

Regulation, Competition and Income Distribution: Latin American Experiences

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EDUCATION REGULATION AS AN INSTRUMENT OF INCOME DISTRIBUTION: THE CASE OF CEARA

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Education and Income Distribution

- Education is a powerful instrument of income distribution.
- Quality regulation of education is essential to its efficacy as a policy tool.
- In order to assure good quality, the state has to create mechanisms to regulate
 - Achievement
 - Attendance
 - Curriculum
 - Teaching staff
 - Etc.

Educational Regulatory Systems

Education $\left\{ \begin{array}{l} \text{.Quantity} \\ \text{.Quality} \end{array} \right. \Rightarrow \text{Re gulation}$

- Two basic policy instruments:
 - Vouchers
 - Incentives

The Voucher System

- Vouchers \Rightarrow \uparrow Competition \Rightarrow \uparrow Efficiency \Rightarrow \uparrow Achievement
- “v” must be set in order to
 - Ensure that every student is served, and
 - Satisfy the government’s budget constraint.
- Per pupil learning will be determined by the value of “v” given peer and teacher quality, and managerial capacity.
- May originate “centers of excellence”, penalizing the least efficient schools.
- Weak teacher incentives may undermine its expected results.

Teacher Incentives

- A form of “positive regulation”, rewarding the best practices.
- May induce a “healthy” competition among schools.
- Points to consider:
 - The free-rider problem;
 - The mechanism should have a long-run perspective; and
 - Teachers should not participate directly in the evaluation process.

The Case of Ceara

- An award to compensate some of its public schools according to their grades on standardized tests:
 - “Schools that achieved the highest grades in SPAECE of the year”.
 - “Schools with the best performances of the year”.
- An additional monthly wage was payed to teachers and principals of the schools awarded.
- May generate spillover effects as teachers seek to improve qualification and teaching skills.

The Case of Ceara

- “Schools with the best performances of the year”

$$IP_i = 0.15 \cdot OAp_i + 0.15 \cdot OAb_i + 0.70 \cdot ONP_i$$

$$OAp_i = \text{Order} \left[\frac{\Delta Ap_{F,i} + \Delta Ap_{M,i}}{2} \right]$$

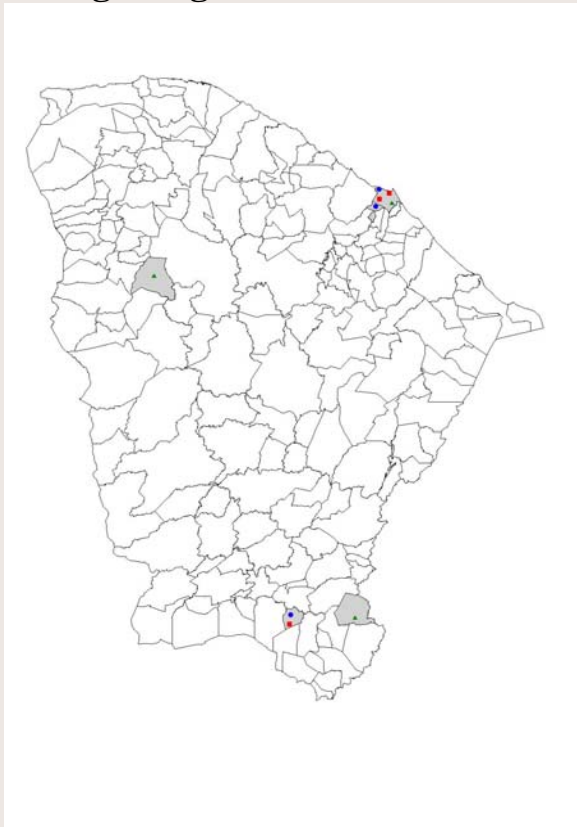
$$OAb_i = \text{Order} \left[-\frac{\Delta Ab_{F,i} + \Delta Ab_{M,i}}{2} \right]$$

$$ONP_i = \text{Order} \left[\frac{n_{F,i}}{n_i} \cdot \Delta \left(\frac{NP_{F,i}}{\sigma_{NPF,i}} + \frac{NM_{F,i}}{\sigma_{NMF,i}} \right) + \frac{n_{M,i}}{n_i} \cdot \Delta \left(\frac{NP_{M,i}}{\sigma_{NPM,i}} + \frac{NM_{M,i}}{\sigma_{NMM,i}} \right) \right]$$

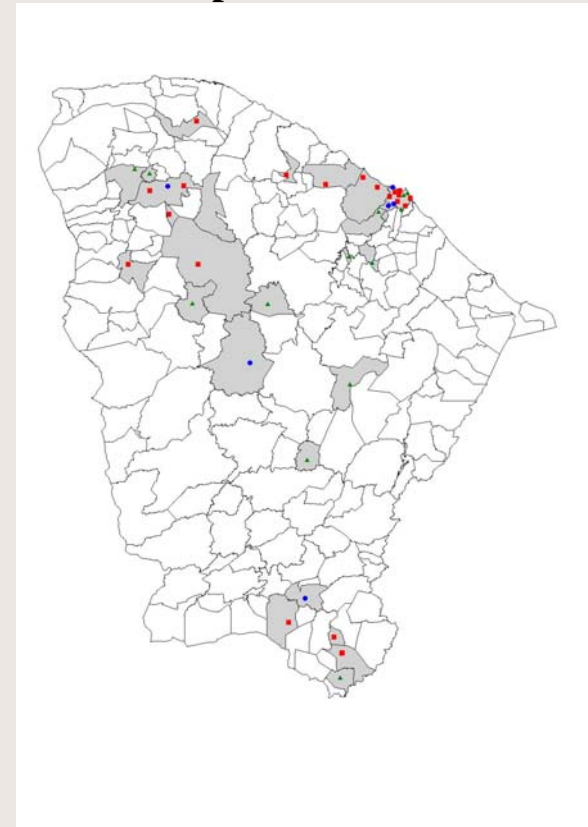
The Case of Ceara - Results

Map of the schools awarded in each category – 2004

Highest grades in SPAECE



Best performances



■ Municipalities with schools that received awards.

The Case of Ceara – Main Conclusions

- There is a great dispersion of schools awarded.
⇒ **The award can be an instrument of income distribution.**
- Some schools awarded are located in poor municipalities that have poor infrastructure.
⇒ **Good teachers can make the difference.**