

## SF2701: Homework 2

### Dividends on Telia Sonera

Before you start solving this problem, download and open the workspace and read the workspace guide. Both are available from the course homepage.

Suppose that today is 2016-01-05 and consider the market prices of the forward contracts on TeliaSonera.

a) Suppose that a dividend of  $d$  SEK is to be paid at 2016-04-15. Determine  $d$  using the available market data (spot, interest rates, forward prices).

b) Suppose that the dividend to be paid at time  $t$ , corresponding to 2016-04-15, is  $\alpha S_t$ , where  $\alpha > 0$  and  $S_t$  is the spot price of the TeliaSonera share on 2016-04-15. Determine  $\alpha$  using the available market data.

c) Consider a stock that pays a dividend in the near future, for instance, Telia Sonera which pays a dividend on 2016-04-15. Using the method (a) for determining the dividend, determine the market's expectation of the dividend over a longer time period (a few months). That is, if you consider the TeliaSonera dividend, determine the dividend amount on, say 2015-11-04, 2015-12-04, 2016-01-04, 2016-02-04, 2016-03-04, to investigate how the expected dividend has changed over time. Interpret the result. If you investigate further the market's expected dividend around the date 2016-01-29 you will see something interesting. What?