

Replication file for Aid, Policies, and Growth (2000)

The programs are provided in MATLAB, and run under Version 7.10.0.499 (R2010a) 64-bit (win64).

There is one data file: `apg_data.xlsx` (this is a subset of a larger data file available on my website). The subset is defined by the availability of all the variables that appear in the regressions in Table 3 in the paper, but also exclude Israel and Singapore from the sample. The data are labeled and further details are found in the text.

There are six programs (m-files) included here.

`apg_replicate.m`: this is the main program which reads in the data and runs the various regressions

`ols.m`: a subroutine for running OLS regressions

`twosls.m`: a subroutine for running 2SLS regressions

`display_reg.m`: a subroutine that prints out the output from the regressions

`iv_diag.m`: a subroutine for computing some of the diagnostic statistics reported with the 2SLS regressions

`display_diag.m`: a subroutine that prints out the diagnostic output from `iv_diag.m`

Conceptual differences

In the original paper the regressions reported in Table 8 and 9 include standard errors corrected for serial correlation. I no longer provide code for this type of correction—but the standard errors calculated in the code are robust to heteroskedasticity. The point estimates of the betas are unaffected by this change.

In the paper Table 8 includes 195 observations. I can no longer determine why this is the case. The replication file gets a version of Table 8 with 189 observations, the same number of observations as in Table 5 (the low income subset of the sample). The results are similar to what appeared in the paper.

Errata

Typo: The coefficient on aid in Table 4 Column 4 (OLS) should be 0.049 not 0.49.

Coding errors led to the following errors:

The chi-squared statistic reported in Table 4 Column 4, should be 2.14 with a p-value of 0.54. Thanks to Weibin Huang of Xiamen University for leading me to this error.

Similarly, the chi-squared statistic reported in Table 5 Column 7, should be 0.53 with a p-value of 0.91.

Other Changes

The code notes that the Durbin-Wu-Hausman statistics should really have been computed without a degrees of freedom correction. This is simply because all other statistics in the paper use large sample (T , not $T-k$) type standard errors. I report the statistics computed (i) the “better” way and (ii) the way they were computed in the paper (for replication purposes).

Clarifications

A common pitfall in replication is that people using the data have not included the time dummies in the list of exogenous right hand side variables when performing the 2SLS regressions. Another common pitfall is not excluding Israel and Singapore. The latter issue is taken care of here, because I have excluded Israel and Singapore from the data subset.

Another small pitfall is that I used large sample standard errors everywhere (except as noted above). Most standard econometrics packages report small sample standard errors. Of course, this has no effect on point estimates.

The paper is also a bit vague about the fact that the same list of instruments is used in all of the regressions reported in Tables 3, 4 and 5.

Table 8 uses the low-income subsample (see above point on 189 vs 195 observations, as well as the conceptual change on standard errors).

Table 9 uses the low-income non-outlier subsample (see above point on the conceptual change on standard errors).

Output

If the program is run in MATLAB it produces a diary file `apg_replicate.txt`. I’ve included a copy of this file.