



optapro

Counting across borders

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#OptaProForum

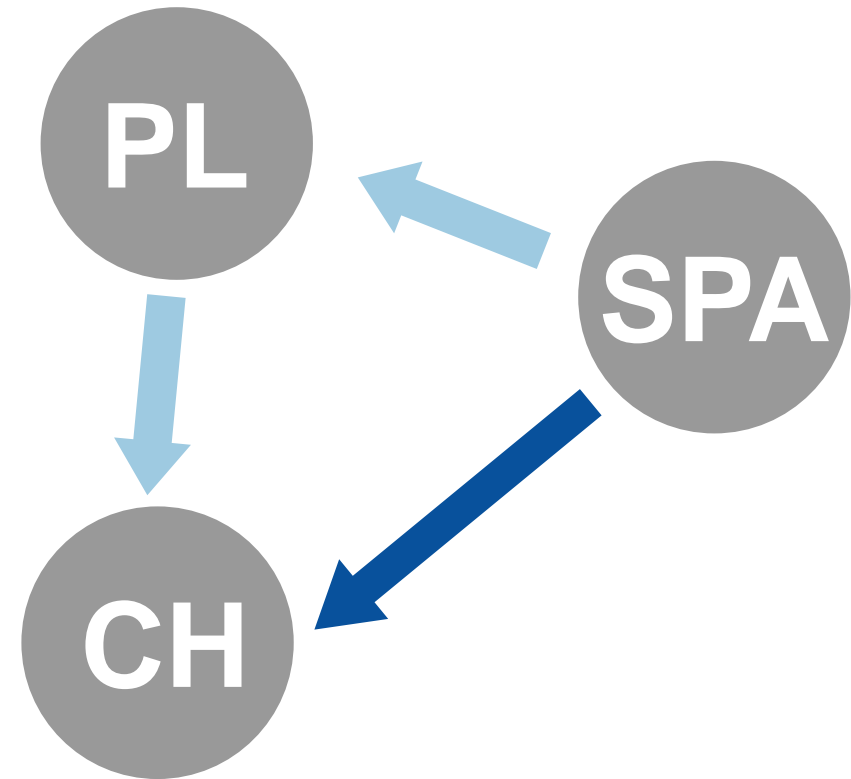
How do we reduce transfer risk?

Make comparisons fair again

Can we make adjustments to put players
onto the same scale?

Expanding the sample size

We can infer league effect both from **direct** and **indirect** transfers.



Rate = Player rate × Age × League

- Rate = Expected # of goals/shots/... per 90

$$\text{Rate} = \text{Player rate} \times \text{Age} \times \text{League}$$

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- League = Effect of league on performance

The maths slide (example)

$$\text{Rate} = \text{Player rate} \times \text{Age} \times \text{League}$$

- Rate = ?
- Player = Aubameyang
- Age = 28
- League = Premier League

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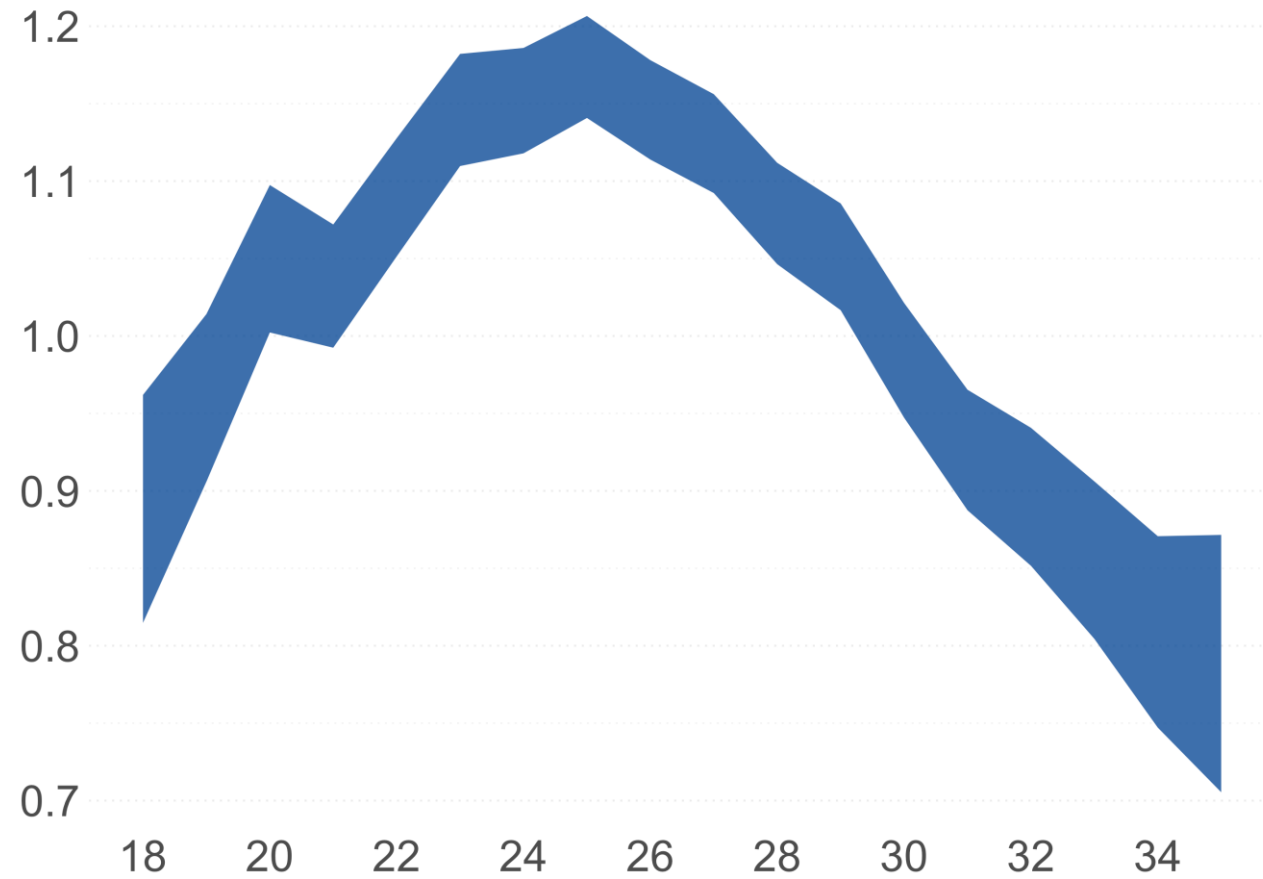
- **Rate** = $0.42 \times 1.08 \times 0.89 \rightarrow$ **0.40**
Gp90
- **Player** = Aubameyang \rightarrow 0.42
- **Age** = 28
 \rightarrow 1.08
- **League** = Premier League \rightarrow 0.89

Goals

- Player goal and minutes totals per season
- 2006/07 to 2015/16 (inclusive)
- Premier League, Bundesliga, La Liga, Portuguese Liga, Serie A, Ligue Un

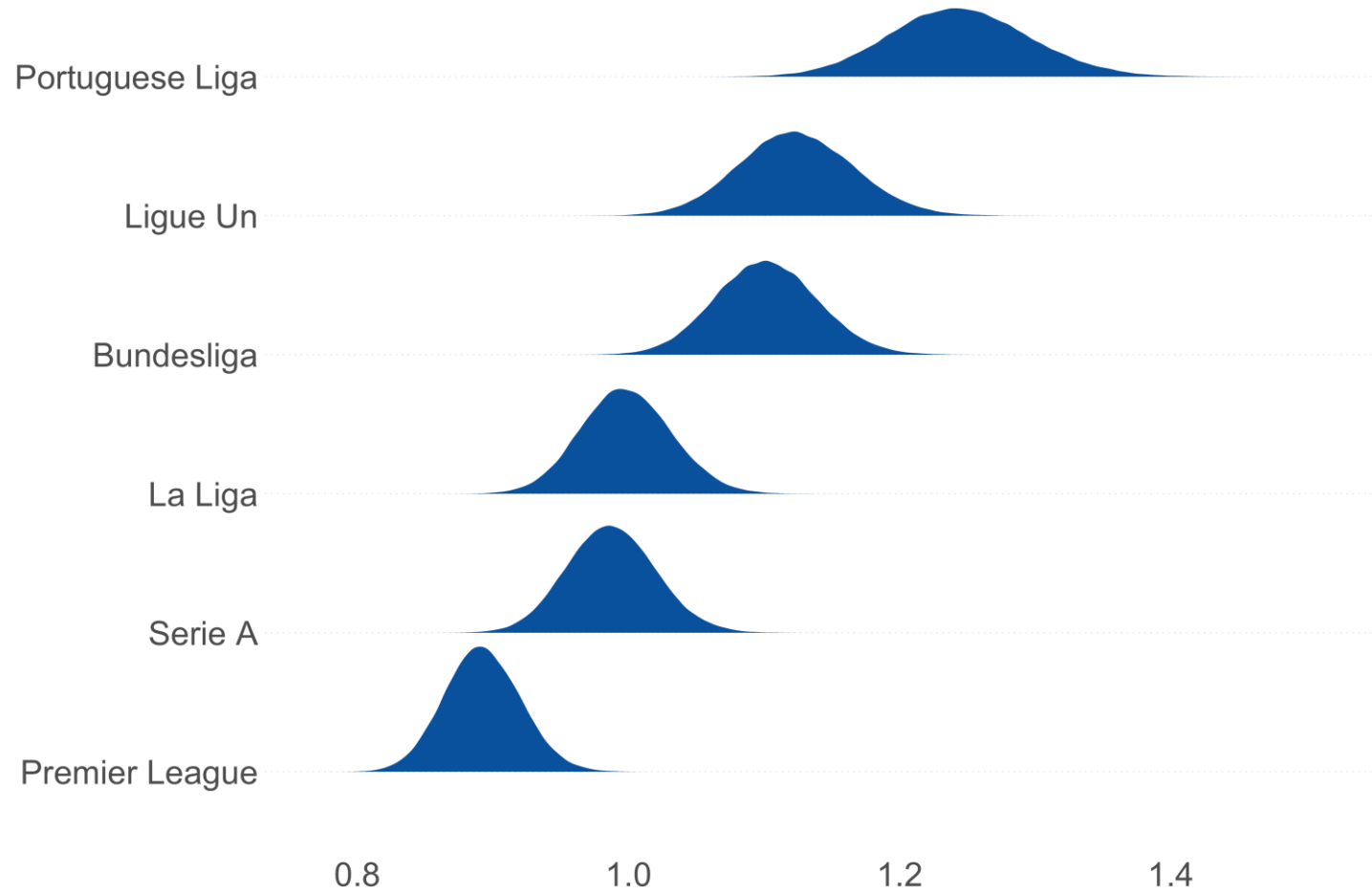
Goals

Relative goalscoring rate
by age



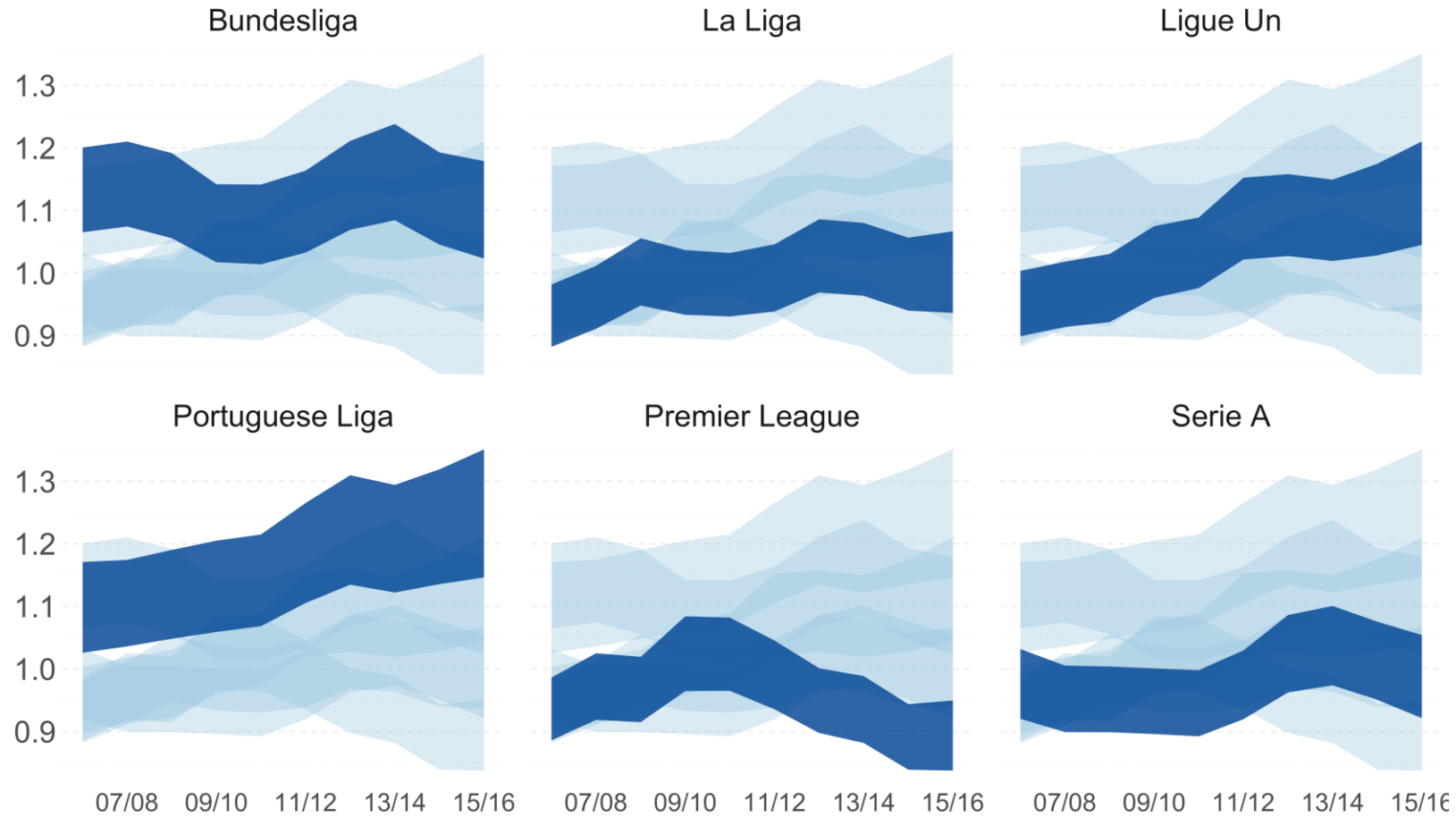
Goals

Relative goalscoring rate
2015/16

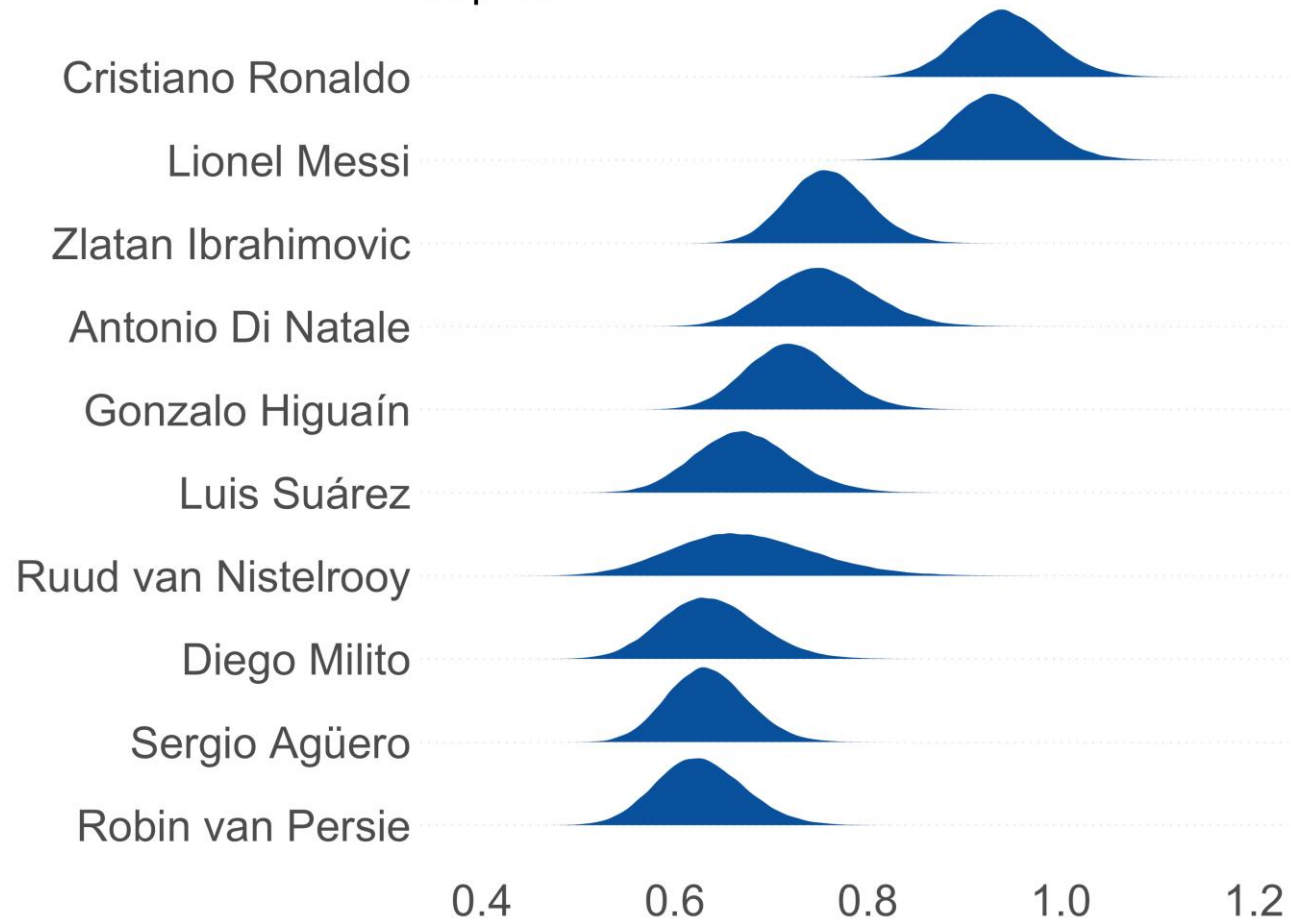


Goals

Relative goalscoring rate By competition



Player goalscoring estimates Top 10

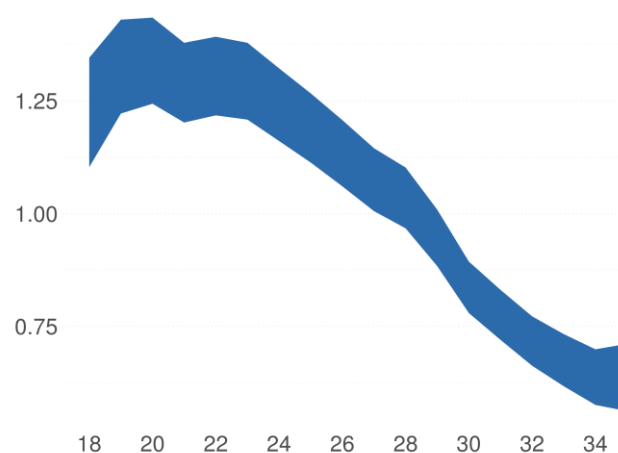


Opta stats

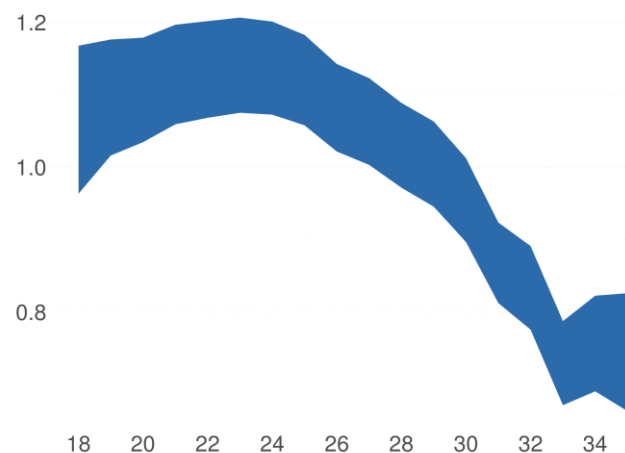
- F9 (total events and minutes per player per game)
- 2013/14 to 2016/17 (inclusive)
-
- Shots, shot assists, take-ons, and final third passes
- Premier League, La Liga, Eredivisie, and Championship

Opta stats

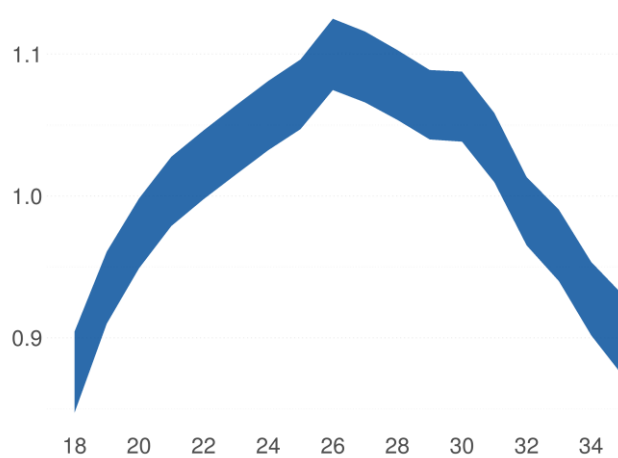
Shots (open play)
by age



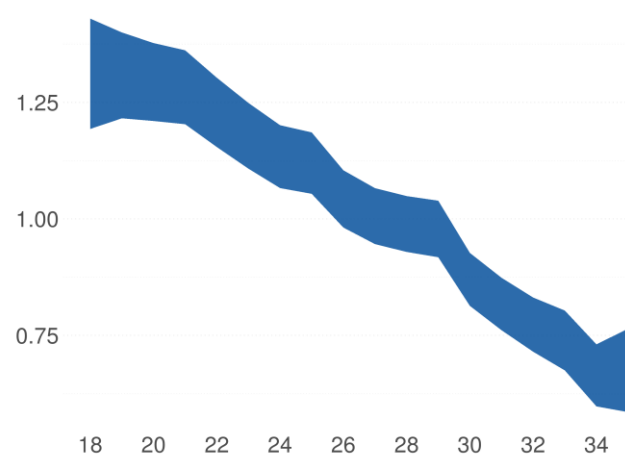
Shot assists (open play)
by age

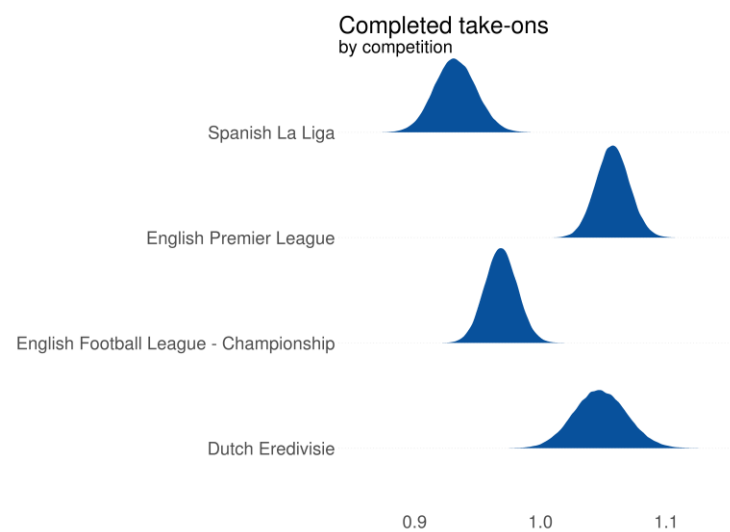
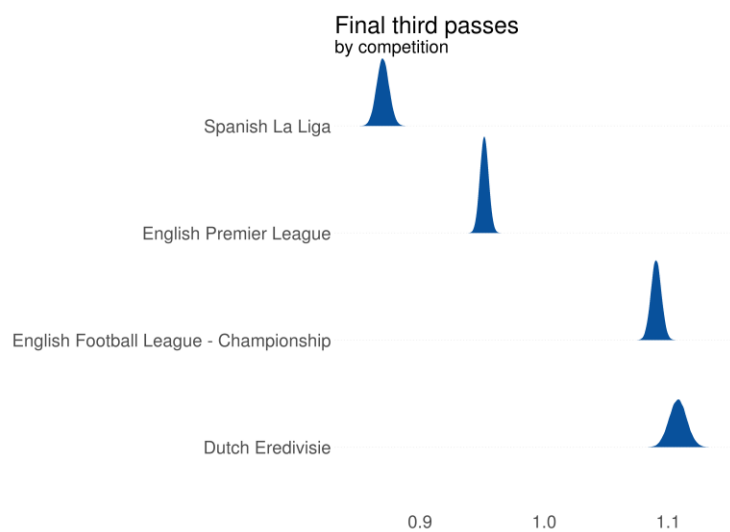
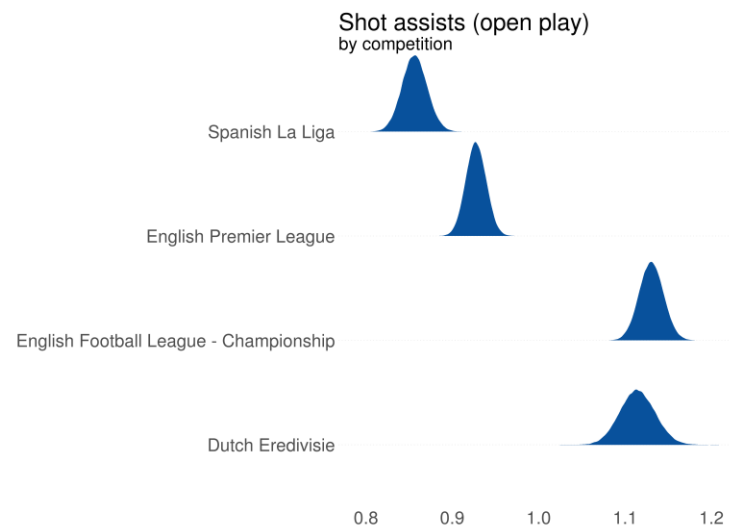
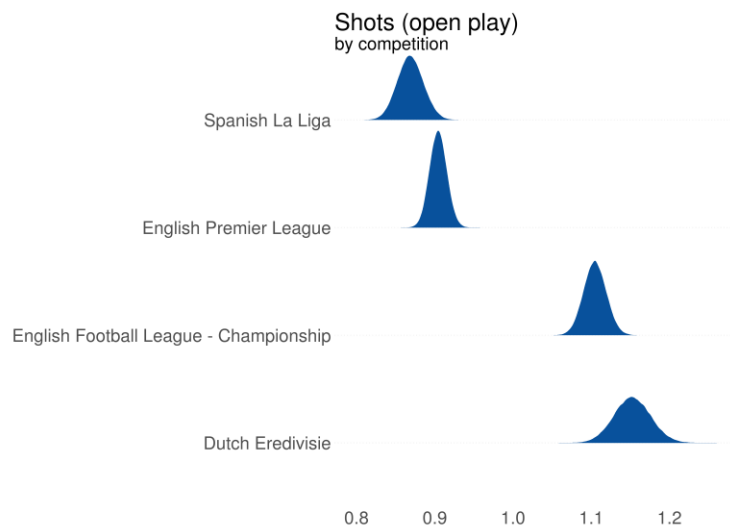


Final third passes
by age

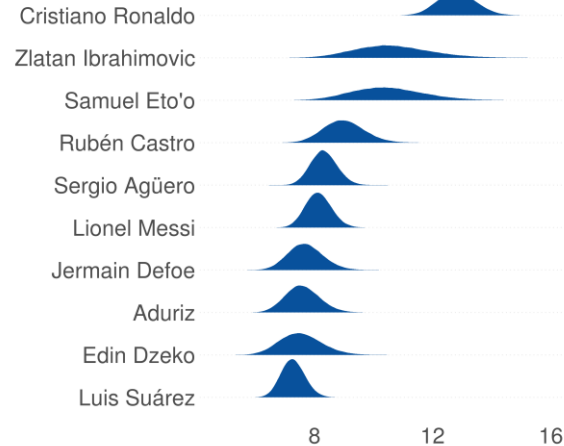


Completed take-ons
by age

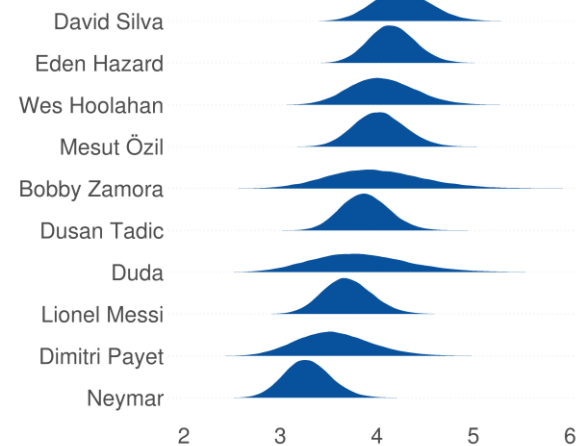




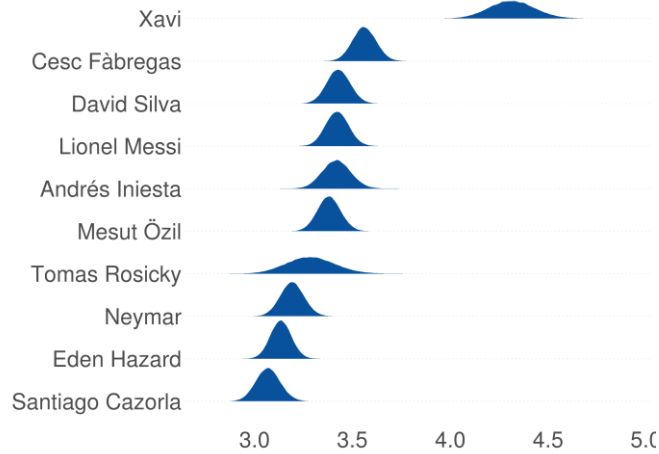
Shots (open play)
Top 10



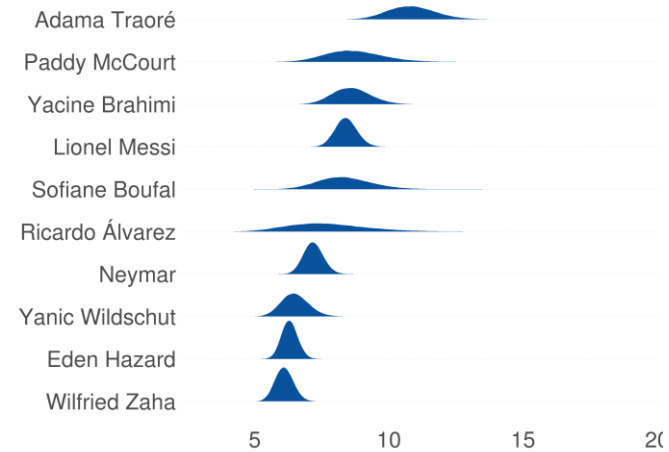
Shot assists (open play)
Top 10



Final third passes
Top 10



Completed take-ons
Top 10



Extending and improving the model

- Personalise age curves
- Account for in-game effects (time, scoreline, ...)
- Adjust for team and manager styles

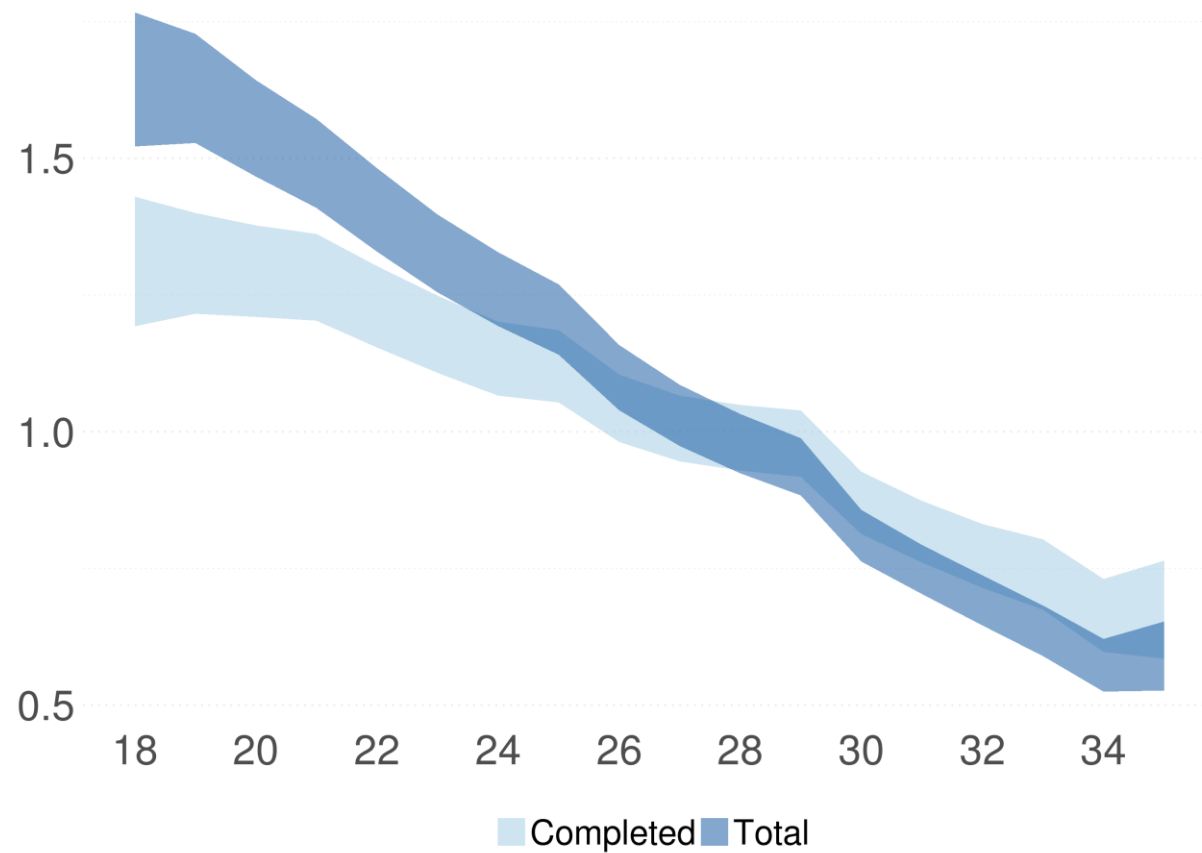


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Thank you for listening
Questions
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Appendix 1: ratios

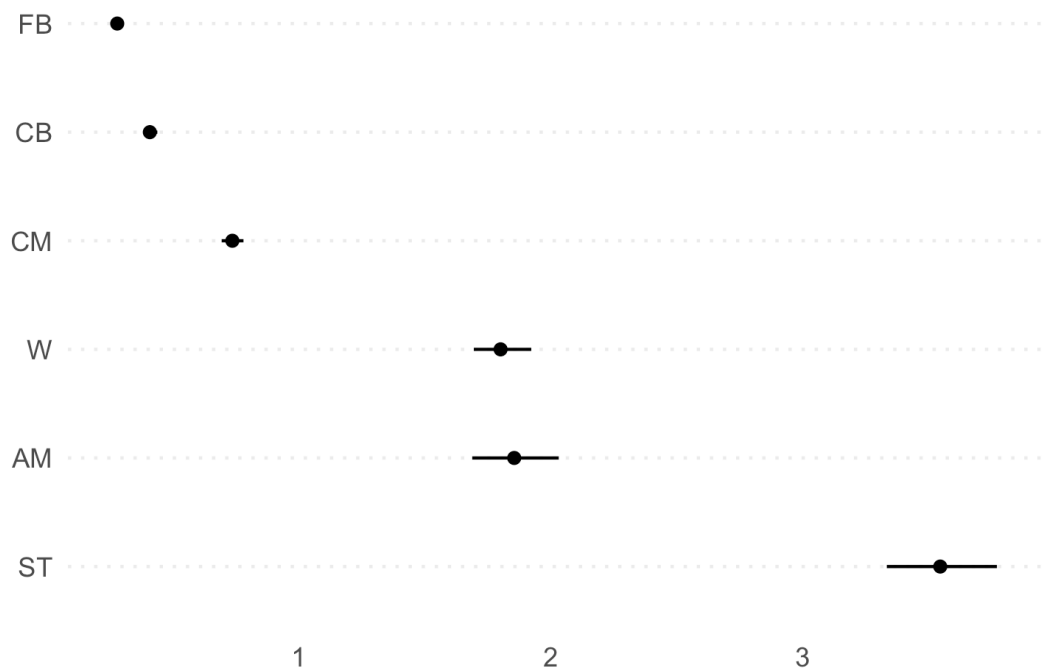
Take-ons
by age



Appendix 2: positions

Relative goalscoring rate

By position



Player goalscoring estimates

Top 15 (2012 to 2016)

