# Some Additional Findings for Xu and Yao (2015)

Using the fixed effect counterfactual estimator (Liu, Wang and Xu 2022), I reconduct the panel data analysis in Xu and Yao (2015). I find that the application passes the placebo test, in which only three periods before the onset of the treatment are used for testing, but fails the the test for no pre-trend, in which close to ten pretreatment periods are used for testing in a leave-one-out fashion.

FIGURE 1. TREATMENT STATUS: CLAN LEADERS AND PUBLIC INVESTMENT
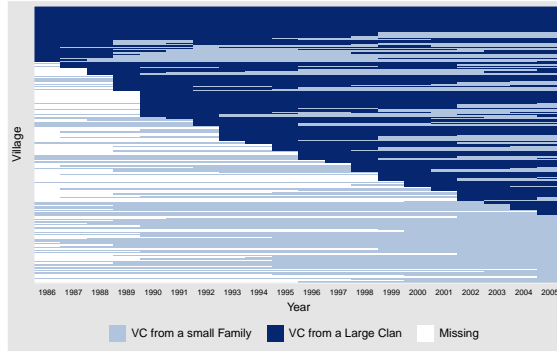
Note: The above figure plots the treatment status using data from Xu and Yao (2015). Villages are ordered based on the timing when a candidate from large clans are elected as the village chairperson. The plot is made by the `panelView` package.

FIGURE 2. THE EFFECT OF CLAN LEADERS ON PUBLIC INVESTMENT
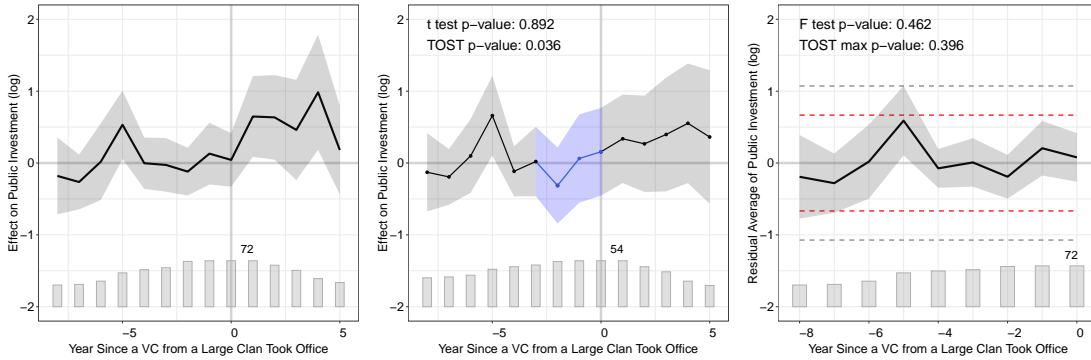
(a) Dynamic Treatment Effects (b) Placebo Test (c) Testing No Pre-Trend

Note: The above figures show the results from applying `FEct` to data from Xu and Yao (2015), who investigate the effect of village chairpersons from large clans on the amount of public investment in Chinese villages. The left figure shows the estimated dynamic treatment effects using FEct. The middle figure shows the results from a placebo test using the "treatment" in three pretreatment periods as a placebo. The right figure shows the results of an equivalence test for no pre-trend, in which the red and gray dashed lines mark the equivalence range and the minimum range, respectively. The bar plot at the bottom of each figure illustrates the number of treated units at a given time period relative to the onset of the treatment.

References

Liu, Licheng, Ye Wang and Yiqing Xu. 2022. "A Practical Guide to Counterfactual Estimators for Causal Inference with Time-Series Cross-Sectional Data." *American Journal of Political Science* (forthcoming).

Xu, Yiqing and Yang Yao. 2015. "Informal Institutions, Collective Action, and Public Investment in Rural China." *American Political Science Review* 109(2):371–391.