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

Skip to pages 3 and 4 to see the results.

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

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

```r
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:

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

data_odds_lay <- xpathSApply(matches_parse,
                          "//button[@class = 'bet-button lay cta cta-lay i13n-ltxt-FltBetSlpL i13n-S
                          , 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
C Palace	35	30	35	Everton
Hull	37	30	33	Newcastle
West Brom	34	30	37	Tottenham
Sunderland	44	29	27	Burnley
Chelsea	45	28	27	Man City
Liverpool	59	24	17	West Ham
Stoke	59	25	15	QPR
Southampton	62	24	14	Swansea
Man Utd	73	17	9	Leicester
Arsenal	77	16	7	Aston Villa

Table 1: Coming Fixtures (Implied) Probabilities

	Home	H	D	A	Away
1	Hull	2.72/2.74	3.3/3.35	3/3.05	Newcastle
2	C Palace	2.82/2.84	3.35/3.4	2.86/2.88	Everton
3	Liverpool	1.68/1.69	4.2/4.3	5.8/5.9	West Ham
4	Man Utd	1.36/1.37	5.7/5.8	10.5/11	Leicester
5	Stoke	1.68/1.69	3.95/4	6.4/6.6	QPR
6	Sunderland	2.28/2.3	3.4/3.45	3.7/3.8	Burnley
7	West Brom	2.94/2.98	3.35/3.4	2.72/2.74	Tottenham
8	Chelsea	2.22/2.24	3.5/3.55	3.65/3.7	Man City
9	Arsenal	1.29/1.3	6.2/6.4	15/15.5	Aston Villa
10	Southampton	1.63/1.64	4.1/4.2	7/7.2	Swansea

Table 2: Coming Fixtures Odds