

The latest economic crisis resulted in the loss of more than four million jobs (20% of the total) between 2008 and 2013. The severity of job destruction was far greater than in the previous two recessions, which had started in the mid-1970s and early 1990s and had led to job losses accounting for approximately 10% of the total.

By sector, the fall in employment during the most recent crisis was particularly pronounced in construction, which lost more than 60% of its jobs, in cumulative terms (see Chart 1). However, the recession also had a strong impact on industry, where around 30% of jobs were destroyed, while employment in the agriculture and market services sectors declined by around 15%. Lastly, employment remained fairly stable in non-market services, consistent with the limited cyclical fluctuations usually associated with employment in these sectors.

If these developments are compared with those of the preceding recession, in the early 1990s, a relatively similar pattern can be observed in qualitative terms, with the exception of the agricultural sector, where the secular process of job reduction associated, among other factors, with the mechanisation of agricultural activity had not yet concluded in that decade. In the preceding crisis, construction, followed by industry, were also the sectors which suffered the greatest job losses, while the services sectors barely destroyed jobs (see Chart 2)<sup>1</sup>.

The recovery which began in the second half of 2013 has recently enabled the GDP to return to its pre-crisis level. However, employment is still 10% lower than it was before the crisis, despite the intense pace of job creation in the four years since the start of the recovery, clearly higher than that observed in the same period of the previous expansionary phase (see Charts 3 and 4). From a sectoral standpoint, in both cycles, the recovery of employment from the cyclical trough was again very similar, with above-average growth in the construction and market services sectors and a slower recovery in industry, while employment growth in non-market services was more subdued<sup>2</sup>. At a higher level of disaggregation, in market services, the employment growth in the current cycle in accommodation and food services is higher than that in construction, in contrast with the preceding recovery, where job growth was higher in professional and business sectors. Employment gains in industry

are concentrated in the manufacturing sectors (in contrast with the previous recovery, in which job creation was much more intense in the mining and quarrying sectors).

Sectoral employment patterns since the previous cyclical peak in 2007 have led to profound changes in the weight of each sector in total employment (see the table below). Specifically, the proportion of workers employed in the construction sector has fallen by more than 7 pp (from 13.2% of the total to 5.9%), and by almost 3 pp in the manufacturing sectors. The sectors which have gained weight all relate to market services, namely accommodation and food services, transportation, warehousing and communication, education, healthcare and social services, with an overall increase of 7.5 pp (from 24.5% to 32%). Thus, compared with the situation at the end of the previous expansionary cycle before the onset of the crisis, accommodation and food services have notably gained weight at the expense of the construction sector, and the fact that the skills it requires are generally of a relatively low level could facilitate the transferability of workers between sectors<sup>3</sup>.

In general, the shifts in employment between sectors observed during the recovery have not had a significant impact on aggregate productivity levels. Chart 5 shows the correlation between productivity by sector at the start of the recovery and the changes in the weight of each sector in total employment. As can be seen, this correlation is only marginally positive, with employment flowing towards more productive sectors, albeit at a subdued pace. In particular, construction is one of the sectors with the highest employment growth since 2014, with above-average productivity, which broadly offsets the lower productivity in accommodation and food service activities.

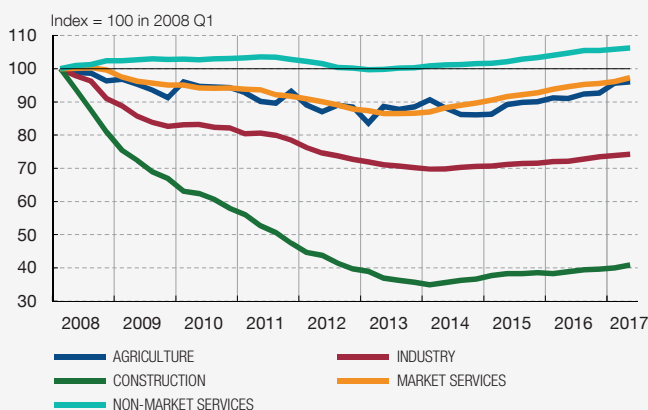
From a broader time perspective, the sectoral changes in the composition of employment observed since the start of the crisis have contributed positively to apparent labour productivity, although on a limited scale. When aggregate productivity growth is broken down into the contributions of the changes in sectoral weights and productivity changes within each sector (see Chart 6), the latter factor is found to have largely led to the observed increase in productivity, which took place during the crisis but not in the recovery phase. This can be explained by the fact that job destruction during recessions tends to concentrate on workers with temporary contracts (which are widespread across sectors), whose productivity level tends to be relatively low since they have less experience. Moreover, the average productivity of the flow of new hires is declining in the recovery

1 Similarly, in the recession which began in the mid-1970s, the level of employment in the services sectors remained relatively stable, while it fell by approximately 30% in construction, industry and agriculture, although, as mentioned above, the nature of job reduction in the latter was more than just cyclical.

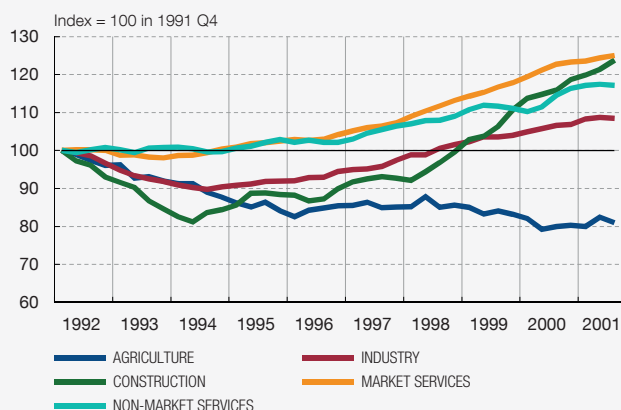
2 In any case, while the level of employment in construction and industry in 2014, in absolute terms, was not so different from that observed in 1994, employment in the services sectors as a whole had almost doubled in that period, as a result of the tertiarisation of the economy.

3 See Lacuesta, A., S. Puente and E. Villanueva (2012), "Sectoral change and implications for occupational mismatch in Spain", *Economic Bulletin*, July, Banco de España and *Annual Report 2012*, Banco de España, box 5.3 ("Sectoral reallocation since the onset of the crisis").

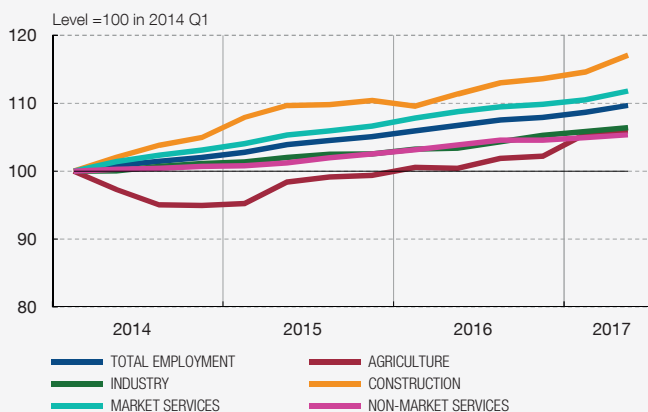
**Chart 1**  
LEVEL OF EMPLOYMENT ON QNA DATA, BY LARGE SECTOR, SINCE 2008



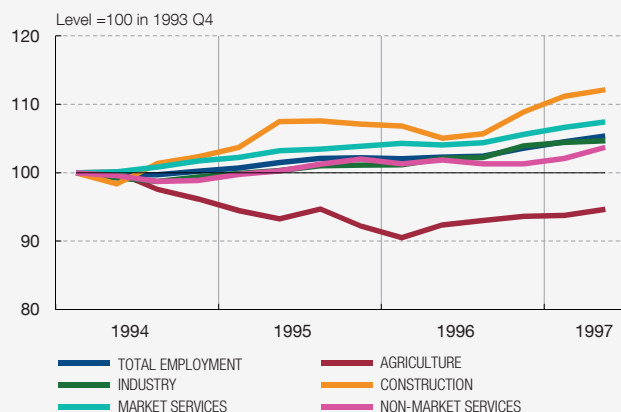
**Chart 2**  
LEVEL OF EMPLOYMENT ON QNA DATA, BY LARGE SECTOR, IN THE PREVIOUS CRISIS



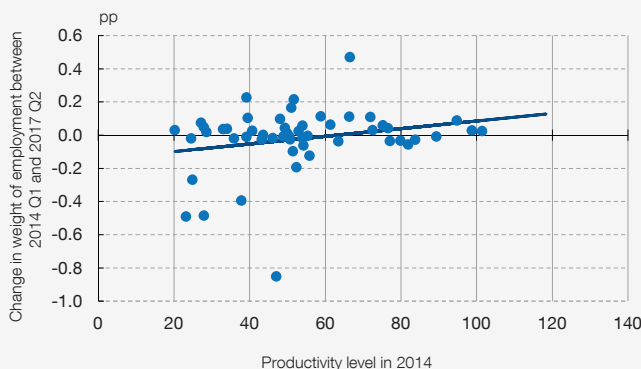
**Chart 3**  
LEVEL OF EMPLOYMENT ON QNA DATA, BY LARGE SECTOR, SINCE THE START OF THE CURRENT RECOVERY



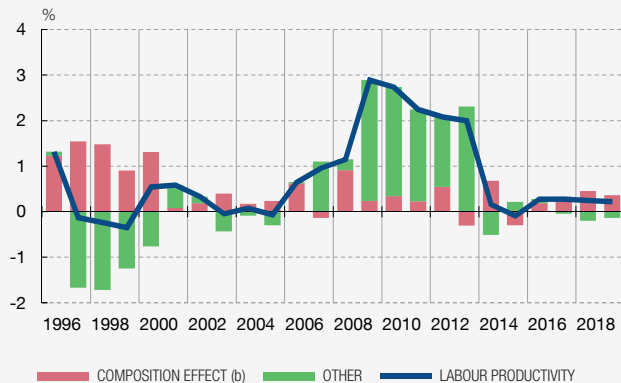
**Chart 4**  
LEVEL OF EMPLOYMENT ON QNA DATA, BY LARGE SECTOR, SINCE THE START OF THE 1993 RECOVERY



**Chart 5**  
CHANGES IN THE SHARE OF EMPLOYMENT BETWEEN 2014 AND 2017 BY SECTOR, ACCORDING TO PRODUCTIVITY LEVEL (a)



**Chart 6**  
RATE OF CHANGE OF APPARENT LABOUR PRODUCTIVITY AND COMPOSITION EFFECT



SOURCE: Instituto Nacional de Estadística (QNA and EPA).

- a 2-digit sectors of the NACE-2009. EPA employment. Eight sectors with atypical values are excluded.
- b Includes the effect of change in employment, based on constant productivity in the 11 sectors considered between two consecutive periods.

phase, since there are individuals returning to work after long periods of unemployment, probably in different tasks to those performed in their previous jobs<sup>4</sup>.

To conclude, the recovery of employment in the current expansionary phase has tended to concentrate, in absolute terms, in several service sectors, some closely linked to the growth in tourism. From the trough recorded after the crisis, employment

has risen notably in the construction sector, which is key to explaining the cyclical swings in the Spanish economy, as is also shown by the fact that this sector had higher relative employment growth after the recession of the early 1990s. In view of the possibility that the accommodation and food services and construction sectors may approach their limits on job creation in the near future, it seems necessary to look for formulas to improve employment opportunities for the lower-skilled unemployed. Finally, one of the consequences of the crisis has been the fact that young people have remained in the education system for longer periods. In the future, a higher level of education among new generations will be the factor that determines the transferability of employment to activities associated with higher productivity levels. It is therefore essential to improve the quality of the education system.

<sup>4</sup> Although the absorption of relatively low-skilled unemployed individuals observed recently may lead to a decline in labour quality at aggregate level, there has been a simultaneous increase in total factor productivity, which could be due to the reallocation of productive factors to more efficient firms. (see chapter 2 "Financing and investment decisions of Spanish non-financial corporations", *Annual Report 2016*, Banco de España.

**Table**  
**WEIGHT OF EMPLOYMENT IN THE MAIN SECTORS IN SPAIN AND THE G4 (GERMANY, ITALY, FRANCE AND UNITED KINGDOM)**

	Spain			G4 (a)			Difference Spain - G4		
	1993 (1)	2007 (2)	2016 (b) (3)	1993 (4)	2007 (5)	2016 (6)	1993 (1-4)	2007 (2-5)	2016 (b) (3-6)
Agriculture; fishing	9.5	4.4	4.2	4.1	2.5	2.0	5.4	1.9	2.2
Mining and quarrying	0.5	0.3	0.2	0.6	0.3	0.2	-0.1	0.0	0.0
Manufacturing	20.6	15.2	12.5	23.8	18.2	15.2	-3.2	-3.0	-2.7
Electricity, gas and water supply	0.7	0.6	1.1	1.1	0.8	1.4	-0.4	-0.2	-0.3
Construction	9.5	13.2	5.9	7.6	7.5	6.7	1.8	5.7	-0.8
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	17.0	15.3	16.1	17.3	14.3	13.7	-0.3	1.0	2.5
Hotels and restaurants	5.5	7.1	8.8	3.3	4.1	4.7	2.2	3.0	4.1
Transport, storage and communication	6.0	5.8	8.1	6.2	6.0	8.2	-0.2	-0.2	-0.2
Financial intermediation	2.9	2.5	2.5	3.7	3.5	3.4	-0.8	-1.1	-0.9
Real estate, renting and business activities	5.1	10.0	10.8	4.8	10.8	11.6	0.3	-0.8	-0.8
Public administration and defence; compulsory social security	6.5	6.1	6.9	8.3	7.7	7.1	-1.9	-1.6	-0.1
Education	5.4	5.5	6.9	6.5	7.1	7.9	-1.1	-1.6	-0.9
Health and social work	4.8	6.1	8.2	7.8	10.9	12.4	-3.0	-4.7	-4.2
Other community, social and personal service activities	3.2	4.2	4.4	4.2	5.2	4.4	-1.0	-1.0	0.0
Activities of households	2.9	3.7	3.4	0.8	1.1	1.1	2.1	2.6	2.3
Extra-territorial organizations and bodies	0.0	0.0	0.0	0.1	0.1	0.1	-0.1	-0.1	-0.1

SOURCES: Eurostat and Banco de España.

- a** Simple average of the weights of Germany, France, Italy and United Kingdom.  
**b** 2016 data back-calculated at the Banco de España to ensure consistency with previous classification.