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Thesis of the Diploma Thesis

Foreign Trade with Hops

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Summary:

This thesis deals with the analysis of foreign trade with Czech hops. The first part is an introduction to the issue and primarily discusses the development of hop growing in the Czech Republic during chosen time series, based on the examination of changes in the acreage of cultivation areas, average yields and shares of individual hop varieties. The second part deals with foreign trade with Czech hops, maps the main importers of Czech hops and type of hop processing of the exports. Three most important export destinations China, Japan and Germany are analyzed in detail. There is also investigated the impact of the exchange rate CZK/EUR on volume of hops exports to Germany. The last part focuses on analysis of foreign trade in hops in practice on example of selected trade company. Further is provided evaluation of the competitive environment on the Czech market with hops. Based on conducted SWOT analysis are drawn opportunities and threats for the company in the future.

Keywords:

Hops, Saaz, export, foreign trade, hop growing, hop varieties, Czech Republic, global market

Aim of the thesis and methodology:

Main objective of this thesis is to analyze foreign trade in hops in practice. Main target is divided into several intermediate objectives, they are as followed:

- Evaluation of the development of the three Czech hop regions;
- Provide an analysis of the export destinations for Czech hops;
- Examine if volume of exported hops to Germany is dependent on the exchange rate CZK/EUR;
- Analysis of trade in hops of chosen Trade Company, evaluation of the strengths, weaknesses, opportunities and threats in the future.

Theoretical part is prepared under comparison and synthesis of scientific literature and specialized internet sources.

Practical part is elaborated with a help of Analysis of the time series, Simple linear regression and correlation analysis, Simulation tool for predictions of statistical program STATISTICA 12, SWOT and Porter's Five Forces analyses as well as interviews with specialists.

Theoretical part:

Theoretical part seeks to briefly introduce the Czech hop growing industry and its importance. In the Czech countries, hops are grown since Antiquities. Hops are important technical crop, grown for harvest of the hop cones. Hop cones represent a basic raw material during beer brewing giving the beer its characteristic bitter taste. In the Czech Republic is the hops cultivation concentrated in three hop regions: Saaz, Auscha in Bohemia and Tirschitz in Moravia. Czech hops are protected by Protected Designation of Origin. PDO means the name of a region, a specific place or, in exceptional cases, a country that describes an agricultural product or a foodstuff. Hops in the Czech Republic are therefore subjected to certification: hops is labeled, weighted, numbered and sealed according to cadastral district of origin and type of varieties. Hops is traded in a form of non-crushed hop cones and hop pellets (type 90 and 45).

Practical part:

Based on the analysis of time series was discovered, that over the past 15 years has the acreage of hop gardens in the Czech Republic decreased by 49 %, the most affected was the most spread hop variety - Saaz. Saaz hop region is the largest, but also the least profitable one. On contrary, all hop varieties grown in the region of Tirschitz reach higher yields than elsewhere. USA is the largest hops producer followed by Germany and the Czech Republic. Foreign trade in hops of the Czech Republic regularly achieves a positive balance which amounted to 716 million CZK in 2015. Hop growing as an industry therefore annually positively contributes to the gross domestic product of the Czech Republic. Biggest importers of the Czech hops are China, Japan and Germany. While

exports to Japan experienced a significant decrease from 2011 due to the situation on the Japan beer market, exports to China are on the rise. Hops exports to Germany are quite volatile, dependent on the level of stocks of German breweries from previous years. Czech Republic is to a lesser extent also an importer of German hops, but especially of hop extracts. Reason for it is a fact, that nowadays there is no place of processing of hop extracts in the Czech Republic and the Czech hops varieties are not suitable for manufacturing of these extracts.

Conclusion:

The influence of exchange rate CZK/EUR was examined on hops exports to Germany with a help of statistical program STATISTICA 12; regression and correlation analysis revealed that volume of exported hops is by 33 % explained by a model with the exchange rate CZK/EUR. Such a proportion of variability suggests that the total exported volume is also influenced by other factors which are not considered in this model. Through a simulation tool for predictions of the same statistical program was examined, what would be the volume of exported hops to Germany if the exchange rate was 24 CZK/EUR (realistic scenario) or 50 CZK/EUR (extreme value). Exchange rate of 24 CZK/EUR showed a volume of 733 tons of hops; whereas at exchange rate 50 CZK/EUR would exports to Germany reach 2,608 tons of hops. As the regression analysis shows elasticity of approximately 1.6 %, these forecasts cannot be considered to be realistic. This view is also supported by relatively wide confidence intervals and especially real experiences which in the long term show that exports of hops are not significantly dependent on the current exchange rate.

To evaluate trade with Czech hops in practice in a narrower scale was chosen a Czech trade company TOP HOP. This company associates five agricultural companies whose business is hop growing and a hop research laboratory. TOP HOP annually sells 15 – 20 % of the overall Czech hops production. Most significant export destinations of TOP HOP are currently Japan, China and Russian Federation. Most promising markets for the future are seen in Asia – further expansion to China, Vietnam.

SWOT analysis strived for evaluation of strengths, weaknesses, opportunities and threats. Biggest strengths were identified in the existence of own research laboratory V.F. Humulus, own storage capacities in Hořesedly, good name of the company and its powerful base. The weaknesses appear to be in gaps in the coverage of demand and quality of some employees in the company. Opportunities were found in investments in new facility, opening new markets in Asia and increasing number of offered hop varieties. Among identified threats belong the quality of future workforce, possible deterioration in the quality of the soil and hops which is not directly influenced by the company and eventual return of the trend of diminishing acreage of hop areas.

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