The Trade Flow of Small Association Agreements When Rules of Origin Are Relaxed

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Abstract : This paper aims to shed light on the extent to which the Agadir Association agreement has fostered inter regional trade between the E.U_26 and the Agadir_4 countries; once that we control for the evolution of Agadir agreement's exports to the rest of the world. The next valid question will be regarding any remarkable variation in the spatial/sectoral structure of exports, and to what extent has it been induced by the Agadir agreement itself and precisely after the adoption of rules of origin and the PANEURO diagonal cumulative scheme? The paper's empirical dataset covering a timeframe from [2000 -2009] was designed to account for sector specific export and intermediate flows and the bilateral structured gravity model was custom tailored to capture sector and regime specific rules of origin and the Poisson Pseudo Maximum Likelihood Estimator was used to calculate the gravity equation. The methodological approach of this work is considered to be a threefold one which starts first by conducting a 'Hierarchal Cluster Analysis' to classify final export flows showing a certain degree of linkage between each other. The analysis resulted in three main sectoral clusters of exports between Agadir_4 and E.U_26: cluster 1 for Petrochemical related sectors, cluster 2 durable goods and finally cluster 3 for heavy duty machinery and spare parts sectors. Second step continues by taking export flows resulting from the 3 clusters to be subject to treatment with diagonal Rules of origin through 'The Double Differences Approach', versus an equally comparable untreated control group. Third step is to verify results through a robustness check applied by 'Propensity Score Matching' to validate that the same sectoral final export and intermediate flows increased when rules of origin were relaxed. Through all the previous analysis, a remarkable and partial significance of the interaction term combining both treatment effects and time for the coefficients of 13 out of the 17 covered sectors turned out to be partially significant and it further asserted that treatment with diagonal rules of origin contributed in increasing Agadir's_4 final and intermediate exports to the E.U._26 on average by 335% and in changing Agadir_4 exports structure and composition to the E.U._26 countries.

Keywords : agadir association agreement, structured gravity model, hierarchal cluster analysis, double differences estimation, propensity score matching, diagonal and relaxed rules of origin

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