

Now Hiring: Seasonal Labor Requirements through a Quarterly I-O model

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After almost a decade of economic recession, unemployment rates have started to decrease across nations, and growth has slowly resumed. Nonetheless, the recovery in Spain has been slower and the composition of jobs has changed significantly from the pre-crisis period, with a higher share of temporary contracts. This has translated into increased variability in the employed-unemployed condition of the labor force along the year, which ultimately impacts seasonal final demand. Despite capturing economy-wide effects, current Input-Output models are still limited in their assessment of intra-year shocks because they are based on annual accounts. Hence, traditional employment multipliers per se offer little insight into these issues. Moreover, although demo-economic models introduce different labor statuses and consumption profiles, they also have an annual basis. In sum, intra-year seasonality in labor requirements has been largely ignored in the Input-Output framework, relying on a temporal aggregation that prevents capturing such employment movements. This topic is particularly important for impact assessments, especially in the case of those sectors involving seasonal production, such as some primary and services activities. Therefore, the aim of this paper is to introduce an Input-Output framework that merges intra-year tables and a cost-share model of employment requirements that yields jobs by contract duration and quarters, and inter-temporal production levels. This model follows the T-EURO method proposed by Avelino (2017) and an econometrically estimated translog cost function in line with Kim and Hewings (2015). This paper uses data from the World Input-Output Database and the Continuous Sample of Employment Histories for Spain to illustrate its application.