Untitled

```
## Loading required package: xts
## Loading required package: zoo
##
## Attaching package: 'zoo'
##
## The following objects are masked from 'package:base':
##
##
       as.Date, as.Date.numeric
## [1] "ABF.L.csv"
##
                                                             OC Tog
            Date Open High Low Close
                                           tr atr
                                                    MA diff
## 221
        5/5/2014 2900 2900 2900
                                  2900
                                        0.00
                                               61 2907
                                                         -7
                                                               0
                                                                   7
        5/6/2014 2924 2963 2892
                                                             39
                                                                -39
                                  2963 71.15
                                               62
                                                  2931
                                                         32
## 223
        5/7/2014 2974 3001 2953
                                  2973 48.00
                                                  2932
                                                             -1
                                                                  21
                                               61
                                                         41
        5/8/2014 2975 3014 2964
                                  2974 50.00
                                               60
                                                  2943
                                                         31
                                                             -1
       5/9/2014 2960 2960 2923
## 225
                                  2945 51.00
                                               60 2947
                                                         -2 -15 -13
## 226 5/12/2014 2948 2984 2927
                                  2982 57.00
                                               59 2955
                                                         27
                                                             34 -28
## 227 5/13/2014 2989 2989 2937
                                  2966 52.00
                                                          9 -23 -20
                                               59
                                                  2957
## 228 5/14/2014 2967 2975 2949
                                  2965 26.00
                                               57
                                                  2956
                                                          9
                                                             -2
                                                                  -7
## 229 5/15/2014 2967 3011 2929
                                  2945 82.00
                                               58 2951
                                                         -6 -22 -60
## 230 5/16/2014 2952 3004 2928
                                  3004 76.00
                                               60 2962
                                                             52 -34
                                                         42
##
  [1]
##
            Date Open High Low Close
## 231 5/19/2014 3014 3078 3001
## [1] ""
## [1] "AGK.L.csv"
##
                                                    MA diff
                                                             OC Tog
            Date Open High Low Close
                                           tr atr
  221
        5/5/2014 1645 1645 1645
                                  1645
                                        0.00
                                               31 1587
## 222
        5/6/2014 1640 1654 1623
                                                                  27
                                  1627 31.00
                                               31 1596
                                                         31 -13
        5/7/2014 1628 1646 1622
## 223
                                  1644 24.46
                                               31 1606
                                                         38
                                                             16
                                                                  16
                                  1650 17.00
## 224
        5/8/2014 1642 1654 1637
                                               30 1615
                                                         35
                                                               8
                                                                  22
       5/9/2014 1651 1655 1631
                                                             -9
                                  1642 24.00
                                               29 1623
                                                         19
                                                                   8
## 226 5/12/2014 1644 1664 1643
                                  1661 22.00
                                               29 1631
                                                         30
                                                             17
                                                                  12
## 227 5/13/2014 1670 1684 1667
                                  1681 23.00
                                               28 1642
                                                         39
                                                             11
                                                                  25
                                                                  22
## 228 5/14/2014 1684 1734 1676
                                                         48
                                                             18
                                  1702 58.00
                                               31 1654
## 229 5/15/2014 1698 1703 1684
                                  1703 19.00
                                               30 1660
                                                         43
                                                               5
                                                                  24
## 230 5/16/2014 1707 1709 1677
                                  1699 32.00
                                               30 1665
                                                         34
                                                             -8
                                                                 12
## [1]
      11 11
##
            Date Open High Low Close
## 231 5/19/2014 1700 1744 1699 1743
## [1] ""
## [1] "AZN.L.csv"
##
            Date Open High Low Close
                                                     MA diff
                                                               OC
                                            tr atr
## 221
        5/5/2014 4808 4808 4808
                                  4808
                                         0.00 192 4465
                                                         343
                                                                0 343.00
## 222
        5/6/2014 4735 4762 4658
                                  4678 150.50 189 4537
                                                         140
                                                             -58 120.50
## 223
        5/7/2014 4622 4664 4609
                                        68.97 181 4596
                                                          35
                                                                9
                                  4631
                                                                   12.53
                                  4713 105.00 175 4650
                                                               83 -20.00
        5/8/2014 4630 4735 4630
                                                          63
## 225
       5/9/2014 4665 4678 4598
                                  4600 114.50 171 4702 -102
                                                             -64
                                                                   24.00
## 226 5/12/2014 4628 4648 4576
                                        72.08 164 4696
                                                         -86
                                                              -18
                                  4610
                                                                   47.50
## 227 5/13/2014 4635 4734 4615
                                  4642 123.50 161 4697
                                                         -55
                                                                7 -36.50
## 228 5/14/2014 4642 4698 4468
                                  4654 229.75 166 4696
                                                         -42
                                                               12
                                                                   -2.25
## 229 5/15/2014 4649 4726 4634
                                  4726 92.00 161 4687
                                                               78 -52.50
                                                          40
```

```
## 230 5/16/2014 4741 4827 4663 4824 164.33 161 4689 134 82 -26.33
## [1] ""
           Date Open High Low Close
##
## 231 5/19/2014 4200 4823 4098 4288
## [1] ""
## [1] "BATS.L.csv"
           Date Open High Low Close
                                        tr atr
                                                  MA diff
                                                                Tog
## 221
       5/5/2014 3396 3396 3396
                                3396 0.00
                                            53 3429
                                                      -32
                                                           0
                                                               32.5
## 222
       5/6/2014 3412 3417 3362
                                 3366 54.40
                                            53 3424
                                                      -58 -45
                                                                7.1
## 223 5/7/2014 3374 3416 3371
                                 3416 49.00
                                            53 3424
                                                       -8 42
                                                                8.5
## 224 5/8/2014 3430 3450 3417
                                 3436 34.00
                                            51 3425
                                                            6
                                                              -8.0
                                                       11
## 225 5/9/2014 3430 3446 3405
                                 3418 40.71
                                            51 3424
                                                       -6 -13 -22.0
                                                       34 -10
## 226 5/12/2014 3469 3478 3451
                                 3458 61.00 51 3424
                                                               27.0
## 227 5/13/2014 3472 3473 3435
                                 3450 38.00
                                            50 3420
                                                       30 -21
## 228 5/14/2014 3455 3468 3429
                                 3464 38.50
                                            50 3425
                                                       40 10
                                                                4.0
## 229 5/15/2014 3460 3478 3430
                                 3466 47.50
                                            49 3427
                                                       40
                                                          6
                                                                3.5
## 230 5/16/2014 3480 3527 3445
                                 3513 82.00 52 3438
                                                       75 34
                                                                7.0
## [1] ""
           Date Open High Low Close
## 231 5/19/2014 3527 3547 3514 3528
## [1] ""
## [1] "BLT.L.csv"
##
            Date Open High Low Close
                                        tr atr
                                                  MA diff
                                                          OC
                                                                 Tog
## 221 5/5/2014 1931 1931 1931 1931 0.00
                                            32 1919
                                                       12
                                                            0
                                                               12.00
## 222 5/6/2014 1921 1924 1890 1912 41.00
                                            33 1918
                                                       -6
                                                          -9
                                                               -6.50
## 223 5/7/2014 1898 1917 1881
                                1917 36.10
                                            33 1918
                                                       -1
                                                          19
                                                                0.90
## 224 5/8/2014 1919 1924 1910
                                                       -3
                                1913 14.00
                                            32 1916
                                                          -6
                                                               -8.00
## 225 5/9/2014 1920 1923 1896
                                 1896 27.50
                                            32 1914
                                                      -18 -24
                                                               -9.00
## 226 5/12/2014 1922 1955 1918
                                 1948 58.69
                                            33 1918
                                                       30 26
                                                              -0.12
## 227 5/13/2014 1959 1990 1896
                                 1965 93.00
                                                       42
                                                            6 - 26.50
                                             38 1923
## 228 5/14/2014 1971 2002 1962
                                 1995 39.00
                                             38 1930
                                                       65 24
                                                               32.50
## 229 5/15/2014 1993 2018 1973
                                1982 44.50
                                            38 1939
                                                       43 -11
                                                               34.00
## 230 5/16/2014 1980 1984 1937
                                 1953 47.50 39 1941
                                                       12 -27 -4.00
## [1] ""
           Date Open High Low Close
## 231 5/19/2014 1940 1952 1924 1942
## [1] ""
## [1] "BNZL.L.csv"
##
            Date Open High Low Close
                                       tr atr
                                                 MA diff
                                                          OC Tog
## 221 5/5/2014 1652 1652 1652 1652 0.0 23 1655
                                                      -3
                                                           0
## 222 5/6/2014 1655 1666 1648
                                1665 18.5
                                           23 1660
                                                       5
                                                         10 -12
## 223 5/7/2014 1636 1661 1636
                                1655 29.0 23 1660
                                                      -5
                                                         19
## 224 5/8/2014 1656 1666 1634
                                 1641 32.0
                                           24 1660
                                                     -19 -15
                                                             -6
## 225 5/9/2014 1638 1648 1629
                                 1647 19.0
                                           23 1658
                                                     -11
                                                          9 10
## 226 5/12/2014 1644 1663 1637
                                 1662 26.0
                                           24 1659
                                                       3
                                                         18 -22
## 227 5/13/2014 1666 1676 1662
                                 1672 14.0
                                            23 1659
                                                      13
                                                          6
                                                               3
## 228 5/14/2014 1672 1685 1667
                                 1682 18.0
                                           22 1659
                                                      23
                                                         10
                                                               8
## 229 5/15/2014 1685 1692 1677
                                 1680 15.1
                                           22 1661
                                                      19
                                                        -5 16
## 230 5/16/2014 1685 1686 1649
                                 1657 37.0 23 1661
                                                      -4 -28 -25
## [1] ""
##
           Date Open High Low Close
## 231 5/19/2014 1662 1676 1645 1652
## [1] ""
## [1] "CCL.L.csv"
```

```
Date Open High Low Close
                                        tr atr
                                                  MA diff
                                                            OC
                                                                  Tog
## 221 5/5/2014 2377 2377 2377
                                 2377 0.00
                                             39 2332
                                                        45
                                                             0
                                                                45.00
       5/6/2014 2379 2421 2375
                                 2399 46.00
                                             40 2345
                                                        54
                                                           20
                                                                30.00
## 223
       5/7/2014 2386 2406 2384
                                 2399 21.74
                                             38 2356
                                                        43
                                                           13
                                                                28.26
       5/8/2014 2394 2413 2394
                                 2403 19.00
                                             37 2366
                                                        37
                                                             9
                                                                28.00
## 225 5/9/2014 2400 2419 2388
                                 2399 31.00
                                             37 2374
                                                        25
                                                               14.00
                                                           -1
## 226 5/12/2014 2394 2432 2378
                                 2429 54.00
                                             38 2388
                                                        41 35 -10.00
## 227 5/13/2014 2441 2449 2414
                                 2419 34.50
                                             38 2392
                                                        27 -22
                                                                22.50
## 228 5/14/2014 2420 2433 2389
                                 2390 44.00
                                             38 2395
                                                        -5 -30 -38.00
## 229 5/15/2014 2395 2410 2335
                                 2341 75.23
                                             41 2393
                                                      -52 -54 -17.00
## 230 5/16/2014 2346 2351 2292
                                 2295 59.00 42 2385
                                                      -90 -51 34.00
## [1] ""
##
           Date Open High Low Close
## 231 5/19/2014 2305 2325 2281 2302
## [1] ""
## [1] "DGE.L.csv"
##
            Date Open High Low Close
                                                  MA diff
                                                           \mathsf{OC}
                                                                 Tog
                                         tr atr
       5/5/2014 1826 1826 1826
                                1826 0.00
                                             28 1821
## 221
                                                             0 4.50
                                             27 1820
## 222 5/6/2014 1838 1839 1820
                                1827 19.25
                                                         7 -11 -0.50
## 223
       5/7/2014 1824 1830 1814
                                 1825 16.00
                                             26 1821
                                                        4
                                                             0 - 6.50
## 224 5/8/2014 1830 1840 1816
                                 1830 24.00
                                             26 1823
                                                        8
                                                            0 - 7.50
## 225 5/9/2014 1826 1856 1823
                                 1850 33.02
                                             27 1827
                                                        24 24 -4.02
## 226 5/12/2014 1856 1862 1844
                                 1862 18.59
                                             26 1831
                                                        31
                                                             6 12.50
## 227 5/13/2014 1864 1880 1859
                                 1872 21.50
                                             26 1836
                                                        36
                                                             8 23.00
## 228 5/14/2014 1874 1885 1864
                                 1878 21.50
                                             26 1842
                                                        36
                                                             4 21.50
## 229 5/15/2014 1872 1914 1872
                                1910 42.50
                                             27 1850
                                                        60 38 21.50
## 230 5/16/2014 1908 1952 1906
                                 1942 46.50
                                             28 1862
                                                        80 34 44.00
## [1] ""
##
            Date Open High Low Close
## 231 5/19/2014 1943 1959 1916 1919
## [1] ""
## [1] "IHG.L.csv"
##
           Date Open High Low Close
                                                   MA diff
                                          tr atr
                                                        160
       5/5/2014 2190 2190 2190
                                 2190
                                        0.00
                                              40 2030
                                                              0
## 221
                                                                 160.0
                                              39 2053
## 222
       5/6/2014 2189 2196 2168
                                 2185
                                       28.00
                                                             -4
                                                        132
                                                                 115.0
## 223 5/7/2014 2189 2232 2185
                                 2221
                                       47.00
                                              40 2080
                                                        141
                                                             32
                                                                 105.0
## 224 5/8/2014 2222 2231 2200
                                 2211
                                       31.00
                                              39 2102
                                                        109
                                                           -11
## 225 5/9/2014 2211 2226 2184
                                 2185
                                                         64 -26
                                       41.90
                                              39 2121
                                                                  63.1
## 226 5/12/2014 2182 2197 2165
                                              39 2141
                                 2186
                                       31.90
                                                         45
                                                              4
                                                                  24.1
                                       49.11
## 227 5/13/2014 2195 2219 2170
                                 2219
                                              40 2163
                                                         56
                                                             24
                                                                   7.0
## 228 5/14/2014 2215 2225 2007
                                 2210 218.00
                                              52 2182
                                                         28
                                                             -5 -175.0
## 229 5/15/2014 2208 2225 2183
                                 2195
                                       42.00
                                              52 2199
                                                        -4 -13
                                                                 -26.0
## 230 5/16/2014 2195 2203 2150
                                 2184
                                       53.00 52 2199
                                                       -15 -11
                                                                  -4.0
## [1] ""
            Date Open High Low Close
## 231 5/19/2014 2192 2226 2174 2185
## [1] ""
## [1] "IMT.L.csv"
           Date Open High Low Close
                                                          OC
                                        tr atr
                                                 MA diff
                                                                Tog
## 221
       5/5/2014 2514 2514 2514
                                 2514 0.0
                                            34 2545
                                                     -31
                                                           0
                                                               31.0
                                                      -27 -14
## 222
       5/6/2014 2531 2535 2507
                                 2517 28.0
                                            33 2544
                                                                9.0
## 223
       5/7/2014 2517 2549 2509
                                 2549 40.0
                                            34 2544
                                                          32 -35.0
## 224 5/8/2014 2594 2596 2567
                                 2595 47.0
                                            35 2549
                                                      46
                                                           1
                                                              18.0
## 225 5/9/2014 2599 2622 2580
                                 2591 42.0
                                            35 2552
                                                      39
                                                          -8
                                                               28.0
```

```
## 226 5/12/2014 2617 2642 2596
                                 2641 51.0 36 2561
                                                          24 35.0
                                                      80
## 227 5/13/2014 2644 2658 2632
                                 2652 25.5
                                                           8 67.5
                                            36 2565
                                                      87
                                 2664 23.0
                                                             72.0
## 228 5/14/2014 2658 2671 2648
                                            35 2576
                                                      88
                                                           6
## 229 5/15/2014 2659 2673 2648
                                 2656 25.0 34 2589
                                                      67
                                                          -3 59.0
## 230 5/16/2014 2656 2676 2640
                                 2662 36.0 34 2604
                                                      58
                                                          6 36.0
## [1] ""
           Date Open High Low Close
## 231 5/19/2014 2672 2688 2657
                                 2665
## [1] ""
## [1] "ITRK.L.csv"
           Date Open High Low Close
                                                         OC Tog
                                       tr atr
                                                MA diff
       5/5/2014 2928 2928 2928
                                           31 2926
## 221
                                 2928
                                        0
                                                      2
                                                          0
                                                              2
## 222
       5/6/2014 2931 3008 2931
                                 2995
                                       80
                                           34 2932
                                                     63
                                                         64
                                                             -1
## 223 5/7/2014 2995 3007 2979
                                 2994
                                       28
                                           34 2939
                                                     55
                                                         -1
                                                             40
## 224 5/8/2014 3006 3015 2969
                                           35 2945
                                                     41 -20
                                 2986
                                       46
                                                             24
## 225 5/9/2014 3018 3047 3006
                                 3027
                                       61
                                           37 2955
                                                     72
                                                          9
                                                             51
                                                             45
## 226 5/12/2014 3042 3056 3013
                                 3050
                                       43
                                           37 2968
                                                     82
                                                          8
## 227 5/13/2014 3065 3084 3057
                                 3068
                                       34
                                           37 2983
                                                     85
                                                             74
## 228 5/14/2014 3081 3104 3059
                                                     98
                                 3100
                                       45
                                           37 3002
                                                             57
                                                         19
## 229 5/15/2014 3107 3110 3067
                                 3090
                                       43
                                           38 3017
                                                     73 -17
                                                             50
## 230 5/16/2014 2960 3003 2869
                                 2992 221
                                           51 3023
                                                    -31
## [1] ""
##
           Date Open High Low Close
## 231 5/19/2014 2991 3001 2939
## [1] ""
## [1] "JMAT.L.csv"
##
           Date Open High Low Close
                                        tr atr
                                                  MA diff
                                                           OC Tog
## 221
       5/5/2014 3308 3308 3308
                                 3308 0.00
                                            55 3285
                                                       23
                                                            0
                                                               23
## 222 5/6/2014 3325 3366 3289
                                                       28
                                 3322 77.00
                                            56 3294
                                                          -3
## 223 5/7/2014 3314 3322 3284
                                 3284 38.00
                                             55 3296
                                                      -12 -30 -26
## 224
       5/8/2014 3289 3331 3280
                                 3314 51.00
                                             55 3299
                                                       15 25 -19
## 225 5/9/2014 3319 3319 3285
                                 3298 34.00
                                             53 3300
                                                       -2 -21 -19
## 226 5/12/2014 3312 3316 3292
                                 3300 24.10
                                             51 3302
                                                       -2 -12 -14
## 227 5/13/2014 3314 3321 3288
                                                      -11 -19 -15
                                 3295 33.00
                                            50 3306
## 228 5/14/2014 3295 3308 3284
                                 3291 24.00
                                             48 3308
                                                      -17
                                                           -4
                                                                0
## 229 5/15/2014 3294 3322 3251
                                 3264 70.69 50 3298
                                                      -34 - 30 - 24
## 230 5/16/2014 3271 3283 3196
                                 3214 87.00 52 3289
## [1] ""
##
           Date Open High Low Close
## 231 5/19/2014 3216 3290 3199 3280
## [1] ""
## [1] "LSE.L.csv"
           Date Open High Low Close
                                         tr atr
                                                  MA diff
                                                           NC
                                                                 Tog
## 221 5/5/2014 1826 1826 1826 1826 0.00
                                                        0
                                            26 1826
                                                            0
                                                                0.00
## 222
       5/6/2014 1826 1832 1815
                                 1826 17.36
                                             26 1823
                                                        3
                                                            0
                                                               -8.36
## 223
       5/7/2014 1821 1839 1817
                                 1825 22.74
                                                        3
                                                               -5.38
                                             25 1822
                                                            4
## 224
       5/8/2014 1830 1849 1821
                                 1849 28.00
                                             26 1825
                                                       24
                                                           19
                                                                -4.00
## 225 5/9/2014 1848 1852 1827
                                 1840 25.00
                                             26 1827
                                                       13
                                                           -8
                                                                0.00
                                                       24
## 226 5/12/2014 1847 1855 1841
                                 1855 15.00
                                             25 1831
                                                            8 10.00
## 227 5/13/2014 1826 1842 1804
                                 1808 51.00
                                             27 1830
                                                      -22 -18 -12.00
                                                      -27 -10 15.00
## 228 5/14/2014 1811 1813 1798
                                 1801 15.00
                                             26 1828
## 229 5/15/2014 1832 1878 1810 1811 77.00 30 1827
                                                      -16 -21 -51.00
## 230 5/16/2014 1815 1817 1764 1780 53.00 31 1822 -42 -35
## [1] ""
```

```
Date Open High Low Close
## 231 5/19/2014 1780 1806 1761 1764
## [1] ""
## [1] "NXT.L.csv"
            Date Open High Low Close
                                          tr atr
                                                    MA diff
                                                              OC
                                                                  Tog
## 221 5/5/2014 6610 6610 6610
                                 6610
                                        0.00 205 6500
                                                               0
                                                        110
                                                                  110
## 222 5/6/2014 6585 6614 6530
                                 6550
                                       84.25 196 6500
                                                         50
                                                             -35
## 223 5/7/2014 6560 6580 6485
                                 6495
                                       95.00 189 6506
                                                        -11
                                                             -65
                                                                  -74
## 224
       5/8/2014 6490 6530 6460
                                 6480
                                       70.00 180 6514
                                                        -34
                                                             -10
                                                                  -16
## 225 5/9/2014 6470 6545 6445
                                 6465 100.00 175 6528
                                                        -63
                                                              -5
                                                                  -17
## 226 5/12/2014 6485 6515 6435
                                 6505
                                       80.00 168 6537
                                                        -32
                                                              20
                                                                   22
## 227 5/13/2014 6540 6545 6475
                                 6535
                                       70.00 161 6542
                                                         -7
                                                              -5
                                                                   -3
## 228 5/14/2014 6535 6575 6520
                                 6565
                                       55.00 153 6546
                                                         19
                                                              30
                                                                  -26
## 229 5/15/2014 6580 6630 6385
                                  6405 245.00 160 6522 -117 -175 -108
## 230 5/16/2014 6415 6430 6292
                                 6400 137.73 158 6501 -101 -15
## [1] ""
##
            Date Open High Low Close
## 231 5/19/2014 6425 6510 6370
## [1] ""
## [1] "RB.L.csv"
##
            Date Open High Low Close
                                                 MA diff
                                                          OC Tog
                                       tr atr
       5/5/2014 4840 4840 4840
                                 4840
                                        0
                                            75 4885
                                                     -45
## 222 5/6/2014 4852 4860 4810
                                 4835
                                            73 4873
                                                     -38 -17
                                       50
                                                              13
## 223
       5/7/2014 4838 4894 4817
                                 4846
                                       77
                                            73 4862
                                                     -16
                                                           8 -32
                                                      -3 -11 -31
## 224 5/8/2014 4860 4883 4807
                                  4849
                                       76
                                            73 4852
## 225 5/9/2014 4847 4854 4799
                                 4826
                                        55
                                            72 4838
                                                     -12 -21 -16
## 226 5/12/2014 4839 4845 4794
                                  4825
                                       51
                                            71 4836
                                                     -11 -14
                                                              -9
## 227 5/13/2014 4839 4888 4807
                                  4888
                                       81
                                            71 4841
                                                      47
                                                          49 -34
                                  4935
## 228 5/14/2014 4897 4941 4874
                                       67
                                            71 4857
                                                      78
                                                          38
                                                              17
## 229 5/15/2014 4941 4960 4892
                                 4960
                                            71 4864
                                       68
                                                      96
                                                          19
                                                              28
## 230 5/16/2014 4960 5080 4949
                                 5070 131
                                            75 4887
                                                     183 110
## [1] ""
##
            Date Open High Low Close
## 231 5/19/2014 5085 5120 5058
                                 5100
## [1] ""
## [1] "RDSA.L.csv"
            Date Open High Low Close
                                          tr atr
                                                   MA diff
                                                                  Tog
## 221 5/5/2014 2354 2354 2354
                                 2354 0.00
                                             59 2291
                                                        63
                                                             0
                                                                63.00
       5/6/2014 2352 2356 2333
                                 2346 23.25
## 222
                                              56 2302
                                                        44
                                                            -6
                                                                30.75
## 223 5/7/2014 2338 2366 2336
                                 2362 29.68
                                             54 2314
                                                        48
                                                            24
                                                                22.00
## 224 5/8/2014 2359 2385 2359
                                 2378 26.00
                                             52 2326
                                                        52
                                                            20
                                                                33.00
## 225 5/9/2014 2378 2378 2362
                                 2370 16.00
                                             50 2338
                                                        32
                                                            -8
                                                                24.50
## 226 5/12/2014 2367 2378 2358
                                 2366 20.50
                                             47 2349
                                                        16
                                                            -2
                                                                 9.00
## 227 5/13/2014 2378 2378 2360
                                                           -8
                                 2370 18.00
                                             45 2358
                                                        12
                                                                 2.00
## 228 5/14/2014 2350 2355 2334
                                 2347 36.00
                                             45 2358
                                                            -2
                                                                 3.22
                                                       -11
## 229 5/15/2014 2353 2378 2343
                                 2351 34.50
                                              44 2360
                                                        -9
                                                           -2 -17.50
## 230 5/16/2014 2356 2368 2341
                                 2346 27.00 43 2359
                                                       -14 -11 -9.00
## [1] ""
            Date Open High Low Close
## 231 5/19/2014 2353 2365 2340
      11 11
## [1]
## [1] "RDSB.L.csv"
##
            Date Open High Low Close
                                                   MA diff OC
                                        tr atr
                                                                Tog
## 221 5/5/2014 2533 2533 2533 2533 0.00 49 2453
```

```
## 222 5/6/2014 2528 2530 2508
                                 2522 25.14 48 2466
                                                        56 -6 41.86
       5/7/2014 2515 2558 2513
                                 2546 44.54
## 223
                                            47 2481
                                                        65 31 32.00
## 224 5/8/2014 2548 2576 2517
                                 2568 59.04
                                             48 2497
                                                        71 20 19.96
## 225 5/9/2014 2568 2576 2552
                                 2576 23.50
                                             46 2514
                                                        62 8 38.50
## 226 5/12/2014 2576 2584 2558
                                 2570 26.00
                                             45 2530
                                                        40 -6 27.50
## 227 5/13/2014 2574 2588 2564
                                 2586 23.78
                                             43 2546
                                                        40 12 17.72
## 228 5/14/2014 2562 2584 2541
                                 2562 45.50
                                             44 2550
                                                        12 0 -9.00
## 229 5/15/2014 2566 2592 2556
                                 2564 35.00
                                             43 2556
                                                        8 -2 0.50
## 230 5/16/2014 2562 2594 2550
                                 2572 44.35 43 2560
                                                        12 10 -9.95
## [1] ""
            Date Open High Low Close
## 231 5/19/2014 2575 2614 2572 2592
## [1] ""
## [1] "RIO.L.csv"
##
            Date Open High Low Close
                                          tr atr
                                                   MA diff
                                                            OC
## 221
       5/5/2014 3247 3247 3247
                                 3247
                                        0.00
                                              62 3239
                                                         8
                                                             0
                                                                  8.00
                                 3215
                                              62 3234
## 222
       5/6/2014 3238 3241 3188
                                       59.50
                                                       -19 -22 -7.00
## 223
       5/7/2014 3183 3250 3174
                                 3247
                                       76.50
                                              63 3234
                                                        13
                                                             64 -60.50
## 224 5/8/2014 3250 3258 3202
                                 3205
                                       56.00
                                              62 3227
                                                        -22 -45 -31.00
## 225 5/9/2014 3220 3256 3188
                                 3188
                                       67.00
                                              63 3218
                                                        -30 -32 -37.50
## 226 5/12/2014 3247 3364 3246
                                 3340 175.50
                                              71 3233
                                                        107
                                                             93
                                                                 13.50
                                              70 3244
## 227 5/13/2014 3348 3372 3308
                                 3330
                                       64.50
                                                         86 -18
## 228 5/14/2014 3332 3390 3313
                                       77.00
                                              71 3259
                                                             42
                                 3374
                                                        115
                                                                 54.00
## 229 5/15/2014 3360 3410 3336
                                 3369
                                       74.01
                                              71 3276
                                                         93
                                                              9
                                                                 60.49
## 230 5/16/2014 3324 3345 3260
                                 3286 108.50
                                             74 3280
                                                          6 - 38 - 19.50
## [1] ""
##
            Date Open High Low Close
## 231 5/19/2014 3211 3246 3208 3225
## [1] ""
## [1] "RRS.L.csv"
##
            Date Open High Low Close tr atr
                                                MA diff
## 221
       5/5/2014 4739 4739 4739
                                 4739
                                        0 97 4704
                                                      35
                                                           0
                                                              35
## 222
       5/6/2014 4765 4794 4747
                                 4772 55 94 4721
                                                      51
                                                           7
       5/7/2014 4771 4771 4627
                                 4703 145 97 4721
## 223
                                                    -18 -68 -50
       5/8/2014 4610 4713 4493
                                 4530 220 106 4708 -178 -80
                                 4539 66 103 4694 -155 -10 109
## 225 5/9/2014 4549 4585 4519
## 226 5/12/2014 4539 4626 4510
                                 4603 116 104 4682
                                                    -79
## 227 5/13/2014 4600 4630 4552
                                 4591 78 102 4667
                                                    -76
                                                         -9
                                                              37
## 228 5/14/2014 4532 4645 4486
                                 4608 159 106 4650
                                                         76
                                                     -42
                                                               5
## 229 5/15/2014 4602 4639 4536
                                 4550 103 106 4637
                                                    -87 - 52
                                                              -2
## 230 5/16/2014 4544 4558 4484
                                 4534 74 104 4617
                                                    -83 -10
## [1] ""
            Date Open High Low Close
## 231 5/19/2014 4539 4580 4517 4530
## [1] ""
## [1] "SAB.L.csv"
##
            Date Open High Low Close tr atr MA diff OC Tog
## 221
       5/5/2014
                   30
                        30
                            30
                                  30
                                     0
                                          0 30
## 222
       5/6/2014
                   30
                        30
                            30
                                  30
                                      0
                                          0 30
                                                  0 0
                                                          0
## 223
       5/7/2014
                   30
                        30
                            30
                                  30
                                      0
                                          0 30
                                                  0
                                                      0
                                                          0
       5/8/2014
                        30
                            30
                                  30
                                                  0
## 224
                   30
                                      0
                                          0.30
                                                      0
                                                          0
## 225 5/9/2014
                   30
                        30
                            30
                                  30
                                      0
                                          0 30
                                                  0
                                                    0
                                                          0
## 226 5/12/2014
                   30
                        30
                            30
                                  30
                                      0
                                          0.30
                                                  0 0
                                                          0
## 227 5/13/2014
                   30
                        30
                            30
                                  30
                                      0
                                          0 30
                                                  0
                                                      0
                                                          0
```

```
## 228 5/14/2014
                   30
                         30
                             30
                                   30
                                           0 30
                         30
## 229 5/15/2014
                   30
                            30
                                   30
                                       0
                                           0.30
                                                    0 0
                                                           0
## 230 5/16/2014
                   30
                         30
                             30
                                   30
                                           0 30
                                                    0
## [1] ""
            Date Open High Low Close
## 231 5/19/2014
                   30
                         30
                            30
                                   30
## [1] ""
## [1] "SDR.L.csv"
##
                                                     MA diff
                                                              OC
            Date Open High Low Close
                                           tr atr
                                                                     Tog
## 221
        5/5/2014 2613 2613 2613
                                  2613
                                         0.00
                                               50 2568
                                                          45
                                                               0
                                                                    45.00
## 222
        5/6/2014 2614 2625 2599
                                  2614
                                        26.00
                                               48 2573
                                                          41
                                                               0
                                                                    26.00
                                               48 2579
## 223
        5/7/2014 2608 2622 2585
                                  2593
                                        37.00
                                                          14
                                                             -15
                                                                    6.00
## 224
        5/8/2014 2596 2620 2584
                                  2620
                                        36.00
                                               47 2586
                                                          34
                                                              24
                                                                    -2.00
## 225 5/9/2014 2613 2613 2591
                                  2602
                                        29.00
                                               46 2592
                                                          10
                                                             -11
                                                                    -1.00
## 226 5/12/2014 2606 2619 2597
                                               44 2599
                                  2615
                                        22.00
                                                          16
                                                               9
                                                                    -2.00
## 227 5/13/2014 2617 2635 2611
                                  2627
                                        24.16
                                                42 2606
                                                          21
                                                              10
                                                                    4.84
                                               41 2612
## 228 5/14/2014 2635 2637 2611
                                  2617
                                        26.00
                                                           5 -18
                                                                    -1.00
## 229 5/15/2014 2624 2711 2593
                                  2597 118.00
                                               47 2611
                                                         -14 -27 -100.00
## 230 5/16/2014 2600 2608 2482
                                                                   -8.00
                                  2501 126.00 52 2600
                                                         -99 -99
## [1] ""
##
            Date Open High Low Close
## 231 5/19/2014 2508 2514 2477
## [1] ""
## [1] "SHP.L.csv"
##
            Date Open High Low Close
                                           tr atr
                                                     MA diff
                                                               OC
                                                                       Tog
## 221
        5/5/2014 3467 3467 3467
                                  3467
                                         0.00 136 3310
                                                         157
                                                                0
                                                                   157.00
## 222
        5/6/2014 3460 3460 3305
                                                          27 -101
                                                                   -27.19
                                  3359 162.19 138 3332
## 223
        5/7/2014 3347 3356 3289
                                  3304
                                        70.00 133 3343
                                                         -39
                                                              -43
                                                                   -13.00
                                                          42
                                                               85
## 224
       5/8/2014 3315 3402 3315
                                  3400 98.00 131 3358
                                                                   -43.00
## 225 5/9/2014 3360 3389 3294
                                  3309 106.00 129 3368
                                                         -59
                                                              -51
                                                                   -21.00
## 226 5/12/2014 3327 3625 3278
                                  3285 346.90 144 3368
                                                         -83
                                                              -42 - 256.90
## 227 5/13/2014 3313 3346 3292
                                  3345
                                        61.00 138 3376
                                                         -31
                                                               32
                                                                    30.00
## 228 5/14/2014 3356 3363 3314
                                  3341
                                        49.00 132 3373
                                                         -32
                                                              -15
                                                                    10.00
## 229 5/15/2014 3336 3352 3257
                                  3270
                                        95.01 129 3355
                                                         -85
                                                              -66
                                                                     3.00
## 230 5/16/2014 3280 3292 3227
                                  3266
                                        65.00 125 3335
                                                         -69
                                                              -14
                                                                    43.00
##
  [1] ""
##
            Date Open High Low Close
## 231 5/19/2014 3283 3362 3250 3353
## [1] ""
## [1] "SSE.L.csv"
            Date Open High Low Close
                                          tr atr
                                                    MA diff
                                                                   Tog
        5/5/2014 1530 1530 1530
                                  1530 0.00
## 221
                                              39 1514
                                                         16
                                                              0
                                                                 16.00
## 222
        5/6/2014 1555 1555 1520
                                  1531 35.00
                                              39 1516
                                                         15 - 24
                                                                  4.00
## 223 5/7/2014 1533 1545 1524
                                  1545 21.28
                                              38 1521
                                                         24
                                                             12
                                                                  2.72
## 224 5/8/2014 1540 1550 1521
                                  1532 29.00
                                              37 1525
                                                          7
                                                             -8
                                                                 -4.00
## 225 5/9/2014 1522 1525 1504
                                  1511 28.00
                                               37 1526
                                                        -15 -11
                                                                  1.00
## 226 5/12/2014 1515 1521 1497
                                  1508 24.00
                                              36 1527
                                                        -19
                                                             -7
                                                                  6.00
## 227 5/13/2014 1514 1515 1496
                                  1509 19.00
                                               35 1525
                                                        -16
                                                             -5
                                                                 10.00
## 228 5/14/2014 1509 1536 1509
                                  1536 27.00
                                              34 1526
                                                         10
                                                             27 -17.00
## 229 5/15/2014 1540 1553 1529
                                  1550 24.00
                                              33 1528
                                                         22
                                                             10
                                                                  1.00
## 230 5/16/2014 1554 1567 1539
                                  1567 28.07
                                              33 1532
                                                         35
                                                             13
                                                                  7.00
## [1] ""
##
            Date Open High Low Close
## 231 5/19/2014 1571 1580 1562 1568
```

```
## [1] ""
## [1] "SVT.L.csv"
##
            Date Open High Low Close
                                         tr atr
                                                  MA diff OC
       5/5/2014 1833 1833 1833
                                 1833 0.00
## 221
                                             26 1817
                                                       16
                                                           0 16.00
       5/6/2014 1833 1850 1829
                                 1837 21.40
                                             26 1821
                                                       16
                                                          4
                                                              8.00
## 223 5/7/2014 1843 1863 1835
                                 1861 27.56
                                            26 1827
                                                       34 18 8.44
## 224 5/8/2014 1863 1876 1843
                                 1863 33.00
                                             26 1833
                                                       30 0 10.00
## 225 5/9/2014 1858 1870 1838
                                 1865 32.14
                                             27 1840
                                                       25 7 -2.00
## 226 5/12/2014 1871 1894 1864
                                 1885 30.18
                                             27 1849
                                                       36 14 14.82
## 227 5/13/2014 1895 1897 1872
                                 1887 25.00
                                             27 1856
                                                       31 -8 16.00
## 228 5/14/2014 1884 1900 1878
                                 1900 22.00
                                             27 1861
                                                       39 16 17.00
## 229 5/15/2014 1904 1916 1880
                                 1901 36.00
                                             27 1866
                                                       35 -3 14.00
## 230 5/16/2014 1907 1913 1896
                                 1909 17.00 27 1874
                                                       35 2 22.00
## [1] ""
##
            Date Open High Low Close
## 231 5/19/2014 1914 1929 1905 1918
## [1] ""
## [1] "TPK.L.csv"
##
           Date Open High Low Close
                                         tr atr
                                                  MA diff
                                                           OC
                                                                 Tog
       5/5/2014 1758 1758 1758
                                 1758 0.00
                                             39 1764
                                                       -6
                                                                6.00
## 222 5/6/2014 1770 1785 1756
                                 1760 28.55
                                             38 1758
                                                        2 -10
                                                               -2.00
## 223 5/7/2014 1760 1766 1736
                                 1745 30.00
                                             37 1749
                                                       -4 -15 -17.00
## 224 5/8/2014 1753 1753 1725
                                                      -16 -23
                                 1730 28.00
                                             37 1746
                                                               -7.00
## 225 5/9/2014 1732 1732 1711
                                 1715 21.45
                                             36 1738
                                                      -23 -17
                                                                5.55
## 226 5/12/2014 1724 1746 1710
                                 1740 36.00
                                             36 1738
                                                        2 16 -28.00
## 227 5/13/2014 1749 1758 1741
                                 1756 18.00
                                             34 1742
                                                       14
                                                            7
                                                               -1.00
## 228 5/14/2014 1756 1761 1735
                                                       -5 -16 -15.55
                                 1740 25.85
                                             34 1745
## 229 5/15/2014 1746 1750 1669
                                 1669 81.00
                                             37 1737
                                                      -68 -77 -13.00
## 230 5/16/2014 1657 1697 1605
                                 1629 91.84 41 1724
                                                      -95 -28 27.16
## [1] ""
##
            Date Open High Low Close
## 231 5/19/2014 1638 1657 1603 1616
## [1] ""
## [1] "ULVR.L.csv"
                                                          OC Tog
           Date Open High Low Close
                                        tr atr
                                                  MA diff
## 221 5/5/2014 2606 2606 2606
                                 2606 0.00
                                            32 2615
                                                       -9
                                                            0
## 222 5/6/2014 2616 2617 2588
                                 2592 29.00
                                            32 2613
                                                      -21 - 24
                                                                -4
## 223 5/7/2014 2573 2598 2568
                                 2597 30.00
                                             32 2610
                                                      -13
                                                           24
                                                                12
       5/8/2014 2603 2616 2598
                                                        0
                                 2612 19.00
                                             31 2612
                                                            9
                                                               -4
## 225 5/9/2014 2609 2640 2603
                                 2639 37.00
                                             32 2616
                                                       23
                                                           30 - 13
## 226 5/12/2014 2640 2646 2623
                                 2646 23.13
                                             31 2619
                                                       27
                                                                4
## 227 5/13/2014 2650 2664 2631
                                                                9
                                 2653 33.00
                                             31 2622
                                                       31
                                                            3
## 228 5/14/2014 2651 2663 2631
                                 2657 32.00
                                             31 2623
                                                       34
                                                            6
                                                                8
                                                       57
## 229 5/15/2014 2656 2692 2649
                                 2687 43.35
                                             32 2630
                                                           31
                                                               19
## 230 5/16/2014 2677 2731 2668
                                 2704 63.36 34 2639
                                                       65
## [1] ""
##
            Date Open High Low Close
## 231 5/19/2014 2710 2742 2699
## [1] ""
## [1] "WEIR.L.csv"
##
            Date Open High Low Close
                                          tr atr
                                                   MA diff
                                                            DC
                                                                  Tog
## 221 5/5/2014 2654 2654 2654 2654
                                        0.00
                                              65 2667
                                                       -13
## 222 5/6/2014 2659 2706 2656
                                 2688
                                              64 2673
                                                            29 -16.95
                                       52.00
                                                        15
## 223 5/7/2014 2679 2692 2634 2638
                                       58.00 63 2671 -33 -41 -21.00
```

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## 224 5/8/2014 2644 2677 2633
                                2652
                                      43.95 62 2670
                                                      -18
## 225 5/9/2014 2651 2668 2625
                                2665
                                      43.00 60 2670
                                                       -5
                                                          14
                                                                2.00
                                            59 2672
## 226 5/12/2014 2668 2711 2666
                                2711
                                      46.00
                                                       39 43
                                                               -6.00
## 227 5/13/2014 2711 2724 2690
                                2696
                                      34.00
                                            58 2668
                                                       28 -15
                                                               22.00
## 228 5/14/2014 2693 2708 2688
                                2695
                                      20.00
                                            55 2669
                                                       26
                                                            2
                                                               19.00
## 229 5/15/2014 2686 2701 2587
                                2598 114.00 59 2665
                                                     -67 -88 -36.00
## 230 5/16/2014 2598 2609 2477
                                2515 132.00 64 2651 -136 -83 42.00
## [1] ""
##
           Date Open High Low Close
## 231 5/19/2014 2516 2543 2492 2523
## [1] ""
## [1] "WOS.L.csv"
           Date Open High Low Close
                                       tr atr
                                                 MA diff
                                                         OC
                                                                Tog
## 221 5/5/2014 3475 3475 3475
                                3475
                                       0.0 51 3424
                                                      51
                                                           0
                                                              51.00
## 222 5/6/2014 3489 3523 3435
                                3437
                                      88.0 53 3431
                                                       6 -52
                                                               4.00
## 223
       5/7/2014 3432 3432 3380
                                3403
                                      57.0
                                           54 3430
                                                     -27 -29
                                                              -2.00
## 224 5/8/2014 3407 3417 3372
                                3396
                                                     -33 -11
                                      45.0 53 3429
                                                             12.00
## 225 5/9/2014 3390 3401 3382
                                3389
                                      19.0 51 3425
                                                     -36 -1
## 226 5/12/2014 3395 3400 3374
                                3400
                                      26.0 49 3424
                                                     -24 5 24.00
## 227 5/13/2014 3420 3462 3411
                                3448
                                      62.0 50 3430
                                                      18 28 -19.00
## 228 5/14/2014 3445 3445 3420
                                3434 28.0 48 3431
                                                       3 -11 -11.00
## 229 5/15/2014 3425 3445 3311
                                3326 134.0 54 3418 -92 -99 -27.00
## 230 5/16/2014 3326 3385 3201  3253 184.2  64 3396 -143 -73  10.82
## [1] ""
##
           Date Open High Low Close
## 231 5/19/2014 3265 3317 3243 3316
## [1] ""
## [1] "WTB.L.csv"
           Date Open High Low Close tr atr
                                               MA diff
                                                         OC Tog
## 221 5/5/2014 4070 4070 4070 4070
                                      0 128 4069
                                                     1
                                                          0 1
## 222
       5/6/2014 4081 4135 4057
                                4080
                                      78 124 4068
                                                    12
                                                         -1 -11
## 223
       5/7/2014 4080 4089 4041
                                4064
                                      48 119 4068
                                                    -4
                                                        -16 -21
## 224 5/8/2014 4071 4110 4057
                                4100
                                      53 114 4072
                                                    28
                                                         29 -15
## 225 5/9/2014 4109 4109 4074
                                4099
                                                       -10 -3
                                      35 108 4077
                                                    22
## 226 5/12/2014 4104 4169 4091
                                4167
                                      78 106 4088
                                                    79
                                                         63
## 227 5/13/2014 4187 4192 4150
                                4191 42 102 4099
                                                         4 51
                                                    92
## 228 5/14/2014 4185 4197 4152
                                4160 45 98 4107
                                                    53
## 229 5/15/2014 4163 4197 4005
                               4025 192 104 4103
                                                  -78 -138 -94
## 230 5/16/2014 4046 4057 3875
                                3921 182 110 4088 -167 -125 31
## [1] ""
           Date Open High Low Close
## 231 5/19/2014 3925 3964 3889 3942
## [1] ""
```