Debt of Municipalities

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November 26, 2023

What is the project about?

- **Municipalities debt:** How much is there and how much there has been?

- Why do we care? There are many reasons why is relevant, among then:
  - Municipalities services are the closest to citizens $\Rightarrow$ highly affected by the financial position.
  - Important lab to study the spending efficiency of the public sector.

- What is there?
  - Some public data on aggregates $\Rightarrow$ hard to tell how accurate it is (more details later). Individual data is scarce and noisy.
  - More information about *flows*, although in the past each municipality could choose its own system.

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The current situation

- In the last decade or so, there some studies about municipalities financial behavior.

    - Antulov-Fantulin Lagravinese and Resce (2021, JEBO): predict bankruptcy
    - Grembi, Nannicini, Troiano (2016,AEJ: applied micro): effectiveness of DSP
    - Di Nicola (2021) (thesis): optimal fiscal rules.

- All these papers use the main data source: *Ministry of the Interior*.

- We have this data: rich data about flows, but debt information for less than 20% of the municipalities, and when present numbers are odd.

- For this reason the previous papers **rely mostly on budget flows** for the quantitative findings.

The current situation

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- *SIOPE* has slowly and recently started to include more information about municipalities. This data is not public.

- Opendata provided only aggregate information.

- The lack of readily available, public data and for a sufficiently long time spam makes assessing the municipalities' financial position difficults to monitor them and prevents the existence of highly needed studies.

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What can be done?

- From the recent past to the future:

  - Legislative Decree No. 118 of 2011 imposed a harmonization process for the accounting systems ⇒ it is possible to scrap public flow data an construct changes on debt.

  - The problem here is disentangle interest from capital payments (and maturities).

- New harmonized accounts provide two items: debt services and interest payments (the first includes the second)

- Some municipalities also provide information about debt issuances and payments (e.g. Milano).

- ⇒ Possible to construct automatic indicator updated with every release of a new budget.

Debt looking backwards

- This is more challenging.

- Use inventory methods again. Problem is that accounts were not harmonized. Split between debt payments and interest rate, not always present.

- Use machine learning on municipalities with information to "determine" the split on those without information.

- Use municipalities that had provided information about as a control to test the accuracy of the estimation.

- We may need an initial measured level of debt: Banca d'Italia? SIOPE?