CENTRE FOR EDUCATION POLICY
& EQUALISING OPPORTUNITIES

Briefing note The impact of recessions on teacher labour markets

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Key points

Recessions can make teaching more attractive:

- They create massive labour market uncertainty and usually boost labour supply in the public sector, including in teaching, because public sector jobs provide higher job security.
- Recessions can also attract better applicants into teaching due to the lack of outside options and thus have a positive impact on teacher quality.
- Recessions can therefore be a unique window of opportunity to address structural teacher shortages in many developed countries, including the UK. They can also have a positive impact on pupils' achievement through better teacher quality

However, cuts in school funding can offset this:

- During the last major recessions, and most notably since the 2008 economic downturn, teacher and teaching assistant numbers have fallen in secondary schools in England due to school funding cuts.
- Cuts in school funding also negatively impacted teachers' pay, decreasing the attractiveness of the teaching profession. This negatively impact pupils' achievement and increases education inequality through bigger class size and fewer teaching assistants.

Recommendations

- Policymakers should maintain or increase school funding during the coming post-Covid recession in order to seize the opportunity to recruit high-quality teachers, which is shown to have a positive impact on pupil attainment and reducing educational inequality.

The Issue

The Covid-19 pandemic has triggered an unprecedented shock to the UK and global economy. Teaching is often perceived as “recession-proof” by the general public. To what extent does existing economic evidence back this intuition? How do economic recessions impact teacher labour markets?

This briefing note summarises the empirical evidence on the impact of recessions on teacher labour markets, through their effects on 1/ teacher labour supply (number and quality of applicants to teaching positions) and 2/ teacher labour demand (teacher job openings). While recessions can positively impact teacher labour supply by making the teaching profession more attractive, it can also negatively impact demand through austerity measures and cuts in teacher job openings and wages.

Recessionsmake the teaching profession more attractive to potential applicants

The consensus among academics is that the labour supply for public sector jobs is higher during economic downturns(Krueger, 1988; Borjas,2002). The first reason is relative job security in the public sector compared to the private sector. Public sector jobs are less vulnerable to recessions: even after accounting for workers characteristics, the probability of job loss is lower for public sector workers at all levels of government (Kopelman and Rosen, 2015). The second reason is the impact of the public-private sector earning differentials. Private sector wages are more affected by higher levels of unemployment than public sector wages. Public sector workers therefore receive an earning premium during recessions (Maczulskij, 2013).

As a public sector job, teaching is relatively sheltered from economic downturns and therefore relatively more attractive. Outside labour market conditions have an impact on teacher shortages. Using data from Norway, Falch and Strom (2005) show that regional unemployment decreases the probability of leaving teaching. Falch et al. (2009) further show that a reduction by one percentage point in the regional unemployment rate increase teacher shortages by nearly 0.4 percentage points.

During recessions, higher quality applicants apply to teaching positions, which results in higher teacher quality. Nagler et al. (2020) show that alternative job opportunities significantly affect teacher quality. Using administrative data on teachers in Florida public schools, they find that teachers entering the profession during recessions are significantly more effective in raising student test scores. Teachers who entered the profession during recessions are 10% of a standard deviation more effective in raising Math scores than teacher who entered the profession during non-recessionary periods. Britton and Propper (2016) use data on schools and teachers in England to document positive effects of local relative teacher pay on school productivity. A ten percent shock to the wage gap between local labour market and teacher wages results in an average loss of around 2% in average school performance in the key exams taken at the end of compulsory schooling in England.

Thus, the current Covid-19 crisis is likely to make teaching more attractive, and therefore to reduce teacher shortages and to increase teacher quality. Preliminary evidence from data published by UCAS already show that the number of initial teacher training applications has increased in April by more than would be expected based on previous trends (Worth, 2020). This could potentially be boosted by the lockdown: teachers are classified as key workers and parents who have to homeschool their children for months may value teachers more than ever before. However, until the virus is under control, teaching, as it is fundamentally based on social interactions can be seen as high riskand therefore unattractive by potential applicants (Benhenda, 2020).

But cuts in school funding during recessions hurt employment prospects in teaching

Recessions can impact negatively teacher labour demand(job openings) if they trigger cuts in school funding. In the United States for example, between 2008 and 2010, following the Great Recession, more than 120,000 teaching jobs were lost. These teaching position cuts proved to be long-lastingas the US today has still fewer public-school teachers than in 2008. State education funding in the US hit its lowest point in 2010, when it was 8% below 2008 levels. It took almost 6 years for state education to rebound to 2008 levels (Griffith, 2020).

In the UK, according to the Institute for Fiscal Studies school spending per pupil fell by about 5% in real terms between 2010 and 2015(Britton et al., 2019). These funding cuts have translated into fewer resources for schools. In secondary schools, teacher numbers have fallen by 10% between 2010 and 2018 and teaching assistant numbers have fallen by about 13% since 2011. As a result, class size and pupil to teacher ratios have significantly risen. An increase in class size can negatively impact pupils' achievement, especially disadvantaged pupils' as disadvantaged and minority groups are the most sensitive to class size variations (Zyngier, 2014).

Further evidence also shows that the value of teacher pay scales declined by about 10% in real terms between 2010 and 2018 as a result of various freezes and cap on public sector pay rises (Sibieta, 2018). Cuts in education funding can therefore hurt employment prospects in teaching, and as a result the attractiveness of the teaching profession. In its 2019 manifesto, the Conservative party has however pledged to significantly increase school funding (by £7bn a year) and teacher pay (raised to £30,000)

Summary and Implications

Recessions impact teacher labour markets in ways that can counterbalance each other. On the one hand, recessions, because they dramatically reduce outside options, usually make the teaching profession more attractive to higher quality applicants. Therefore, they can be a unique opportunity to address teacher shortages, increase teacher quality, and as result pupils' performance.

On the other hand, if recessions trigger austerity measures and cuts in school funding, they can have major adverse effects on the education sector and on the teaching profession, through teaching position cuts. This translates into higher class size and a decrease in learning conditions for pupils. This can contribute to a decrease in student performance, and an increase in education inequality.

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