

# COVID-19, Productivity and Reallocation: Hibernation, Not Zombification

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## The issue

The consequences of the pandemic for potential output will partly hinge on its impact on the reallocation of labour from low to high productivity firms. While Schumpeter proposed that recessions can accelerate this “cleansing” process, downturns can also distort reallocation dynamics if financial constraints result in the premature shakeout of productive but financially fragile firms. The pandemic could provide a further twist if job retention schemes delayed the restructuring of unproductive firms that would have otherwise contracted, thereby risking “zombification”. But timely evidence on this issue is scarce.

## What we do

To fill this gap, two new OECD working papers explore how workforce adjustments (and exit) since early 2020 are connected to firm-level labour productivity, based on two high frequency firm-level datasets:

- **Xero** – a cloud-based accounting software platform for small businesses – which supplies: *i*) data for Australia, New Zealand and the United Kingdom; *ii*) novel variables (e.g. hours worked and usage of E-commerce and cashflow reporting and management apps); and *iii*) analysis of reallocation and productivity before and after the onset of the pandemic.
- **Single Touch Payroll** (STP) – which contains data on employment for most Australian firms since early 2020 –

merged with Business Income Tax data from 2018/19. Crucially, this dataset contains flags on participation in JobKeeper (Australia's job retention scheme).

## What we find

### *Reallocation remained productivity-enhancing*

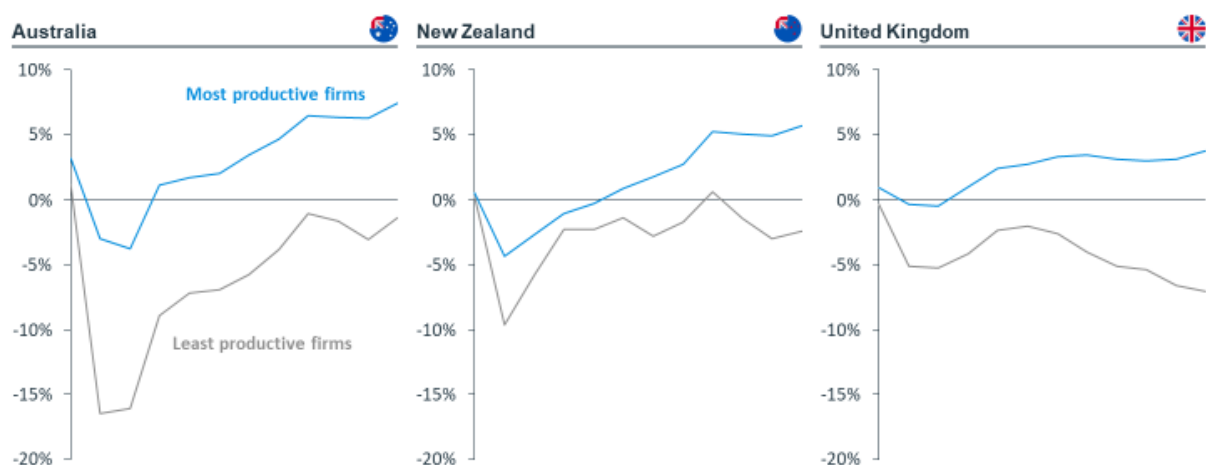
Both papers show that while overall rate of job reallocation fell following the onset of the pandemic, a non-trivial share of firms were still adding or shedding workers, and this reallocation process remained connected to productivity. That is, the tendency for high productivity firms to expand and low productivity firms to contract – which propels medium-term productivity growth – remained intact.

Workforce adjustments remained connected to firm productivity, on both the heads and hours worked margins. This was especially the case in Australia, as reflected by a large gap in employment growth between firms in the top and bottom productivity quartiles (Figure).

#### The most productive firms saw smaller job losses during the crisis and a faster recovery in jobs as the crisis receded

Change in employment from February

% (log difference) change from February to relevant month; productivity based on revenue per employee in 2019



Source: Andrews et al. (2021). Xero Small Business Insights  
The pandemic also coincided with a temporary strengthening of the reallocation-productivity link in Australia and the United Kingdom over the first half of 2020, relative to 2019. But the

reverse is true for New Zealand, which may partly reflect the earlier introduction of New Zealand's job retention scheme, which also protected a greater share of workers than the JobKeeper scheme in Australia.

Firms that intensively used Apps to manage their business were more resilient, even after controlling for productivity. Thus, while policy partly thwarted creative destruction, the nature of the shock – i.e. one where being online and able to operate remotely were key – potentially favoured high productivity and tech-savvy firms, resulting in a reallocation of labour to such firms.

### ***Job retention schemes played a nuanced role***

That the reallocation-productivity link remained intact is surprising, given the large scale of Australia's JobKeeper Scheme. JobKeeper provided broad-based crisis support from April to September 2020 (JobKeeper 1.0), but was then phased-out and firms had to re-apply for support (under JobKeeper 2.0).

Productivity-enhancing reallocation was actually *stronger* in those local labour markets that had a higher proportion of workforce in receipt of JobKeeper. This is consistent with the fact that JobKeeper 1.0 disproportionately shielded productive but financially fragile firms – a pivotal group whose premature shakeout can impart scarring effects.

But the scheme grew more distortive over time, with JobKeeper 2.0 (from October 2020) more likely to support low productivity firms. In fact, there was virtually no productivity-enhancing labour reallocation in those local labour markets where the reach of JobKeeper 2.0 remained pervasive. By contrast, where a large amount of the workforce exited the scheme, more labour flowed towards high productivity firms.

### **What this means**

The use of timely data to investigate the allocative effects of the pandemic is significant, given that the seminal paper on reallocation during the Great Recession arrived six years after Lehman Brothers collapsed (Foster et al., 2014). Yet, the pandemic may also shape productivity via other channels –digitalization, global knowledge spillovers and human capital – that will only become clear over time.

This analysis suggests that job retention schemes can potentially protect workers from scarring without significantly distorting firm dynamics. While some initial concerns about zombification may have been overplayed, there is a fine line between such policies being supportive and distortive. This underscores the need for job retention schemes to be truly temporary and to evolve as economic conditions change.

## **References**

Andrews, D., A. Charlton and A. Moore (2021), “COVID-19, Productivity and Reallocation: Timely evidence from three OECD countries”, OECD Economics Department Working Paper No. 1676. <https://doi.org/10.1787/d2c4b89c-en>.

Andrews, D., E. Bahar and J. Hambur (2021), “The COVID-19 shock and productivity-enhancing reallocation in Australia: Real-time evidence from Single Touch Payroll”, OECD Economics Department Working Paper No. 1677. <https://doi.org/10.1787/2f6e7cb1-en>

Foster, L., C. Grim and J. Haltiwanger (2014). “Reallocation in the Great Recession: Cleansing or Not?,” NBER Working Paper 20427.