Key driving forces in the Czech brewing industry

Změnotvorné síly v odvětví pivovarnictví v České republice

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Abstract: The paper is a part of solution of a post-doctorate grant awarded by the Grant Agency of the Czech Republic (GAČR No. 402/02/P059) connected with the research plan of the FBE MUAF in Brno (GAMSM 431100007), and it focuses on environmental analysis of the brewing industry in the Czech Republic with a focus on the key driving forces in this industry. The basic types of analysed driving forces are the following: long-term growth rate of the industry, character of customers and how they use the product, product innovation, process innovation, marketing innovation, entry/exit of major firms, diffusion of proprietary knowledge, changes in cost and efficiency, buyer preferences for a differentiated product, regulatory influences and government policy changes, changing societal priorities and lifestyles, uncertainty and business risk, and globalisation. Factors identified in the above-mentioned areas are examined also owing to their period of influence, and the possible implications on actions and strategies of breweries are discussed.

Key words: brewing; industry; analysis; driving force; factor; production, consumption

Abstrakt: Příspěvek, který je součástí řešení post-doktorandského grantu uděleného GAČR (č. 402/02/P059) navázaného na výzkumný záměr PEF MZLU v Brně (GAMSM 431100007), se zabývá analýzou prostředí pivovarnictví v České republice se zaměřením na hybné změnotvorné síly v tomto odvětví. Hybné změnotvorné síly jsou analyzovány v následujících oblastech: dlouhodobá míra růstu odvětví, charakter zákazníků a způsob užívání produktu, výrobkové inovace, změny technologie, marketingové inovace, vstup nebo odchod velkých firem, rozšíření technického know-how, změny v nákladové efektivnosti, poptávka zákazníků po diferencovaném produktu, regulační vlivy a změny vládní politiky, změny společenských priorit a životního stylu, nejistota a podnikatelské riziko, globalizace. Identifikované faktory ve výše zmíněných oblastech jsou zkoumány rovněž z pohledu doby jejich působení a jsou diskutovány možné důsledky na opatření a strategie pivovarů.

Klíčová slova: pivovarnictví; odvětví; analýza; změnotvorná síla; faktor; výroba, spotřeba

Czech brewing industry belongs to one of the most important and also most popular industries of the Czech economy. Its position even improved when the former Czechoslovakia split into two independent republics, because the consumption of beer in the Slovak Republic is much lower (about 58%) than in the Czech Republic (Nagyová 2000). In past, there took place several processes, which influenced the situation in this industry and operation of firms within it (Chlachula 2000).

First of all, we can name the processes of privatisation and restitution, which led to a change of ownership of breweries, and resulted in their disestablishment. Then there started the second most important process, the process of concentration, which can still be seen, and which resulted in creation of three biggest groups of breweries, which currently play the role of market leaders (Chlachula 2000).

When estimating the future development of an industry, it is helpful to analyse (besides others) the key driving forces of the industry. This paper focuses on examining these forces for the brewing industry in the Czech Republic and their possible development in the future.

MATERIALS AND METHODS

First of all, it is necessary to define the analysed industry and its borders. In this paper, the brewing industry is considered to be the industry formed by industrial breweries – the restaurant breweries are not included.

The analytical part of the paper is based on the concept presented by Thompson and Strickland (Thompson, Strickland 1989) and identifies key driving forces in the examined industry and estimates their impact on this industry. The basic types of analysed driving forces are the following:

– Changes in the industry long-term growth rate
– Changes in that who buys the product and how they use it

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– Product innovation
– Process innovation
– Marketing innovation
– Entry/exit of major firms
– Diffusion of proprietary knowledge
– Changes in cost and efficiency
– Buyer preferences for a differentiated product
– Regulatory influences and government policy changes
– Changing societal priorities and lifestyles
– Uncertainty and business risk.

This model is extended (according to Sedláčková 2000) by one more important driving force, which is
– Globalisation.

Identified factors in the above-mentioned areas are examined also owing to their period of influence, and the possible implications on actions and strategies of breweries are discussed. Based on this, the most important determinants of the future development are identified, which should show managers percieve the most important influences on their firms and assist them in being prepared for their impacts.

RESULTS AND DISCUSSION

With respect to the Czech brewing industry, the above-mentioned driving forces can be described in the following way (the most important ones are bannered in italics):

– *Long-term industry growth rate* **–** thanks to the level of beer-consumption in the Czech Republic (the world-wide leader with yearly consumption of around 160 litres of beer per capita), we can expect stagnation or a small decline in the domestic market (beer production in the Czech Republic oscillates around 18 mil hectolitres per year, during the last 5 years (http://www.pivovary.ic.cz/novinky.htm – see Table 1 for the actual production of the year 2001), but the quality of Czech beers creates a high export potential (in 2001, Czech breweries exported the total of 1.855 mil hectolitres, which is almost 17% growth in comparison with 2000);
– Character of customers and the way of use of the product – as far the structure of Czech consumers is rather stable, the most important change seems to be an increase of bottled/canned beer consumption (see Table 2), connected with higher exports.
– Product innovation – became the key driving force in several national beer-markets (especially focus on low-calorie beers – http://www.pivovary.ic.cz/novinky.htm), and could gain (depending on actions of current firms) a similar importance also in the Czech Republic. So far we can identify a growing demand for non-alcoholic beer, whereas the demand for stronger beers and "beer specialties" is still "unsure" (see Table 2).
– *Marketing innovation* - thanks to a rather uniform character of the product, breweries are trying to find other possibilities of differentiation, which is based mainly on building the brand assisted by advertising.
– Process innovation – majority of breweries switched from the old way of production to production in cylindrical-conical tanks, which shortened the production period; most of them also replaced pasteurisation by filtration, which enables keeping the natural taste of the beer and not damaging important nutrients contained in beer – suistaining the durability at the same level as pasteurisation.
– Diffusion of proprietary knowledge – in connection with the previous field, we could mention new technology, which is generally known, and its use depends more on availability of resources for purchase of this technology.
– Entry/exit of major firms – in this consequence, we can mention mainly capital inputs into the already existing firms – mostly of foreign investors. This process, though, is currently not a major one, as far as market leaders are already owned by foreign firms, and renovation of production of a formerly closed brewery, which happens from time to time (with no major success), does not enable its actors to achieve a significant market share.
– *Cost efficiency* **–** again it is bound with the previous fields; as far as the price of the beer does not grow respectively with the price of supplies, breweries are forced to develop more effective ways of operation. Therefore it becomes one of the most important keys of reaching profits.

Table 1. Production of the selected breweries in 2001

Brewery	Production (mil. hectolitres)
Plzeňský prazdroj (Pilsner Urquell)	5.122
Pražské pivovary (Prague Breweries)*	2.100
Radegast	1.900
Budějovický Budvar (Budweiser Budvar)	1.320
Velkopopovický Kozel	0.943
Drinks Union	0.742
Krušovice	0.711
Starobrno	0.545
Holba Hanušovice	0.420
Litovel	0.210
Černá Hora	0.159
Platan Protivín	0.150
Havlíčkův Brod	0.149
Náchod	0.144
Krakonoš Trutnov	0.121
Zlatovar Opava	0.104
Bernard Humpolec	0.095
Kutná Hora	0.090
Nová Paka	0.087
Hlinsko	0.086
Polička	0.068
Vratislavice	0.060
Broumov	0.021
TOTAL	15.347

Note: * Data only for the group Staropramen+Braník+Ostravar

Source: ČTK, breweries [8]

– Buyer preferences for a differentiated product – as it was already mentioned, the demand for special products slowly increases, while on the general level, differentiation is perceived mostly by the way of building a brand recognition.
– Regulatory influences - main changes in this field can be connected especially with the term of validity of the tax advantages for the “small” breweries – see Table 3 – and their possible revision or cancellation after the integration of the Czech Republic into the EU (Žufan, Erbes 2001).
– Societal priorities and lifestyles – in this respect, we can mention changes in perception of the impact of production on the environment, but this does not seem to be critical for the brewing industry. Change of the lifestyle can project into the already mentioned gradual decrease of beer consumption in the domestic market, but also into higher demand for e.g. low-calorie beer, which is expected, but does not show, yet.
– Uncertainty and business risk – owing to the stage of the industry life cycle, we can speak about a stabilised character, and the risk is connected mainly with the success in free competition. Furthermore, as far as operation of many breweries becomes concentrated on exports, risks are connected with success in a foreign market.
– Globalisation – a force the importance of which grows continuously. It already showed in the above-mentioned technological field, and the question is, how important will be a possible application of managerial experience in the firms partly or totally owned by foreign owners, and cancellation of market barriers connected with the integration of the Czech Republic into the EU.

The current most important driving forces in the Czech brewing industry are the following: long-term industry growth rate, marketing innovation and cost efficiency. From the situation in the industry it is obvious, that these forces are closely interconnected - thanks to the stagnation of the domestic demand, breweries are forced to defend and extend their market shares by increased marketing activities and work on productivity in order to stay competitive and be successful in the long run.

Table 2. Survey of total basic indicators for beer in 2000 as compared with 1999

Indicator	Measure units	1999	2000	Difference 2000–1999	Index 2000/1999
CBMA* brew.in org.struc. to 31Dec.	number	49	50	1	102.04
Breweries number	56	57	1	101.79	
barrelage per brewery	1000 hl	319	314	–5	98.59
Total barrelage	1000 hl	17 863	17 925	62	100.35
of which a) bottles	1000 hl	8 710	8 417	–293	96.64
cans	1000 hl	393	465	72	118.32
micro-casks	1000 hl	–	10	10	–
casks	1000 hl	8 377	8 637	260	103.10
tanks	1000 hl	383	395	12	103.13
b) Light beers	1000 hl	691	168	–523	24.31
Low-sugar(content) beers	1000 hl	72	34	–38	47.22
Draught beer	1000 hl	11 541	11 450	–91	99.21
Lager beer	1000 hl	5 999	0	–5 999	–
Premium beer	1000 hl	208	63	–145	30.29
Non-alcoholic beer	1000 hl	115	117	2	101.74
flavoured beers	1000 hl	–	1	1	–

Source: *CBMA – Czech Beer and Malt Association [9]

Table 3. Taxation of beer and lower rates for small independent breweries

Nomenclature code of the tariff	Basic taxation in CZK/hl for every whole % of the original worth’s extract					
	for small independent breweries according to the § 2 letter – size group according to the production in hectolitres					For other subjects
	≤10 000	10 001–50 000	50 001–100 000	100 001–150 000	150 001–200 000	
2203	12.00 CZK	14.40 CZK	16.80 CZK	19.20 CZK	21.60 CZK	24.00 CZK

Source: Law No. 587/1992 Code, as regulated by subsequent directions

CONCLUSION

Identification of the key driving forces in an industry can assist businesses in their planning. They have to be aware of the development of key influences in time and be careful in planning, so that their strategies are in accordance with the development of environment. In this respect, the analysis of key driving forces should not be the only focus of strategists. There exists a number of other tools, which can be used simultaneously (e.g. Porter's analysis of five forces – Žufan, Erbes, Černíková 2000) and complementarily (e.g. elaborating Industry attractiveness matrix, using the "4C" model etc.) to this method – all with the same goal: to assist strategists in identifying the current position of their business and to help them find opportunities for future development. Results of these analytical tools can serve as important inputs for the synthetic part of the strategy formulation process and also help in the selection of the most desired strategies leading to achievement of the main goals.

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