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))
```

```r
# 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.

```r
# 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
Burnley	37	30	33	West Brom
Leicester	41	30	30	C Palace
Tottenham	29	28	43	Arsenal
Everton	29	29	43	Liverpool
Newcastle	43	29	28	Stoke
West Ham	24	27	49	Man Utd
Swansea	51	28	21	Sunderland
QPR	21	26	53	Southampton
Aston Villa	10	20	70	Chelsea
Man City	81	13	6	Hull

Table 1: Coming Fixtures (Implied) Probabilities

	Home	H	D	A	Away
1	Tottenham	3.4/3.45	3.55/3.6	2.34/2.36	Arsenal
2	Aston Villa	9.6/9.8	5/5.1	1.43/1.44	Chelsea
3	Leicester	2.44/2.48	3.35/3.4	3.35/3.4	C Palace
4	Man City	1.23/1.24	7.4/7.6	17.5/18.5	Hull
5	QPR	4.8/4.9	3.8/3.85	1.88/1.89	Southampton
6	Swansea	1.97/1.98	3.5/3.55	4.7/4.8	Sunderland
7	Everton	3.45/3.5	3.45/3.5	2.34/2.36	Liverpool
8	Burnley	2.66/2.68	3.3/3.35	3.05/3.1	West Brom
9	Newcastle	2.3/2.32	3.4/3.45	3.55/3.6	Stoke
10	West Ham	4.1/4.2	3.7/3.75	2/2.02	Man Utd

Table 2: Coming Fixtures Odds