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Net appendix to

Simulating an empirical paper in economics

Why publication bias are so common

Available from: http://www.martin.paldam.dk/Papers/Meta-method/Simulating-pub-bias.pdf

Part 1: Five cartoon (page 1-6)

Part 2: Graphs comparing the PET and PEESE meta-averages (page 7-11)

The following consists of five cartoons, c1, …, c5, with eight pictures on the same page. They correspond to Tables 2 to 6 in the paper. Half of the pictures are also found in the paper. The simulations use the same parameter values as given in the paper.

The DGP: $y_t = \beta\, x_t + \varepsilon_t$, where, $x_t = N(0, \sigma_x^2)$ and $\varepsilon_t = N(0, \sigma_\varepsilon^2)$.
The three parameters are $\beta = 1$, $\sigma_x^2 = 2$ and $\sigma_\varepsilon^2 = 10$.

The EM: $y_t = b\, x_t + u_t$, estimated by OLS.

The number of simulated data for each regression in $m = 30$. All cartoons start with exactly the same picture as Figure c#.1 for reasons explained in the paper.

Figures c#.1 to c#.7 are one of the 1,000 funnel of 500 points estimated for line 1 to 7 in Tables 2 to 6 in the paper. Thus, funnels c#.1 to c#.7 are based on $500 \cdot 140 = 70{,}000$ simulated regressions. The tables in the paper are based on 1,000 funnels, which are 1,000 times more regressions. That is 70 million.

Figures c#.8 is based on 75'000 simulated regressions. The corresponding rows in Tables 2 to 6 are not calculated.

Each picture has a vertical line at $\beta = 1$, which is the true value for the parameter of interest. The horizontal axis always extends 4 units, either from -1 to 3 or from 0.5 to 4.5. The vertical axis also extends 4 units, which is always from 1 to 5. Thus, the 40 pictures are easy to compare.

Figure 1. *SR*0: The ideal funnel; a cartoon for *J* rising

Figure 1.1. For *J* = 1

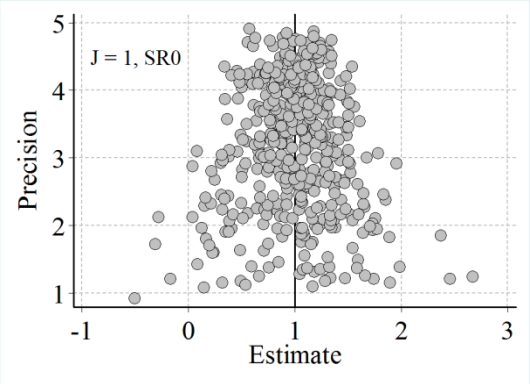


Figure 1.2. For *J* = 5

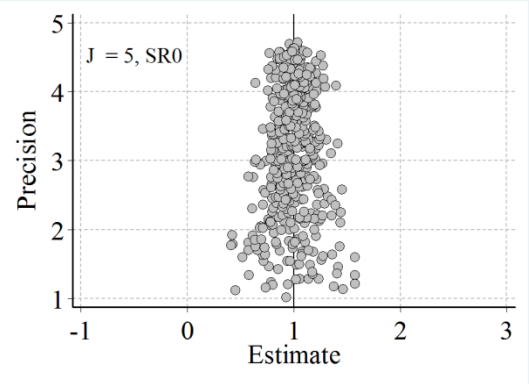


Figure 1.3. For *J* = 10

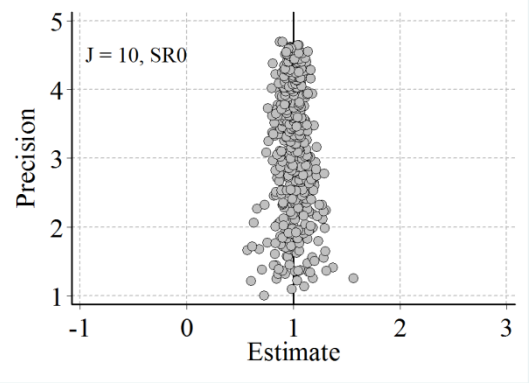


Figure 1.4. For *J* = 15

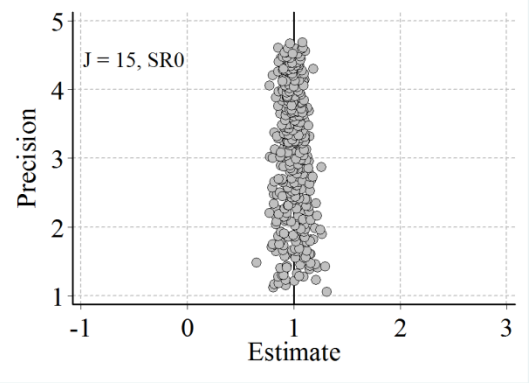


Figure 1.5. For *J* = 25

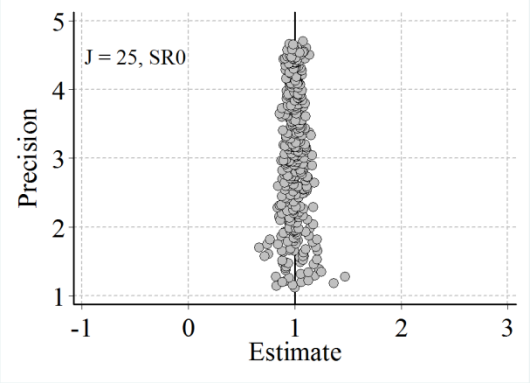


Figure 1.6. For *J* = 34

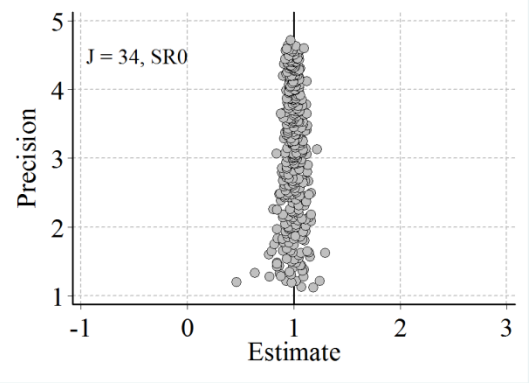


Figure 1.7. For *J* = 50

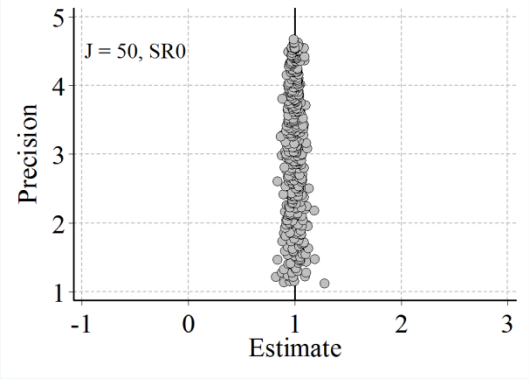


Figure 1.8. For *J* = 150

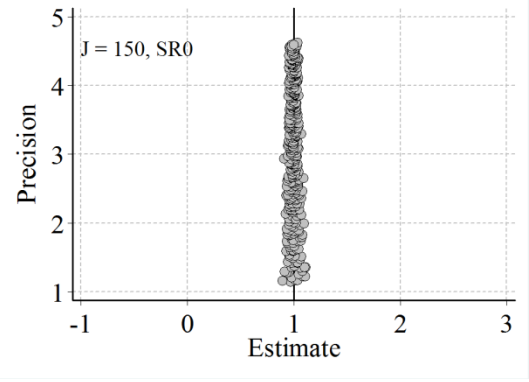


Figure 2. *SR*1: The polished funnel; a cartoon for *J* rising

Figure 2.1. For *J* = 1

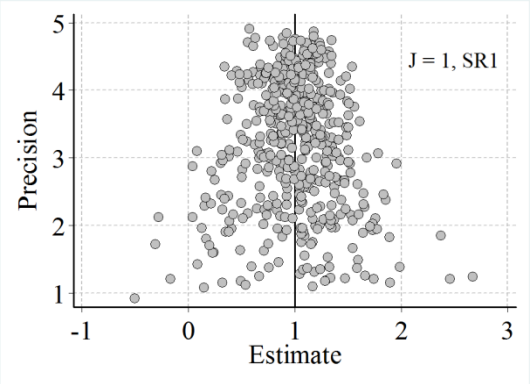


Figure 2.2. For *J* = 5

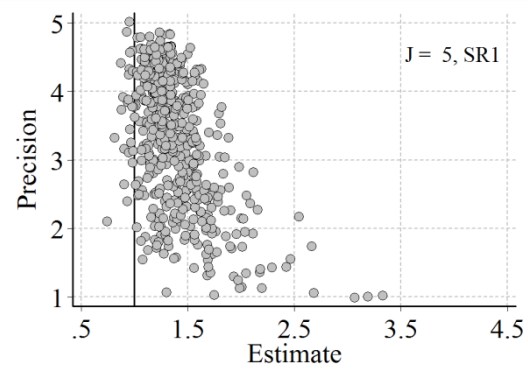


Figure 2.3. For *J* = 10

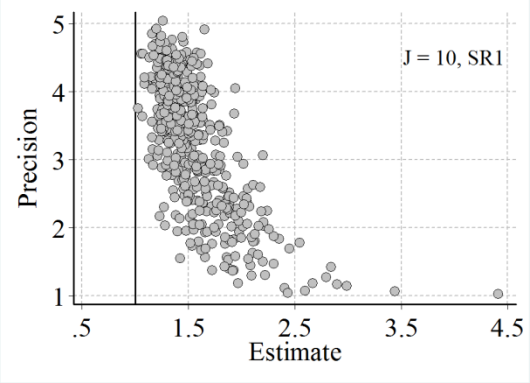


Figure 2.4. For *J* = 15

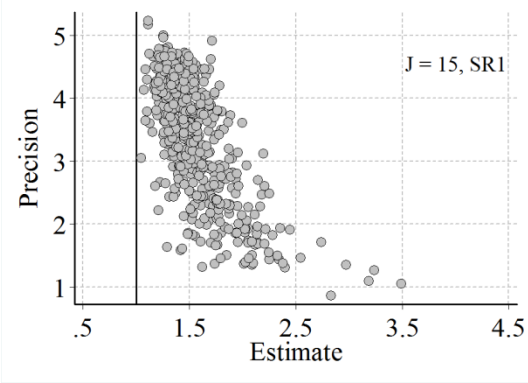


Figure 2.5. For *J* = 25

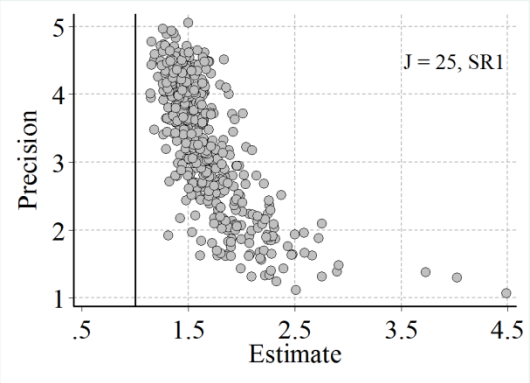


Figure 2.6. For *J* = 34

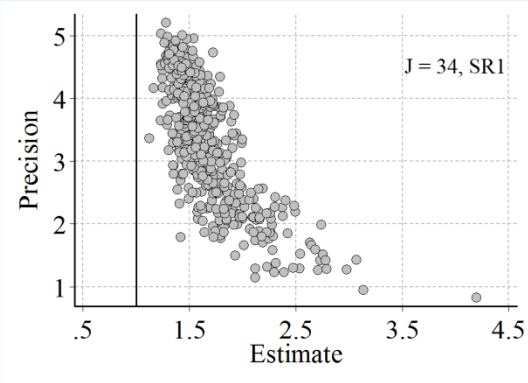


Figure 2.7. For *J* = 50

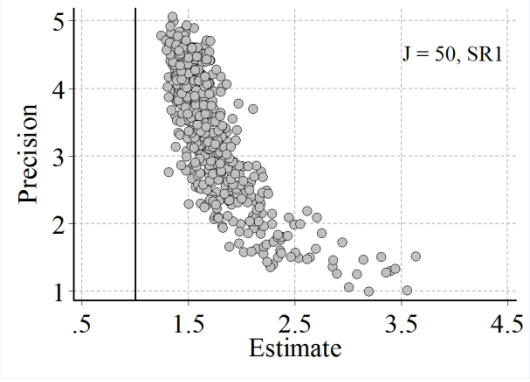


Figure 2.8. For *J* = 150

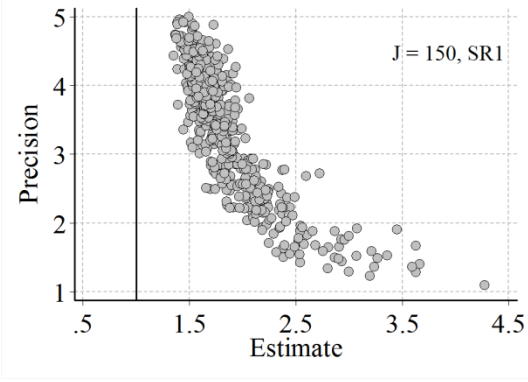


Figure 3. *SR*2: The censored funnel; a cartoon for *J* rising

Figure 3.1. For *J* = 1

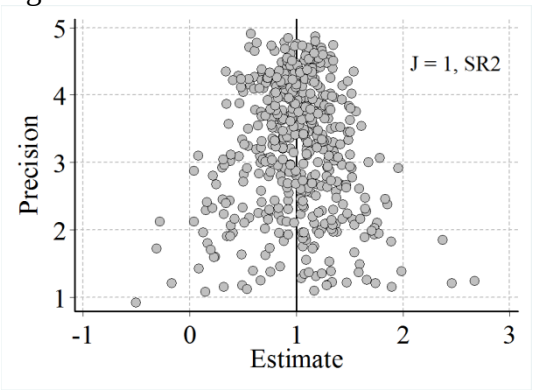


Figure 3.2. For *J* = 5

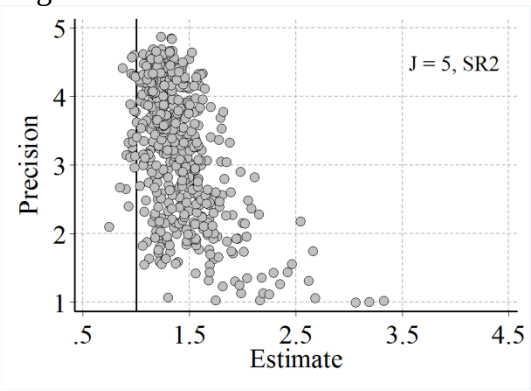


Figure 3.3. For *J* = 10

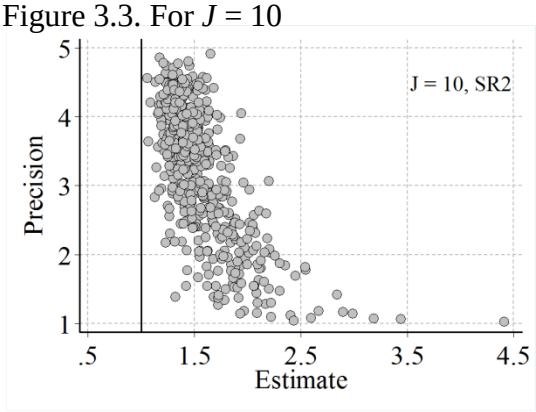


Figure 3.4. For *J* = 15

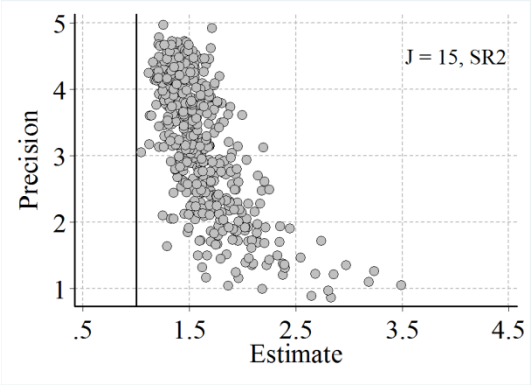


Figure 3.5. For *J* = 25

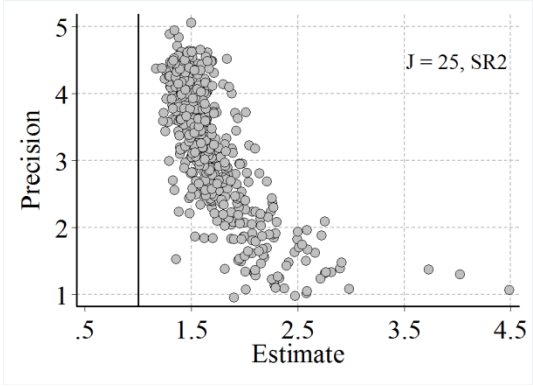


Figure 3.6. For *J* = 34

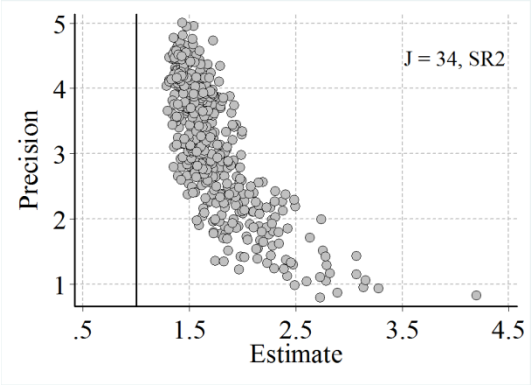


Figure 3.7. For *J* = 50

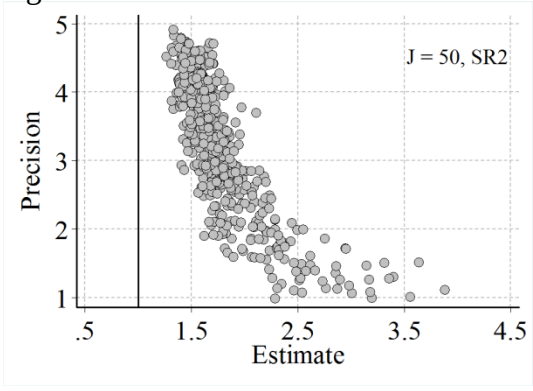


Figure 3.8. For *J* = 150

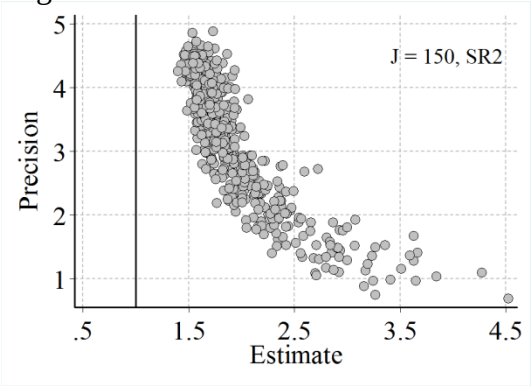


Figure 4. *SR*3: The best indifference funnel; a cartoon for *J* rising

Figure 4.1. For *J* = 1

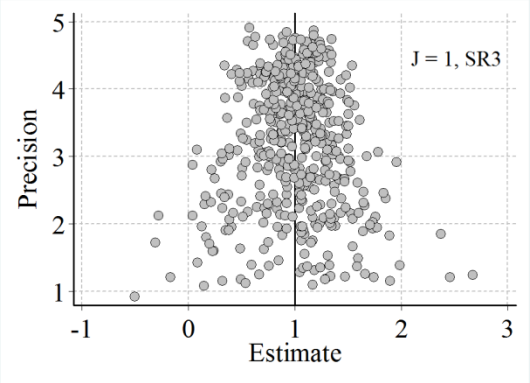


Figure 4.2. For *J* = 5

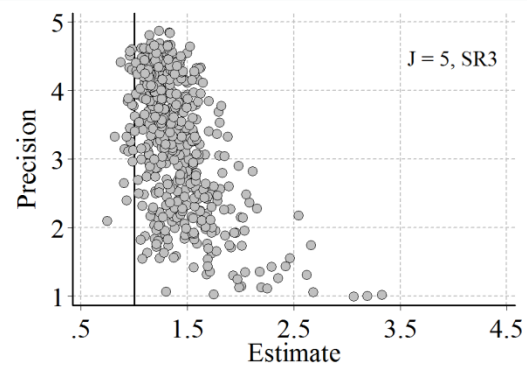


Figure 4.3. For *J* = 10

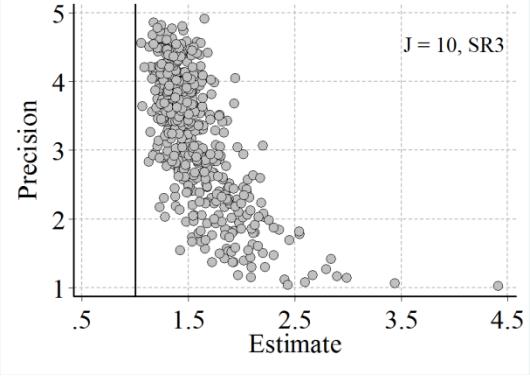


Figure 4.4. For *J* = 15

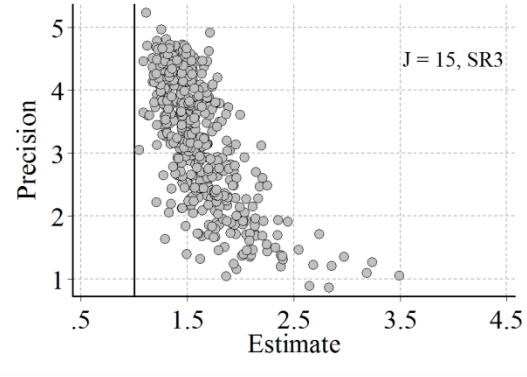


Figure 4.5. For *J* = 25

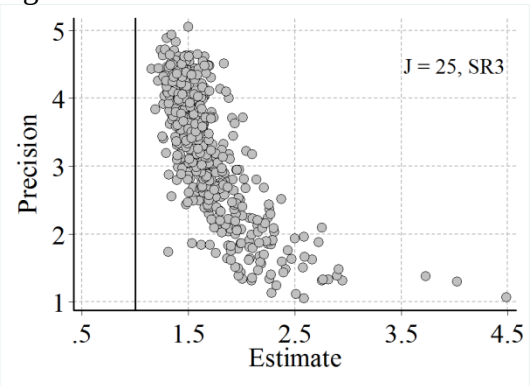


Figure 4.6. For *J* = 34

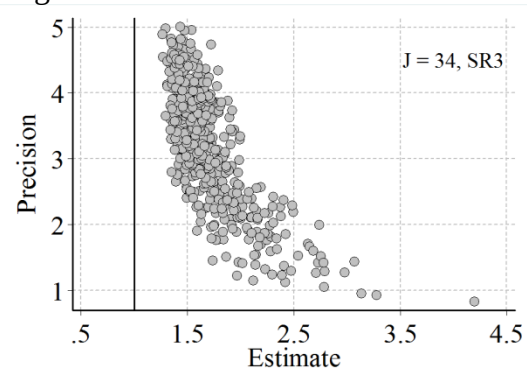


Figure 4.7. For *J* = 50

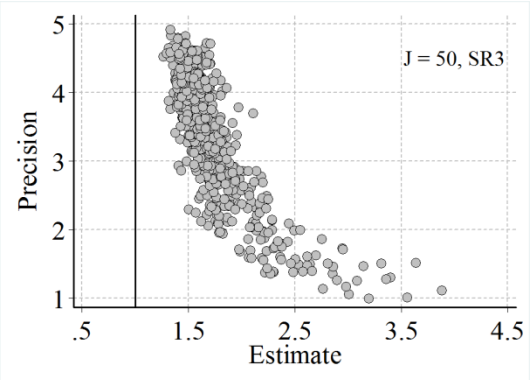


Figure 4.8. For *J* = 150

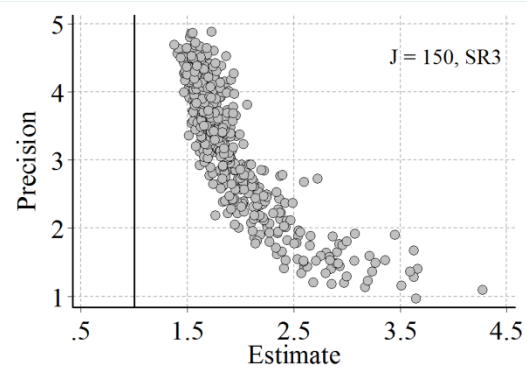


Figure 5. *SR*4: The satisficing funnel; a cartoon for *J* rising

Figure 5.1. For *J* = 1

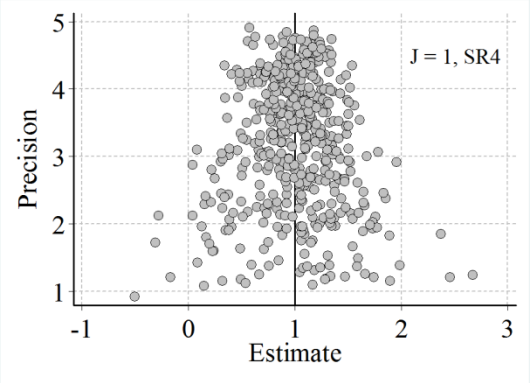


Figure 5.2. For *J* = 5

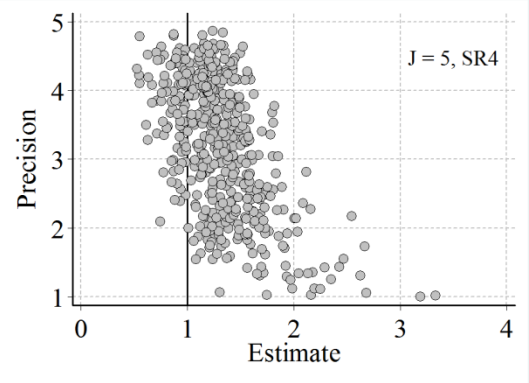


Figure 5.3. For *J* = 10

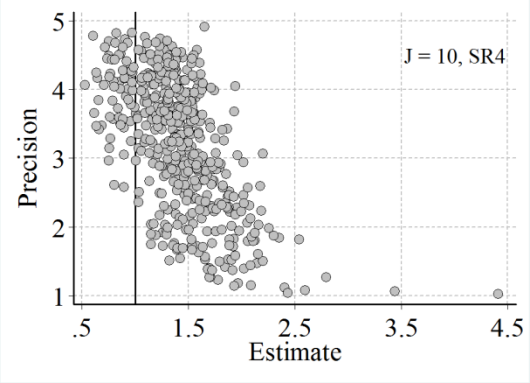


Figure 5.4. For *J* = 15

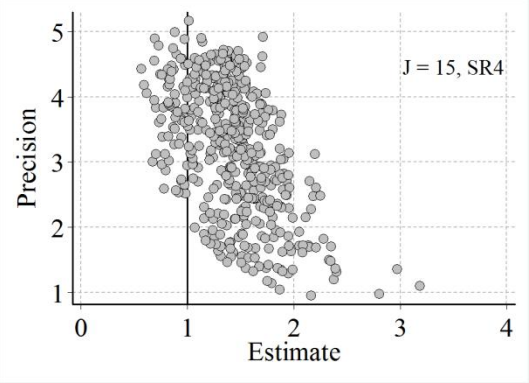


Figure 5.5. For *J* = 25

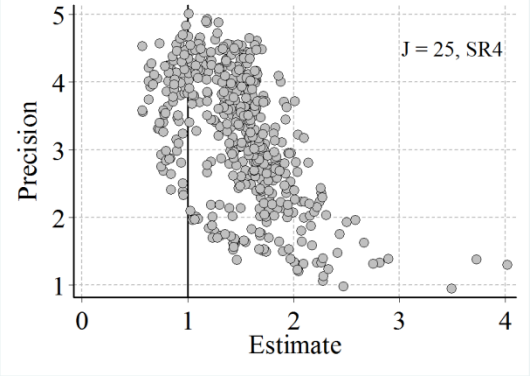


Figure 5.6. For *J* = 34

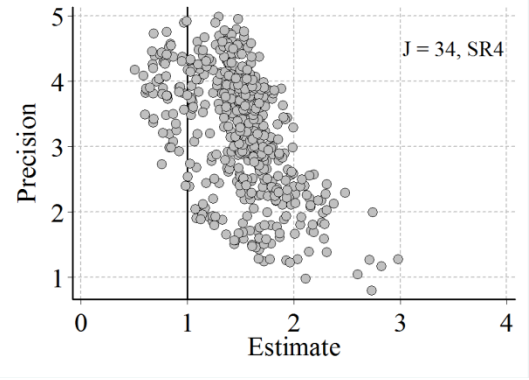


Figure 5.7. For *J* = 50

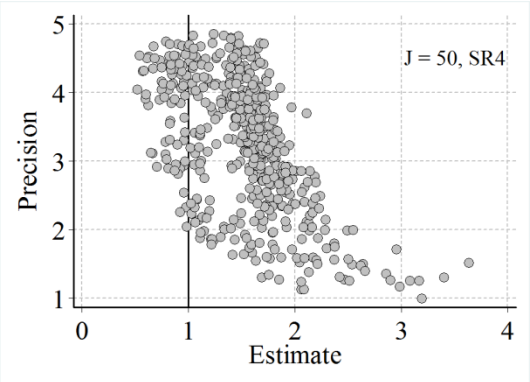
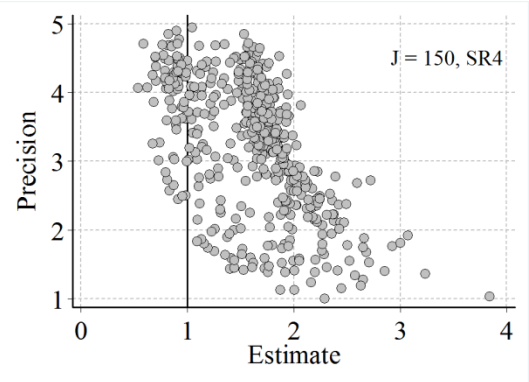


Figure 5.8. For *J* = 150



Part 2: Graphs comparing the PET and PEESE meta-averages

The two meta-averages are trivially the same as the mean for SR0. For the remaining four SRs they differ.

Fig 6a. Comparing bias the PET and PEESE for *SR*1

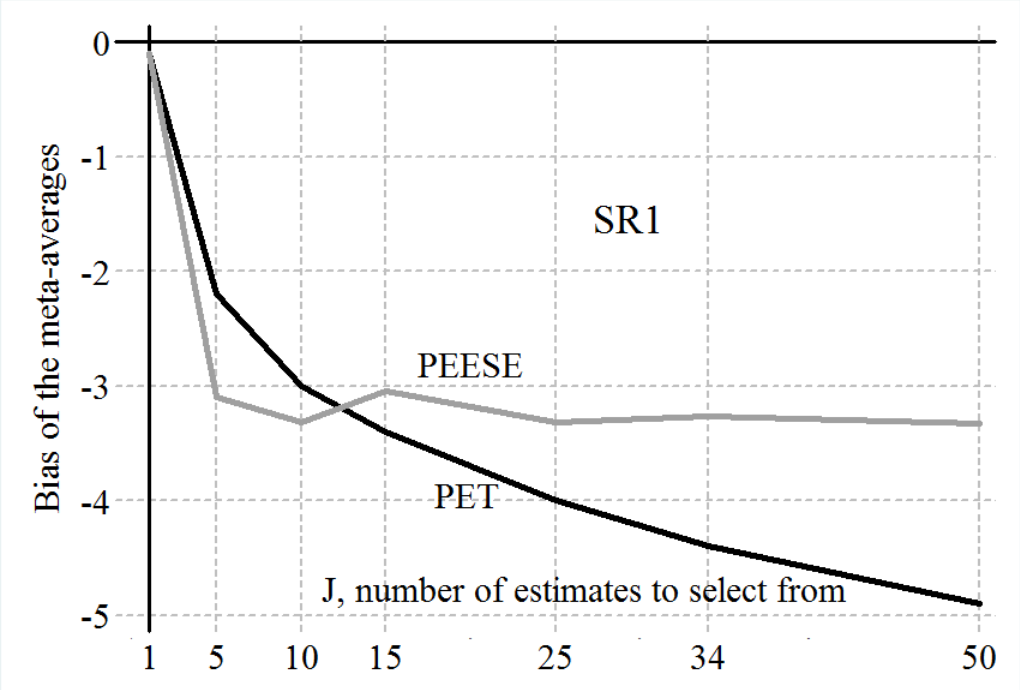


Fig 6b. Comparing rejections of the PET and PEESE for *SR*1

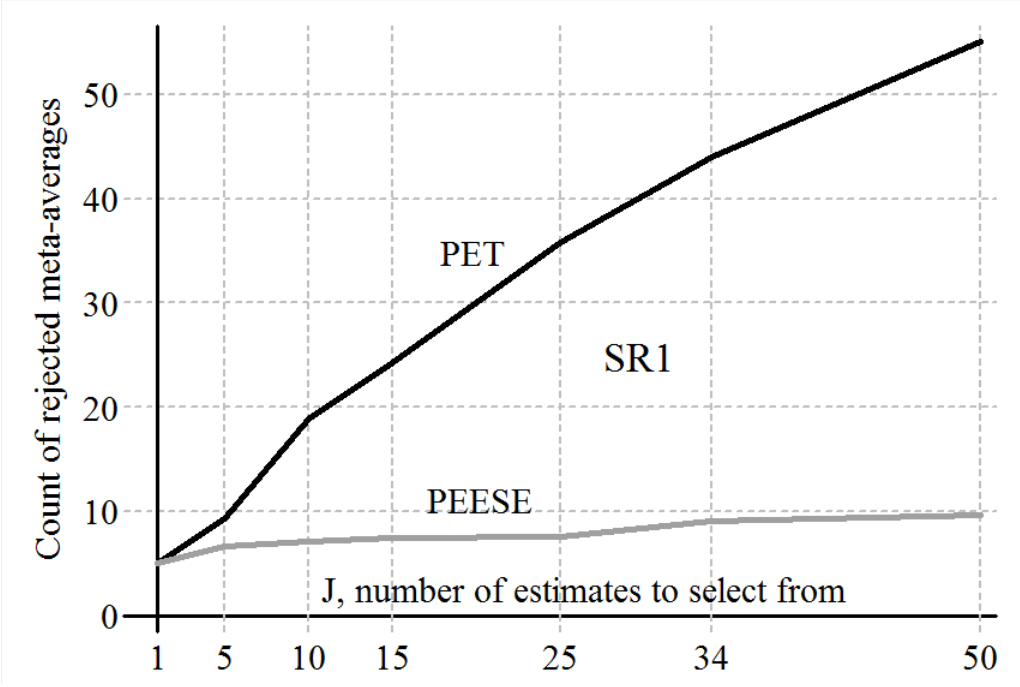


Fig 7a. Comparing bias the PET and PEESE for *SR*2

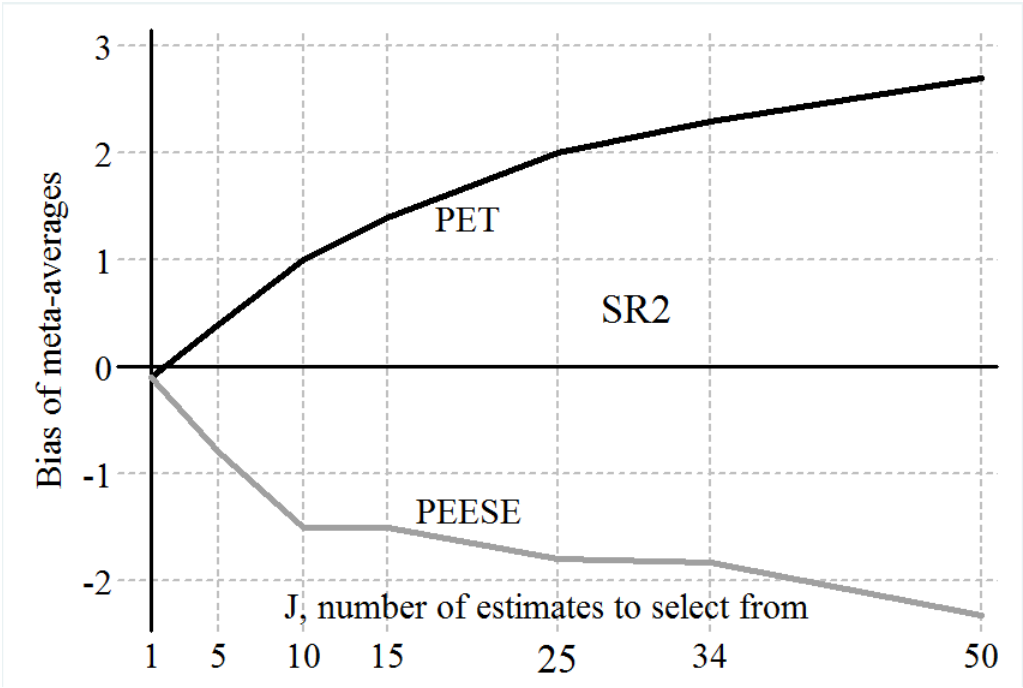


Fig 7b. Comparing rejections of the PET and PEESE for *SR*2

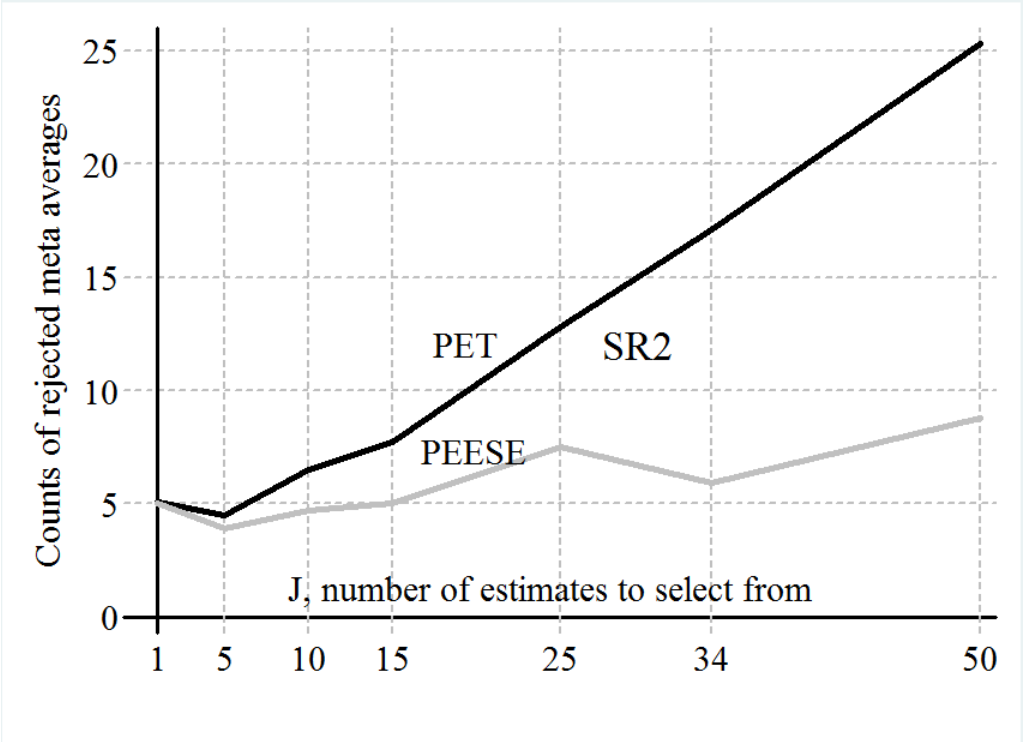


Fig 8a. Comparing bias the PET and PEESE for *SR*3

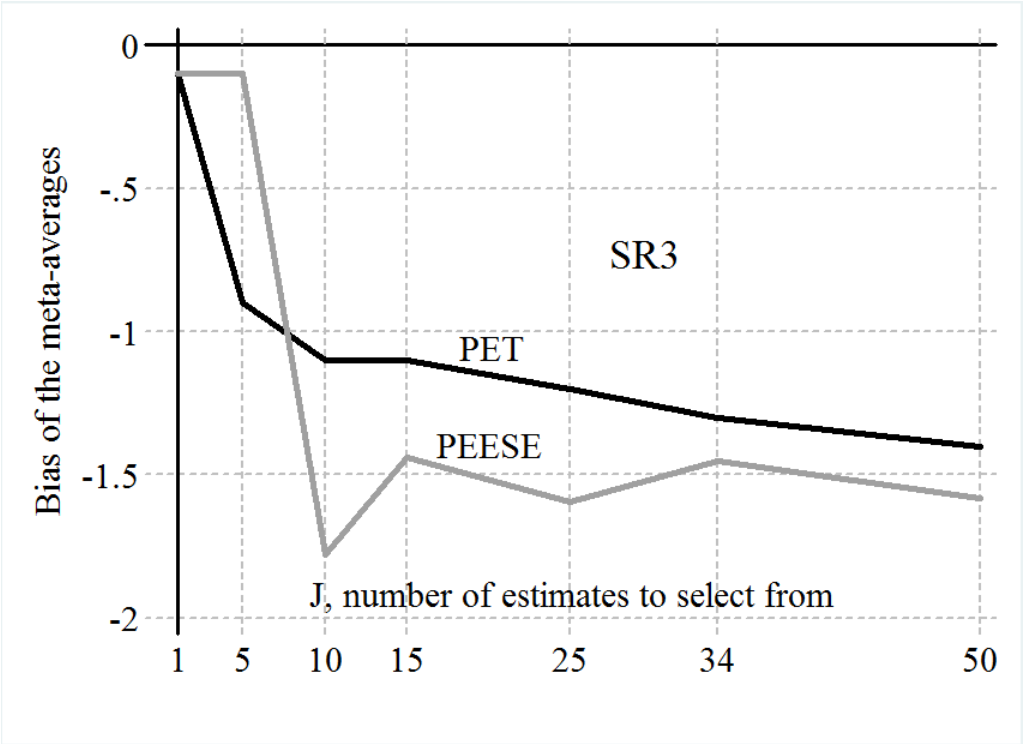


Fig 8b. Comparing rejections of the PET and PEESE for *SR*3

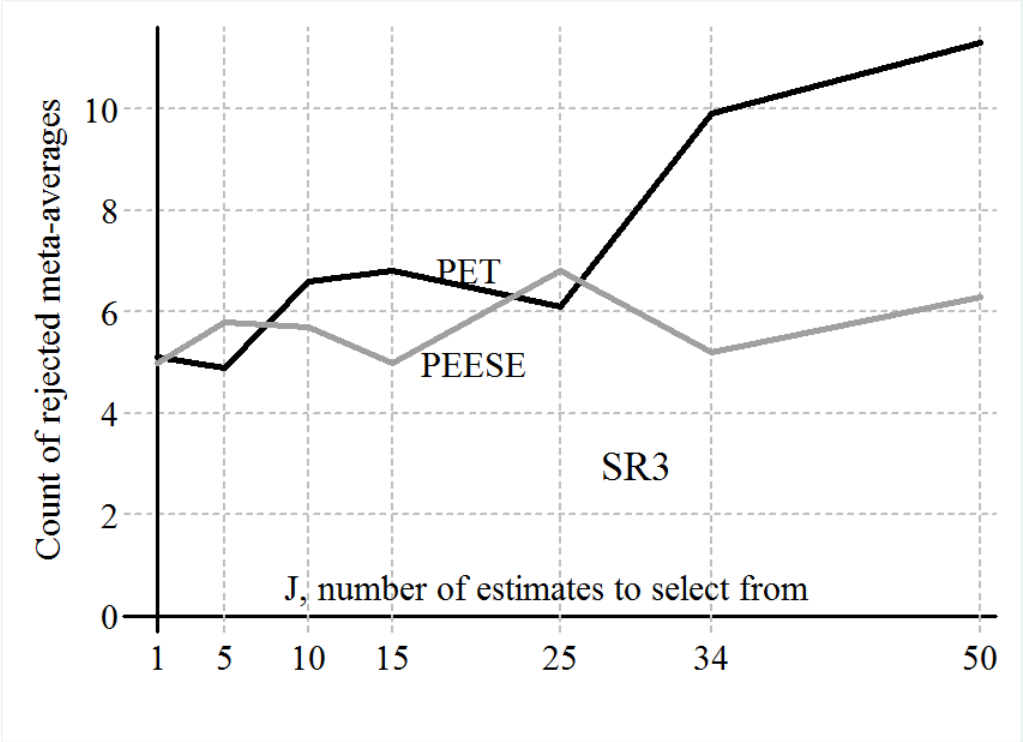


Fig 9a. Comparing bias the PET and PEESE for *SR*4

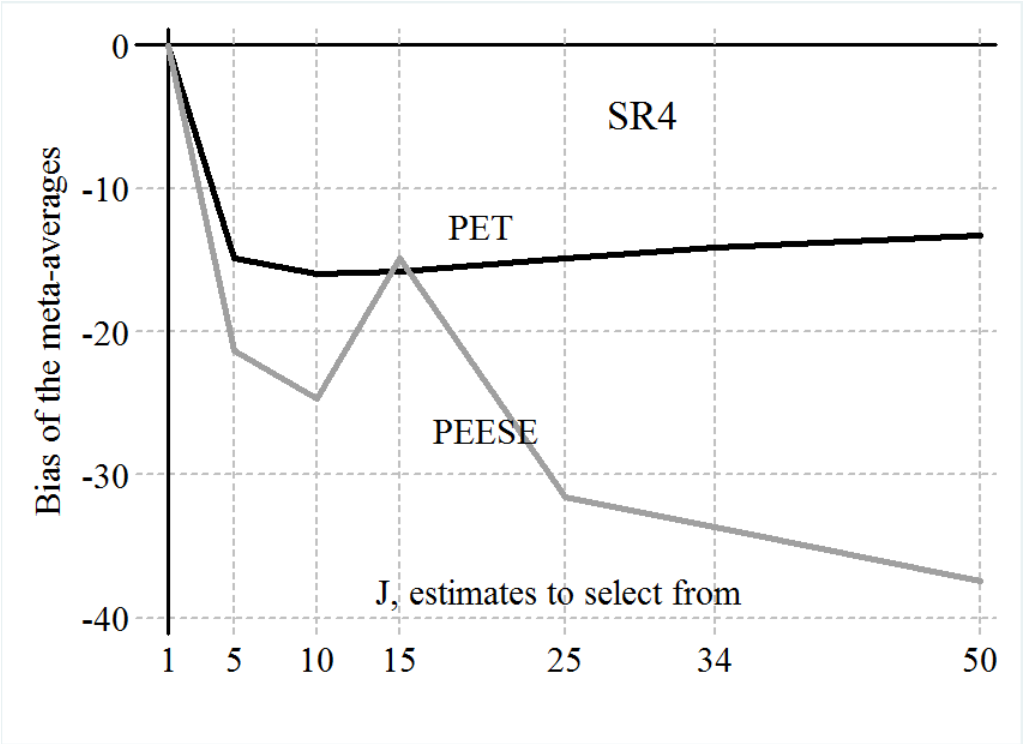
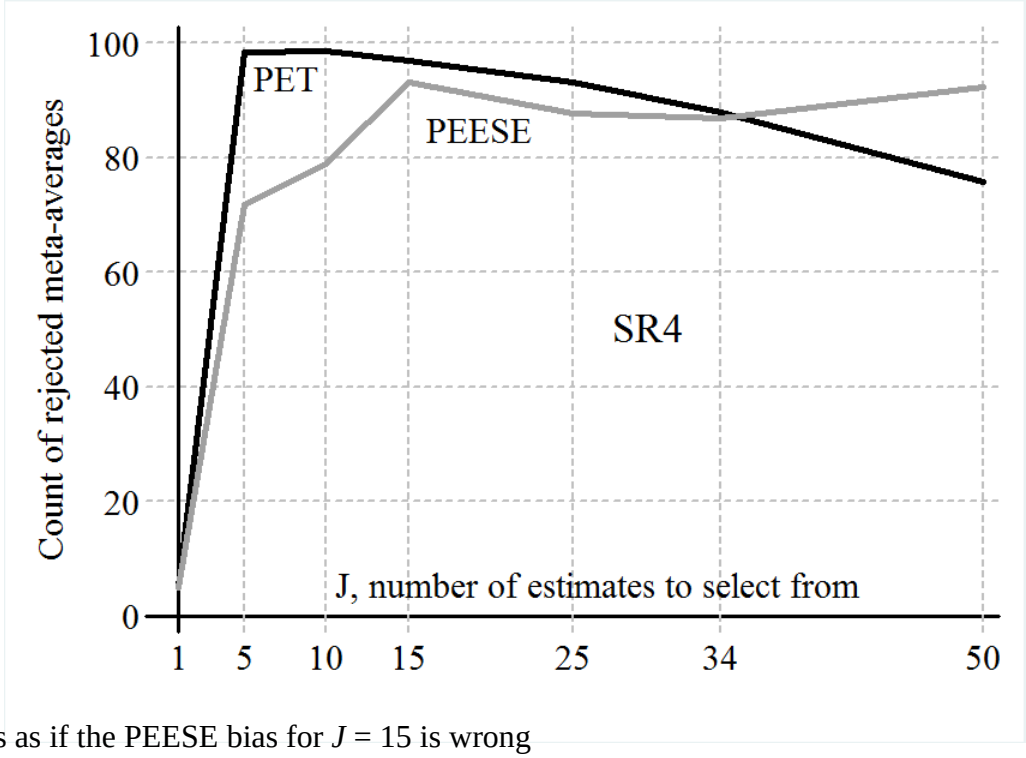


Fig 9b. Comparing rejections of the PET and PEESE for *SR*4



It looks as if the PEESE bias for $J = 15$ is wrong