First version: August 2019. This version: June 24, 2020.

This Matlab code replicates the results in all the Tables and Figures in Qu and Zhuo: "Likelihood Ratio Based Tests for Markov Regime Switching." All folders and subfolders must be added to Matlab path for all the scripts to work.

The files are organized by tables and figures. For example, the folder 'Table\_1' contains scripts that can be used to reproduce the results in Table 1 of the paper. Similarly, the folder 'Figure\_1' contains scripts that can be used to reproduce Figure 1 of the paper. The scripts in different folders run independently.

Inside each folder, there is a readme file that explains the functions of the scripts and how they can be executed. The relevant output files are enclosed to allow a direct comparison with the results reported in the paper. The computational time is also given when it is not trivial.

The directory 'General' contains Matlab functions that support the replication scripts in these folders. It must be added to Matlab path for other scripts to work.

Some figures are plotted using R by loading the output from Matlab.

The codes have been tested on Matlab version 2017b and R version 3.6.1.

The following Packages or toolboxes are needed. For Matlab: Parallel Computing Toolbox. For R: R.matlab.