Next 30 Matches (Implied) Probabilities NHR

Friday, December 26, 2014

Reading Data from http://www.betfair.com/exchange/football/competition?id=31

```
library(XML);
library(xtable);
matches_URL <- "http://www.betfair.com/exchange/football/competition?id=31"

# For some reason, Betfair has changed its design recently.
# It's not a table anymore
# matches_Table <- readHTMLTable(matches_URL)

# ReadLine and Parse the HTML page.
matches_html <- readLines(matches_URL)
matches_parse <- htmlTreeParse(matches_html, useInternal=TRUE)</pre>
```

Cleaning Data:

```
# Extract the relevant bits.
data_odds <- xpathSApply(matches_parse, "//span[@class = 'price']", xmlValue)

data_home <- xpathSApply(matches_parse, "//span[@class = 'home-team']", xmlValue)

data_away <- xpathSApply(matches_parse, "//span[@class = 'away-team']", xmlValue)

# Otherwise team names would be interpreted as factors.
options(stringsAsFactors = FALSE)

# Clean odds and make them numeric
data_odds <- data.frame(matrix(data_odds[1:180], ncol = 6, byrow = TRUE))
data_odds <- data.frame(apply(data_odds, 2, as.numeric))

# Matches data.frame
all_matches <- cbind("Home" = data_home, data_away, data_odds)
colnames(all_matches) <- c("Home", "Away", "H_B", "H_L", "D_B", "D_L", "A_B", "A_L")</pre>
```

Creating probabilities data.frame with a rough normalisation method. The results are reported with 0 decimal points.

```
# Output data.frame

H <- round((100/all_matches[,3]+ 100/all_matches[,4])/rowSums(1/all_matches[,3:8]), digits = 0)
D <- round((100/all_matches[,5]+ 100/all_matches[,6])/rowSums(1/all_matches[,3:8]), digits = 0)
A <- round((100/all_matches[,7]+ 100/all_matches[,8])/rowSums(1/all_matches[,3:8]), digits = 0)

output <- data.frame(cbind("Home" = all_matches[,1], H, D, A, "Away" = all_matches[,2]))

print(xtable(output), comment=F)</pre>
```

	Home	Н	D	A	Away
1	Chelsea	75	17	8	West Ham
2	Burnley	18	25	57	Liverpool
3	C Palace	25	29	46	Southampton
4	Everton	53	27	20	Stoke
5	Leicester	28	28	43	Tottenham
6	Man Utd	71	19	10	Newcastle
7	Sunderland	48	30	22	Hull
8	Swansea	56	26	18	Aston Villa
9	West Brom	15	23	62	Man City
10	Arsenal	77	16	7	QPR
11	Tottenham	30	28	42	Man Utd
12	Southampton	20	26	54	Chelsea
13	Aston Villa	41	29	29	Sunderland
14	Hull	43	29	28	Leicester
15	Man City	83	12	5	Burnley
16	QPR	41	28	31	C Palace
17	Stoke	50	28	22	West Brom
18	West Ham	27	27	46	Arsenal
19	Newcastle	34	29	37	Everton
20	Liverpool	58	24	17	Swansea
21	Stoke	23	24	53	Man Utd
22	Aston Villa	44	27	29	C Palace
23	Hull	27	29	44	Everton
24	Liverpool	70	18	13	Leicester
25	Man City	77	14	9	Sunderland
26	Newcastle	58	23	19	Burnley
27	QPR	34	29	37	Swansea
28	Southampton	34	26	39	Arsenal
29	West Ham	55	25	20	West Brom
30	Tottenham	26	28	46	Chelsea