Project 9

MGMTMFE 405

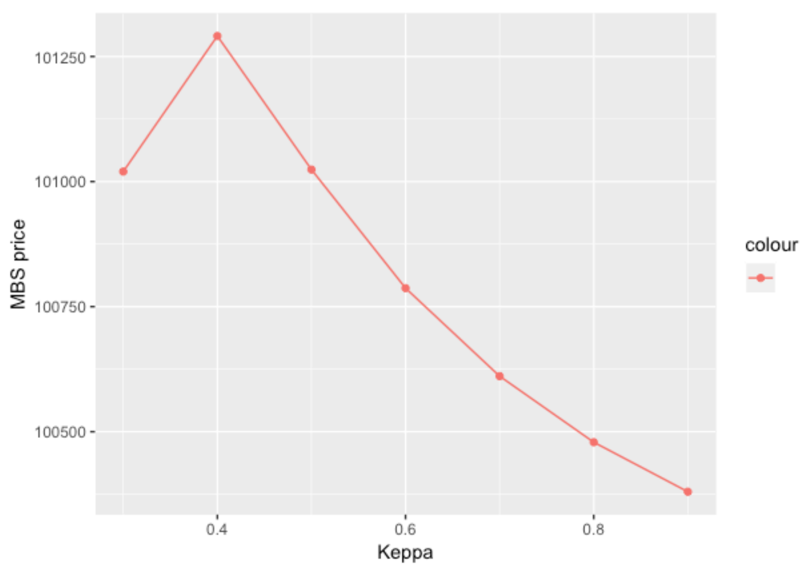
Runhong Huang

Question 1.

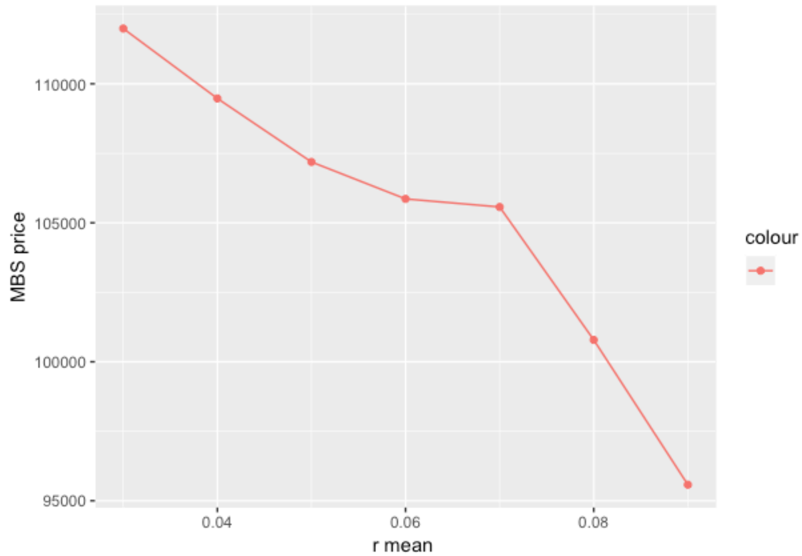
(a)

Using 10000 paths, we obtained the MBS price of **100787.4 .**

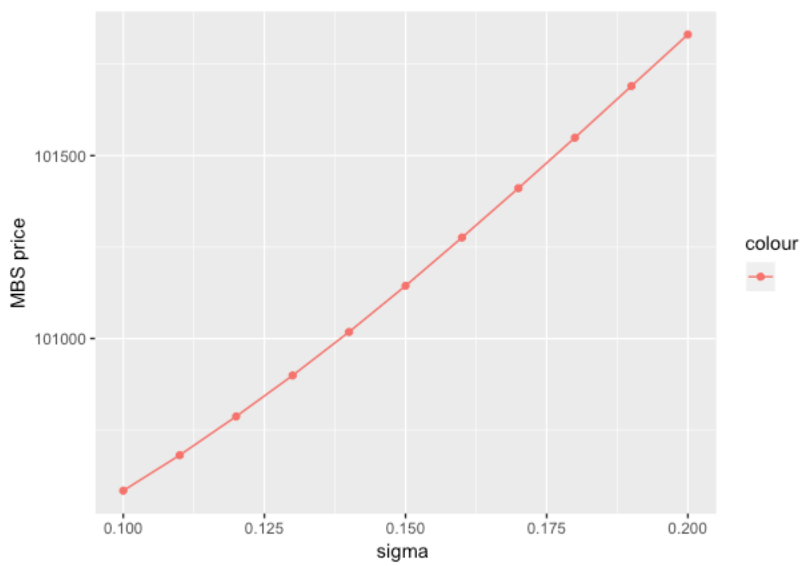
(b)



(c)



(d)



Question 2.

The MBS price is monotonic with the increasing value of the rate, therefore MBS monotonic function of the option adjusted spread. We calculated the OAS is –0.0125.

Question 3.

With the MBS with the market price of 11000. We calculated the duration and convexity.
Duration = **7.24071**
Convexity = **42.8961**