

## FACTORS INFLUENCING INTERNATIONAL BEER TRADE

LILI JANTYIK, ÁRON TÖRÖK, ATTILA JÁMBOR

Corvinus University of Budapest  
Department of Agricultural Economics and Rural Development  
1093 Budapest Fővám tér 8., Hungary  
lili.jantyyik@uni-corvinus.hu

In 2016, trade value of beer made from malt was 13.8 billion USD, according to UN Comtrade data. The main exporter was Mexico with her 27% share in total beer export, followed by three EU beer producers: Netherlands, Belgium and Germany with shares of 14%, 11% and 9%, respectively. On the other side, beer import was even more concentrated: the USA represented 35% of global beer import, followed by France and the United Kingdom (5-5%), China (4,5%) and Italy (4,3%). In the beer industry, domestic consumption largely determines the industry, because the largest producers are not the top exporters. Based on the FAO data, in 2014, 28% of global beer production was brewed in China, followed by the USA (the biggest importer - 13%), and 8% was produced in Brazil. Germany and Mexico, the two main exporters, only had 5-5% of market shares.

In our study we measured competitiveness used by the index of Symmetric Revealed Comparative Advantage (SRCA), calculated for all countries exporting beer in the period of 1988-2017. In order to identify factors influencing SRCA, we applied panel-data linear models by using feasible generalized least squares (FGLS). We used the following independent variables: barley production, FDI levels, population, per capita GDP, per capita beer consumption, beer export unit value, number of beers with geographical indications, EU membership (as a dummy variable) and beer production.

Revealed comparative advantages measured by SRCA seems to be high for all the most important exporting countries except Germany. Mexico, Netherlands and Belgium were among the countries with the highest SRCA values indicating strong comparative advantages (0,77; 0,63 and 0,54 respectively, calculated as an average of the past 10 years). However, the most relevant importers (except the United Kingdom) had comparative disadvantages in international beer trade. The panel regression model also provided solid, statistically significant results (mostly with  $p < 0,01$ ).

Barley production had very marginal and negative effect on the SRCA index, so the input can be purchased from international markets. FDI did not have a direct impact on competitiveness. The population and the purchasing power (GDP/capita) of the domestic market had a negative influence on beer

competitiveness. It seems producers with higher per capita consumption were usually more successful in exporting. The EU membership also increased the SRCA level. We also examined the role of the quality in the beer industry. Producing and exporting beer with geographical indications had positive influence on the exporting countries' comparative advantages. Export unit value is in negative connection with competitiveness, so we can conclude that large quantities of average quality beers more relevant in competitiveness. We found that quantity of beer production strongly and positively influenced the SRCA. Countries producing more beer can expect more success in the global market.