DATA DESCRIPTIONS

Mafia and Public Spending:
Evidence on the Fiscal Multiplier from a Quasi-experiment

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This document explains the mnemonics in the data appendix to accompany "Mafia and Public Spending: Evidence on the Fiscal Multiplier from a Quasi-experiment". The corresponding data set is used to run the final econometric models discussed in the paper.

Y: Percentage growth rate of real per-capita total value added calculated as $\frac{y_{i,t}-y_{i,t-1}}{y_{i,t-1}}$, where $y_{i,t}$ is the real (1995 price) per-capita value added. The value added at provincial level is measured in millions of euros at current prices. We deflate the provincial value added using the national GDP deflator for Italy. Source of value added: Istituto Guglielmo Tagliacarne. Source of population: Italian Institute of Statistics, ISTAT (*Statistiche Demografiche*). Source of deflator: ISTAT (*Contabilità Nazionale*). In particular, we construct the value added growth rate by relying on two different series of province-level value added for the periods 1985-1991 and 1991-1999, respectively. Data for the first period are used to construct values of **Y** up to 1991, while after 1991 we use the more recent series. Regarding the province-level value added, it is estimated using both province-level and regional basic indicators. For firms producing in different locations, the value added is attributed to each distinct productive unit depending on its effective share in production activities. The same applies for attributing the value added accruing to the owner of productive factors (labor, capital and managerial activities)—the value added attributed to each province is based on an estimate of the activities effectively carried out within its administrative border. As regards Manufacturing, local-level data consist of labor input, primary and secondary inputs, and capital utilization. In particular, estimates make extensive use of detailed information on employment (as a proxy for labor income), energy consumption (correlated with utilization of primary inputs), and short-term bank credit to industrial firms (supplied by the Bank of Italy). Aggregation is based on the input-output tables built by ISTAT.

G: Year-on-year percentage change of real (1995 price) per-capita public investment in infrastructure $g_{i,t}$, as a ratio of lagged real per-capita value added, that is $\frac{g_{i,t}-g_{i,t-1}}{y_{i,t-1}}$. Public investment includes spending on the following categories: Transport (roads and airports, railroads and other kinds of transportation, ports and rivers, telecommunications); Sanitation-Energy-Reclamation (hospitals, electric plants, swamps, land reclamation, other categories); Buildings (public buildings and schools; public spending devoted to private buildings). ISTAT provides a consistent data series on current prices spending on infrastructure at provincial level from 1987 to 1999. The source is: ISTAT, *Annuario delle Opere Pubbliche*—various issues. We deflate the provincial value added using the national GDP deflator for Italy. In particular, over the sample years, ISTAT collected detailed quarterly data on infrastructure investment at municipal level through the network of local statistical offices. Such data were then aggregated at provincial level at yearly frequency. Since not all municipalities were included in the data collection, ISTAT provides, for each year and province, an index, M_{it}, based on the share of municipalities reporting information about public investment. This index is used to convert the sample data into the effective level of provincial investment. In particular, let $\widetilde{x}_{it}$ denote the level of investment for province i at time t, aggregating information from all the municipalities in the sample. Given the index M_{it}, the overall public investment level at provincial level is constructed as $x_{it} = \widetilde{x}_{it}/M_{it}$. To get g_{it}, we deflate the public expenditure using the national GDP deflator for Italy.

Gprop: Percentage growth rate of real (1995 price) per-capita public investment in infrastructure, calculated as $\frac{g_{i,t}-g_{i,t-1}}{g_{i,t-1}}$.

SG: For any province i, the year-on-year percentage change of real (1995 price) per-capita public investment in infrastructure in provinces which belong to the same region as i excluding province i itself, as a ratio of lagged real per-capita value added defined accordingly.

CD: Number of municipalities placed under the administration of external commissioners (compulsory administration) by the central government on evidence of ties between administrators and the mafias, either through the direct infiltration of mobsters among local bureaucrats and/or politicians or through indirect influence, weighted by the share of the province population living in these municipalities. Source: *Ministero dell'Interno—Dipartimento per gli Affari Interni e Territoriali* and *Commissione parlamentare d'inchiesta sul fenomeno della criminalità organizzata mafiosa o similare (*Technical Report, various issues).

CDS1: Same as before, provided that the official decree is published in the first semester of the year.

CDS2: Same as before, provided that the average number of days between the dismissal of the city council and the year end is less than 180. Specifically, for each case of compulsory administration, we first calculate the number of days between the dismissal of the city council and the year end, and average them over all municipalities put under compulsory administration in the same province×year. Then, for every province×year observation for which this average is less than 180, we take the number of municipalities put under compulsory administration.

Resignation: Number of city councils dismissed because of either resignation by elected officials or special cases of ineligibility of the mayor. Source: *Ministero dell'Interno—Dipartimento per gli Affari Interni e Territoriali.*

Election: Number of city councils dismissed because of failure to organize political elections. Source: *Ministero dell'Interno—Dipartimento per gli Affari Interni e Territoriali.*

Budget: Number of city councils dismissed because of failure to pass the annual budget or political crisis in the ruling coalitions. Source: *Ministero dell'Interno—Dipartimento per gli Affari Interni e Territoriali.*

Others: Number of city councils dismissed for reasons different from resignation, election, budget, and mafia infiltration. Source: *Ministero dell'Interno—Dipartimento per gli Affari Interni e Territoriali.*

Mafiosi: First difference of the number of people reported by the police forces to the judicial authority because of mafia-type association (art. 416-bis of the Italian penal code), per 1000 population. Source: ISTAT, *Statistiche giudiziarie* (various issues).

Murder: First difference of the number of people reported by the police forces to the judicial authority because of murders related to the activity of mafia associations, per 1000 population. Source: ISTAT, *Statistiche giudiziarie* (various issues). Murders related to mafia activity are recorded by ISTAT according to information supplied by the police forces.

Extortion: First difference of the number of people reported by the police forces to the judicial authority because of extortion, per 1000 population. Source: ISTAT, *Statistiche giudiziarie* (various issues).

Corruption1: First difference of the number of people reported to the judicial authority because of corruption, defined as to include embezzlement, misappropriation of public funds, extortion and bribery agreements, per 1000 population. Source: ISTAT, *Statistiche giudiziarie* (various issues).

Corruption2: First difference of the number of crimes reported to the judicial authority because of corruption, defined as to include embezzlement, misappropriation of public funds, extortion and bribery agreements, per 1000 population. Source: ISTAT, *Statistiche giudiziarie* (various issues).

U1: Change in the log of per-capita employment. Sources of employment: Istituto Guglielmo Tagliacarne and ISTAT.

U2: Change in the log of per-capita hours of wage supplement provided by the unemployment insurance scheme available to employees of large private firms in Italy. Source of hours: Istituto Guglielmo Tagliacarne.

Population: Total population. Source: ISTAT, *Statistiche Demografiche.*

Id: Identifier of the panel unit.

Group: Identifier of the cluster unit.

To replicate the results: Use the file ACCOSI_AER_STATA_PROGRAM_MAFIA_PUBLIC_SPENDING. This is a STATA do file. The file ACCOSI_AER_DATA_MAFIA_PUBLIC_SPENDING allows to replicate all province-level results while ACCOSI_AER_AGGDATA_MAFIA_PUBLIC_SPENDING allows to replicate results based on aggregation of provinces.