

Release of the ‘coresoi’ R package: collection, cross-processing of procurement data and software codes for the risk of corruption in emergencies.



The CO.R.E - COrruption Risk indicators inEmergency project is going through the completion of several specific steps for achieving its main goal: the development of a Composite Indicator (CI) of corruption risk as a new tool to prevent corruption in public procurement.

For doing that, a replicable procedure for computing a Composite Indicator of corruption risk based on the collection and cross-processing of public procurement data has been recently finalised and released in the ‘coresoi’ R package.

R packages are essential tools for data analysts and statisticians who work with the R programming language. These packages consist of a set of organised functions, data, and documentation that are designed to solve specific data analysis problems.

The *coresoi* package is a valuable tool for quantifying risk in emergency scenarios (such as the COVID-19 or earthquakes) by exploiting relevant red flags in open contracting. It provides support to any users interested in computing corruption risk in public procurement over emergencies through analytical codes, users’ guides and practical examples. *coresoi* contains a toy dataset based on the Italian Anti-Corruption Authority (ANAC) open data – the BDNCP (Banca Dati Nazionale dei Contratti Pubblici) – that researchers can use to calculate elementary indicators of corruption risk (i.e., red flags) under emergencies and the composite indicator (CI) of corruption risk, resulting from the aggregation of the red flags.

The main purpose of R *packages* like *coresoi* is to provide users with a set of functions, data, and documentation aimed at addressing specific analytical problems. The package's functions and datasets are meant to be directly accessed by users within their R code. Additionally, R packages like *coresoi* guarantee to be easily installable across different systems. With regular building

The documentation for this package is available at <https://core-forge.github.io/coresoi/>



The specific goal of *coresoi* is to provide a sandbox environment for researchers and anti-corruption analysts to interact with the indicators of corruption risk in public procurement over emergencies to promote greater transparency in governments and make their efforts in fighting corruption more effective.

Stay tuned for the next steps!