

Supplementary Information

For

“Duration, Score, and Timing: Factors Influencing the Success of Offensive Transitions
in Top, Marginal, and Emerging Football Leagues”

By

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Supplementary information with the results obtained in each of the observed leagues is presented below:

Table S1: Distribution of the types of goals per league

		Games Observed with Goals	Total Goals	Goals by NT + SP	Goals by OT + POS OUT	% Of goals By OT + POS OUT
Top Leagues	Germany	148	492	211	281	57,11 %
	Italy	177	540	257	283	52,41 %
	Spain	173	494	248	246	49,80 %
Totals		498	1526	716	810	
Marginal Leagues	Netherland	132	483	275	208	43,06 %
	Portugal	139	368	201	167	45,38 %
	Russia	110	293	174	119	40,61 %
Totals		381	1144	650	494	
Emerging Leagues	UAE	86	275	165	110	40,00 %
	Qatar	63	211	116	95	45,02 %
	Saudi	113	341	201	140	41,06 %
Totals		262	827	482	345	
Totals		702	3497	1848	1649	

Note: NT + SP – Goals where there is no offensive transition reported (direct or Positive outcome). Goals from Non-transitions and Set Pieces. OT + POS OUT – Goals obtained by Offensive transition and Positive Outcome.

Table S2. Distribution of relative frequencies from the studied variables across the nine leagues classified.

	Top Leagues % (n=810)			Marginal Leagues % (n=494)			Emerging Leagues % (n=345)		
Performance indicators	Germany (n = 281)	Italy (n = 283)	Spain (n = 246)	Netherland (n = 208)	Portugal (n = 167)	Russia (n = 119)	UAE (n = 110)	Qatar (n = 95)	Saudi (n = 140)
Variable Dependent - Duration of Transition									
“Fast” 0” to 8”	39,29 (n= 55)	24,21 (n= 23)	30,00 (n= 33)	30,29 (n= 63)	36,53 (n= 61)	20,17 (n= 24)	30,00 (n= 33)	24,21 (n= 23)	39,29 (n= 55)
“Medium” 9” to 12”	27,14 (n= 38)	44,00 (n= 38)	29,09 (n= 32)	26,44 (n= 55)	25,75 (n= 43)	34,45 (n= 41)	29,09 (n= 32)	40,00 (n= 38)	27,14 (n= 38)
“Slow” +13”	33,57 (n= 47)	35,79 (n= 34)	40,91 (n= 45)	43,27 (n= 90)	37,72 (n= 63)	45,38 (n= 54)	40,91 (n= 45)	35,79 (n= 34)	33,57 (n= 47)
Variable Independent - Time of the OT Goals									
0’ – 15’	13,52 (n= 38)	9,89 (n= 28)	13,41 (n= 33)	11,06 (n= 23)	10,18 (n= 17)	11,76 (n= 14)	7,27 (n= 8)	16,84 (n= 16)	15,71 (n= 22)
16’ – 30’	12,10 (n= 34)	17,31 (n= 49)	8,54 (n= 21)	15,87 (n= 33)	12,57 (n= 21)	13,45 (n= 16)	10,91 (n= 12)	13,68 (n= 13)	9,29 (n= 13)
31’ – 45’*	20,28 (n= 57)	16,96 (n= 48)	21,14 (n= 52)	18,75 (n= 39)	20,36 (n= 34)	17,65 (n= 21)	21,82 (n= 24)	20,00 (n= 19)	19,29 (n= 27)
45’ – 60’	14,59 (n= 41)	16,61 (n= 47)	11,38 (n= 28)	13,94 (n= 29)	14,37 (n= 24)	12,61 (n= 15)	10,91 (n= 12)	5,26 (n= 5)	10,00 (n= 14)
61’ – 75’	12,81 (n= 36)	18,37 (n= 52)	17,07 (n= 42)	15,38 (n= 32)	19,16 (n= 32)	18,49 (n= 22)	20,00 (n= 22)	20,00 (n= 19)	16,43 (n= 23)
76’ – 90’**	26,69 (n= 75)	20,85 (n= 59)	28,46 (n= 70)	25,00 (n= 52)	23,35 (n= 39)	26,05 (n= 31)	29,09 (n= 32)	24,21 (n= 23)	29,29 (n= 41)
Variable Independent - Score at the moment									
Tied	28,47 (n= 80)	34,63 (n= 98)	34,55 (n= 85)	28,85 (n= 60)	37,72 (n= 63)	34,45 (n= 41)	20,91 (n= 23)	33,68 (n= 32)	33,57 (n= 47)
Balanced	50,53 (n= 142)	44,88 (n= 127)	45,53 (n= 112)	43,27 (n= 90)	43,71 (n= 73)	47,06 (n= 56)	59,09 (n= 65)	52,63 (n= 50)	50,00 (n= 70)
Unbalanced	21,00 (n= 59)	20,49 (n= 58)	19,92 (n= 49)	27,88 (n= 58)	18,56 (n= 31)	18,49 (n= 22)	20,00 (n= 22)	13,68 (n= 13)	16,43 (n= 23)

Table S3: Distribution of OT Goals, per interval of the game and duration of the transition according with each league.

Time of the OT Goals	Leagues	Transition Duration			
		Fast 0'' – 8''	Medium 9'' – 12''	Slow +13''	
0' – 15'	Top Leagues	Germany	9	12	17
		Italy	11	9	8
		Spain	8	12	13
	Marginal Leagues	Netherlands	7	5	11
		Portugal	4	8	5
		Russia	6	4	4
	Emerging Leagues	UAE	5	0	3
		Qatar	9	3	4
		Saudi	8	8	6
16' – 30'	Top Leagues	Germany	10	10	14
		Italy	18	11	20
		Spain	7	8	6
	Marginal Leagues	Netherlands	11	10	12
		Portugal	6	7	8
		Russia	1	5	10
	Emerging Leagues	UAE	4	3	5
		Qatar	1	7	5
		Saudi	4	4	5
31' – 45'*	Top Leagues	Germany	20	16	21
		Italy	18	9	21
		Spain	18	15	19
	Marginal Leagues	Netherlands	13	8	18
		Portugal	12	8	14
		Russia	4	6	11
	Emerging Leagues	UAE	9	7	8
		Qatar	4	8	7
		Saudi	11	7	9
45' – 60'	Top Leagues	Germany	17	12	12
		Italy	11	14	22
		Spain	11	8	9
	Marginal Leagues	Netherlands	7	7	15
		Portugal	12	4	8
		Russia	2	4	9
	Emerging Leagues	UAE	6	1	5
		Qatar	1	3	1
		Saudi	7	2	5
61' – 75'	Top Leagues	Germany	13	11	12
		Italy	16	14	22
		Spain	13	12	17
	Marginal Leagues	Netherlands	8	12	12
		Portugal	13	8	11
		Russia	4	8	10
	Emerging Leagues	UAE	5	6	11
		Qatar	5	6	8
		Saudi	8	8	7
76' – 90'***	Top Leagues	Germany	15	31	29
		Italy	15	18	26
		Spain	21	17	32
	Marginal Leagues	Netherlands	17	13	22
		Portugal	14	8	17
		Russia	7	14	10
	Emerging Leagues	UAE	4	15	13
		Qatar	3	11	9
		Saudi	17	9	15

Table S4: Distribution of OT Goals, per interval of the game, duration of the transition according and score at the moment in each league

Time of the OT + POS OUT Goals	Leagues	Tied						
		Transition Duration			Balanced			
		Fast 0'' – 8''	Medium 9'' – 12''	Slow +13''	Fast 0'' – 8''	Medium 9'' – 12''	Slow +13''	
0' – 15'	Top Leagues	Germany	7	11	14	2	0	3
		Italy	11	9	8	0	0	0
		Spain	8	11	12	0	1	1
	Marginal Leagues	Netherlands	6	3	10	1	2	1
		Portugal	4	7	3	0	1	2
		Russia	5	4	4	0	0	0
	Emerging Leagues	UAE	4	0	3	1	0	0
		Qatar	8	3	3	1	0	1
		Saudi	6	8	5	2	0	1
15' – 30'	Top Leagues	Germany	5	4	10	4	4	4
		Italy	13	8	10	4	3	10
		Spain	3	5	3	1	2	2
	Marginal Leagues	Netherlands	5	7	7	5	3	4
		Portugal	3	5	4	3	2	3
		Russia	1	4	8	0	1	2
	Emerging Leagues	UAE	2	1	2	2	2	3
		Qatar	0	5	1	1	2	4
		Saudi	2	3	2	2	1	3
30' – 45'*	Top Leagues	Germany	6	3	6	11	10	12
		Italy	8	4	5	7	5	10
		Spain	6	7	7	10	6	9
	Marginal Leagues	Netherlands	3	2	7	7	4	7
		Portugal	5	3	8	7	3	3
		Russia	1	2	4	2	4	6
	Emerging Leagues	UAE	4	2	1	2	5	6
		Qatar	1	2	2	2	5	5
		Saudi	3	3	4	6	3	4
45' – 60'	Top Leagues	Germany	2	2	4	13	7	6
		Italy	5	3	3	5	8	11
		Spain	2	3	4	8	3	5
	Marginal Leagues	Netherlands	1	1	3	4	2	6
		Portugal	7	1	3	3	2	5
		Russia	0	1	3	2	3	4
	Emerging Leagues	UAE	1	0	1	4	1	3
		Qatar	0	1	1	0	1	0
		Saudi	2	1	1	3	0	3
60' – 75'	Top Leagues	Germany	1	1	1	8	7	5
		Italy	2	1	2	8	7	14
		Spain	4	4	2	7	4	8
	Marginal Leagues	Netherlands	0	2	1	6	6	6
		Portugal	0	1	2	8	3	5
		Russia	1	0	0	3	5	7
	Emerging Leagues	UAE	0	0	2	2	4	8
		Qatar	1	3	1	3	3	5
		Saudi	0	2	1	7	4	4
75' – 90'***	Top Leagues	Germany	1	1	1	11	20	15
		Italy	3	0	3	8	10	17
		Spain	0	2	2	17	12	16
	Marginal Leagues	Netherlands	0	1	1	8	8	10
		Portugal	2	0	5	9	7	7
		Russia	0	2	1	6	6	5
	Emerging Leagues	UAE	0	0	0	2	11	9
		Qatar	0	0	0	2	9	6
		Saudi	1	1	2	11	6	10

Table S4: Multinomial logistic regression of the variables “Duration of the Transitions”, “Time of the OT Goals” and “Score at the moment” in the Germany league

Duration of the Transitions vs Time of the OT Goals vs Score at the moment – Germany			
Multinomial logistic regression			
Performance indicators		p	OR (95% CI)
Duration of the Transitions	Time of the OT Goals		
Medium 9’’ to 12’’ – Fast 0’’ to 8’’	76’ – 90’’* - 31’ – 45’’*	0.039	2.58 (1.05- 6.36)
Medium 9’’ to 12’’ – Fast 0’’ to 8’’	76’ – 90’’* - 45’ – 60’	0.029	2.93 (1.12- 7.66)
Fast 0’’ to 8’’ - Slow +13’’	45’ – 60’ - 76’ – 90’’*	0.041	2.74 (1.04- 7.20)

Note: *p*: *p* value; OR: Odd ratios; 95% CI: confidence intervals (95%);

Table S5: Multinomial logistic regression of the variables “Duration of the Transitions”, “Time of the OT Goals” and “Score at the moment” in the Italian league

Duration of the Transitions vs Time of the OT + POS OUT Goals vs Score at the moment – Italian			
Multinomial logistic regression			
Performance indicators		p	OR (95% CI)
Duration of the Transitions	Score at the moment		
Slow +13’’ – Fast 0’’ to 8’’	Balanced - Tied	0.003	2.63 (1.40 – 4.93)
Slow +13’’ – Fast 0’’ to 8’’	Unbalanced – Tied	0.03	2.35 (1.07 – 5.16)

Note: *p*: *p* value; OR: Odd ratios; 95% CI: confidence intervals (95%);

Table S6: Multinomial logistic regression of the variables “Duration of the Transitions”, “Time of the OT Goals” and “Score at the moment” in the Spanish league

Duration of the Transitions vs Time of the OT Goals vs Score at the moment – Germany			
Multinomial logistic regression			
Performance indicators		p	OR (95% CI)
Duration of the Transitions	Score at the moment		
Medium 9’’ to 12’’ – Fast 0’’ to 8’’	Tied - Balanced	0.04	2.14 (1.04 – 4.37)

Note: *p*: *p* value; OR: Odd ratios; 95% CI: confidence intervals (95%);

Netherlands league on the Multinomial logistic regression of the analyses of the variables “Duration of the Transitions”, “Time of the OT Goals” and “Score at the moment” does not show any associations.

Table S7: Multinomial logistic regression of the variables “Duration of the Transitions”, “Time of the OT Goals” and “Score at the moment” in the Portuguese league

Duration of the Transitions vs Time of the OT Goals vs Score at the moment – Germany			
Multinomial logistic regression			
Performance indicators		p	OR (95% CI)
Duration of the Transitions	Time of the OT Goals		
Medium 9'' to 12'' – Fast 0'' to 8''	0' – 15' - 45' – 60'	0.033	6.00 (1.15- 31.23)

Note: *p*: *p* value; OR: Odd ratios; 95% CI: confidence intervals (95%);

Table S8: Multinomial logistic regression of the variables “Duration of the Transitions”, “Time of the OT Goals” and “Score at the moment” in the Russia league

Duration of the Transitions vs Time of the OT Goals vs Score at the moment – Germany			
Multinomial logistic regression			
Performance indicators		p	OR (95% CI)
Duration of the Transitions	Time of the OT + POS OUT Goals		
Slow +13'' – Fast 0'' to 8''	15' – 30' - 0' – 15'*	0.028	15.00 (1.34- 167.67)

Note: *p*: *p* value; OR: Odd ratios; 95% CI: confidence intervals (95%);

Table S9: Multinomial logistic regression of the variables “Duration of the Transitions”, “Time of the OT Goals” and “Score at the moment” in the UAE league

Duration of the Transitions vs Time of the OT Goals vs Score at the moment – UAE			
Multinomial logistic regression			
Performance indicators		p	OR (95% CI)
Duration of the Transitions	Time of the OT Goals		
Medium 9'' to 12'' – Fast 0'' to 8''	76' – 90'*** - 31' – 45'*	0.037	4.82 (1.10- 21.19)
Medium 9'' to 12'' – Fast 0'' to 8''	76' – 90'*** - 45' – 60'	0.011	22.52 (2.07- 245.20)
Duration of the Transitions	Score at the moment		
Medium 9'' to 12'' – Fast 0'' to 8''	Balanced - Tied	0.011	6.49 (1.53 – 27.56)

Note: *p*: *p* value; OR: Odd ratios; 95% CI: confidence intervals (95%);

Table S10: Multinomial logistic regression of the variables “Duration of the Transitions”, “Time of the OT Goals” and “Score at the moment” in the Qatar league

Duration of the Transitions vs Time of the OT Goals vs Score at the moment – Qatar			
Multinomial logistic regression			
Performance indicators		p	OR (95% CI)
Duration of the Transitions	Time of the OT Goals		
Medium 9'' to 12'' – Fast 0'' to 8''	15' – 30' - 0' – 15'	0.016	21.00 (1.78- 248.09)
Medium 9'' to 12'' – Fast 0'' to 8''	31' – 45''** - 0' – 15'	0.048	6.00 (1.02- 35.37)
Medium 9'' to 12'' – Fast 0'' to 8''	76' – 90''** - 0' – 15'	0.010	11.00 (1.77- 68.35)
Slow +13'' - Fast 0'' to 8''	76' – 90''** - 0' – 15'	0.033	2.75 (1.16- 39.20)

Note: *p*: *p* value; OR: Odd ratios; 95% CI: confidence intervals (95%);

Table S11: Multinomial logistic regression of the variables “Duration of the Transitions”, “Time of the OT Goals” and “Score at the moment” in the Saudi league

Duration of the Transitions vs Time of the OT Goals vs Score at the moment – Saudi			
Multinomial logistic regression			
Performance indicators		p	OR (95% CI)
Duration of the Transitions	Score at the moment		
Medium 9'' to 12'' – Fast 0'' to 8''	Tied - Balanced	0.029	2.85 (1.11 – 7.30)
Slow +13'' – Fast 0'' to 8''	Unbalanced – Tied	0.03	2.35 (1.07 – 5.16)

Note: *p*: *p* value; OR: Odd ratios; 95% CI: confidence intervals (95%);