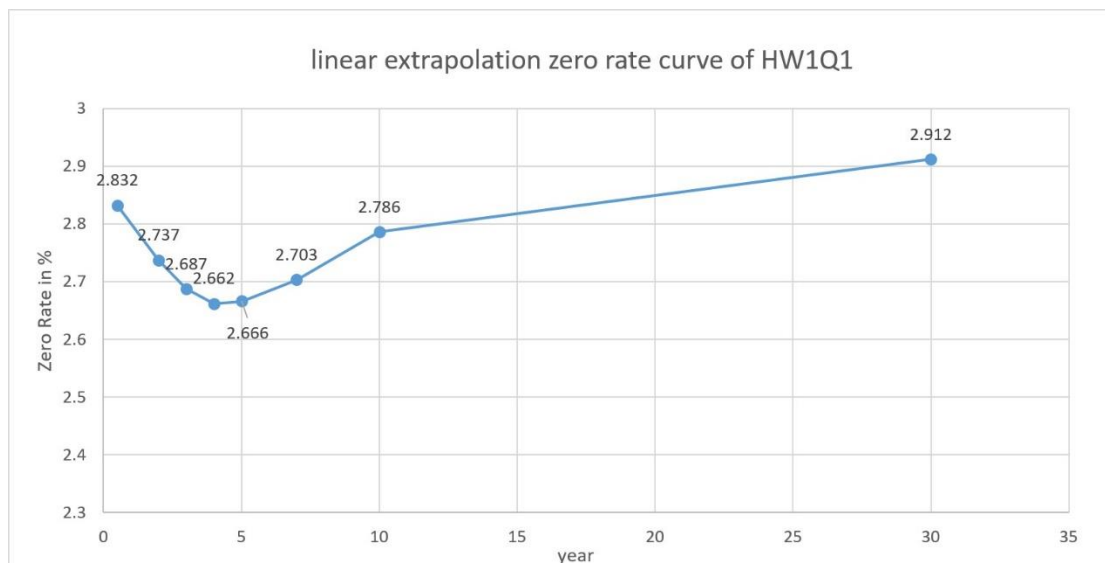# Conclusion of code files & the corresponding Q1Q2 figures

The MATLAB code file "Code_for_linear_interpolation" is used for linear part of Q1 and the Python code files "cubic_spline_part_of_HW1Q1" and "cubic_spline_part_hw1Q1_another" are used for cubic spline part of Q1 (why we use the second python code to generate the cubic spline figures is because the original method of cubic spline extrapolation of the spot rate to get the corresponding 28 unknown variables equations power to 60 are difficult to solve both in MATLAB and Python).

Result figures:

linear extrapolation discount factor curve of HW1Q1

0.986037706
0.923048681
0.947082735
0.899624701
0.875973559
0.82866209
0.758299096
0.420083718

cubic_spline_extrapolation_discount_factor_curve_HW1Q2

cubic_spline_extrapolation_zero_rate_curve_HW1Q1