

THE REALLOCATION OF RESOURCES DURING THE PANDEMIC

The total number of net jobs created by new or expanding firms and those destroyed by firms that ceased or scaled back their activity is generally much higher than the overall change in the number of jobs for the entire production sector during the period. The difference is a measure of how many more jobs are created and destroyed than would have been strictly necessary to satisfy the desired increase or decrease in the aggregate labour input. This difference, called ‘excess allocation’, is an indicator of the dynamism of an economic system: an increase, especially after periods of crisis, can predict an economy’s capacity to reorganize itself and redirect the human resources that are no longer employed by distressed or permanently closed firms towards other employment opportunities.¹

In the non-farm private sector as a whole, firms created 1.7 million payroll positions on average each year between 2017 and 2019 (14.7 per cent of existing jobs; see panel (a) of Figure A) and destroyed 1.3 million (11.3 per cent), for a net increase in jobs of 3.4 per cent per year. This growth in employment was fairly well spread across the production system, reducing the need for a reallocation of the labour force between one firm and another, and excess reallocation fell by around 1.2 percentage points per year (see panel (b) of Figure A).

During the COVID-19 pandemic, job creation fell drastically in 2020, owing to the suspension of some activities and the drop in demand, and partially recovered in 2021. Job destruction instead rose substantially in the early months of the pandemic, owing especially to the failure to renew fixed-term employment contracts, and then declined to just below 2019 levels, in part due to the freeze on dismissals and recourse to the ‘COVID-19’ emergency wage supplementation scheme (*CIG di emergenza*; see Chapter 8, ‘The labour market’, *Annual Report for 2020, 2021*).²

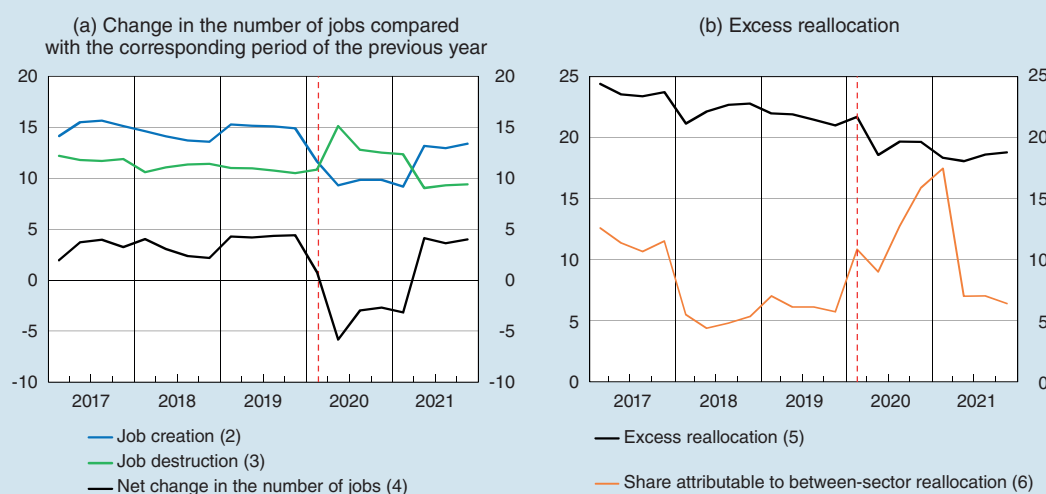
Due to the strong contraction in activity and the slowdown in the flow of firms entering and exiting the market, excess reallocation declined further during the most acute phase of the pandemic crisis. It showed very little signs of recovery even during the quarters in which there was a more vigorous economic upturn, continuing the downward trend under way since 2017. These developments stand in contrast to what occurred in 2009 during the global financial crisis, when excess

¹ Net creation or destruction of jobs takes account of the employment dynamics of a firm in a given period and does not consider worker mobility when this does not involve a change in a given firm’s employment levels (e.g. an exit due to retirement offset by a new hire). The analysis summarized here is the result of a collaboration with INPS’s Research Department, DCSR; see L. Citino, E. Di Porto, A. Linarello, F. Lotti, A. Petrella and E. Sette, ‘Job creation, destruction and reallocation in Italian firms: an analysis based on INPS’s administrative data 1984-2021’, INPS, *Studi e Analisi*, forthcoming (only in Italian).

² For further details on recent labour market dynamics, see Ministry of Labour and Social Policies, Banca d’Italia and ANPAL, ‘Labour market data and analyses’, May 2022 ([only in Italian](#)).

Figure A

Resource reallocation indicators (1) (quarterly data; per cent)



Source: Based on INPS data for the universe of non-farm private sector firms with at least one employee.

(1) The dashed vertical line represents 21 February 2020, the date on which the first COVID-19 case was detected in Italy. – (2) Number of jobs created by new or expanding firms between the quarter indicated and the corresponding period of the previous year, expressed as a percentage of the average number of employees in the two periods. – (3) Number of jobs lost by firms that exited the market or scaled back their operations between the quarter indicated and the corresponding period of the previous year, expressed as a percentage of the average number of employees in the two periods. – (4) Difference between the number of jobs created and those destroyed between the quarter indicated and the corresponding period of the previous year, expressed as a percentage of the average number of employees in the two periods. – (5) Sum of the number of jobs created and those destroyed between the quarter indicated and the corresponding period of the previous year, less the absolute value of their difference, expressed as a percentage of the average number of employees in the two periods. – (6) Share of excess reallocation attributable to the reallocation of jobs between sectors, as identified by four-digit ATECO 2007 codes.

reallocation rose considerably,³ and to the dynamics registered in countries that adopted support measures that were less focused on protecting existing jobs, such as the United Kingdom and especially the United States, where the indicator has increased considerably over the last two years.⁴

Despite the overall decline in excess reallocation, during the most acute phase of the crisis the share attributable to changes in the sectoral composition of jobs rose swiftly (see panel (b) of Figure A), as a result of performance diverging significantly between sectors; it subsequently fell, from the second quarter of 2021, as the recovery took hold.

Sectoral rebalancing of employment was driven by certain sectors, based on their specific dynamics. ICT services firms, which have a high level of digital intensity and which benefited from greater use of remote working arrangements,

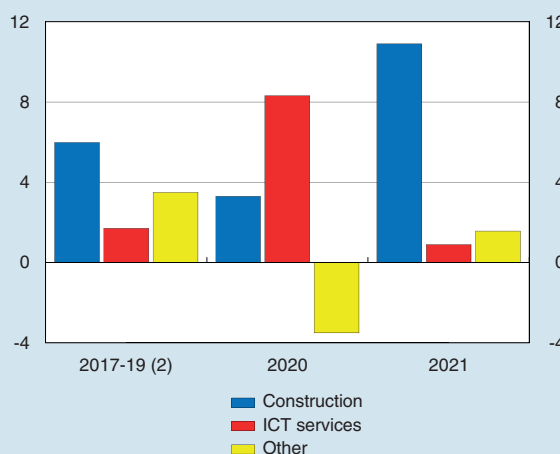
³ The years following the global financial crisis were also characterized by an increase in the contribution of allocative efficiency to aggregate productivity dynamics. For further details, see A. Linarello and A. Petrella, 'Productivity and reallocation: evidence from the universe of Italian firms', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 353, 2016 and M. Bugamelli and F. Lotti (eds), 'Productivity growth in Italy: a tale of a slow-motion change', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 422, 2018.

⁴ See L. Anayi, J.M. Barrero, N. Bloom, P. Bunn, S. Davis, J. Leather, B. Meyer, M. Oikonomou, E. Mihaylov, P. Mizen and G. Thwaites, 'Labour market reallocation in the wake of Covid-19', *VoxEU CEPR*, 13 August 2021.

absorbed jobs, especially in 2020 (Figure B). The construction sector, traditionally deemed low-productivity and which was already in expansion, continued to create jobs even during the most acute phase of the crisis; in 2021, the intensity of job creation was greater still, thanks in part to the contribution of new firms. Overall for the two-year period, job growth was driven by firms in the residential construction sector and in specialized works, which benefited from tax incentives to improve the energy efficiency of buildings. The persistence of these developments and their effects on aggregate productivity will have to be analysed in the coming years.

Figure B

Change in the number of jobs by sector (1)
(per cent)



Source: Based on INPS data.

(1) Percentage changes in the average number of jobs recorded in the year compared with the previous period. – (2) Average change over the three-year period.