**Introduction**

Stem-based method provides:

* Robust to various assumptions of publication selection processes
* Non-parametric
* Conservative
* Fully data-dependent

It provides a formal way to choose the optimal number of most precise studies to include in the meta-analysis estimates.

This folder contains:

* Code to implement
  + Estimation
  + Funnel plot figure
  + MSE figure
* Sample data to generate
* Figures to refer to (as an example output)

**Description**

There are a number of different publication bias correction methods; and each makes specific assumptions about the publication selection processes.

* Each method is accepted with controversy with each other.
* The difficulty is that each method is based on mutually contradictory assumption so that it is difficult to build consensus through these estimates.

The stem-based method will focus on some most precise number of studies.

* Theoretical: this is a valid across all models.
  + For e.g.: most influential according to the model.
  + Formula of decomposition.
  + Also, need not make assumption on underlying distributions.
* Empirical:
  + As the paper shows, it has more adequate coverage probability than other methods.

**Installation**

The following

Open R or R Studio and download the necessary packages.

* After downloading the package and ensuring that the location is correct, you can run read().

**Example**

The following example demonstrates the use of stem-based method:

```

Estimate = stem (data$coefficient, data$SD)

**Technical Description**

There are some arbitrary choice to be made about the estimation procedure.

* One can change these figures at the top of the helper file.

**Final Notes:**

* The name of the bias correction method
* Figure include
* The “choose\_median()” function is included.
  + It is common that the meta-analyses in economics requires choosing one estimate among many estimates contained in one study.

**Acknowledgement:**

I thank Amy Kim for helping me translate the MATLAB code to implement the stem-based method into the R code.

* I also thank Anna Mikusheva for guiding me through the process.