

DESEGREGATING SCHOOLS

Evidence from Middle School Closures in Deprived Neighbourhoods

Educational policies research group

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Publications:

- Nina GUYON, Quels effets de la rénovation urbaine sur les quartiers ciblés? *Policy Brief*, n°29, février 2017
- Nina GUYON, Étude des effets de la rénovation urbaine sur l'évolution du bâti et du peuplement dans les quartiers ciblés entre 2004 et 2013, *LIEPP Report*, février 2017

Other publications :

- Nina GUYON, Elise HUILLERY, Biased Aspirations and Social Inequality at School: Evidence from French Teenagers, *LIEPP Working Paper*, n°44, January 2016.
- Yann ALGAN, Elise HUILLERY, Nina GUYON, Comment lutter contre la violence et le harcèlement à l'école et au collège ? *LIEPP Policy Brief* n°19, juin 2015.
- Nina GUYON, Elise HUILLERY, Choix d'orientation et origine sociale : mesurer et comprendre l'autocensure scolaire *LIEPP Report*, décembre 2014.

The recent literature in economics has shown that moving out of a poor neighbourhood when you are young enough in the U.S. leads to dramatic improvements in labour market outcomes later on. Is it also the case in European countries in which the situation is less extreme in terms of homicide rates? Moreover, are these positive effects compensated by negative effects on incumbents in the new neighbourhoods or schools? This project examines the effects of a desegregation policy consisting in closing down a middle school located in a deprived neighbourhood and reallocating its students to other middle schools in the city. I analyse the direct effects on students from deprived neighbourhoods (the “movers”), as well as the indirect effects on incumbent students in receiving schools (the “receivers”).

Middle school closures

In France, the local educational district is in charge of deciding how students are allocated to schools based on their address. When a school is closed down, the district decides a new allocation of students between middle schools. In general, parents thus cannot choose which middle school they send their child to (except by relocating).

However, a minority of parents can still manage to get a derogation in order to attend another middle school, and of course parents can also decide to put their kid in the private system if they like. One may for instance expect the movers to remain in the public system instead of switching to the private system because of the school closure, while on the contrary one might expect a “rich flight” of receivers to private schools.

Method

Controlling for the abovementioned selection biases is key to measure causal effects. To avoid any bias due to such parental responses, I use an exhaustive administrative panel data at the student level -covering private schools- that allows me to follow students from last year of elementary school (5th grade) to the end of high school.

As a result, I can define the samples of movers and receivers based on students' elementary schools and on flows of students between elementary and middle schools before closure (excluding years just before closure to avoid capturing anticipation effects). For both movers and receivers, treatment status is thus defined based on their elementary school and based on their predicted middle school instead of their actual one.

To measure the direct and indirect effects of closing down a school in a deprived neighbourhood, I make use of the staggered closures of middle schools in cities all over France as well as of the availability of control cities, and I compare cohorts of students before and after closure.



Contributions

This study measures the pure effect of attending a new school for children from deprived neighbourhoods, while existing papers usually cannot disentangle between the effect of switching school and the effect of a change in neighbourhood as both often happen at the same time.

Causal evidence on the effects of social desegregation on incumbents' outcomes is very scarce. If poor children benefit from desegregation in terms of educational and labour market outcomes, this positive effect might be compensated by a negative effect on the incumbents. This study shows that this is not the case.

Preliminary results

Movers:

I find that a school closure leads to a decrease in the probability of dropping out of school after middle school for movers, that is driven by boys and students from a low socioeconomic status (SES). These effects are consistent with a strong decrease in disruption that outweighs other potential negative effects.

Receivers:

Crucially, the probability of dropping out also decreases for receivers. These results are consistent with small disruption effects for receivers that are outweighed by positive ranking effects. Importantly, for high-SES receivers, I also find a moderate “rich flight” toward the private system.

In both cases, I show that changes in class size cannot explain the results while changes in classmates' characteristics can.



Conclusions

Movers:

The strong positive effects that are found on the movers are consistent with a strong decrease in disruption or even violence that outweighs other potential negative effects such as ranking effects or commuting effects.

Another potential mechanisms driving the positive effect might be the increase in school quality. This could happen through an increase in teachers' quality, through an increase in the level at which the teachers pitch their classes, or through peer to peer learning.

Receivers:

The positive effects found on receivers are consistent with small disruption effects from movers on receivers that are outweighed by positive ranking effects.

Disruption effects being small may be explained by the fact that, at 11 years old, students arriving from deprived neighbourhoods are not more disruptive on average than incumbent students, or at least not disruptive enough to affect their probability of dropping out or attending an academic high school. This would be the case if children from deprived neighbourhoods were actually becoming disruptive during middle school due to exposure to violence from older schoolmates in the absence of closure.

Additional findings strengthens the hypothesis that the positive effects found on receivers are due to ranking effects. Namely, I find that the decrease in the probability of dropping out for receivers is fully driven by the difference in quality between the receiving and closing middle schools. When this difference increases, low-achieving receivers indeed appear better and better than new comers from deprived neighbourhoods, which should reinforce the ranking effect.