Replication data for
Playing Yo-Yo with Bank Competition:
New Evidence from 1890 to 2014

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The folder contains datasets and programs which are necessary for replicating the results in the article “De Bonis R., Marinelli G., Vercelli F., 2017, Playing Yo-yo with Bank Competition: New Evidence from 1890 to 2014, Explorations in Economic History”. The dataset does not include the observations after 1973 because the microdata, gathered by the Bank of Italy for prudential purposes, cannot be released to the public.

The **datasets** are:

- Original_Micro_Data.dta
- serie_aggregate_1890_1973_FontiVarie.dta
- Macro_Data.dta
- GeographicalData_ActiveBanks.dta
- GeographicalData_Herf.dta
- Bank_Data_for_Boone.dta
- micro_boone_ByAnno_OLS.dta

The **programs** are:

- 001_BuildingDataset.do

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1 Dataset

“Original Micro Data.dta” contains micro data on banking balance sheets. Most of the variables come from the ASCI database (Historical Archive of Credit in Italy). The description of the variable can be found in (Natoli et. al 2016). It also contains 4 variables that are not included in the ASCI database:

- Cod_Reg_BI: regional level code
- Cod_Prov_BI: province level code
- Utili_Lordi: Pre-tax profits since 1963
- Costi_Oper: Operational costs, since 1963

It is used within the program “001_BuildingDataset.do”.

“serie_aggregate_1890_1973_FontiVarie.dta” includes estimates of Italian total, deposits and loans. It is based from “Cotula et al., 1996, I bilanci delle aziende di credito 1890-1936, Laterza, Roma-Bari”, and on “Banca d’Italia, various issues, Bollettino”. It is used within “001_BuildingDataset.do” to compute market shares.

“Macro Data.dta” includes some macro variables that are used in Figures 1 and 2. It also contains the 3 macro variables that are included in the regressions of Table 3.

- Anno: Year
- Sample: Number of banks in our sample
- Universe_NoBCC: Number of banks in the universe, excluding mutual cooperative banks
- Universe_ConBCC: Number of banks in the universe, including mutual cooperative banks
- Tot_Sportelli: Number of branches
- Entries: Number of entries (including mutual cooperative banks since 1960)
• Exits: Number of exits (including mutual cooperative banks since 1960)
• TurnoverRate: Turnover rate (considering mutual cooperative banks since 1960)
• ma: Annual flow of M&As operations
• ma_flusso_pct: Annual percentage flow of M&As operations
• PCM_Agg_mean_W99: Price-to-cost-margin
• Herfindahl_Attivo: Herfindahl index (based on assets)
• GR_GDP_Tot: Growth rate of GDP
• Inflazione: Inflation rate
• Tasso_Ufficiale_MedioAnnuale: M1 over GDP

These are the Figures and the Table in which the variables are used:
• Figure 1, Panel A: Anno, Sample, Universe_NoBCC, Universe_ConBCC, Tot_Sportelli
• Figure 1, Panel B: Anno, Entries, Exits, TurnoverRate
• Figure 1, Panel C: Anno, ma, ma_flusso_pct
• Figure 2: Anno, PCM_Agg_mean_W99, Herfindahl_Attivo
• Table 3: GR_GDP_Tot, Inflazione Tasso_Ufficiale_MedioAnnuale

“GeographicalData_ActiveBanks.dta” includes the number of active banks by region in 1890, 1936, 1970, 1980, 1995, 2010. The dataset is used to produce Figure A.1.

“GeographicalData_Herf.dta” includes the Herfindahl index at the regional level, based on loans, in 1936, 1950, 1970, 1980, 1995, 2010. The dataset is used to produce Figure A.2.

“Bank_Data_for_Boone.dta” is the output of program “001_BuildingDataset.do”. It includes the subsets of observations that are employed in the estimates of the Boone indicator.

“micro_boone_ByAnno_OLS.dta” contains the individual estimates of the Boone indicator. It is produced with program “002_Boone_ByAnno_CostiMix_OLS.do”. The variable “Pred_6381” refers to the predicted individual Boone indicator based on profits, “Pred_6382” refers to the predicted individual Boone indicator based on loan market shares.
2 Programs

“001_BuildingDataset.do” uses “Original_Micro_Data.dta” and “serie_aggregate_1890_1973_FontiVarie.dta” to produce the dataset “Bank_Data_for_Boone.dta” which is employed in the estimates of the Boone indicator.

“002_Boone_ByAnno_CostiMix_OLS.do” uses “Bank_Data_for_Boone.dta” to estimate the Boone indicator based both on profits (variable Bos_log_Utili_Netti) and on loan market shares (variable log_MS_Idempagni). The estimation method is OLS, year by year. Standard errors are clustered by province. Marginal effects are used to compute the impact of average costs (variable W99_log_Costi_Mix_Medi) on the dependent variable. The estimates are displayed in Table 2 and Figure 3. By running the dofile code you can obtain a new dataset with the estimates.

The variables ending with:
- “_md6381” relate to the estimates based on profits
- “_md6382” relate to the estimates based on market shares of loans.

The variables starting with:
- “boone_coef”: refer to the estimated Boone indicator
- “ci90_low”, “ci90_high”: refer to the 90% confidence interval of the estimates Boone indicator
- “ci95_low”, “ci95_high”: refer to the 95% confidence interval of the estimates Boone indicator
- “HP”: refers to a Hodrick-Prescott filter applied to the Boone indicator
- “test1”, “test2” and “test3” refer to t-tests on the coefficients of the average cost variable (linear, quadratic, cubic) in the yearly regressions
- “osserv”: refer to the number of observations used in the yearly regressions

The dofile also save the dataset “micro_boone_ByAnno_OLS.dta” which contains the individual estimates of the Boone indicator used in the program “003_Determinants_ByAnno_CostiMix_OLS.do”.

“003_Determinants_ByAnno_CostiMix_OLS.do” produce the fixed effects estimates displayed in Table 3. The coefficients obtained will differ from the ones in the article because post-1973 observations cannot be released to the public. The dofile uses the bank individual estimates of the Boone indicator from the dataset “micro_boone_ByAnno_OLS.dta”, macro variables from the dataset “Macro_Data.dta” and micro variables from the dataset
“Bank_Data_for_Boone.dta”. The individual Boone estimates are regressed (FE estimation) on time period dummies and a set of micro and macro controls. Errors are clustered at the bank level. At the end we test the differences between each pair of period coefficients.

“004_Boone_ByAnno_CostiMix_GMM.do” computes the year-by-year GMM estimates of the Boone indicator displayed in Figure A.4.

“005_Boone_rolling7_CostiMix_OLS.do” computes the OLS rolling windows estimates of the Boone indicator displayed in Figure A.5.

“006_stima_boone_local_reg_boot.R” computes the year-by-year local regression estimates of the Boone indicator displayed in Figure A.6.