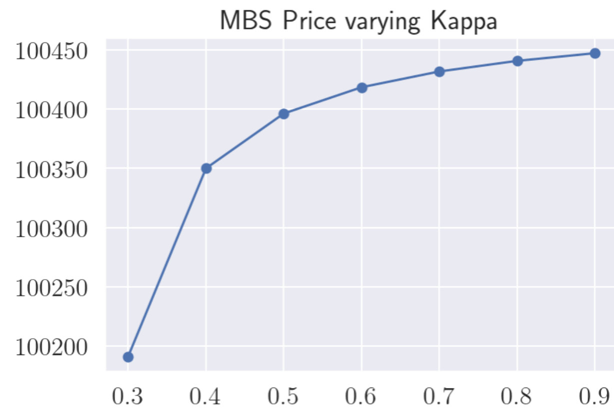
Problem Set 9 _ Kaiyue Wu

1.

a) The MBS price is 100418.3649

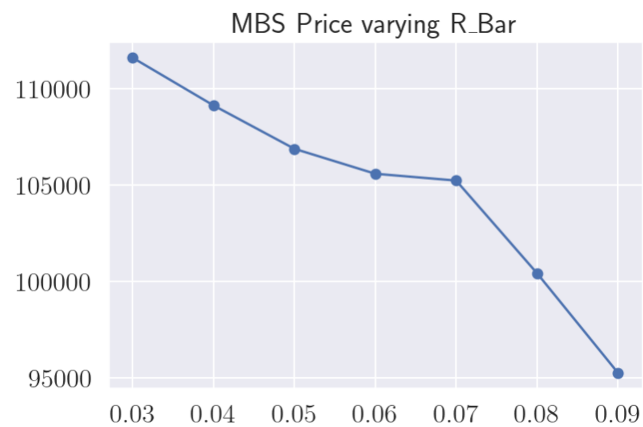
b)

	k	MBS
0	0.3	100191.332559
1	0.4	100349.936148
2	0.5	100396.196404
3	0.6	100418.364881
4	0.7	100431.673114
5	0.8	100440.626103
6	0.9	100447.093347



c)

	r_bar	MBS
0	0.03	111582.879995
1	0.04	109111.603774
2	0.05	106865.303909
3	0.06	105571.417424
4	0.07	105218.926582
5	0.08	100418.364881
6	0.09	95258.401828



2. The Option-Adjusted-Spread (OAS) if the Market Price of MBS is $102,000 is -0.0176040178901824

3.

The OAS-duration is : 6.84137682620905
The OAS-convexity is : 42.3203787769821

4.

	IO	PO
0.03	27085.580525	81797.567105
0.04	26562.817583	79306.232131
0.05	26726.959849	76348.771876
0.06	32665.892997	67834.302390
0.07	47600.633923	49178.500863
0.08	49083.162065	41848.669334
0.09	47577.613326	37895.204394