Instructions for Running the Codes

Interactions and Coordination between Monetary and Macro-Prudential Policies

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These notes explain how to run the codes in the subfolders.

1 Flexible Price Economy

This subfolder contains the codes that solve the economies with flexible prices and with or without macro-prudential policy intervention. The subfolder also contains the codes that generate Figures 1-4 in the paper and derive the numerical results in Subsection III.A.

To run the codes, do the following:

1. Run `Parameters.m`. This code generates the parameter values and saves the values in `parameters.mat`.
2. Run `FrictionlessEconomy.m`. This code solves the frictionless economy and saves the solution in `frictionless.mat`.
3. Run `LaissezFaireEconomy.m`. This code solves the laissez-faire economy and saves the solution in `laissezfaire.mat`.
4. Run `FinanciallyRegulatedEconomy.m`. This code solves the financially regulated economy with the socially optimal macro-prudential policy intervention and saves the solution in `financiallyregulated.mat`.
5. Run `FiguresPaper.m`. This code generates Figures 1-4 in the paper.
6. Run `TablePaper.m`. This code generates Table 2 in the paper and derives the numerical results in Subsection III.A.

2 Sticky Price Economy

This subfolder contains the codes that solve the economies with sticky prices and with or without macro-prudential policy intervention. The subfolder also contains the codes that

generate Figures 5-6 in the paper and derive the numerical results in Subsection III.B and Subsection III.C.

To run the codes, do the following:

1. Run `Parameters.m`. This code generates the parameter values and saves the values in `parameters.mat`.
2. Run `FrictionlessEconomy.m`. This code solves the frictionless economy and saves the solution in `frictionless.mat`.
3. Run `LaissezFaireEconomy.m`. This code solves the laissez-faire economy and saves the solution in `laissezfaire.mat`.
4. Run `MonetaryEconomy.m`. This code solves the sticky price economy without the macro-prudential policy and with the socially optimal monetary policy.
5. Run `FiguresPaper.m`. This code generates Figure 5 and Figure 6 in the paper.
6. Run `Table3Paper.m`. This code generates Table 3 in the paper.
7. Run `SocialWelfareMonetaryEconomy.m`. This code derives the numerical results in Subsection III.B.
8. Run `EconomyCoordinatedPolicy.m`. This code solves the sticky price economy with the coordinated policy.
9. Run `Table4Paper.m`. This code generates Table 4 in the paper.
10. Run `SocialWelfareCoordinatedPolicy.m`. This code derives the numerical results in Subsection III.C.

3 Online Appendix

This subfolder contains the codes that plot Figure 1 in the Online Appendix.

To run the codes, do the following:

1. Run `Parameters.m`. This code generates the parameter values and saves the values in `parameters.mat`.

2. Run `FrictionlessEconomy.m`. This code solves the frictionless economy and saves the solution in `frictionless.mat`.

3. Run `SteadyStates.m`. This code generates Figure 1 in the Online Appendix.