

DynareR Manual

Sagiru Mati

2020-06-25

About the Author

The author of this package, **Sagiru Mati**, obtained his PhD in Economics from the Near East University, North Cyprus. He works at the Department of Economics, Yusuf Maitama Sule (Northwest) University, Kano, Nigeria. Please visit his [website](#) for more details.

Please follow his publications on [ORCID: 0000-0003-1413-3974](#)

1 About DynareR

DynareR is an R package that can run Dynare program from R Markdown.

2 Requirements

Users need the following in order to knit this document:

1. Dynare 4.6.1 or above
2. Octave 5.2.0 or above
3. Dynare is installed in the standard location as follows:
 - `/usr/lib/dynare/matlab` for Linux
 - `/usr/lib/dynare/matlab` for macOS
 - `c:/dynare/x.y/matlab` for Windows, where `x.y` is Dynare version number.

If `dynare` and `Octave` are installed in standard location, `DynareR` package will take care of the configurations, which include adding `matlab` directory to path, using the latest installed `dynare` and so on. Otherwise, users have to specify the `matlab` folder using `add_path` function, set the `Octave` path using the `set_octave_path` function, or set `dynare` version using the `set_dynare_version` function.

3 Installation

DynareR can be installed using the following commands in R.

```
install.packages("DynareR")

OR

devtools::install_github('sagirumati/DynareR')
```

4 Usage

Please load the DynareR package as follows:

```
```${r DynareR}
library(DynareR)
```
```

Then create a chunk for `dynare` (adopted from Dynare example file `bkk`) as shown below:

The above chunk creates a Dynare program with the chunk's content, then automatically run Dynare, which will save Dynare outputs in the current directory.

Please note that DynareR uses the chunk name as the model name. So, the output of Dynare are saved in a folder with its respective chunk name. Thus a new folder `bkk/` will be created in your current working directory.

By default, `dynare` chunk imports log output as a list of dataframes, which can be accessed via `dynare$modelName`. Therefore to access the outputs of the `bkk` model produced by the `dynare` chunk, use `dynare$bkk`.

Use inline code `0.0024` to access the value of second row and third column of the `moments`, which is `0.0024`.