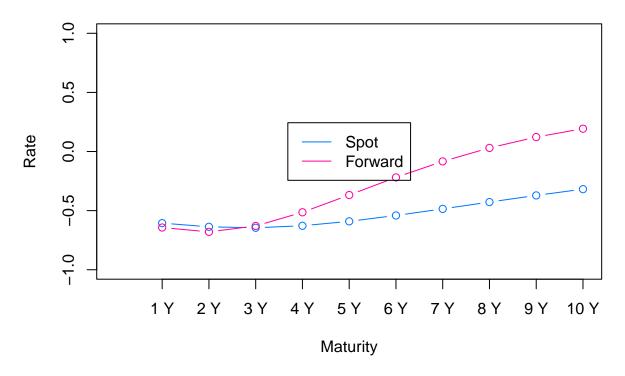
## Yield

## Plot

## Yield curve at 2020



The plot above represents the spot and forward yield curve in July 2020. The spot yield is entirely in the negative area of interest rate due to the APP of the ECB. Even the forward curve is negative until the 8Y maturity. Indeed, In addition, the ECB enlarged the APP program to face the pandemic in the EU countries, lowering the yield curve in the short maturity.

The curves are upward-sloping after 3Y, and the forward rate premium becomes higher as maturity increases. Suggesting that agents the agents had been expecting the recovery of the consumption at pre-covid level, a tightening in the monetary policy, and probably higher inflation rates.

Regarding the maturity before 3Y, the forward rate is above the spot rate and both have negative slopes. Leading to the belief that the agents had been incorporated a recession in the 3 years ahead. As Engstrom and Sharpe (2018) find that a negative near-term spread may only predict recessions because it reflects the market's expectation that a contracting economy will induce the central bank to lower its policy rate. Indeed, the nominal interest rate are driven by: 1. E(Inflation rates) -> inflation risk premium 2. E(Monetary policy) -> real rate risk premium Hence, if investors see higher odds of a recession, the long-term inflation risk premium in Treasury bonds will fall. In contrast, an increase in the recession probability would increase the real rate risk premium assked by agents. One interpretation can be that if investors see greater risk of recession, they will attribute higher value to short-term assets that they can easily liquidate to finance

spending on goods and services. It seems reasonable because the covid had already broken out in July, and the prices incorporated the expectation of future covid measures that hinder consumption.

Plot 2

## Yield curve at 2021

