0.049*** (0.010)	-0.046*** (0.009)	-0.045*** (0.009)
Eqipot	0.002*** (0.001)	0.002*** (0.001)	0.002*** (0.001)	0.002*** (0.001)	0.002*** (0.001)	0.002*** (0.001)
XDt	-0.002 (0.002)					
XDt-1	-0.001 (0.002)					
XD2t		0.0001 (0.0004)				
XD2t-1		-0.001 (0.0003)				
XHRt			0.006* (0.004)			
XHRt-1			0.001 (0.002)			
XHR2t				0.001*** (0.0004)		
XHR2t-1				0.0002 (0.0003)		
XGSt					-0.001 (0.001)	
XGSt-1					0.002*** (0.001)	
XGS2t						-0.00003 (0.0001)
XGS2t-1						0.00004 (0.0001)

Note:

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

Bateadores: Primeras Diferencias

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.012*** (0.002)	-0.011*** (0.002)	-0.011*** (0.002)	-0.012*** (0.002)	-0.011*** (0.002)	-0.012*** (0.002)

Años contratot	-0.044*** (0.009)	-0.043*** (0.009)	-0.045*** (0.009)	-0.046*** (0.009)	-0.044*** (0.009)	-0.044*** (0.009)
Equipot	0.002*** (0.001)	0.002*** (0.001)	0.002*** (0.001)	0.002*** (0.001)	0.002*** (0.001)	0.002*** (0.001)
XOPSt	-0.007 (0.009)					
XOPSt-1	0.013* (0.007)					
XOPS2t		-0.013 (0.008)				
XOPS2t-1		-0.005 (0.006)				
XOBPt			0.017 (0.022)			
XOBPt-1			0.049*** (0.015)			
XOBP2t				0.052** (0.026)		
XOBP2t-1				0.029*** (0.010)		
XSLGt					-0.011 (0.012)	
XSLGt-1					-0.010 (0.014)	
XSLG2t						-0.010 (0.014)
XSLG2t-1						-0.023* (0.014)

Note:

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

Bateadores: Primeras Diferencias

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.011*** (0.002)	-0.012*** (0.002)	-0.009*** (0.002)	-0.011*** (0.002)	-0.014*** (0.002)	-0.012*** (0.002)
Años contratot	-0.046*** (0.009)	-0.045*** (0.009)	-0.045*** (0.009)	-0.044*** (0.009)	-0.051*** (0.009)	-0.050*** (0.009)
Equipot	0.002*** (0.001)	0.002*** (0.001)	0.002*** (0.001)	0.002*** (0.001)	0.002*** (0.001)	0.002*** (0.001)
XRBIIt	0.0004 (0.001)					
XRBIIt-1	0.002 (0.001)					
XRBI2t		0.0003 (0.0003)				
XRBI2t-1		-0.0002 (0.0001)				
XTt			-0.029***			

	(0.007)		
XTt-1	0.002		
	(0.009)		
XT2t	-0.002		
	(0.003)		
XT2t-1	0.003**		
	(0.001)		
XWARt		0.030***	
		(0.003)	
XWARt-1		0.004	
		(0.005)	
XWAR2t			0.014***
			(0.004)
XWAR2t-1			0.0002
			(0.001)
=====			
=====			
Note:	*p<0.1; **p<0.05; ***p<0.01		

Starting pitcher

Lanzadores Iniciales: Primeras Diferencias

=====						
Dependent variable:						

	(1)	(2)	(3)	(4)	(5)	(6)

Edadt	-0.019**	-0.018***	-0.019**	-0.017**	-0.015**	-0.016**
	(0.009)	(0.007)	(0.008)	(0.008)	(0.008)	(0.007)
Años contratot	-0.025***	-0.043***	-0.035***	-0.033***	-0.033***	-0.036***
	(0.009)	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)
Equipot	0.002**	0.004***	0.003***	0.003***	0.003***	0.003***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
XH2t	-0.0003***					
	(0.0001)					
XH2t-1	0.00002					
	(0.0001)					
XHt		0.003*				
		(0.001)				
XHt-1		0.0005				
		(0.001)				
XR2t			-0.0002			
			(0.0001)			
XR2t-1			0.00003			
			(0.0001)			
XER2t				-0.0005***		
				(0.0002)		
XER2t-1				-0.00004		
				(0.0001)		
XERt					-0.001	
					(0.001)	
XERt-1					0.003***	

(0.001)

XRt -0.0002
(0.001)

XRt-1 0.003**
(0.001)

=====

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

Lanzadores Iniciales: Primeras Diferencias

=====

	Dependent variable:					
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.020** (0.008)	-0.019** (0.007)	-0.018** (0.007)	-0.016** (0.007)	-0.019*** (0.007)	-0.019*** (0.007)
Años contratot	-0.038*** (0.009)	-0.041*** (0.008)	-0.033*** (0.008)	-0.036*** (0.008)	-0.035*** (0.008)	-0.040*** (0.008)
Equipot	0.004*** (0.001)	0.003*** (0.001)	0.004*** (0.001)	0.003*** (0.001)	0.004*** (0.001)	0.003*** (0.001)
XComando2t	-0.002 (0.003)					
XComando2t-1	0.00001*** (0.00000)					
XComandot		0.017* (0.009)				
XComandot-1		0.001*** (0.0003)				
XControl2t			-0.069*** (0.018)			
XControl2t-1			-0.026*** (0.005)			
ControlHt				0.009 (0.034)		
XControlt-1				-0.058*** (0.016)		
XDominio2t					-0.010*** (0.003)	
XDominio2t-1					0.009*** (0.003)	
XDominiot						0.030*** (0.006)
XDominiot-1						0.012** (0.005)

=====

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

Lanzadores Iniciales: Primeras Diferencias

=====

Dependent variable:

	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.016** (0.008)	-0.014* (0.007)	-0.017** (0.008)	-0.015* (0.008)	-0.020*** (0.007)	-0.018** (0.008)
Años contratot	-0.033*** (0.010)	-0.035*** (0.011)	-0.029*** (0.008)	-0.029*** (0.009)	-0.034*** (0.007)	-0.033*** (0.007)
Eqipot	0.003*** (0.001)	0.003*** (0.001)	0.003*** (0.001)	0.003*** (0.001)	0.003*** (0.001)	0.003*** (0.001)
XERA2t	0.001 (0.002)					
XERA2t-1	-0.003 (0.003)					
XERAt		-0.003 (0.009)				
XERAt-1		-0.021*** (0.005)				
XIP2t			-0.0002*** (0.0001)			
XIP2t-1			0.00004 (0.0001)			
XIPt				-0.002** (0.001)		
XIPt-1				0.002* (0.001)		
XL2t					-0.003* (0.002)	
XL2t-1					-0.00002 (0.001)	
XLt						-0.007 (0.005)
XLt-1						-0.0005 (0.003)

=====

Note:

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

Lanzadores Iniciales: Primeras Diferencias

	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.019*** (0.007)	-0.018** (0.007)	-0.018** (0.007)	-0.017** (0.008)	-0.018** (0.007)	-0.017** (0.008)
Años contratot	-0.036*** (0.008)	-0.036*** (0.008)	-0.035*** (0.009)	-0.042*** (0.008)	-0.030*** (0.009)	-0.035*** (0.010)
Eqipot	0.003*** (0.001)	0.003*** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.003*** (0.001)	0.003*** (0.001)
XS2t	0.100*** (0.001)					
XS2t-1	0.020*** (0.006)					

XSt	0.074*** (0.007)				
XSt-1	-0.014 (0.022)				
XS02t		-0.0001*** (0.00003)			
XS02t-1		0.0003*** (0.0001)			
XS0t			0.001* (0.0005)		
XS0t-1			0.002*** (0.001)		
XWAR2t				-0.002 (0.002)	
XWAR2t-1				-0.004*** (0.001)	
XWARt					-0.005 (0.006)
XWARt-1					0.005 (0.008)

=====

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

Lanzadores Iniciales: Primeras Diferencias

Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)
Edadt	-0.013* (0.007)	-0.014* (0.008)	-0.017** (0.007)	-0.015** (0.008)	-0.018** (0.009)	-0.015* (0.008)
Años contratot	-0.032*** (0.009)	-0.036*** (0.009)	-0.034*** (0.008)	-0.025*** (0.008)	-0.034*** (0.010)	-0.026*** (0.009)
Equipot	0.003*** (0.001)	0.004*** (0.001)	0.003*** (0.001)	0.004*** (0.001)	0.003*** (0.001)	0.003*** (0.001)
XWHIP2t	0.003 (0.004)					
XWHIP2t-1	-0.021*** (0.006)					
XWHIPt		-0.004 (0.007)				
XWHIPt-1		-0.034** (0.013)				
XBB2t			-0.0002 (0.0002)			
XBB2t-1			0.0005** (0.0002)			
XBBt				-0.005*** (0.001)		
XBBt-1				0.004*** (0.001)		
XW2t					-0.001	

XW2t-1	(0.001) 0.0003 (0.001)	
XWt		-0.010*** (0.004)
XWt-1		0.003 (0.003)
=====		
=====		
Note:	*p<0.1; **p<0.05; ***p<0.01	

Estimaciones conjuntas

Lo que se hará ahora es volver a estimar los modelos anteriores, pero con todas las variables que fueron significativas para un nivel del %5.

Bateadores

Para los bateadores las variables significativas son:

Bateadores: Comparación de los modelos

Dependent variable:				
	Pooling (1)	Within (2)	Random effects (3)	First-Differences (4)
Edadt	-0.006** (0.003)	-0.005 (0.005)	-0.006** (0.003)	-0.012*** (0.002)
Años contratot	-0.003 (0.005)	-0.042*** (0.014)	-0.006 (0.005)	-0.047*** (0.010)
Equipot	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.002*** (0.001)
XABt				0.004*** (0.001)
XH2t				-0.0001 (0.0001)
XHt	-0.0002 (0.001)	-0.001 (0.003)		-0.003*** (0.001)
XOPS2t	-0.007 (0.023)	-0.030 (0.033)	-0.017* (0.010)	
XBAAt				-0.026 (0.025)
XBA2t				-0.024 (0.028)
XHRt				0.005 (0.005)
XHR2t				0.0002 (0.001)
XGSt				-0.006***

				(0.002)
XOPSt				-0.042*
				(0.022)
XOBPt	-0.028	-0.017		0.076*
	(0.025)	(0.039)		(0.045)
XOBP2t	-0.017	0.077		0.081***
	(0.036)	(0.049)		(0.028)
XSLG2t	0.004	0.033		
	(0.036)	(0.035)		
XRBIt	-0.003	0.001		-0.0004
	(0.002)	(0.004)		(0.001)
XTt	-0.005	-0.015	-0.006	-0.061***
	(0.008)	(0.012)	(0.008)	(0.010)
XT2t				0.021***
				(0.005)
XWArt	0.017**	0.037***	0.019**	0.012***
	(0.008)	(0.013)	(0.007)	(0.005)
XWAR2t	-0.001	-0.002	-0.002	0.009**
	(0.004)	(0.010)	(0.004)	(0.005)
XABt-1				-0.001***
				(0.0004)
XH2t-1				-0.0004***
				(0.0001)
XHt-1	-0.001	-0.001		-0.001
	(0.002)	(0.002)		(0.002)
XOPS2t-1	0.015	-0.041	0.004	
	(0.022)	(0.025)	(0.010)	
XBA2t-1				0.065***
				(0.024)
XBA2t-1				0.024
				(0.027)
XHRt-1				-0.006***
				(0.002)
XHR2t-1				0.0001
				(0.0004)
XGSt-1				0.005***
				(0.001)
XOPSt-1				-0.059***
				(0.017)
XOBPt-1	0.030	0.066*		0.067**
	(0.026)	(0.039)		(0.027)
XOBP2t-1	-0.033	0.059		-0.042
	(0.029)	(0.047)		(0.029)
XSLG2t-1	-0.005	-0.037		
	(0.028)	(0.028)		
XRBIt-1	0.001	0.004		0.004*
	(0.003)	(0.003)		(0.002)
XTt-1	0.012**	0.001	0.009*	0.005
	(0.006)	(0.011)	(0.005)	(0.005)
XT2t-1				-0.001
				(0.001)
XWArt-1	0.010	-0.003	0.007	0.013**
	(0.007)	(0.011)	(0.006)	(0.006)
XWAR2t-1	0.003	-0.001	0.002	-0.001

	(0.002)	(0.003)	(0.002)	(0.002)
Agentet	0.166**		0.177**	
	(0.081)		(0.086)	

=====

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

Como se puede observar, no todas las variables son significativas de manera conjunta. Reduciremos la cantidad de variables en la estimación ya que muchas de estas están correlacionadas con otras dentro de la misma. Nos quedaremos con las que fueron significativas en el modelo anterior, además de las WAR puesto que son un tipo de PCA.

Bateadores: Comparación de los modelos - Primer refinamiento

Dependent variable:				
	Pooling (1)	Within (2)	Random effects (3)	First-Differences (4)
Edad_t	-0.006** (0.003)	-0.006 (0.005)	-0.006** (0.003)	-0.011*** (0.002)
Anios_de_contrato_t	-0.004 (0.004)	-0.038*** (0.012)	-0.006 (0.004)	-0.048*** (0.009)
team_num_t	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.002*** (0.001)
X_Porcentaje_On_base_plus_slugging_2_t			-0.017 (0.010)	
X_Triples_t_1	0.010* (0.005)		0.009 (0.005)	
X_At_bats_t				0.004*** (0.001)
X_At_bats_t_1				-0.001*** (0.0004)
X_Bateos_t				-0.002** (0.001)
X_Bateos_2_t				-0.0001 (0.0001)
X_Bateos_2_t_1				-0.0004*** (0.0001)
X_Juegos_iniciados_t				-0.005*** (0.002)
X_Juegos_iniciados_t_1				0.006*** (0.001)
X_Porcentaje_On_base_plus_slugging_t				-0.047* (0.027)
X_Porcentaje_On_base_plus_slugging_t_1				-0.054*** (0.015)
X_Porcentaje_on_base_t				0.066 (0.043)
X_Porcentaje_on_base_t_1		0.033 (0.028)		0.079*** (0.026)
X_Porcentaje_on_base_2_t				0.066*** (0.014)

X_Triples_t				-0.064*** (0.010)
X_Triples_2_t				0.023*** (0.005)
X_WAR_t	0.016** (0.007)	0.036*** (0.009)	0.018*** (0.006)	0.013*** (0.005)
X_WAR_t_1				0.010** (0.005)
X_WAR_2_t				0.011** (0.004)
X_Bateos_promedio_t_1				0.031 (0.021)
X_Home_runs_t_1				-0.007*** (0.002)
X_Runs_batted_in_t_1				0.004** (0.002)
Constant	0.187** (0.081)		0.170** (0.085)	

Note:

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

Bateadores: Comparación de los modelos - Segundo refinamiento

Dependent variable:				
	Pooling (1)	Within (2)	Random effects (3)	First-Differences (4)
Edad_t	-0.006** (0.003)	-0.006 (0.004)	-0.006** (0.003)	-0.011*** (0.002)
Anios_de_contrato_t	-0.004 (0.004)	-0.039*** (0.012)	-0.007* (0.004)	-0.050*** (0.009)
team_num_t	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.002*** (0.001)
X_Triples_t_1	0.010* (0.005)			
X_At_bats_t				0.004*** (0.001)
X_At_bats_t_1				-0.002*** (0.0003)
X_Bateos_t				-0.003*** (0.001)
X_Bateos_2_t_1				-0.0005*** (0.0001)
X_Juegos_iniciados_t				-0.005*** (0.002)
X_Juegos_iniciados_t_1				0.006*** (0.001)
X_Porcentaje_On_base_plus_slugging_t				-0.017 (0.010)
X_Porcentaje_On_base_plus_slugging_t_1				-0.049*** (0.014)

X_Porcentaje_on_base_t_1				0.107*** (0.014)
X_Porcentaje_on_base_2_t				0.081*** (0.026)
X_Triples_t				-0.064*** (0.009)
X_Triples_2_t				0.024*** (0.005)
X_WAR_t	0.016** (0.007)	0.035*** (0.009)	0.019*** (0.006)	0.014*** (0.005)
X_WAR_t_1				0.008* (0.004)
X_WAR_2_t				0.010** (0.005)
X_Home_runs_t_1				-0.006*** (0.002)
X_Runs_batted_in_t_1				0.004** (0.002)
Constant	0.187** (0.081)		0.181** (0.082)	

Note:

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

Bateadores: Comparación de los modelos - Econométrico final

Dependent variable:				
	Pooling (1)	Within (2)	Random effects (3)	First-Differences (4)
Edad_t	-0.006** (0.003)	-0.006 (0.004)	-0.006** (0.003)	-0.011*** (0.002)
Anios_de_contrato_t	-0.004 (0.004)	-0.039*** (0.012)	-0.007* (0.004)	-0.050*** (0.009)
team_num_t	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.002*** (0.001)
X_Triples_t_1	0.010* (0.005)			
X_At_bats_t				0.003*** (0.001)
X_At_bats_t_1				-0.002*** (0.0004)
X_Bateos_t				-0.003*** (0.001)
X_Bateos_2_t_1				-0.0005*** (0.0001)
X_Juegos_iniciados_t				-0.004** (0.002)
X_Juegos_iniciados_t_1				0.006*** (0.001)
X_Porcentaje_On_base_plus_slugging_t_1				-0.056*** (0.012)

X_Porcentaje_on_base_t_1				0.113*** (0.012)
X_Porcentaje_on_base_2_t				0.063*** (0.019)
X_Triples_t				-0.067*** (0.010)
X_Triples_2_t				0.025*** (0.005)
X_WAR_t	0.016** (0.007)	0.035*** (0.009)	0.019*** (0.006)	0.015*** (0.004)
X_WAR_t_1				0.008* (0.005)
X_WAR_2_t				0.010** (0.005)
X_Home_runs_t_1				-0.006*** (0.002)
X_Runs_batted_in_t_1				0.004** (0.002)
Constant	0.187** (0.081)		0.181** (0.082)	

=====

Note:

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

Aplicaremos un teest de Hausmann a cada pareja de modelos

\$pooling_vs_within

Hausman Test

data: formula
chisq = 24.791, df = 4, p-value = 5.542e-05
alternative hypothesis: one model is inconsistent

\$pooling_vs_random

Hausman Test

data: formula
chisq = 34.85, df = 4, p-value = 4.988e-07
alternative hypothesis: one model is inconsistent

\$pooling_vs_fd

Hausman Test

data: formula
chisq = 29.901, df = 4, p-value = 5.128e-06
alternative hypothesis: one model is inconsistent

\$within_vs_random

Hausman Test

data: formula
chisq = 19.316, df = 4, p-value = 0.0006812
alternative hypothesis: one model is inconsistent

\$within_vs_fd

Hausman Test

data: formula
chisq = 19.74, df = 4, p-value = 0.0005619
alternative hypothesis: one model is inconsistent

\$random_vs_fd

Hausman Test

data: formula
chisq = 26.893, df = 4, p-value = 2.089e-05
alternative hypothesis: one model is inconsistent

Se halló evidencia de un cambio estructural entre cualquiera de los modelos.

Lanzadores

Lanzadores Iniciales: Comparación de los modelos

=====				
	Dependent variable:			

	Pooling	Within	Random effects	First-Differences
	(1)	(2)	(3)	(4)

Edad_t	-0.008**	-0.023*	-0.009**	-0.028***
	(0.004)	(0.012)	(0.004)	(0.007)
Anios_de_contrato_t	-0.015*	-0.025	-0.015*	-0.042***
	(0.009)	(0.023)	(0.009)	(0.013)
team_num_t	0.003**	0.005**	0.003**	0.001
	(0.001)	(0.002)	(0.001)	(0.002)
X_Bateos_2_t				0.001***
				(0.0004)
X_Bateos_t				0.023***
				(0.003)
X_Carreras_ganadas_2_t				-0.001***
				(0.0004)
X_Carreras_ganadas_t				0.007
				(0.006)
X_Control_2_t	-0.181**		-0.176**	-0.051
	(0.074)		(0.075)	(0.082)

X_Control_t	0.082*		0.076*	-0.011
	(0.045)		(0.046)	(0.045)
X_Dominio_2_t	-0.045		-0.047	-0.194***
	(0.029)		(0.030)	(0.050)
X_Dominio_t	0.008		0.010	0.159***
	(0.023)		(0.023)	(0.048)
X_ERA_2_t	0.001		0.001	
	(0.003)		(0.003)	
X_Inning_pitched_2_t				-0.001***
				(0.0003)
X_Inning_pitched_t				-0.008**
				(0.003)
X_Losses_2_t				-0.003
				(0.002)
X_Carreras_t		0.003		-0.037***
		(0.003)		(0.009)
X_Comando_2_t		-0.005		-0.014
		(0.008)		(0.009)
X_Comando_t				0.036***
				(0.013)
X_ERA_t	-0.017*	0.0004	-0.016*	-0.066***
	(0.009)	(0.013)	(0.009)	(0.015)
X_Saves_2_t	-0.253	-1.291*	-0.284	-4.154**
	(0.874)	(0.708)	(0.864)	(1.822)
X_Saves_t	0.261	0.975**	0.291	3.006**
	(0.579)	(0.482)	(0.573)	(1.237)
X_WHIP_2_t	0.006		0.007	0.114***
	(0.020)		(0.020)	(0.021)
X_WHIP_t	0.005		0.004	0.031
	(0.020)		(0.019)	(0.020)
X_Walks_2_t				0.001**
				(0.0005)
X_Walks_t				0.013**
				(0.006)
X_Wins_t				-0.008
				(0.012)
X_Bateos_2_t_1				-0.001**
				(0.0003)
X_Bateos_t_1				0.010
				(0.006)
X_Carreras_ganadas_2_t_1				0.001
				(0.0003)
X_Carreras_ganadas_t_1				0.007
				(0.007)
X_Control_2_t_1	-0.019		-0.021	-0.099***
	(0.036)		(0.037)	(0.035)
X_Control_t_1	-0.027		-0.028	-0.039
	(0.037)		(0.037)	(0.025)
X_Dominio_2_t_1	0.009		0.008	-0.131***
	(0.037)		(0.037)	(0.027)
X_Dominio_t_1	0.044*		0.041*	0.048**
	(0.024)		(0.024)	(0.022)
X_ERA_2_t_1	0.006		0.005	
	(0.005)		(0.004)	

X_Inning_pitched_2_t_1				0.0002 (0.0003)
X_Inning_pitched_t_1				-0.011*** (0.002)
X_Losses_2_t_1				-0.007*** (0.002)
X_Strike_outs_2_t	-0.0001 (0.0001)			0.0001 (0.0001)
X_Strike_outs_t				0.011*** (0.003)
X_WAR_2_t	0.002 (0.004)			-0.002 (0.005)
X_Carreras_t_1	-0.002 (0.003)			0.003 (0.003)
X_Comando_2_t_1	0.00001 (0.00000)			0.0004*** (0.0001)
X_Comando_t_1				-0.054*** (0.012)
X_ERA_t_1	-0.016* (0.009)	-0.029** (0.012)	-0.017* (0.009)	-0.043*** (0.009)
X_Saves_2_t_1	-0.217** (0.106)	0.166* (0.097)	-0.214** (0.104)	0.046 (0.148)
X_Saves_t_1	0.419** (0.182)	-0.168 (0.163)	0.412** (0.179)	0.116 (0.280)
X_WHIP_2_t_1	-0.020 (0.021)		-0.017 (0.021)	0.010 (0.029)
X_WHIP_t_1	-0.003 (0.019)		-0.004 (0.019)	0.003 (0.025)
X_Walks_2_t_1				0.001 (0.0005)
X_Walks_t_1				-0.010 (0.007)
X_Wins_t_1				0.017** (0.007)
X_Strike_outs_2_t_1		0.0003 (0.0002)		0.001*** (0.0002)
X_Strike_outs_t_1				-0.010* (0.005)
X_WAR_2_t_1		-0.008** (0.004)		-0.021*** (0.003)
Constant	0.251** (0.121)		0.261** (0.126)	

Note:

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

Seguiremos el proceso análogo de refinamiento para cada modelo

Lanzadores Iniciales: Comparación de los modelos - Primer refinamiento

Dependent variable:

Pooling Within Random effects First-Differences

	(1)	(2)	(3)	(4)
Edad_t	-0.008** (0.004)	-0.020* (0.012)	-0.009** (0.004)	-0.016*** (0.005)
Anios_de_contrato_t	-0.013* (0.007)	-0.017 (0.020)	-0.013* (0.007)	-0.057*** (0.012)
team_num_t	0.002 (0.001)	0.004 (0.002)	0.002 (0.001)	0.002 (0.001)
X_Control_2_t	-0.157** (0.071)		-0.148** (0.071)	
X_Control_t	0.091** (0.041)		0.084** (0.041)	
X_Bateos_2_t				0.0005** (0.0002)
X_Bateos_2_t_1				-0.0004*** (0.0001)
X_Bateos_t				0.020*** (0.002)
X_Carreras_ganadas_2_t				-0.001*** (0.0003)
X_Dominio_t_1	0.047*** (0.014)		0.043*** (0.014)	0.042*** (0.009)
X_Inning_pitched_2_t				-0.001*** (0.0001)
X_Inning_pitched_t				-0.001 (0.002)
X_Inning_pitched_t_1				0.001 (0.001)
X_Losses_2_t_1				-0.003*** (0.001)
X_ERA_t_1	-0.019*** (0.006)	-0.034*** (0.011)	-0.019*** (0.006)	-0.035*** (0.006)
X_Carreras_t				-0.023*** (0.003)
X_Comando_2_t_1				0.0004*** (0.0001)
X_Comando_t				0.047*** (0.006)
X_Comando_t_1				-0.046*** (0.006)
X_Control_2_t_1				-0.098*** (0.014)
X_Control_t_1				-0.047** (0.020)
X_Dominio_2_t				-0.152*** (0.012)
X_Dominio_t				0.136*** (0.021)
X_Dominio_2_t_1				-0.084*** (0.011)
X_ERA_t	-0.013** (0.006)		-0.012** (0.006)	-0.047*** (0.007)
X_Saves_2_t		-1.883*** (0.656)		-2.416*** (0.448)

X_Saves_2_t_1	-0.194** (0.090)	0.066*** (0.019)	-0.170** (0.083)	
X_Saves_t_1	0.374** (0.159)		0.332** (0.145)	
X_Saves_t		1.447*** (0.465)		1.745*** (0.294)
X_Strike_outs_2_t_1				0.001*** (0.0001)
X_Strike_outs_t				0.006*** (0.001)
X_Strike_outs_t_1				-0.006*** (0.002)
X_WAR_2_t_1		-0.008** (0.003)		-0.017*** (0.002)
X_WHIP_2_t				0.084*** (0.012)
X_Walks_2_t				0.001*** (0.0002)
X_Walks_t				0.007*** (0.002)
X_Wins_t_1				0.004 (0.003)
Constant	0.257** (0.123)		0.275** (0.132)	

=====

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

Lanzadores Iniciales: Comparación de los modelos - Segundo refinamiento

Dependent variable:				
	Pooling (1)	Within (2)	Random effects (3)	First-Differences (4)
Edad_t	-0.008** (0.004)	-0.020* (0.012)	-0.009** (0.004)	-0.016*** (0.004)
Anios_de_contrato_t	-0.013* (0.007)	-0.017 (0.020)	-0.013* (0.007)	-0.058*** (0.012)
team_num_t	0.002 (0.001)	0.004 (0.002)	0.002 (0.001)	0.002* (0.001)
X_Control_2_t	-0.157** (0.071)		-0.148** (0.071)	
X_Control_t	0.091** (0.041)		0.084** (0.041)	
X_Bateos_2_t				0.0005** (0.0002)
X_Bateos_2_t_1				-0.0004*** (0.0001)
X_Bateos_t				0.020*** (0.002)
X_Carreras_ganadas_2_t				-0.001*** (0.0003)

X_Dominio_t_1	0.047*** (0.014)		0.043*** (0.014)	0.042*** (0.009)
X_Inning_pitched_2_t				-0.001*** (0.0001)
X_Losses_2_t_1				-0.003*** (0.001)
X_ERA_t_1	-0.019*** (0.006)	-0.034*** (0.011)	-0.019*** (0.006)	-0.036*** (0.006)
X_Carreras_t				-0.023*** (0.003)
X_Comando_2_t_1				0.0004*** (0.0001)
X_Comando_t				0.048*** (0.006)
X_Comando_t_1				-0.046*** (0.006)
X_Control_2_t_1				-0.098*** (0.013)
X_Control_t_1				-0.053*** (0.012)
X_Dominio_2_t				-0.151*** (0.011)
X_Dominio_t				0.134*** (0.020)
X_Dominio_2_t_1				-0.084*** (0.011)
X_ERA_t	-0.013** (0.006)		-0.012** (0.006)	-0.046*** (0.007)
X_Saves_2_t		-1.883*** (0.656)		-2.435*** (0.439)
X_Saves_2_t_1	-0.194** (0.090)	0.066*** (0.019)	-0.170** (0.083)	
X_Saves_t_1	0.374** (0.159)		0.332** (0.145)	
X_Saves_t		1.447*** (0.465)		1.770*** (0.295)
X_Strike_outs_2_t_1				0.001*** (0.0001)
X_Strike_outs_t				0.005*** (0.001)
X_Strike_outs_t_1				-0.005*** (0.001)
X_WAR_2_t_1		-0.008** (0.003)		-0.017*** (0.002)
X_WHIP_2_t				0.081*** (0.012)
X_Walks_2_t				0.001*** (0.0002)
X_Walks_t				0.006*** (0.002)
Constant	0.257** (0.123)		0.275** (0.132)	

=====

=====

Note:

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

Aplicaremos un teest de Hausmann a cada pareja de modelos

\$pooling_vs_within

Hausman Test

```
data: formula
chisq = 4.2929, df = 5, p-value = 0.5081
alternative hypothesis: one model is inconsistent
```

\$pooling_vs_random

Hausman Test

```
data: formula
chisq = 4.8623, df = 10, p-value = 0.9002
alternative hypothesis: one model is inconsistent
```

\$pooling_vs_fd

Hausman Test

```
data: formula
chisq = 9.4283, df = 6, p-value = 0.1509
alternative hypothesis: one model is inconsistent
```

\$within_vs_random

Hausman Test

```
data: formula
chisq = 4.4388, df = 5, p-value = 0.4881
alternative hypothesis: one model is inconsistent
```

\$within_vs_fd

Hausman Test

```
data: formula
chisq = 101.17, df = 7, p-value < 2.2e-16
alternative hypothesis: one model is inconsistent
```

\$random_vs_fd

Hausman Test

```
data: formula
```

```
chisq = 9.501, df = 6, p-value = 0.1473  
alternative hypothesis: one model is inconsistent
```

Solo hay evidencia de un cambio estructural entre el estimador *within* y *fd*.