CENTRE FOR THE STUDY OF MARKET REFORM OF EDUCATION

CMRE Research Digest 2017-04 (3)

Editor: Gabriel Heller-Sahlgren

CENTRE FOR THE STUDY OF MARKET REFORM OF EDUCATION

Table of Contents

CENTRE FOR THE STUDY OF MARKET REFORM OF EDUCATION

Editor's Pick

Putting Dollars before Scholars? Evidence from For-profit Charter Schools in Florida

By: John D. Singleton

Economics of Education Review (June 2017)

Published version

Working paper

Politicians worldwide have in the past decades tried to improve their state-funded schooling systems by introducing more choice and competition. By introducing market forces, the idea is to ensure that bad schools either are forced to improve or go out of business and that good schools expand – creating a virtuous 'race to the top'.

But introducing a profit motive in this process is still anathema, in England and in many other countries. The fear is that profit-making companies will only focus on reducing costs, thereby decreasing quality as well. Instead of a 'race to the top', we would enter a 'race to the bottom'. Furthermore, people have been arguing that profits will introduce stronger incentives among providers to 'cream skim' the best pupils, thereby producing higher school segregation and decrease equity.

In this paper, the author analyses the impact of for-profit, state-funded charter schools in Florida, whose enrolment shares have increased by about 80 per cent since 2005. Having access to data from detailed annual independent financial audits and accountability reports enables the author to study differences in spending patterns, pupil composition as well as pupil performance among schools with different ownership structures.

The results display intriguing differences between state schools, non-profit charter schools, and for-profit charter schools. Non-profit and for-profit charters tend to be located in poorer areas than state schools on average. Both non-profit and for-profit charters locate in areas with higher shares of ethnic minorities – and for-profit charters do so even to a larger degree than non-profits. The enrolment patterns support this story: charter schools, especially for-profit ones, take on more pupils from ethnic minorities than state schools. The data also suggest for-profit charter schools especially focus on Hispanic kids, whereas non-profit focus slightly more on African-American children. While the share of pupils on reduced or free school meals is somewhat lower in the charter sector overall, it is slightly higher in the for-profit charters than in the non-profit ones.

A starker difference between non-profit and for-profit charter schools is that whereas only 13 per cent of non-profit charter schools belong to a network, fully 60 per cent of for-profit charters do so. In the published paper, the author only presents differences between the two sectors separately for independent schools and network schools. The argument is that networks may realise economies of scale, which may have an impact by itself apart from profit-making status.

But this ignores the fact that for-profit schools may become network organisations precisely because of their for-profit status; indeed, the ability to scale and grow is an argument often used in favour of such schools. Disaggregating network schools from independent ones when analysing differences across ownership structures may therefore generate selection bias. If successful for-profit schools grow into networks, whereas non-profit schools do not, then it would be inaccurate to only compare network schools or independent schools when studying differences between the two sectors.

The aggregated data presented in the working paper suggest that per-pupil expenditures are somewhat lower in for-profit charter schools than in non-profit charter schools on average. In addition, the former spend less money on instruction and have higher pupil-teacher ratio. At the same time, for-profit schools have the same average test scores and actually higher value added than non-profit schools.

In the analyses adjusting for background characteristics, the author only presents estimates disaggregated by network/independent status. The results reveal that independent for-profit schools perform on par with non-profit network schools and slightly lower than non-profit independent schools in reading but not in maths. On average, for-profit network schools perform better than all other groups, although most differences are not different from zero.

However, when adjusting for differences in expenditures, for-profit network schools do better than all other groups. In other words, for-profit network schools are more efficient than all types of non-profit schools (and independent for-profit charters). This means that for the same amount of money spent, they achieve higher results.

Furthermore, since profits are taxed and thus bring in more money to the state, the total efficiency gains of for-profit network schools are probably undervalued. And the null effects of for-profit independent schools also become important in this perspective: some of the money can be repatriated through taxes, which is not the case among non-profit schools.

The author also finds evidence that network size is only positively associated with performance among for-profit schools; among non-profit schools, network size is associated with lower results. The evidence is mostly consistent with a story in which good for-profit schools join networks or scale up as a result of being good rather than becoming good because they scale up. Among non-profit

network schools, however, the findings are both consistent with a story in which poorly performing schools scale up and that they become worse as they do so. These differences may potentially be due to different incentives across the different sectors, which are important for policymakers to consider.

Unfortunately, the data do not permit the author to use a solid methodology and we therefore cannot be entirely confident that the estimated results reflect causal effects. However, they are supported by other research, which, on average, suggests that for-profit schools at least perform on par with non-profit schools and often provide more choice for disadvantaged parents, while at the same time injecting more private funding into the state system. Policymakers should therefore at the very least consider allowing regional randomised trials to investigate the benefits of profit-making, state-funded schools in England as well.

Effects of Policy and Practice – Developed World

Illusory Gains from Chile's Targeted School Voucher Experiment

By: Benjamin Feigenberg, Steven Rivkin, and Rui Yan

NBER Working Paper No. 23178

Published version

Free version

In 2008, Chile implemented a targeted voucher program that increased voucher values for disadvantaged students at participating schools by approximately 50%. Although disadvantaged students made substantial fourth grade test score gains that other studies have attributed to the program, the authors' analysis raises serious doubts that the program had a substantial effect on cognitive skills. First, there was only a minor reduction in class size and little evidence of increases in any inputs. An audit showed that many schools were not using additional revenues for permitted expenditures, and estimates that exploit a discontinuity in the revenues allocated to schools show no evidence of positive effects of allocated funds on achievement growth. In addition, there is limited evidence of competitive or incentive effects on school quality or that disadvantaged students transitioned to higher quality schools. The much smaller gains made by disadvantaged students in low-stakes eighth grade test scores along with an increased rate of missing scores on fourth grade tests is consistent with extensive strategic behaviour by schools. In contrast, increases in parental education and income among disadvantaged children indicate a primary role for improvements in family circumstances of tested students in explaining the meaningful decline in the achievement gap.

The More, the Better? The Impact of Instructional Time on Student Performance

By: Maria A. Cattaneo, Chantal Oggenfuss, and Stefan C. Wolter

Education Economics (forthcoming)

Published version

Working paper version (free)

Building on earlier work that explored within-student variation in hours of instruction across school subjects, the authors investigate the impact of instruction time on student test scores in Switzerland, as measured by the PISA

2009 test. The results confirm the results of previous studies of a positive effect of instruction time on student performance. Moreover, the authors find considerable heterogeneity in the effectiveness of instructional time across ability-related tracks, with the more able students benefitting more. Additional instruction time increases the within-school variance of subject-specific test scores, indicating an increase in educational inequality.

School Lunch Quality and Academic Performance

By: Michael L. Anderson, Justin Gallagher, Elizabeth Ramirez Ritchie

NBER Working Paper No. 232218

Published version

Free version

Improving the nutritional content of public school meals is a topic of intense policy interest. A main motivation is the health of school children, and, in particular, the rising childhood obesity rate. Medical and nutrition literature has long argued that a healthy diet can have a second important impact: improved cognitive function. In this paper, the authors test whether offering healthier lunches affects student achievement as measured by test scores. The sample includes all California (CA) public schools over a five-year period. The authors estimate difference-in-difference style regressions using variation that takes advantage of frequent lunch vendor contract turnover. Students at schools that contract with a healthy school lunch vendor score higher on CA state achievement tests, with larger test score increases for students who are eligible for reduced price or free school lunches. They do not find any evidence that healthier school lunches lead to a decrease in obesity rates.

Effects of Policy and Practice – Developing World

The Lessons Private Schools Teach: Using a Field Experiment to Understand the Effects of Private Schools on Political Behaviour

By: *Emmerich Davies*

Working paper (free)

Government services have often been found to act as important sites of political socialisation. Through interactions with institutions and functionaries of the state, individuals learn important lessons about their worth as citizens and the functioning of democracy, form preferences over government services, and understand the value of political participation. What then happens when governments no longer provide basic services and are replaced by the private sector? The author explores these questions in the context of a large private school voucher experiment. He leverages the randomised distribution of private school vouchers to understand the impact of private schools on citizen's engagement with the state. Based on an original household survey of 1,200 households conducted five years after a voucher lottery, I find that voucher winning households hold stronger market-oriented beliefs than voucher losing households. Voucher winning households are willing to pay more for private services and express a preference for private service provision. However, voucher-winning households show no difference in political participation. Evidence suggests that this is driven by two factors: access to new channels through which to make political demands, and greater comfort with private providers as permanent economic actors. These results suggest economic preferences are malleable and exposure to different economic actors, in the form of private schools, have the potential to change them.

Medium- and Long-Term Educational Consequences of Alternative Conditional Cash Transfer Designs: Experimental Evidence from Colombia

By: *Felipe Barrera-Osorio, Leigh L. Linden, Juan Saavedra*

NBER Working Paper No. 23275

Published version (free)

This paper shows that three Colombian conditional cash transfer (CCT) programs for secondary schools improve educational outcomes eight and 12 years after random assignment relative to a control group. Forcing families to save a portion of the transfers until they make enrolment decisions for the next academic year increases on-time enrolment in secondary school, reduces dropout rates, and promotes tertiary enrolment and completion in the long-term. Traditionally structured bimonthly transfers improve on-time enrolment and

high school exit exam completion rates in the medium term, but do not affect long-term tertiary outcomes. A delayed transfer that directly incentivises tertiary enrolment promotes secondary school on-time enrolment and enrolment—only in lower-quality tertiary institutions—in the medium term but not the long term.

General Education

Human Capital and Shocks: Evidence on Education, Health and Nutrition

By: Elizabeth Frankenberg and Duncan Thomas

NBER Working Paper No. 23347

Free version

Human capital, including health and nutrition, has played a key role in the literature on poverty traps. Economic shocks that affect human capital during early life are thought to translate into permanently reduced levels of human capital and, thereby, push individuals into poverty. Three potential concerns in this literature are explored with empirical evidence drawn from primary longitudinal survey data collected before and after two major shocks in Indonesia: the 1998 financial crisis and the 2004 Indian Ocean tsunami. First, it is very hard to identify shocks that are unanticipated and uncorrelated with other factors that affect human capital outcomes. Second, and related, there is abundant evidence that individuals, families and communities invest in strategies that are designed to mitigate the impact of such shocks. The nature and effectiveness of the myriad array of these behaviours vary with the context in ways that are not straightforward to measure or model. Third, the impacts of shocks on human capital outcomes in the short and longer-term may differ precisely because of the behavioural changes of individuals and their families so that drawing inferences about the longer-term impacts based on negative impacts in the short term can be very misleading. The picture of remarkable resilience that emerges from investigating the impacts of major shocks on child health and human capital in Indonesia is nothing short of stunning.

The Impact of Special Needs Students on Classmate Performance

By: Nienke Ruijs

Economics of Education Review (June 2017)

Published version

Free version

Does the presence of special needs students in regular schools affect the academic achievement of their classmates? The author examines this question in the context of primary and secondary education in the Netherlands, where the per-student budget for special needs students in regular schools is roughly twice the amount of the regular student budget. The author uses three independent

identification approaches: student fixed effects models, school fixed effects models, and neighbourhood variation. For both education levels and all three identification approaches, the estimates indicate that special needs students do not have a statistically significant effect on the academic achievement of their classmates. The estimates are precise enough to rule out even modest effects.