

Capital Tax Reform and the Real Economy: The Effects of the 2003 Dividend Tax Cut

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This .zip file contains the Stata programs used to generate all results in the paper, including general code for estimating firm-level cost of capital (see below). Three logistical steps are necessary for execution: (a) Set up the directory structure specified in the first lines of *div_analysis_exec.do*, (b) Place all .do files (included in this .zip file) in the “do” subdirectory and place all input datasets (some listed below, others available only under contract with the U.S. Internal Revenue Service and on secure IRS systems) in the “rawdata” subdirectory, and (c) Run *div_analysis_exec.do* in Stata.

Description of each .do file:

[1] *div_analysis_exec.do* generates every table, graph, and number reported in the paper.¹ It calls each of the other .do files, so one only needs to run this .do file in order to replicate the paper. The input datasets that are not contained in this zip file are firm-year level datasets as described in the manuscript; those input datasets as well as the SAS code used to create them run internally on IRS systems and cannot be posted publicly due to confidentiality restrictions.

[2] *div_analysis_dfldefinebins.do* prepares the data for reweighting.

[3] *div_analysis_dfl.do* executes the reweighting.

[4] *div_analysis_mainmacros.do* set default options for the regressions.

[5] *div_analysis_makeyvarscaled.do* scales each regression’s dependent variable.

[6] *div_analysis_ddreg.do* executes a difference-in-difference regression.

[7] *div_analysis_ddregyrbyyr.do* executes a difference-in-difference regression that estimates an effect for every post-tax-cut year.

[8] *div_analysis_table3loop.do* is used to generate each cell reported in Table 3.

[9] *div_analysis_makeyvarscaled_graph.do* scales the dependent variable for each panel in Figure 2.

[10] *div_analysis_graph.do* generates each panel in Figure 2.

[11] *div_analysis_fig3loop.do* generates each dot’s value in Figure 3.

¹The exceptions are Appendix Figures 1a-c, which are created in SAS using population microdata accessed under IRS contract on secure IRS systems.

Description of each input dataset:

[1] *gross_private_fixed_nonres_inv_1111_Quarterly.txt* contains 1947-2011 quarterly gross private fixed non-residential investment from the National Income and Product Accounts (downloaded from Federal Reserve Economic Data updated 11/23/2011 from <http://research.stlouisfed.org/fred2>).

[2] *gross_private_fixed_nonres_inv_1111_Monthly.txt* contains 1947-2011 Consumer Price Index and is used in conjunction with *gross_private_fixed_nonres_inv_1111_Quarterly.txt*. The source is the same as for *gross_private_fixed_nonres_inv_1111_Quarterly.txt*.

[3] *div_census_statainsheet.csv* is a CSV version of the Census table “Number of Firms, Number of Establishments, Employment, Annual Payroll, and Estimated Receipts by Enterprise Receipt Size for the United States, All Industries: 2007”, downloaded from <http://www.census.gov/econ/susb/data/susb2007.html> on December 5, 2012.

[4] *houses Shapiro_tablea2_decon_rates.csv* is a CSV version of Table A2 “Economic and MACRS Depreciation by Detailed Type of Capital” from House and Shapiro (AER 2008).

[5] *taxrates_all_19962012fedplusstateavg.csv* contains a 1996-2012 time series of U.S. top business income tax rates and of accelerated (bonus) depreciation allowances. The tax rates equal the top federal tax rate in each plus a pooled average of top state tax rates. The sources and details are listed in the .xlsx file of the same name. The tax rates included are the corporate income tax rate (applicable to C-corporation business income), the individual ordinary income tax rate (applicable to S-corporation business income), the individual dividend income tax rate (applicable to dividend income earned by U.S. individuals from C-corporations), and the individual capital gains tax rate (applicable to all taxable capital gains realized by U.S. individuals on both C-corporate and S-corporate stock).

Description of general code for estimating firm-specific costs of capital:

Many modern empirical analyses of taxes and investment require firm-specific costs of capital that account for firm-specific investment mixes (across assets with different depreciation rates and tax recovery periods). However to my knowledge, there is no existing public code that computes firm-specific costs of capital. The *div_analysis_exec.do* file contains Stata code that computes firm-specific costs of capital following Auerbach and Hassett’s (1992) formulation, as detailed in Online Appendix D. The code can be amended to compute firm-specific costs of capital in any other dataset with firm-level information on investment or asset mixes. This code is under the heading “Appendix Table 6” in *div_analysis_exec.do*. See Online Appendix D.ii for full details.