

Extended Abstract

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| Paper/Poster Title | The impact of markups on export behaviour: Firm level evidence from Hungarian food industry |
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Abstract prepared for presentation at the 97th Annual Conference of the Agricultural Economics Society, The University of Warwick, United Kingdom

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| Abstract | 200 words max |
| <p>Theory predicts that firms with relatively low marginal costs and/or higher product quality, that is, larger markups, enter the export market and adjust their product prices depending on the level of competition they expect to encounter at the export destination. The empirical evidence on the relationship between exporting and markups is limited especially for food industry. The aim of the paper is the investigate the impact of markups on export behaviour in Hungarian food industry using firm level data between 2004 and 2019.</p> <p>Our results suggest that higher markups lead to both increased participation in the export market and greater export intensity. In addition, we find that firms obtain higher markups by entering and remaining in the export market. Finally, our results suggest that exporters generate higher markups, on average, than non-exporters. We find similar results with controlling for differences in firms' productivity.</p> | |
| Keywords | export behaviour, markups, food industry, firm-level data, Hungary |
| JEL Code | D22, F14, L11, Q18 |
| Introduction | 100 – 250 words |
| <p>Theory predicts that firms with relatively low marginal costs and/or higher product quality, that is, larger markups, enter the export market and adjust their product prices depending on the level of competition they expect to encounter at the export destination. Furthermore, markups can change through learning by exporting for firms remaining in the export market for a number of years. The influence of markups, that is, the ratio of output price over marginal cost and its components, on firms' export participation and intensity has received considerable attention in the literature. A firm's physical productivity—which determines its marginal cost—has been identified as one of the key determinants of export participation and intensity. Although these models predict that productivity will have a positive impact on export intensity, defined as the ratio of export sales over total sales, a reverse effect is also possible. Given that firms with a given level of productivity can reach a certain fraction of consumers in both domestic and export markets, improved productivity enables them to increase the fraction of consumers they reach in both markets. If the positive impact of productivity improvements on domestic sales exceeds the positive impact on export sales, productivity, and export intensity will be inversely related. However, the empirical evidence on the relationship between exporting and markups is limited especially for</p> | |

food industry. The aim of the paper is the investigate the impact of markups on export behaviour in Hungarian food industry. We provide additional insights from a non Western European country with different hirstorical and institutional background and market structure/competition.

Methodology

100 – 250 words

The database employed in the analysis contains 20466 observations. It represents an unbalanced panel of 11 types of products from the Hungarian food industry about which data was gathered during the period 2004-2019. Firm-level data is collected by the Research Institute of Agricultural Economics based on bookkeeping data in the National Tax Authority.

We employ two stages approach. First, we adopt the De Loecker and Warzynski (2012) approach and augment it to account for input market power to recover markups of price over marginal cost. Production function estimated by Akerberg et al. (2015) with both Cobb-Douglas and Translog specifications. In the second stage, we investigate the impact of markups on export participation and export intensity. Because only a small percentage of firms engage in exporting, the dataset contains a large number of zero trade values. Nevertheless, these zeros must be treated as meaningful observations as they represent the optimal choice for these firms. Therefore, we employ the Cragg hurdle regression. We control for labor, capital, and material (all in natural log form) to capture differences in factor intensity and size. We also consider year and industry dummies (at the four-digit NACE level) to account for trend and subsector-specific aggregate effects in the dependent variable.

Results

100 – 250 words

Our results suggest that higher markups lead to both increased participation in the export market and greater export intensity. However, if we take into account heterogeneity between products, the effect disappeared. In addition, we find that firms obtain higher markups by entering and remaining in the export market. The product-level fixed effects do not affect the results. Finally, our results suggest that exporters generate higher markups, on average, than non-exporters. This result is robust for different model specifications. Similar results are found when controlling for differences in firms' productivity. We also perform robustness checks, but removing the outliers does not change the result.

Discussion and Conclusion

100 – 250 words

We provided evidence on the relationship between markups and export activity. Firms selling products to export markets tend to have higher markups. However, this effect does not hold for all products in the Hungarian food industry. The lack of effect may be attributed to those food products whose exports have high requirements,

which tend to increase transport costs. However, once a firm enters the export market, the markup increases. This is also the case when a company continues its export activity. Based on these results, we suggest that firms should start exporting their products or increase export intensity to generate higher markups.