A Dynamic Hypothetical Extraction Technique for Analizing Price Effects

Topic: Structural change and dynamics 1

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The problem of competiveness has becoming one of the main concerns of European governments. This is reflected trough out the Europe 2020 Strategy that includes as key priority the promotion and efficient and productive use of inputs. Differently to other "well-behaved" European "neighbours", namely, Germany, Belgium, Netherlands, and even Greece, in Spain productivity growth closely connected to competiveness improvements has been remarkably slow during the last decade. Some analysts consider that the bad evolution of Spanish competiveness levels is basically due to the increase in labour costs during these years, i.e unitary labour costs in, for instance, the manufacturing sector has increased more than ten percent since 2000. Others blame the inappropriate sectoral distribution of investment, less orientated to those sectors related to R+D+i activities. Consequently, this paper pursues to shed some light about which have been the main reasons that explains the lack of competiveness for the case of the Spanish economy. In doing so, we use a multi-sectoral approach employing yearly Input-Output data for this economy that covers the 2000-2007 time-frame. This is the empirical contribution of our paper. In terms of methodology, to the best of our knowledge, the contribution of this paper relating to the Hypothetical Extraction Method (HEM) is two-fold. Differently to what is common practise, the first contribution has to do with evaluating endogenous price impacts using the HEM. Expanding the application of the original approach first proposed by Leontief (1970) and then further elaborated by C.K Liew (1977) and C.J.Liew (2000, 2005), the second contribution consists in introducing dynamics to the HEM. This helps to analyze the evolution and the main determinants of the rise in price levels that has generated a decline in Spanish competitiveness levels.