

Teachers' preferences and financial incentives

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Teacher sorting

- Teacher sorting across schools in France results from the rules of the point scale and the teacher preferences.

Institutional Features

- Mobility rules:
 - Teachers give their preferences when they want to switch (or just after their training)
 - To decide between teachers: a point scale specifies a number of points attached to each person according mainly to his seniority in the school and in teaching, and also a little to his qualification
 - Flexibility given by temporary teachers

Institutional Features

- New teachers tend to be served after more senior ones and to get the least popular schools

Institutional Features

- Benefits of the French system:
 - Demand side roughly known: schools “choose” the most experienced teachers
 - Teachers rarely leave the educational system and they have identical salaries: mobility not influenced by pecuniary factors until 1990
- They are even more rarely forced to leave or to switch
- Teachers’ preferences can be evaluated through reduced-form estimates

Teacher preferences

- Results confirm other studies:
 - ▶ Teachers tend to switch when they work in schools with disadvantaged students (in respect to achievement, nationality and economical background)
 - ▶ Prefer schools in the regions where they were born

Financial incentives

- Finally, one specific program:
 - bonuses for teachers in schools part of a program set up in 1982, the “zones d’éducation prioritaire” (ZEP)
 - schools chosen for their economically disadvantaged students
 - a program meant to foster specific initiatives and to give extra resources (Benabou, Kramarz, Prost, 2009)

Financial incentives

- since 1990, bonuses
 - ▶ In 1990, €300 per year: a 2% - 2.5% wage increase for a novice teacher; around 1% for the most experienced teachers
 - ▶ In 1991: double (€52)
 - ▶ In 1992: triple (€79)

Financial incentives

- ▶ No decrease in the mobility in the ZEP schools
- ▶ Turnover even increased in 1992
- Bonuses: this kind of policy must be used very carefully. Magnitude of the bonuses of great importance. Risk of adverse effects through the signal given to the teachers (very difficult schools). Threats on the durability of the program.

Other incentives

- Since 1992:
 - teachers staying 5 years in a ZEP school gain a lot of points on the point scale that allows mobility.
 - Paradoxical: strong incentive to stay at least 5 years, and then strong incentive to leave
 - Yet more efficient than bonuses

Economic policy

- Difficult to reform: geographical mobility is a non-pecuniary deferred wage
- Be able to choose the location is part of the job benefits (for tenured teachers...)
- Teacher career: few possibilities of functional mobility. More difficult to reward mobility.

A clear sorting of teachers according to their age

School Characteristics According to Teacher Age

School Characteristic	Teacher Age				
	Under 25	Between 26 and 39	Between 31 and 40	Between 41 and 50	Above 51
Rural and semi-rural area	7%	11%	10%	10%	9%
South of France	10%	16%	23%	24%	29%
Suburbs of Paris	41%	23%	16%	14%	12%
Paris	1%	1%	2%	2%	3%

Note: Means of school characteristics, weighted by the number of teachers in each school having the specified experience or qualification. School year 2000-2001.

A clear sorting of teachers according to their age

School Characteristics According to Teacher Age

School Characteristic	Teacher Age				
	Moins de 25 ans	Entre 26 et 30 ans	Entre 31 et 40 ans	Entre 41 et 50 ans	Plus de 51 ans
Percent students not having lunch at school	53%	47%	43%	41%	40%
Percent students with African nationality	6%	4%	4%	3%	3%
Percent students whose father is a blue collar	9%	8%	7%	6%	6%
ZEP	35%	28%	21%	16%	14%

Note: Means of school characteristics, weighted by the number of teachers in each school having the specified experience or qualification. School year 2000-2001.

Institutional Features

- French public school sector run on a national basis
- Teachers: civil servants, recruited through competitive examinations
- In general, several candidates for one job
- Most of the teachers remain teachers (until they retire)
- Teachers' salaries depend only on qualification and number of years of experience

Teacher preferences

- Literature on teacher preferences:
 - non-pecuniary factors: teachers prefer advantaged students (Hanushek et alii, 2004, Boyd et alii, 2005)
 - Hanushek, Kain and Rivkin (2004): teacher mobility much more strongly related to the characteristics of the students (race and achievement) than to salary

The Data

- Confidential administrative database on all teachers in French public secondary schools
- About 350,000 teachers for each year from 1987-1988 to 1992-1993
- Identifier for the teacher; identifier for the school

The Data

- Information about the teacher:
 - age, region of birth, gender
 - administrative grade which determine the teacher's salary (proxy for years of experience)
 - type of qualification and seniority in this qualification
 - the subject he/she teaches
 - the number of hours worked in the school
- Unfortunately, nothing about the family situation

Conclusions

- Would it be better with a decentralized system?
- Not sure if ability is difficult to observe
- Greenberg and McCall (1974): “usually the rationing of the preferred assignments is by education and experience, the more experienced and educated teachers being awarded the best assignments”