

PL Fixtures - (Betfair) Odds & (Implied) Probabilities

Skip to pages 3 and 4 to see the results.

```
library(XML);
library(xtable);
library(knitr);
```

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

```
matches_URL <- "https://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.

# download.file(matches_URL, "aa.html")
matches_html <- readLines("aa.html")

# matches_html <- readLines(matches_URL)

matches_parse <- htmlTreeParse(matches_html,useInternal=TRUE)
```

Cleaning Data:

```
# Extract the relevant bits.
data_odds_back <- xpathSApply(matches_parse,
                               "//*[button[@class = 'bet-button back cta cta-back i13n-ltxt-FltBetSlpB i13n-SlpB i13n-SlpL i13n-SlpR]]",
                               xmlValue)

data_odds_lay <- xpathSApply(matches_parse,
                              "//*[button[@class = 'bet-button lay cta cta-lay i13n-ltxt-FltBetSlpL i13n-SlpB i13n-SlpR]]",
                              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)

# make "odds" numeric

data_back <- data.frame(
  apply(
    matrix(data_odds_back, ncol = 3, byrow = TRUE),
    2, as.numeric))
```

```

data_lay <- data.frame(
  apply(
    matrix(data_odds_lay, ncol = 3, byrow = TRUE)
    , 2, as.numeric))

# Matches data.frame
all_matches <- cbind(data_home, data_away, data_back, data_lay)
colnames(all_matches) <-
  c("Home", "Away", "H_B", "D_B", "A_B", "H_L", "D_L", "A_L")

```

Creating probabilities data.frame (a rough estimate + normalisation). The results are reported with 0 decimal points.

```

# Output data.frames

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

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

odds_output <- data.frame(cbind(
  "Home" = all_matches[,1],
  H = paste(all_matches[,3], all_matches[,6], sep = "/"),
  D = paste(all_matches[,4], all_matches[,7], sep = "/"),
  A = paste(all_matches[,5], all_matches[,8], sep = "/"),
  "Away" = all_matches[,2])
)

odds_output <- odds_output[1:10, ]

prob_output <- prob_output[1:10, ]

prob_output <-
  prob_output[order(apply(prob_output[,2:4],1, max)),]

```

Home	H	D	A	Away
West Brom	41	31	29	Stoke
Sunderland	42	30	28	Aston Villa
Leicester	44	30	26	Hull
Swansea	24	28	49	Liverpool
Man Utd	51	26	23	Tottenham
C Palace	54	26	20	QPR
Everton	54	26	20	Newcastle
Chelsea	61	24	15	Southampton
Burnley	13	21	67	Man City
Arsenal	70	19	11	West Ham

Table 1: Coming Fixtures (Implied) Probabilities

	Home	H	D	A	Away
1	C Palace	1.84/1.85	3.75/3.85	5/5.1	QPR
2	Arsenal	1.41/1.42	5.3/5.4	9/9.2	West Ham
3	Leicester	2.26/2.28	3.35/3.4	3.8/3.85	Hull
4	Sunderland	2.38/2.42	3.3/3.35	3.5/3.55	Aston Villa
5	West Brom	2.46/2.48	3.25/3.3	3.45/3.5	Stoke
6	Burnley	7.6/8	4.8/4.9	1.49/1.5	Man City
7	Chelsea	1.62/1.65	4.1/4.2	6.8/7	Southampton
8	Everton	1.85/1.86	3.75/3.8	5/5.1	Newcastle
9	Man Utd	1.95/1.96	3.8/3.85	4.3/4.5	Tottenham
10	Swansea	4.2/4.3	3.55/3.65	2.04/2.06	Liverpool

Table 2: Coming Fixtures Odds