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 <- "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)
```

Cleaning Data:

```
# Extract the relevant bits.
data_odds_back <- xpathSApply(matches_parse,
                              "//button[@class = 'bet-button back cta cta-back i13n-ltxt-FltBetSlpB i13
                              , xmlValue)

data_odds_lay <- xpathSApply(matches_parse,
                             "//button[@class = 'bet-button lay cta cta-lay i13n-ltxt-FltBetSlpL i13n-Sp
                             , 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(cbind(
    "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])
    )
```

	Home	H	D	A	Away
1	Stoke	24	27	49	Man Utd
2	Aston Villa	41	30	29	C Palace
3	Hull	29	29	42	Everton
4	Liverpool	70	19	11	Leicester
5	Man City	80	14	6	Sunderland
6	Newcastle	56	26	19	Burnley
7	QPR	32	29	39	Swansea
8	Southampton	33	28	38	Arsenal
9	West Ham	54	26	20	West Brom
10	Tottenham	19	25	55	Chelsea
11	Sunderland	22	25	53	Liverpool
12	Burnley	41	29	31	QPR
13	Chelsea	80	13	7	Newcastle
14	Everton	19	26	54	Man City
15	Leicester	40	29	31	Aston Villa
16	Swansea	44	27	29	West Ham
17	West Brom	47	29	24	Hull
18	C Palace	27	28	46	Tottenham
19	Arsenal	71	18	11	Stoke
20	Man Utd	58	24	18	Southampton

Table 1: Coming Fixtures Odds

	Home	H	D	A	Away
1	Stoke	4.2/4.3	3.6/3.7	2.04/2.06	Man Utd
2	Aston Villa	2.46/2.48	3.3/3.4	3.35/3.45	C Palace
3	Hull	3.4/3.5	3.45/3.5	2.36/2.4	Everton
4	Liverpool	1.42/1.44	5.1/5.2	9.2/9.4	Leicester
5	Man City	1.25/1.26	7/7.2	17/17.5	Sunderland
6	Newcastle	1.8/1.81	3.9/3.95	5.3/5.4	Burnley
7	QPR	3.1/3.15	3.4/3.45	2.58/2.62	Swansea
8	Southampton	2.98/3.05	3.5/3.55	2.6/2.64	Arsenal
9	West Ham	1.86/1.87	3.8/3.85	4.9/5	West Brom
10	Tottenham	5.1/5.2	3.9/3.95	1.81/1.82	Chelsea
11	Sunderland	4.2/5.1	3.6/4.3	1.83/1.91	Liverpool
12	Burnley	2.32/2.58	3.35/3.6	3.05/3.5	QPR
13	Chelsea	1.22/1.28	6.4/9.2	11.5/23	Newcastle
14	Everton	4.8/5.7	3.5/4.2	1.79/1.93	Man City
15	Leicester	2.42/2.6	3.35/3.65	3/3.4	Aston Villa
16	Swansea	2.2/2.4	3.4/4.2	3.3/3.75	West Ham
17	West Brom	2.08/2.18	3.35/3.6	3.95/4.5	Hull
18	C Palace	3.4/4.4	3.4/4.1	2.1/2.42	Tottenham
19	Arsenal	1.38/1.45	4.5/7.6	7.6/11	Stoke
20	Man Utd	1.69/1.75	3.95/4.5	5/6.6	Southampton

Table 2: Coming Fixtures (Implied) Probabilities