==============================================================

README

Program Files for “Optimal Monetary Policy Rules and House Prices: The Role of Financial Frictions” by A. Notarpietro and S. Siviero (2014)

==============================================================

Note: results have been generated using MATLAB R2013a and Dynare 4.4.2.

The files in the folder “**MS13-347\_programs.zip**” reproduce the results reported in the paper (Tables 1-5, Figure 1-6).

Results reported in Table 1 and Table 2 are reproduced by running **NS\_2014.mod**. The corresponding steady-state file (**NS\_2014\_steadystate.m**) contains the parameter values.

The optimal values of the coefficient reported in the Table must be inputed in NS\_2014\_steadystate.m to obtain the corresponding results.

The welfare evaluation under the Ramsey plan is obtained by running **NS\_2014\_optimal\_MP.mod**. Such file is automatically generated from NS\_2014.mod, using Giovanni Lombardo’s optimal policy routines, available at: <https://sites.google.com/site/giovannilombardohomepage/>.

Results in Table 3 are obtained by running **NS\_2014\_NO\_FF\_rule.mod** (which computes the optimal coefficients), **NS\_2014\_NO\_FF\_optimal.mod** (which does the welfare evaluation under the Ramsey plan) and **NS\_2014\_NO\_FF.mod** (which provides the results).

Results in Table 4 and Table 5 are obtained by running **NS\_2014\_rule.mod** (which computes the optimal coefficients under the three different objective functions), after changing the values of xi\_p\_D and rho\_H, respectively (see lines 82-87).

Figures 1-2-3 are obtained by running **Make\_Figure\_1\_2\_3.m**, which is self-explanatory. In particular, the numbers reported in the code are taken from **FIGURE\_1\_2\_3\_GRID.xls** (see Footnote 17 in text for details).

The file **Make\_Figure\_4\_5** uses some saved results and produces Figure 4 and Figure 5 in the text. The underlying results can be generated by running **NS\_2014.mod**, after changing the parameter values in **NS\_2014\_steadystate.m**

Figure 6 is generated by the file **Make\_Figure\_6.xls**. The grid of numbers in the file is compiled after collecting results contained in individual files labelled **1.xls**, **2.xls**, …, up to **56.xls**. Such files store the results generated by running **SEQUENCE\_RUN.m**, which in turn calls individual files called **NS\_2014\_rule\_1.mod**, **NS\_2014\_rule\_2.mod**,…, up to **NS\_2014\_rule\_56.mod**. Each of these files computes the optimal coefficients under a different calibration of the two financial frictions parameters (LTV ratio and share of borrowers)