

Engle-Granger critical value calculation at the 5% level for $N = 2$ and $T = 25$ with no trend:

$$\begin{aligned} & \beta_{\text{inf}} + \beta_1/T + \beta_2/T^2 + \beta_3/T^3 \\ & -3.33613 - 6.1101/25 - 6.823/25^2 = -3.635118 \end{aligned}$$

With trend:

$$-3.78057 - 9.5106/25 - 12.074/25^2 = -4.257586$$

References

- [(2010)] MacKinnon, James G., 2010. Critical Values for Cointegration Tests. http://qed.econ.queensu.ca/working_papers/papers/qed_wp_1227.pdf