

Testing the Effectiveness of Enforcing Industrial Pollution Regulations in Montevideo, Uruguay

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 - gave firms almost two years to invest in abatement technology
 - relaxed emissions standards
 - characterized by frequent monitoring of industrial plants and tolerance for non-compliance

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- This strategy failed to improve compliance levels with BOD₅ emission standards. (Caffera, 2007).
- Regulators have been applying another enforcement strategy since 2003, and even more since 2005
 - less tolerance
- Data substantiate what they declare
 - 1997 – 2002: around 7 penalties per year
 - 2003 and 2007: double. (Preliminary data).
- Unluckily, we know nothing about how effective this new strategy has been in increasing the levels of compliance

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- The model basically tests a unique hypothesis:
 - *An increase in expected penalties, decreases the probability that an industrial plant would be out of compliance with effluent standards.*

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- **Rigorous test about the effectiveness of lenient vs. less tolerant regime**

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 - 4 number of employees,
 - 5 days worked,
 - 6 volume of effluents and
 - 7 several parameters characterizing the plant's effluents

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 - Industrial Production Index in month t , or dummy for crisis
- Inspection equation is fitted to obtain the variable expected probability of being inspected, and multiplied by the corresponding fine in case of being inspected (or probability of being fined).

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- I do not have with me yet the information regarding the period 2002 – 2007.
- If possible, test for "ignorability" (Verbeek and Nijman's (1992) test).
- I will also test the effect of imputing values for the item non-report cases using an iterative Buck (1960) procedure, as suggested by Beale and Little (1975), for each plant.

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- ③ **Explicit system of equations**

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 - **comparing means levels of reports when and when not inspected**

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- 5 **Advice regulators in other areas as retribution for the data**

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- and academic conferences (ALEAR, EAERE, etc.).
- The research project will lead also to a non-technical publication for regulators in Spanish.
- Finally, I plan to publish a paper with the results of this research in the best possible journal.