

Predictions Euro 2016

10 giugno 2016

1 Predictions

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Group A

Scores:

Francia 2-1 Romania
Albania 0-1 Svizzera
Romania 1-1 Svizzera
Francia 1-0 Albania
Svizzera 1-1 Francia
Romania 1-1 Albania

Rank

	punti	Gf	Gs
Francia	7	4	2
Svizzera	5	3	2
Romania	2	3	4
Albania	1	1	3

Group B

Scores:

Inghilterra 2-1 Russia
Galles 0-1 Slovacchia
Russia 1-2 Slovacchia
Inghilterra 1-0 Galles
Russia 0-0 Galles
Slovacchia 1-1 Inghilterra

Rank

	punti	Gf	Gs
Inghilterra	7	4	2
Slovacchia	7	4	2
Russia	1	2	4
Galles	1	0	2

¹In **black** the qualified teams

Group C

Scores:

Polonia 3-1 IrlandaNord
Germania 1-1 Ucraina
Ucraina 1-0 IrlandaNord
Germania 1-2 Polonia
Ucraina 1-3 Polonia
IrlandaNord 0-1 Germania

Rank

	punti	Gf	Gs
Polonia	9	8	3
Germania	4	3	3
Ucraina	4	3	4
IrlandaNord	0	1	5

Group D

Scores:

Turchia 1-1 Croazia
Spagna 1-0 RepubblicaCeca
RepubblicaCeca 1-1 Croazia
Spagna 1-1 Turchia
RepubblicaCeca 1-1 Turchia
Croazia 1-1 Spagna

Rank

	punti	Gf	Gs
Spagna	5	3	2
Croazia	3	3	3
Turchia	3	3	3
RepubblicaCeca	2	2	3

Group E

Scores:

Irlanda 1-0 Svezia
Belgio 2-1 Italia
Italia 1-0 Svezia
Belgio 1-1 Irlanda
Italia 0-1 Irlanda
Svezia 1-2 Belgio

Rank

	punti	Gf	Gs
Belgio	7	5	3
Irlanda	7	3	1
Italia	3	2	3
Svezia	0	1	4

Group F

Scores:

Austria 2-1 Ungheria
Portogallo 1-1 Islanda
Islanda 1-0 Ungheria
Portogallo 1-1 Austria
Islanda 1-2 Austria
Ungheria 0-1 Portogallo

Rank

	punti	Gf	Gs
Austria	7	5	3
Portogallo	5	3	2
Islanda	4	3	3
Ungheria	0	1	4

Round of 16

Svizzera 1-1 **Germania** (dtr)
Spagna 1-0 Italia
Inghilterra 1-1 Turchia dtr
Austria 1-1 Irlanda (dtr)
Polonia 3-1 Islanda
Belgio 2-1 Croazia
Francia 1-1 Ucraina (dtr)
Slovacchia 1-1 Portogallo (dtr)

Quarter Finals

Germania 1-1 Spagna (dtr)
Inghilterra 2-2 Austria (dtr)
Polonia 1-1 **Belgio** (dtr)
Francia 1-1 Slovacchia (dtr)

Semi finals

Germania 1-2 **Inghilterra**
Francia 1-1 **Belgio** (dtr)

Final

Inghilterra 1-1 Belgio (dtr)

2 Appendix - The model and the data

Let be $m = 1, \dots, M$ the number of matches, y_{m1} the number of goals scored by the team 1 in match m , y_{m2} the number of goals scored by the team 2 in match m , T the number of teams, the model specification is:

$$y_{m1} \sim \text{Poisson}(\theta_{m1})$$
$$y_{m2} \sim \text{Poisson}(\theta_{m2})$$

with the following specification for θ 's parameters:

$$\begin{aligned}\log(\theta_{m1}) &= att_{m1} + def_{m2} \\ \log(\theta_{m2}) &= att_{m2} + def_{m1}\end{aligned}$$

and group-level specification for random effects parameters:

$$\begin{aligned}att_m &\sim N(\mu_{att} + b * RankingAtt + c * RankingUefa, \sigma_{att}^2) \\ def_m &\sim N(\mu_{def} - d * RankingDef - c * RankingUefa, \sigma_{def}^2)\end{aligned}$$

with priors:

$$\begin{aligned}\mu_{att}, \mu_{def} &\sim N(0, 10) \\ \sigma_{att}, \sigma_{def} &\sim Cauchy^+(0, 2.5) \\ b, c, d &\sim Uniform(-10, 10)\end{aligned}$$

Data details: M=88, T=24. For estimating the model, I used all the 88 matches played by the 24 teams of Euro 2016 one against each other in the time period September 2014-June 2016.

In Figures 1 and 2, the 95 % posterior intervals for attack quality and defense quality parameters of the teams estimated by the model are plotted. Predictions and estimation are done with STAN.

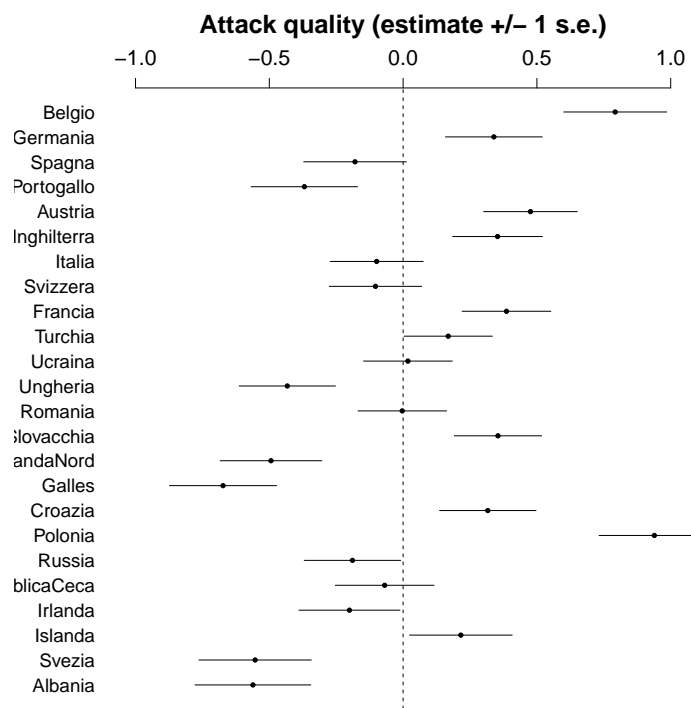


Figura 1: Attack bars for the teams. Values greater than 0 suggest a good attack performance

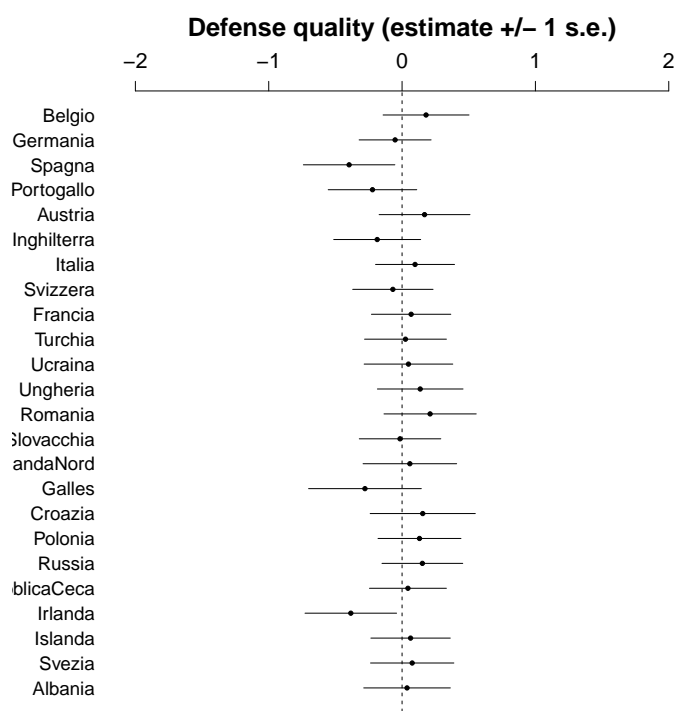


Figura 2: Defense bars for the teams. Values **lower** than 0 suggest a good defense performance.