Time to maturity	**1**	**3**	**5**	**10**	**20**
N=2	0.03%	0.07%	0.23%	0.42%	0.42%
N=3	0.01%	0.03%	0.02%	0.03%	0.01%
N=5	0.01%	0.02%	0.00%	0.00%	0.00%
N=8	0.00%	0.00%	0.00%	0.00%	0.00%

Table 1: Relative absolute difference for different number of basis function N and time to maturity ϑ on the option price compared to $N = 10$, with $Y_0 = D, h_0 = 1, \alpha = 0.1, T_0 = 1$, strike $K = 1$ and the intensity $\beta = 1$. BNS model