

# Getting in under the hood: firm and job dynamics in the UK before, during and after the 'Great Recession'

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1. purpose
2. data sources & construction
3. accounting for firm dynamics
4. births & deaths
5. continuing firms
6. net job creation
7. what have we learned?

## 1. sources

- ▶ Inter-Departmental Business Register (IDBR) is a 'live' register updated for jobs from HMRC (VAT and PAYE) and Business Register Employment Survey
- ▶ the BSD comprises extracts from 'snapshots' of the IDBR taken each March (1997 to 2013)
- ▶ all employer enterprises in the UK

## 2. construction

- ▶ focus on firm and job dynamics with firms linked year-to-year by ID
- ▶ appearance of first job  $\equiv$  birth of firm
- ▶ dis-appearance of last job  $\equiv$  death of firm
- ▶ private sector (defined by industrial activity)
- ▶ focus here: cohort of private sector firms born in 1998

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In our treatment of job creation and destruction we track the contribution of *continuing* firms: firms which were born before the beginning of a year and survive to the end of that year. So we have,

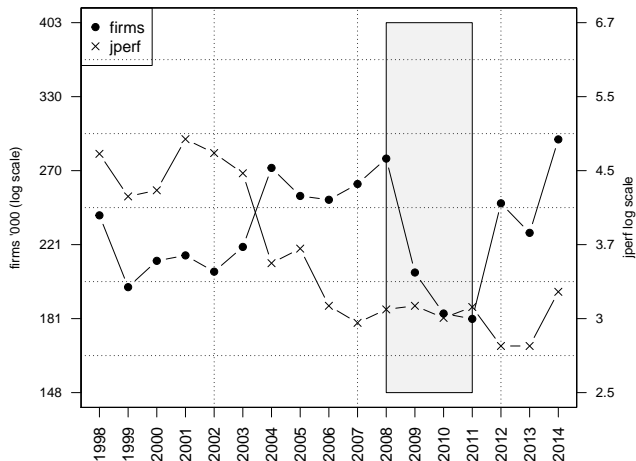
- the stock of continuing firms inherited from the previous year
- *plus* the firms born in the previous year, because at the beginning of the current year all last year's births are 're-labelled' continuing firms
- *less* the firms which die in the current year

$$\text{continuing}_t^f \equiv \text{continuing}_{t-1}^f + \text{births}_{t-1}^f - \text{deaths}_t^f$$

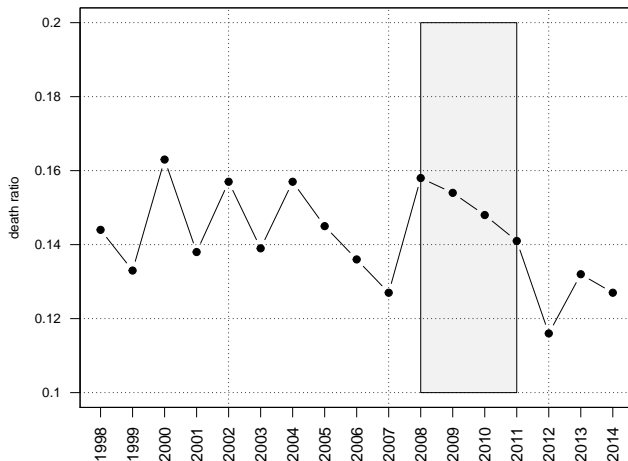
and the corresponding stock/flow relation is,

$$\Delta \text{continuing}_t^f \equiv \text{births}_{t-1}^f - \text{deaths}_t^f \quad (1)$$

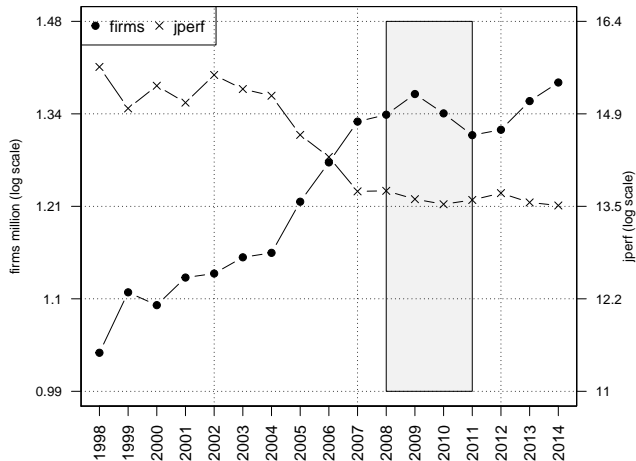
# births: firms ('000) & jobs per firm (jperf), 1998 – 2014



deaths: ratio to opening stock of firms (%), 1998 – 2014

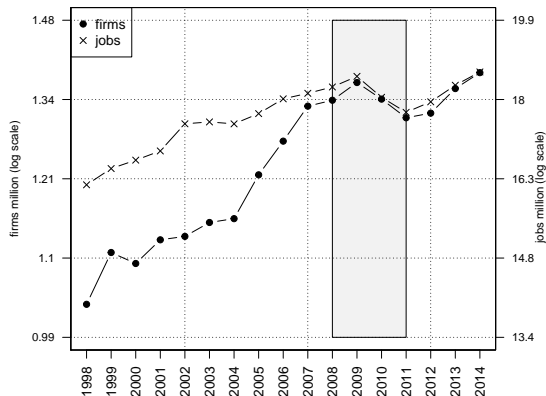


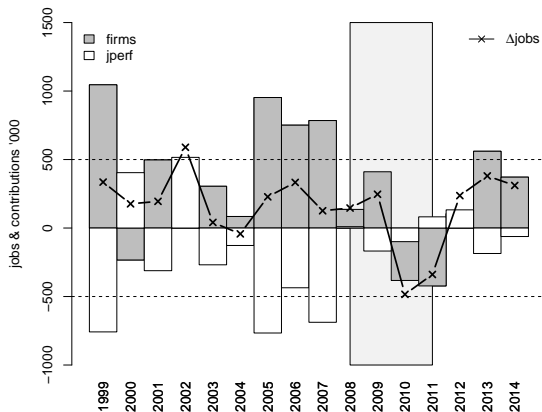
continuing firms (million) & jobs per firm (jperf), 1998 – 2014  
(log scales)





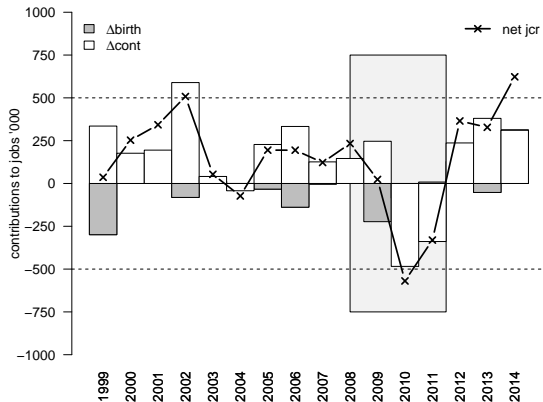
# continuing firms & jobs (million), 1998 – 2014 (log scales)





# contributions of births and continuing firms to net job creation

('000), 1999 – 2014



- focusing on firm stocks rather than job flows provides a more coherent account of job dynamics in the UK since 1998
- jobs per firm – driven by expansion & contraction– varied relatively little, stocks of firms – driven by births and deaths – varied rather more
- the onset of the Great Recession period was signalled by a collapse in firm births, which remained depressed until 2010
- the depressed number of births depressed continuing firm numbers in the following years
- because jobs per firm remained largely unchanged during the Great Recession period, the changes in the stock of firms translated into changes in the stock of jobs
- ***today's startups are tomorrow's continuing firms***