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JOB FLOW DYNAMICS AND FIRING RESTRICTIONS: EVIDENCE FROM EUROPE*

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We exploit homogeneous firm level data of manufacturing and non-manufacturing industries to study the impact of firing restrictions on job flow dynamics across 14 European countries. Our results suggest that more stringent firing laws dampen the response of job destruction to the cycle, thus making job turnover less counter-cyclical. Moreover, stricter EPL reduces both the creation and destruction of jobs in declining sectors relative to expanding sectors, implying that faster trend growth attenuates the impact of firing costs on firm's hiring and firing decisions.

How does the reallocation of factors of production behave along the business cycle? Are there significant differences across countries? Which are the determinants of such differences? Following Davis and Haltiwanger's (1990, 1992) seminal work, a large literature has emphasised the importance of labour reallocation and microeconomic heterogeneity for macroeconomic fluctuations. While the direction of causality is debatable,[1] the study of the behaviour of job reallocation over the business cycle is fundamental in order to understand economic fluctuations. Moreover, even if reallocation is just a consequence of the business cycle, understanding the nature and timing of job reallocation remains crucial to design the appropriate policy responses to recessions and, more generally, to business cycle fluctuations. Several studies in Anglo-Saxon countries clearly suggest that the reallocation of jobs presents a counter-cyclical pattern. During slumps the rate at which jobs are destroyed increases rapidly. Perhaps more surprisingly, job creation reacts slowly to economic downturns, sometimes even not declining at all. As a result, job reallocation (the sum of job creation and job destruction) is clearly counter-cyclical.[2]

This set of facts spurred the proposal of different theories consistent with the counter-cyclicality of reallocation. Caballero and Hammour (1994) show, within a vintage model of process and product innovation, that declines in demand are only partly accommodated by a reduction of job creation when fast creation of jobs in an industry is costly due to increasing creation costs. As a consequence, job creation is smoothed over the business cycle and job destruction is concentrated in recessions, implying a counter-cyclical pattern in the reallocation of jobs. In Mortensen and Pissarides (1994), counter-cyclical movements of job reallocation are generated by the

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[1] See Schuh and Triest (1998) for a discussion of the causality links between reallocation and business cycle fluctuations.

[2] See Davis and Haltiwanger (1992) and Davis *et al.* (1996) for the US manufacturing sector, Baldwin *et al.* (1998) for Canada and Konings (1995) for the UK.

actions. Moreover, the estimated effects of firing restrictions on employment dynamics are large in magnitude and can account for observed cross-country differences in the cyclical patterns of job flows.

Our estimates further suggest that the impact of EPL on job turnover is closely related to trend growth in the sector. Accordingly, the burden of legislation falls on firms in declining sectors, implying that differences in reallocation across countries with different degrees of employment protection are likely to be more noticeable in contracting sectors, such as manufacturing, than in growing sectors, such as most service industries.

Our results have potentially important policy implications. Understanding the behaviour of gross job flows over the cycle and its determinants is fundamental for the assessment of the extent and need of stabilisation policies. Our findings strongly suggest a role for EPL in stabilising employment fluctuations along the business cycle. In countries with little protection of jobs, recessions are times of strong reallocation. On the contrary, when firing a worker is costly and time consuming the reallocation of labour is smoothed along the business cycle. The welfare impact of such insulation of job destruction to economic downturns will depend on several factors, including the availability of alternative insurance mechanisms and possible productivity losses due to legislation as those documented in Autor *et al.* (2007). A fully fledged cost benefit analysis of this stabilising device constitutes a promising line for further research.

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