

DESEGREGATING SCHOOLS Evidence from Middle School Closures in Deprived Neighborhoods

Educational policies research group

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Assistant Professor in the department of economics of the National University of Singapore. Her research focuses on The recent literature in economics has shown that moving out of a poor neighbourhood when you are young enough leads to dramatic improvements in labour market outcomes later on. However, we still do not know much about how such social desegregation policies affect 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**").

Contributions

The first key contribution of this project is to measure the pure effect of switching school for the movers, 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.

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).

social inequalities in education and urban segregation.

The other key contribution concerns the receivers. Several papers have recently shown that sustained interactions in neighbourhoods or schools with socially disadvantaged new-comers, even at a young age, shift long-term political preferences towards the left of the political spectrum. But what about educational outcomes? This is a crucial question as opponents to desegregation policies argue that, even 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.

Many papers report a behavioural response from incumbents, moving away from their original neighbourhood or school due to the arrival of poorer or racially different households. This behaviour reveals their belief that these new-comers would affect them negatively if they were to stay, or at least the belief that other households will think so, for instance due to disruptive or even violent new peers in their children's school. However, causal evidence on the effects of social desegregation on incumbents' outcomes is very scarce.

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. 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.



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.

Preliminary results

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 low socioeconomic status (SES). These effects are consistent with a strong decrease in disruption that outweighs other potential negative effects.

Crucially, the probability of dropping out also decreases for receivers, with a stronger effect on low-SES students. These results are consistent with small disruption effects for receivers that are outweighed by positive ranking effects.

Conclusions

Movers

The strong positive effects that are found on the movers are consistent with a strong decrease in disruption that outweighs other potential negative effects such as ranking effects or commuting effects. This can be explained by the fact that, if movers had attended the middle school that closed, they would have suffer from important levels of disruption in class or even violence from older peers.

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

I show that, contrary to changes in classmates' characteristics, changes in class size cannot explain the results.

Finally, for high-SES receivers, I find a slight decrease in the probability of attending an academic high school that does not vary with the proportion of new-comers and that goes together with a "rich flight" toward the private system.

becoming disruptive during middle school due to exposure to violence from older schoolmates in the absence of closure.

The fact 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 school strengthens this hypothesis. When this difference increases, low-achieving receivers indeed appear better and better than the new comers from deprived neighbourhoods, which should reinforce the ranking effect. On the contrary, when this difference increases, the shock becomes bigger and bigger for the movers, so if they were disruptive, they would be likely to be even more disruptive, which is inconsistent with the positive effect becoming stronger.



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