Production and profitability in Swedish breweries, 1924-1950

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ABSTRACT

Sweden's alcohol policy during the 20th century was one of the strictest in Europe and it affected producers, such as alcoholic-beer brewers. This article analyses how production and profitability developed among brewery firms following the 1923 prohibition of strong beer. Breweries tried to find other high-return opportunities, for example by increasing the production of non-alcoholic beverages and reaching other segments of the consuming public. However, both production and profitability declined, hence diversification seems to have been rather negative for the brewery industry, although not for all its actors. The article concludes that while diversification gave breweries a way to reach other consumers, it was the largest actors that were best placed to reap the benefits of the closed-off market environment. Thus, the article shows how diversification of production may be a result of government intervention, which will affect firm performance negatively or positively, depending on market structure, competition, and cost structure.

KEYWORDS: business history, alcohol policy, breweries, Sweden.

JEL CODES: C18, D22, L66, N84.

1. Introduction

Swedish breweries avoided complete prohibition or nationalisation during the interwar period, contrary to the alcohol sector in many other countries, but instead found their possibility to brew stronger beer circumvented. The sector responded by increasingly moving away from producing beer, to focus their attention on making non-alcoholic beverages. Diversification into such "related fields" has been a market feature in several national brewery contexts, but with differing results. Whether this diversification of production

Received: 13 October 2022 – Fecha de recepción: 13 de Octubre de 2022 Accepted: 2 May 2023 – Fecha de aceptación: 2 de Mayo de 2023

Revista de Historia Industrial – Industrial History Review, Vol. XXXII, no. 88, July 2023. 119-147

ISSN: 1132-7200. DOI: https://doi.org/10.1344/rhiihr.40772

in the Swedish beer industry generated greater returns was also a subject of debate during the time and will be the object of investigation in this article.

In 1923, domestic sales of beer above four percent alcohol by volume (henceforth, ABV) were prohibited in Sweden. It has been stated that this and other regulations "put a grinding halt to Swedish beer culture" (Johansson 2008). The period that followed saw a large decrease in the number of active breweries, with few to no entries in the business for decades to come, and a trend towards large business groups (Sandberg 2006, Box 2017). These new market conditions and their effects on the breweries, such as market structure, production possibilities, and profitability, were the theme of several government official reports (Statens Offentliga Utredningar, henceforth SOU) during the period. From 1923, the SOU noted that "the malt beverage industry has, more than several other industries, been the object of legislation, which has affected their economy and possibilities for development". The report also stated that rentability in the brewery sector would surely be hurt if the strong beer ban remained in place, particularly if the malt tax were to be increased (SOU 1923: 32, p. 40). The Swedish Industrial Organization echoed these sentiments in 1948, saving that "restrictive legislation concerning sales etc have always held back the development of the industry since 1905" (Sveriges Industriförbund 1948, p. 561). The 1959 SOU noted that, by the end of the 1940s and early 1950s, there were several differences between small and large breweries in terms of production structure, cost burden, and profit margins per produced unit of beer, soft drinks, and mineral water, and saw significant differences compared to conditions during the 1930s. A recurring theme in the government reports from the 1920s to the 1970s was whether the state should "dismantle the private profit interest" in the breweries, in order to bring down the level of alcohol consumption (SOU 1959: 46). The complete nationalisation of the industry, which had occurred to spirits distillers, never came to fruition, but several other regulations tried to decrease the importance of profitability, for the sake of public health. According to Johansson (2008), one central long-standing feature of Swedish alcohol policy was that social concerns often trumped industrial concerns.

The claims of difficulties caused by restrictive legislation clash with arguments that the breweries had been working more or less isolated, with explicit barriers to entry, in a protected monopoly-style market with limited competition (Sandberg 2022, p. 113). It also seems as if the brewery sector had been highly profitable during the 1910s and early 1920s, outperforming most other industries (SOU 1923: 32, p. 40). When the production of beer was circumvented, it became "natural" for the breweries to move into other production, mostly that of soft drinks and mineral water, which was "un-

1. All quotes originally in Swedish have been translated to English by the author.

doubtedly meant to increase returns" (SOU 1936: 5, p. 110). Apparently, the profit margin per bottle of soft drink was generally higher than it was per bottle of beer (SOU 1959: 46, p. 61). This might have been a comparative advantage for smaller breweries, which produced a larger amount of soft drinks (and low alcohol beer) as a share of total production than larger breweries that depended more on production of higher alcohol-content beer (SOU 1959: 46, p. 52). Diversification, mostly into producing soft drinks, seems to have been a feature of beer markets in other countries, whose governments imposed restrictions on breweries during the interwar period (Cabras and Higgins 2016, p. 613).

This article investigates the effects of alcohol policy and regulations on producers of alcohol. It analyses the industry response to laws prohibiting or limiting the production of certain types of products and assesses the impact of changes in production on firms' performance. This research focuses on the brewery industry in Sweden from 1924 to 1950. It studies changes in output and the structure of beverage production in the brewery sector and connects it to trends in profitability on the firm-level. It finds that both production and profitability in the brewery sector waned. Production and consumption of beer stagnated after a boom period, and the breweries chose to diversify into non-alcoholic beverages, mostly soft drinks. However, higher dependency on alcohol-content beer was connected to higher profitability, which characterised larger breweries the most. The article concludes that while diversification gave breweries a way to reach other segments of the consuming public, it was the largest actors that best could reap the benefits of the closed-off market environment. The article argues that state regulations might create need for diversification, particularly when it affects de-merit goods, such as alcohol. However, whether diversification is actually profitable is dependent on other factors, such as market structure, competitive environment of the market, and costs of production.

The article is organised as follows: section two discusses production, diversification, and profitability in general, and in the brewery sector more specifically, while section three describes and explains the data and sources used to analyse the breweries. Section four goes through the regulations concerning beer and the brewery sector. Next follows the descriptive statistics concerning production, consumption, and profitability, before section six tests the impact of diversification on profitability. Section seven summarises and concludes the article.

2. Breweries, production, and profitability

While maximising profits is not the sole goal of firms and its managers, some profitability must be ensured for the survival of the business, for instance since decreasing profits will lower company stock prices, increase the risk of takeover and that of bankruptcy (Scherer and Ross 1990, pp. 46-48). However, very high profits do not necessarily mean superior efficiency or performance, as they may be a result of firms being able to exploit market power (Hawkins and Pass 1979, p. 106).

As for diversification, it has been found that businesses who diversified mostly into related areas to the core production were characterised by higher profitability (Rumelt 1974, 1982).² Palepu (1985) found similar results of benefits from diversification, as opposed to diversifying into unrelated areas, on profit growth. The "relatedness" aspect has been problematised over time, and it has been shown that competitive advantage may not always arise from diversification, because strategic assets and competences may be different even in supposedly related production. If that is the case, diversification may not be profitable (Markides and Williamson 1995, p. 155). Beer as a product has been shown to be strongly related to other beverages, mostly soft drinks, but also wine and spirits, because of similar value-added chains in terms of procurement, production, and marketing and sales. Beer was to a lesser extent also related to packaged foods (Da Silva Lopes 2007, table 6.1, p. 119, figure A1.1, pp. 193-196). Diversification is supposed to be an endeavour with positive outcomes, yet it may carry significant costs, in terms of sufficient investment in new production, which will lower the return on capital. In this sense, profitability is inversely related to the growth of demand (Teece 1982, p. 42). Diversification, in any form, may come out of a drive to maximise profits, but it may also be a result of government regulation and taxation (Teece 1982, p. 40).

One empirical example was jeans-manufacturer Levis moving into the production of men's suits, which failed. In the example of breweries, seemingly related diversification may be producing foodstuff of various kinds. American breweries who tried to survive during Prohibition did "diversify" into soft drinks and non-alcoholic beer, but experienced lower returns (Poelmans and Swinnen 2011). They also moved into production of foodstuffs, for instance ice-cream, milk chocolate, and cheese spread (Poelmans et al. 2022, p. 2). Belgian breweries diversified into production of soft drinks, lemonade, and water, in the aftermath of World War II, either by acquiring other businesses or changing production lines. Several firms did so with the hope that it would compensate for decreasing consumption of low-alcohol beers, and

^{2.} Businesses are related when "a common skill, resource, market or purpose applies to them" (Rumelt, 1974, p. 29).

that it would lead to higher profit margins, because these non-alcoholic beverages had lower tax rates than beer (Bertrams et al, 2019, pp. 126-127). British brewery firms moved away from beer from the 1960s onwards and started producing spirits to meet new demands from consumers. Some firms even ceased brewing operations completely (Millns 1996). However, most beer-producing firms had low or no level of diversified production by the early 1960s (Da Silva Lopes 2007, pp. 110, 249-250). During the following decades it was a clear trend of some larger brewery firms to diversify into production of wine and spirits, such as the Dutch company Heineken (however at low levels), the Japanese Kirin and Sapporo, and American/South African SAB-Miller. Some brewing giants stayed completely concentrated on beer, such as the American Anheuser-Busch, the Danish Carlberg, and the Chinese Tsingtao. Several Japanese breweries and the Brazilian Ambey diversified into soft drinks. Heineken and Guinness had the reverse trend and switched to focus sales solely on alcoholic beverages (Da Silva Lopes 2007, pp. 124-127, 242-243, 249-250). Kirin was in one way unique, when they decided to diversify into biopharmaceuticals in the early 1980s. This followed a period of declining beer sales, connected to economic stagnation, but there was also belief in a market ripe for growth. Kirin saw biopharmaceuticals as a "somewhat related production" to beer and other beverages, as they were able to exploit their accumulated knowledge in fermentation, but also expertise in engineering and biochemistry. By 2005, this new branch of production had grown to four percent of total sales, and 13 percent of operating income (Lynskey 2006, pp. 699-714). In the present example of Swedish breweries, diversification into less related areas, holding assets such as hotels, cafés, stables, or small-scale hydropower, did occur occasionally, but none of these activities amounted to any larger share of total assets, which was fully dedicated to producing beverages.

Despite its many possible variations, beer must still be considered a homogenous product by industrial standards. Because of highly centralised and uniform ways of production, particularly of macro-style lager which grew in importance in the post WWII-world, there has typically been a strong positive connection between the size of the production plant and productivity (Prais 1981, pp. 120-121). Historically, because of high transport costs, sales were quite regional in scope and less concentrated within a small number of huge firms. This was even more so the case for soft drinks than for beer (Prais 1981, p. 111). Partly because of returns to scale in production, it has been found that rising market concentration leads to higher profitability in the brewing industry (Iwasaki et al. 2008, Bhuyan and McCafferty 2013). However, in the UK, the large breweries were seen as less efficient, even if there was only smaller profitability compared to regional or smaller competitors (Hawkins and Pass 1979, pp. 107-110). Taxation may also hurt profits, if it

decreases production and consumption when the breweries pass taxation hikes onto consumers in the form of higher prices (Colli 1998). Similarly, Horowitz and Horowitz (1965) found a negative connection, albeit weak, between excise taxes and beer consumption in the US between 1949 and 1961. Prices can also be raised to offset output losses, hence maintaining, or increasing profitability, as was done in British breweries during World War I (Vaizey 1960, p. 24). Whether higher prices, caused by taxation or other increased costs, actually lowers consumption depends on the elasticity of demand. A related issue is whether beer can be replaced with wine or spirits by consumers (Hogarty and Elzinga 1972).

The interwar years were a period of stagnation or even decline for the brewery sector in many countries. The British brewery industry, as a backdrop to the Swedish case discussed in this article, had become more concentrated by the late 1930s compared to pre-WWI times, and was still profitable, with rising profits and output before 1939, although it was less profitable than it had been in 1913. This was also a time of rising excise taxes, and therefore higher beer prices. Some bigger national breweries were doing very well, and some smaller actors had grown to become regionally important (Vaizey 1960, pp. 35-36).

3. Data, sources, methods

Since alcohol-producers have been so regulated, taxed, and controlled by the state, data has also been collected to be able to follow business operations and implementation of legislation. Swedish business and industry statistics is generally encompassing, although spread out in different sources.

Most data in this article have been taken from official sources, whether primary or secondary. The general picture on production is from the official industrial statistics SOS Industri (before 1911 BiSOS D, Industri), which presents the aggregate statistics on all Swedish industries. The detailed data on production volumes, values, and type of production (as well the workforce, and use of raw materials) by brewery has been collected from the primary material underlying SOS Industri. The breweries themselves submitted these production figures and related data to the National Board of Trade, which summarised them into the official industry statistics. All breweries were included, as long as they were active during that year. All data therein has been hand collected and calculated, as most of the forms that the firms submitted were filled in by hand, with numbers constantly being crossed out and re-written where they were incorrect, hence making digitalisation impossible. Due to the large number of breweries and data-points, only information for every other year from 1924 onwards has been collected and analysed.

Data on profitability has been taken from two main sources: first, the annual book series of Swedish joint-stock companies ("Sveriges Aktiebolag"), which presents summarised balance sheets and profits- and loss-accounts for a large number of firms. One problem with this source is that not all breweries were included from the beginning, and it is only during the 1930s that this volume included a larger number of smaller brewery firms. From 1935 onwards the sample is more consistent (see Figure 1). This source has been complemented with the full annual reports that breweries submitted to the National Library of Sweden for preservation. Unfortunately, not all firms did send in these reports; usually they stated in letters to the library that the reports before a certain year were not printed and could hence not be reproduced. There is a bias towards the larger and medium-sized firms in this source, too. Hence, we have profitability data on most breweries from 1935 onwards, but many smaller units are missing before that. Profits have been calculated for every available year as the return on total assets (ROA), where the return is annual net profits after all expenses and deductions have been made. One caveat with the profitability sources is that they only include jointstock companies. This does include the large majority of taxable Swedish breweries: in 1947, 83 out of 93 (89 percent) listed taxable breweries were joint-stock companies (Svensk industrikalender, 1947). Hence, most taxable breweries are represented in the profitability calculations and all but one of the largest businesses are included.³

All used data is deemed reliable and correct, even though data were submitted by the breweries themselves. As for the production data, it was continuously controlled by the Board of Trade and various control boards, and firms were forced to provide corrections in cases where numbers were deemed incorrect. A threat of sanction also went out to breweries who failed to submit any information. Smaller discrepancies have been found in the original material, usually having to do with incorrect aggregation of production values. These have been corrected in the elaboration of the data. As for the profitability data, the largest problem is that book-keeping practices were not completely uniform between the companies. They differed mostly in how detailed the balance sheets were made, and profit and loss accounts, but it seems that net profits and total assets were defined and calculated in the same way, as far as it has been possible to assess. The difference in detail in the book-keeping however means that we cannot properly calculate cost variables for all firms. Some firms detailed each cost very carefully, while some

^{3.} The largest taxable brewery not run as a joint-stock company was the family business Åbro, which was a limited partnership company ("kommanditbolag") until 1985. It would have been interesting to include, as it was one of the few true success stories during this time, with large increases in production. It is also one of a very small of number of breweries who have survived to this day.

others only included costs as one aggregated item. This makes it difficult to calculate, for example, how the cost of malt taxation affected profits, at least for a large sample. The annual reports and profit statements were not controlled by authorities in the same way as was the production data, but since they were published annually, they were at least left to some public scrutiny. Since all included breweries were joint-stock companies, they had to present financial statements and were held accountable by shareholders each year. The findings of the paper of rather high profitability at the beginning of the period but falling thereafter, does conform to what was believed at the time (see section 5). One robustness check has been added: if brewery firms were trying to hide profits (for instance to evade lawmakers' regulatory attention) we could find that capital increased more than expected. However, in highgrowth firms, capital increased more rapidly between 1923 and 1936 (at slightly over 50 percent) compared to low-growth firms (30 percent), and from 1936 to 1941 no discernible difference was found at all (12.0 and 12.3 percent capital growth, respectively).

Marcus Box (2017) has detailed the problems of clearly defining the population of Swedish taxable breweries. One issue is whether to count the number of companies (firms) or the number of producing units, i.e., physical breweries. One brewery firm could own several production sites, and it differed over time how firms would count these sites based on production. A further complication is that, with the increasing trend of mergers and acquisitions around the middle of the 20th century, there were differences in how the breweries operated. Ownership would increasingly be concentrated around the larger business groups (Sandberg 2010), but some subsidiaries would run their own operations (and hence for instance do their own annual reports, with their own profit and production data). Increasingly over time, the parent company would take over the operations of their subsidiaries and affiliated companies, either the physical production, the accounting, or both. Occasionally, the parent company could overtake the accounting, but not the production, creating different populations whether we study profits or production. It also means that across the study period there are fewer and fewer independent units which have their own proper data to analyse. The number and difference between the different possible taxable brewery populations is summarised in figure 1. Here, we focus on the taxable breweries, since it was those who brewed beer of any higher alcohol content (typically above 2.25 percent ABV, called class II in the Swedish system). The tax-exempt breweries (also termed "small beer breweries") were more numerous, but the taxable made up the bulk of production volumes, close to 90 percent of the total, and over 90 percent of total added value (1955–1965) (SOS Industri). The first wave of concentration, during the 1940s and 1950s was largely due to increased merger and acquisition activity, with the largest business groups acquiring smaller actors.⁴ Here, all production and profitability data has been aggregated to the parent company level (or "firm" level).

The Swedish brewery population was relatively small compared to larger beer countries such as Belgium and the UK, but still had more producing units per capita than the neighbouring Denmark and Norway (Swinnen and Briski 2017, p. 43; SOU 1936: 5, pp. 168-169). The trend of initial concentration, in terms of a decreasing number of breweries, was similar to that of other beer markets from 1930 to 1950, such as in Belgium, the Netherlands, the UK, and USA (Garavaglia and Swinnen 2018, figure 1.1, p. 11).

180 160 140 120 100 80 60 40 20 1925 1930 1935 1940 1945 1948 1950 Active Firms Sample

FIGURE 1 • The number of active breweries (active), the total number of parent companies (firms), and the number of firms included in this study (sample)

Sources: Total active breweries: Lundqvist, 1995, table 2.2, p. 44. Number of firms and sample calculated from sources described in the text.

4. Alcohol policy and the brewery sector

When talking about producers of demerit goods, as alcohol has often been deemed, it is difficult, not to say impossible, to not get into the issue of alcohol policy and state regulation. This is particularly true concerning the interwar period, which was so marked by prohibition, such as in North America and several Nordic countries, and otherwise tightening of legislation and regulatory pressure.

4. While the number of individual breweries still remained rather high during these decades, many brewed as individual industries, but were subsidiaries of the two largest business groups, Stockholmsbryggerier, and Pripps (in Gothenburg). Hence, concentration by owner was higher than if we count by individual firms.

The Swedish brewery industry was basically unregulated and untaxed from 1848 on, when freedom of establishment was implemented. While new restrictions concerning retail and distribution of alcohol were put in place from about 1885, consumption of beer was still not considered an important issue by lawmakers. This was because the consumption of spirits, "brännvin", had been the largest culprit behind problems related to drunkenness (Johansson 2008, p. 40). Towards the end of the century the temperance movements would start to challenge Swedish drinking culture, and policy interventions would increase in intensity. Beer consumption per capita increased almost fivefold from 1860 to 1900, and went from being seen as a healthier low-alcohol alternative to spirits, to a central alcohol-policy problem (Johansson 2008, p. 52). Beer had grown to make up 27 percent of total alcohol consumption by the turn of the century and had in many areas replaced the stronger spirits as the intoxication of choice (Johansson 2008, p. 53). This increasingly caught the attention of the teetotal temperance movement, and the fact that breweries operated mobile vending units also concerned local authorities. The temperance movements had grown in strength during the end of the 19th century, and were strongest in the countryside, where beer consumption was also the highest. There was considerable local control over alcohol regulations, and since the struggle against spirits was seen as successful, the attention was instead turned towards the breweries' often aggressive sales tactics (Johansson 2008, p. 60). Social problems associated to drinking increased; for instance, in Stockholm, rates of public drunkenness were particularly high between 1900 and 1913, at 20-25 incidents per 10,000 inhabitants (Nycander 1996, p. 124). National assault rates were also high during this period, and was, at least on the surface, correlated with total national alcohol consumption (Lenke 1989, graph 3, p. 83). National politics towards alcohol also changed, as more and more members of parliament had connections to the temperance movement. Between 1910 and 1950, around 35-40 percent of members of the Swedish parliament were members of any of the sobriety interest groups, and most of them were self-confessed teetotallers, compared to only 16 percent in 1899. Most members belonged to the Social Democratic Party and the liberal *Folkpartiet*, while notably fewer came from the right-wing party, the agricultural party, and the communist party (Lindblad and Lundkvist 1996, pp. 194-195). The Social Democratic Party changed its stance towards the temperance movement during this time, partly because the movement became increasingly connected to the workers movement, from

^{5.} One can define the Swedish brewery industry as basically untaxed, if taxes such as import tariffs on malt, hops, and other raw materials are disregarded.

^{6.} However, the liberal party split in two over the prohibition issue in 1922, but eventually the anti-prohibition side would dissipate.

being hostile to neutral, to partly embracing it during the 1910s and 1920s (Tingsten 1967, pp. 296-323).⁷

As a result, regulations on beer producers increasingly tightened. Beginning in 1903, breweries were classified as either taxable and tax exempt, determined by whether they produced beer stronger than 2.25 percent ABV or not. Breweries producing stronger beer had to pay a malt tax, while the "small beer breweries" (lättölsbryggerier) were exempt. Sweden was a latecomer in this regard, as the penultimate European country to implement some tax on beer (production or consumption) (Lundqvist 1995). The nominal malt tax rate was increased on multiple occasions; the tax pressure rose from five percent of the sales value in 1919 to 50 percent in 1941 and was increased again in 1947 and 1948. The taxation of malt had been progressive to the benefit of smaller breweries before 1923 (by production volume), but this advantage would lose significance after 1923 when the progressivity of taxation was lowered (IUI 1953). A soft drink production tax was introduced in 1941 to mitigate fiscal problems caused by World War II. It was at a lower level than the malt tax, at between 20-25 percent of the sales value, before also being increased in 1947. In 1922, Swedish parliament enacted a ban on domestic sales of all beer stronger than 3.2 percent by weight (roughly 4.0 percent ABV), to come into effect by late 1923. There was no vote in parliament on the ban, but it was just confirmed. Members of the right-wing party Allmänna valmansförbundet wrote a reservation towards the decision. Production of strong beer (class III in the Swedish system) was still permitted, though only for exports or for "medical purposes" in pharmacies. These restrictions were removed in 1953 when beer of up to 5.4 percent ABV was permitted to be sold in the monopoly retailer (Systembolaget). The 1923 prohibition was under debate the following decades, where several parliamentarians suggested to allow the full or partial retail of strong beer. It was for instance put forward in some instances that class-III beer (porter) should be allowed to be sold domestically again, but it never won approval in parliament (SOU 1936:5, p. 141). In 1932, 21 members of parliament from Allmänna valmansförbundet laid forth a proposition to completely remove the strong-beer ban. The question was investigated, but did not gain majority in parliament, and so the ban remained until 1953. The brewery industry narrowly avoided complete nationalisation during the interwar period, as lawmakers deemed it would be too costly, economically speaking in terms of paying off owners of the firms, an endeavour to take control of the entire sector (SOU 1936: 5).

^{7.} By the referendum on the complete prohibition of alcohol in 1922 the Social Democratic Party was split however (Tingsten, 1967, pp. 319-322).

^{8.} What those medical purposes were is not entirely clear, but some breweries argued that porter of higher ABV had its clear health benefits.

The retail of wine and spirits was placed under public monopoly in 1919, run by local authorities, but this was not extended to class II beer. Breweries could still sell their products from the brewery sites and from different deposit sites, but there was large regional variation in how this retail possibility was controlled, as was how beer could be ordered in restaurants and cafés. Sales directly from the breweries made up about one fourth of total sales, and close to 70 percent was sold through supermarkets and stores (IUI 1953, table 54, p. 75). Typically, the number of retail and consumption sites per number of breweries was much higher in the larger cities than in other parts of the country, and the regulation of retail and consumption was most liberal in Stockholm, and less so in different parts of the countryside, for instance in the northernmost parts (SOU 1952:55, pp. 325-330).

While Sweden never implemented full prohibition, by 1950 the country still had the strictest alcohol control policy regime in Europe, together with Finland and Norway, far ahead of any other country. The Swedish brewery sector was also notably self-regulated during this entire period, with all breweries, but a small number of exceptions, joined together in a national cartel (Lundqvist 1995; Sandberg 2006). The cartel regulated minimum prices for beer, and tried to make sure breweries did not conduct "unlawful competition" outside of their assigned territories (Sandberg 2022). Cartelisation of the beer market was not a distinct Swedish feature during the interwar period, as it also existed in Denmark, Finland, Norway, and Czechoslovakia.

5. Production and profitability, 1924–1950

If we measure the value of total beer production as share of the total economy, there was a slight increase during the 1920s, before we see a continuous downward trend more or less across the whole period. The highpoints of slightly over one percent of GDP were short-lived and would decrease to 0.4 percent by 1950. Production volume per capita was more stable, but fluctuated during times of recession, such as during the Great Depression and the start of World War II. The brewery sector lost shares of total industrial value and had nominally grown notably slower than other food industry until 1950, i.e., doubling while the food industry more than tripled since the end of WWI (IUI 1953, p. 2). This firmly established the brewery sector as one of the smallest industrial branches. From an international perspective, beer production decreased in a more liberal alcohol policy regime such as in Denmark

^{9.} Out of a total 20 points, Sweden had 17.5, and Finland and Norway 17, with the closest thereafter being Ireland and the UK, each with eight points (Karlsson and Österberg, 2001, table 2, p. 124).

as well, and the interwar period was no boom-period for larger beer-producing countries such as the UK, Belgium, or Germany either (based on figures from Mitchell 2003, and Bertrams et al. 2019, table 2.1, p. 50). In a comparative perspective, in terms of production per capita, Sweden was one of the smallest beer markets in the Western world, at about half the level of countries like Denmark and Germany, and far below Belgium and the UK.

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FIGURE 2 • Production value as share of GDP (right axis) and production volume (HL per capita, left axis) of beer, 1896–1955

Sources: Production value and volume: BiSOS D and SOS Industri; GDP and population: Schön & Krantz, 2012.

5.1 Changes to production structure

Naturally, a ban on certain types of production will drastically change the structure of production. The Swedish 1923 strong beer ban was no different, but the effects were somewhat diminished, since in practice almost no class III strong beer had been produced during World War I, due to problems of importing raw material, such as malt and hops. It was re-instated in 1919, but was not produced for the domestic market, initially due to uncertainties regarding raw materials, but even more due to the fact that many breweries were doubting whether it would find outlet, given it would be sold in the regional public retail monopolies, under quantitative restrictions (Hamberg 1985, p. 67). We have already established that total beer production experienced relative decline during the interwar period. A different way to look at the consequences of the 1923 ban is to examine the extent to which stronger beer was produced before 1915. Porter was the strongest beer type, at between 6.5 and 7.6 percent ABV, and became the most difficult beer type to brew during the

interwar period. Breweries specialising in porter particularly struggled, and many, such as Gefle Porterbryggeri, even stopped brewing porter completely (SOU 1936: 5, p. 5). In addition, stronger lager was typically above five percent ABV, while pilsner was slightly weaker. Some breweries made pilsner under four percent ABV already before prohibition, and likely had smaller problems re-adjusting, but most of the included breweries brewed stronger lager and pilsner and had to change their brewing processes. Other styles, like British ale and bitters, or German-style dark lagers, while making up only 2-3 percent of total production before WWI, disappeared completely (Lundqvist 1995, table 2.5, p. 47). 10 After 1920, the weaker pilsner dominated production, with over 90 percent of total malt beverage volumes. The traditional lager still held on somewhat in the southern and western parts of the country but decreased in importance even there. The difference in variety of beer types compared to other markets should not be exaggerated; in the UK, for instance, stronger beer only made up slightly more than one percent of total beer sales, but the main difference was that the strongest beer styles, such as Russian imperial stout and barley-wine, were at least allowed to exist, and did so for at least a small segment of the consuming public (Vaizey 1960, pp. 67-68). Few Swedish breweries took the chance to produce stronger beer for foreign markets, although there were export-coordination efforts between the largest producers. Only the three largest firms did so at any notable volumes, but it still made up a very small percentage of total production. The brewery sector was by all accounts a pure home-market industry. Swedish producers were effectively protected from foreign competition between 1923 and 1955, when import of stronger beer was prohibited. Import penetration levels of lower ABVbeer were practically zero during the entire period and import of British beer had ceased completely (SOS Handel). The Scandinavian brewery industry organisations had also established an agreement to limit interference in each other's markets (SOU 1923: 32, p. 39).

Another key structural change was that alcohol-content beer altogether became relatively less important for the breweries. They instead relied more and more on producing sweet soft drinks, whose consumption increased more than three times between 1930 and 1950 (Sundström and Ekström 1962). The breweries also increased their share in total soft drinks production, relative to the soft drinks and mineral water factories, which did not brew any beer at all (SOU 1952: 55, p. 61, table 2). Taxable breweries produced 70 percent of all soft drinks and mineral water in the country around 1950 (IUI 1953, table 2, p. 5). Producing soft drinks alongside malt beverages became a "natural union" for most breweries, given the similar technology and transport used

^{10.} A Swedish type of seasonal dark lager, "Christmas beer" ("julöl"), was still being produced in minor quantities by a large number of breweries.

(SOU 1952: 55, pp. 307-308). The cost for producing non-alcoholic beverages was about 20 percent lower than for malt beverages, increasing the incentive for diversification (SOU 1923: 32, p. 30). The move towards increased production of non-alcoholic beverages was a general trend for most of the breweries, but it occurred with slightly different timing and intensity across the 1930s and 1940s. The largest breweries were still more dependent on alcohol-content beer and produced only small quantities of non-alcoholic beverages. The breweries also produced class I beer (below 2.25 percent ABV), mineral water, and a type of kvass ("svagdricka"), but at notably smaller quantities than soft drinks. In 1947, out of the 93 listed companies who brewed at least class II beer, 85 also produced soft drinks and mineral water, and 82 also brewed small beer. The largest change in magnitude of the diversification towards soft drinks occurred during WWII (see Figure 3), probably connected to problems of importing raw materials such as malt and hops, while sugar and caramel colour for soft drinks remained more available. WWII also accentuated the different production structures between different firms. There had been a slight trend among most breweries towards decreasing their dependence on beer already after 1924, but on the aggregate the change was small. Some breweries changed their production earlier, but few did so as early as the 1920s. Breweries could also diversify into different types of beer styles, when legislation allowed for such production, such as Carnegie Porter starting to brew stout for export, which had been an uncommon

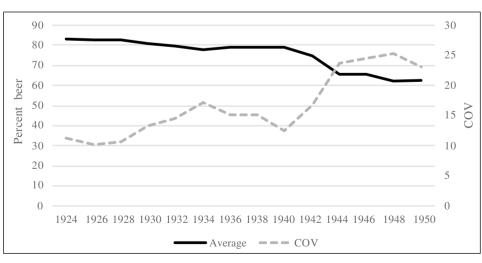


FIGURE 3 • Average dependence on alcohol-content beer (% of total value) in the brewery firms (left axis) and coefficient of variation (right axis)

Sources: Author's calculation based on Kommerskollegium, Statistiska byrån, Statistiska byrån (1924–1962), Specialuppgifter från bryggerier, sockerbruk, brännerier m.m. 1924-1951, SE/RA/420132/12/2/H I aab/1.

style among Swedish brewers. However, this experiment proved to be an exception rather than a rule.

5.2. Beer consumption

Beer consumption experienced clear peaks and troughs throughout the period, with increasing levels during the 1920s, before they dropped quite sharply during the Great Depression. The level quickly jumped back up again during the rest of the 1930s, before dipping notably again with the onset of WWII. Consumption of class II beer as a share of total private consumption decreased from 1.5 percent in 1939 to 0.9 percent in 1950 (IUI 1953, p. 6, table 3). Consumption trends were overall similar for wine and spirits, although the former slowly became more and more popular as the alcoholic beverage of choice. While national consumption figures give one quite clear picture, it is somewhat muddled by the fact there were quite notable regional differences in consumption. While there is no long-run regional data, in the early 1950s consumption of beer per capita was highest in Stockholm (37 litres/capita), followed by Göteborg (32), Halland (29), Gävleborg (28), Malmö and Kopparberg (both 25) (SOU 1959: 46, p. 42). Consumption was notably lower in the northernmost regions, which was attributed to the larger presence in those regions of the temperance movement and sobriety organisations (IUI 1953, p. 10). Hence, there seem to have been advantageous for the breweries have

30.00 8.00 7.00 Beer consumption (1 / capita) Spirits / wine consump (1 / 6.00 20.00 5.00 15.00 4.00 3.00 10.00 2.00 5.00 0.00 0.00 — Spirits

FIGURE 4 • Consumption of beer in litre/capita (left axis) and spirits and wine (right axis)

Sources: Statistisk årsbok, several issues.

been situated in the bigger city regions, those who generally also had more lax local regulations concerning retail and consumption.

5.3. Profitability in the brewery sector

Did Swedish breweries continue to be profitable after 1923, despite being circumvented in their possibility to sell strong beer for the domestic market? Return on assets (ROA) has been calculated for as many brewery firms as possible, from 1910 to 1950, to get some comparisons with a time when strong beer was produced for consumption in the home market. First, profit-levels almost doubled during the 1910s, even throughout World War I. Indeed, difficulties of importing raw materials, hops and malt most of all, would not be truly felt until the end of the war. With the resumption of business as usual in 1920, including relatively free retail possibilities for the breweries, profits skyrocketed before the deflation crisis hit. It seems as if Swedish breweries had similar profitability levels as the British during the 1910s, but somewhat higher during the early 1920s (Gourvish and Wilson 1985, Arnold 1999). The 1920s were then marked by slightly decreasing profitability, before dropping by almost half during the Great Depression. A slight uptick thereafter was reversed with the onset of WWII. This was, again, likely connected to problems of importing malt and hops in sufficient volumes. The issue was most severe concerning hops, whose levels dropped by more than half compared to pre-war levels (SOS Handel).¹¹ This forced the government to lower the allowed extraction rate (gravity), lowering the ABV again in all beer, to between 2.75 and 3.25% (Anell and Person 1984, p. 27). The import price of hops rose by more than three times from 1938 to 1944, and beer prices soared from 1938 to 1942, which was more or less the only part of this period where there was a rise in the real price of beer. 12 Consumers were hence left to pay more for weaker beer. The conditions were similar to those of British breweries during WWII, with hop shortage and falling gravity, with the difference that beer consumption rose in Britain (Vaizey 1960, pp. 39-41). In Nazi-occupied Belgium, gravity fell even more, and breweries had to scramble to find new raw materials and ingredients for beer production. Production fell notably, and would not recover for a long time, and over 300 breweries (out of a total of

^{11.} One central part of the problem was that Swedish breweries had become almost exclusively dependent on cheaper Czech hops after the Great Depression. With Nazi occupation of the Czech part of Czechoslovakia and Sweden's general stance concerning Nazi Germany, breweries now imported exclusively from Germany and the occupied Bohemia and Moravia. Breweries scrambled, trying to import from a variety of countries during the war, but it was impossible to reach pre-war import levels.

^{12.} Beer prices have been calculated from the production statistics. Import prices from SOS Handel.

1132 in 1939) had to cease operations completely (Bertrams et al. 2019, pp. 97-99). Profitability in the Swedish breweries then recovered somewhat after the war, but there was a big drop again from 1947 to 1948, perhaps connected to the heightening of the malt tax. 13 Overall then, profits were plummeting during our period of interest, and it was a common trend among the breweries. In the short run, profits followed quite closely drops in consumption levels of beer during recessions. However, consumption resumed pre-recession levels to a much greater extent than profits did. This indicates that increasing costs, and perhaps cost inefficiency, was the culprit of falling profitability. It could also have been the case that since physical output was constant, and so were prices for most of the period, that gross income remained overall flat, but costs grew, for instance due to taxes, but also higher cost for raw materials. However, there were quite notable differences in the level of profitability between breweries, depending on size, with the six largest companies performing better than the rest of the sector throughout the period. 14 This either shows that it was more beneficial to operate in the larger urban areas, as these did, or that

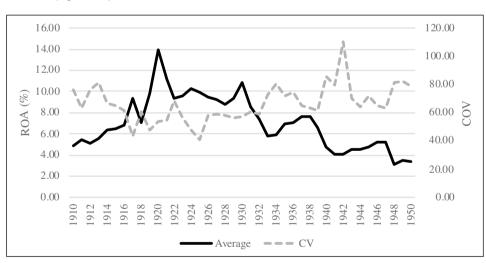


FIGURE 5 - Average return to assets in the brewery sector (left axis) and coefficient of variation (right axis)

Sources: Sveriges Aktiebolag, several issues; Historical Annual Reports Archive; National Library of Sweden, submitted annual reports.

Note: unweighted average.

^{13.} The tax increase was somewhat passed on to consumers in the form of higher prices for pilsner, although the price only rose about ten percent nominally.

^{14.} The high coefficient of variation likewise show large differences in profitability between the brewery-firms.

they had other advantages of scale. Few breweries recorded actual losses during recessions, even though there were a few such cases, it was more the case that profitability levels were lower compared to times of increasing GDP. While difficult to find proper comparisons with other sectors, it seems as if the breweries were more profitable during the period than other parts of the food sector before 1938, although the difference decreased over time.¹⁵

More can be said about the large players in the sector and how they related to and interacted with one another. Stockholmsbryggerier, and Pripps, based in Gothenburg, were clearly the two largest actors. Each had almost full control of the market in Sweden's two largest cities and made up about 25 and 12 percent of total national beverage production respectively (beer and non-alcoholic beverages). Both had expanded by acquiring other breweries in their region already during the 1910s, which for *Pripps* continued through the 1920s, creating a larger actor in the western parts of Sweden (Attman 1961, pp. 169-181). The other major brewery firms had market shares of about 2-4 percent each, with many medium-sized companies holding shares of around one percent. Profitability in the two largest breweries displayed two distinct trends across the period. First, both firms experienced sharply increasing profitability from the early 20th century to the peak around 1919-20. Second, thereafter, there was a reverse trend of decreasing profits all the way until the early 1950s. There was a sharp drop in the early 1920s, probably connected to the deflation crisis of 1921-22, which generally hurt a lot of business that had seen good days during the speculative boom years of World War I (Schön 2010). Profits decreased not only during years of recession, but also did so during the second half of the 1920s, as well as after the Great Depression. By the 1950s, profitability-levels were a third of what they had been at their height in the 1910s, and at roughly the same level as during the late 1800s. There is one other distinct observation to be made from this – both the trend and level of profits were overall very similar between the two businesses. It perhaps speaks to what Peter Sandberg (2006, 2010) has written on the nature of the brewery sector during this period, particularly that before around 1955 there was not really a competitive national market. The large regional players, who formed the centre of the Brewery Association cartel, each more or less controlled the markets in the three largest city areas, Stockholm, Gothenburg, and Malmö and the surrounding areas, and had an agreement not to interfere in each other's "territory". Furthermore, several smaller breweries had their market mostly in the area just outside of the physical brewery plant (the production site). The brewery cartel's dividing up of the market was not the sole reason for this, but high transport costs also caused sales to be

^{15.} Compared to profit levels shown in Dahmén, 1950a and 1950b. The soft drinks and mineral water industries were also said to be profitable, but no figures were shown.

mainly regional before the 1960s (SOU 1959: 46, p. 53). The cartel did limit competition quite strictly, sometimes drawing maps, defining which brewery could control sales in each territory (Sandberg 2022, pp. 115-116). However, there was some room for competition, for instance in the fact that some cities had several independent breweries, i.e., not belonging to the same parent company or corporate group. In total though, breweries mostly sold beer in their own regions, except for Carnegie who provided porter for the national market, and almost held a monopoly in that regard. Only nine breweries chose not to participate in the cartel and its competition policy, and they were mostly medium and small-sized actors (SOU 1952: 55, p. 321).

6. Did diversification yield profits?

While the aggregate picture showed increasing diversification and generally decreasing profitability, we must put the supposed relationship to the test, and do so on the firm level. Since production data has been collected every other year, all variables in the regressions will follow the same frequency, from 1924 to 1950. As for the control variables, they are divided into brewery-specific vs. general, i.e., that vary in the same way for all breweries. The total number of included firms is 84 observed during 14 points in time. Hence, the total available number of observations is 1176.

As for the included variables, profitability is measured as the return on assets (ROA), which is net profits divided by total assets. The focus variable, diversification, is calculated as the share of alcohol-content beer in total production. Hence, if the estimated coefficient of the variable has a positive sign, diversifying into non-alcoholic beverages exerted a negative effect on profitability. The market shares are included, both for the national (MS) and regional (MSReg) levels. MS is measured as each firm's share of total production in current value. Regional market shares measure whether there was any effect of becoming a dominant regional actor. Since most brewery firms only operated in their home region, market shares might have mattered only on the sub-national level. In the few cases where a brewery produced and sold in several regions, only their market share in their principal home regional has been included. 16 Total physical output is measured in hectolitres. The price variable is each firm's product price for class II pilsner, the alcohol-content beer that was sold the most. It is included to see whether it hurt profitability to pass price hikes onto the consumers. GDP growth (real GDP per capita)

^{16.} Carnegie Porter has been excluded from this part of the analysis, since they were the only brewery who sold their beverages nation-wide, and hence cannot be compared to the rest of the population who operated mainly regionally.

is included to account for the possible effect of recessions and boom periods. Then we have the consumption of beer, spirits, and wine, all in litres per capita. The latter two are meant to check for whether there were any substitution effects for other alcoholic beverages. Unfortunately, it has not been possible to calculate any specific cost-measure (labour, raw material, or taxes over beer excises) other than for a smaller sub-set of the sample. It would have been ideal to include some regional macro-variable, such as regional GDP or regional beer consumption, but given the lack of sufficient data over time, national variables have to suffice.

TABLE 1 • Summary statistics for all regression variables

Variable	Obs.	Mean.	Std. dev.	Min.	Max.
ROA (%)	913	6.30	4.84	-6.02	30.66
Divers (%)	1,097	75.53	14.18	0.00	100.00
MS (%)	1,097	1.18	3.18	.01	31.75
MSReg (%)	1,088	23.79	22.63	.28	100.00
Output	1,098	22374.35	59931.01	613.77	592954.00
Price	1,089	67.16	13.72	31.10	108.87
GDP (%)	1,176	2.89	4.27	-7.55	9.73
Beer	1,176	23.21	2.37	19.20	27.40
Spirits	1,176	4.57	.40	3.90	5.20
Wine	1,176	.88	.22	.50	1.20

Sources: Brewery specific (ROA, Divers, MS, Output, Price): see text. GDP: Schön & Krantz, 2012, table I. Beer, spirits, wine consumption: Statistisk årsbok, various issues.

Notes: every variable rounded to two decimals.

Four slightly different models have been estimated (see Table 2 below), all including time and firm-level fixed effects. The base model (1) includes only beer consumption, while in (2) wine consumption is controlled for, and in (3) the consumption of spirits is included. Wine and spirits are not included in the same model since they were highly correlated, indicating a risk of multi-collinearity (see Appendix). In the final regression (4), the national market share has been excluded while the regional market share has been included. As can be seen in Table 1, about 200 possible observations are lost due to insufficient profits data.

All four models show that dependency on alcohol-content beer was positively related to profitability, or inversely, that diversification had a negative effect, albeit with a rather small size. While the profit margins seem to have been larger per produced unit of soft drinks, because of lower production

TABLE 2 • OLS regression results, return on assets (ROA, %) as dependent variable

	(1)		(2)		(3)	(4)			
	Coeff.	P-value	Coeff.	P-value	Coeff.	P-value	Coeff.	P-value	
Divers	.0900845	0.000***	.0826035	0.001***	.0804748	0.001***	.0886212	0.000***	
	(.0230306)		(.0230641)		(.023528)		(.0233101)		
MS	.2492313	0.309	.2396011	0.302	.2291878	0.333			
	(.2436221)		(.2308624)		(.2353166)				
RegMS							.0056922	0.909	
							(.0498044)		
Output	0000114	0.308	-8.65e-06	0.384	-8.54e-06	0.388	-8.92e-06	0.351	
	(.0000111)		(9.89e-06)		(9.85e-06)		(9.50e-06)		
Price	0782808	0.000***	0679621	0.002***	0661815	0.004***	0802289	0.000***	
	(.0213576)		(.0216341)		(.0222996)		(.0216867)		
GDP	.1915653	0.000***	.2485497	0.000***	.236189	0.000***	.1937637	0.000***	
	(.0263539)		(.0426581)		(.0394221)		(.02708)		
Beer	.3002719	0.000***	.4101704	0.000***	.4069227	0.000***	.3012746	0.000***	
	(.0622469)		(.0929586)		(.0984084)		(.061298)		
Wine			-1.939504	0.039**					
			(.9255672)						
Spirits					9642487	0.088*			
					(.5588111)				
Constant	-2.547331	0.468	-3.721147	0.299	8753567	0.806	-2.165107	0.535	
	(3.492399)		(3.561306)		(3.55728)		(3.471021)		
Obs	911		911		911		901		
R-sq:									
within	0.2900		0.2940		0.2926		0.2916		
between	0.0362		0.0356		0.0356		0.0345		
overall	0.1689		0.1707		0.1712		0.1745		

Notes: robust standard errors in parentheses. All regressions include firm-level and time fixed effects.

costs, and consumption of these beverages increased heavily, it does not seem to have yielded higher profits. One reason may be that many breweries did not diversify to any larger extent, and hence did not take advantage enough of these larger profit margins. Another possibility is that the larger brewery firms had other benefits of scale, as indicated by the positive sign of the national market shares. The larger breweries were the most "beer-dependent", in terms of their production structure, and they typically also operated in the regions with highest beer consumption, highest number of retail locations per brew-

ery, and with the highest regional income levels (based on regional GDP, see Enflo et al. 2014). Given that profitability followed national GDP and beer consumption quite closely, we would also expect regional variation of income and consumption to be important influencing factors. Large breweries in rich areas hence had higher market capacity than did smaller actors. Although they were focusing more on producing soft drinks, the latter also had a larger average cost burden, for instance in higher relative transport costs. The larger firms also rationalised earlier and to a larger degree, cutting labour costs (Folin and Uvebrandt 1960). While speculative, increasing malt taxation may also have hurt the smaller firms to a larger extent, given already higher costs and less room for growth in market shares. However, a proper cost variable, where for instance the tax burden is specified, would need to be calculated and analysed to know this surely. Furthermore, it was somewhat negative to pass on higher prices to the beer consumers, which likely was negative for smaller breweries in poorer regions. A further possibility is that, with stagnating consumption, consumers increasingly moved their preferred tastes to the larger well-known brands.

7. Conclusions

From 1924 and for the next three decades, Swedish breweries were no longer allowed to sell strong beer in their home market. This changed the production structure and possible outlets for their products. The breweries increasingly moved away from beer, and instead focused their attention on producing non-alcoholic beverages, which were less taxed and regulated by the state. This was supposed to increase profitability and keep the brewery firms afloat amid stagnating domestic beer consumption and small possibilities for export. In the end, this aspiration was not realised, but profits waned in the entire market, and the diversification into soft drinks only seem to have worked negatively overall. Instead, the production structure and regional closed-off market characteristic only worked to cement benefits for the larger firms and company groups, who maintained higher profitability throughout.

This article has highlighted and analysed the impact of alcohol policy and regulations on Swedish alcohol-producers beginning in the 1920s. It has found that policy, in the form of the strong beer prohibition, did alter production structure, and possibly left breweries with fewer avenues of the high returns that stronger beer could yield before. Increased taxation may have done its part to increase the cost-burden, mainly for smaller producers. If diversification itself was costly, because of investment in new production, then perhaps it was mostly so for the smaller actors. The higher tax pressure

for producing beer relative to producing soft drinks may have done its part to push diversification itself, similar to the Belgian case. British breweries moved into the production of spirits based on consumer demand rather than alcohol policy factors, and it was likely more beneficial than in the Swedish case. It may have been more beneficial to diversify alcohol production in the post-war period with generally increasing consumption and economic upswings, compared to doing so in the interwar period, which was plagued by decline for the brewery sector in many countries. Avenues of diversification may work negatively in a relatively small market with rather high market concentration, which characterised the Swedish brewery sector. In a less tightly regulated environment, in time or in space, effects on profitability may have been positive, but in this historical context the main production had its limitations of returns amid stagnating consumption and increasing costs.

Whether diversification increases firm performance is still debated within the literature on various industries. The case of Swedish breweries contributes to this debate and highlights the importance of firm size and market power. Moreover, this research provides insights into the related issue of how diversification works in fields of de-merit goods, such as alcohol, where legislation and regulation can be more restrictive and might muddle the proposed relationship with firm performance.

Acknowledgements

The author would like to thank the two anonymous referees as well as the editors of the RHI-IHR for constructive and helpful inputs on the manuscript. An earlier version of the article was presented in the session "Quantitative Business History" at European Business History Association Congress (CUNEF, Madrid, 22-24 June 2022); thank you to participants there for comments, and especially to Michael Aldous for insightful reading. The article was written with funding support from the Jan Wallander and Tom Hedelius foundation, grant number P20-0007.

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Appendix

TABLE A.1 • Pairwise correlations for all regression variables

	ROA	Divers	MS	Output	Price	GDP	Beer	Spirits	Wine	MSReg
ROA	1.0000									
Divers	0.2864	1.0000								
MS	0.0716	0.2590	1.0000							
Output	0.0547	0.2230	0.9830	1.0000						
Price	-0.3372	-0.4284	-0.0274	0.0003	1.0000					
GDP	0.0763	-0.0977	0.0052	0.0062	0.0714	1.0000				
Beer	0.2123	0.1747	-0.0057	0.0177	-0.3263	-0.2130	1.0000			
Spirits	-0.0554	-0.3306	0.0224	0.0771	0.3571	0.3849	0.3631	1.0000		
Wine	-0.0178	-0.2747	0.0187	0.0658	0.2764	0.4191	0.3526	0.9287	1.0000	
MSReg	0.1818	0.1325	0.4975	0.4895	0.0689	0.0177	-0.0218	0.0613	0.0498	1.0000

Sources: see Table 1.

Producció i rendibilitat a les cerveseries sueques, 1924-1950

RESUM

La política sueca en matèria d'alcohol durant el segle XX va ser una de les més estrictes d'Europa i va afectar els productors, entre ells els fabricants de cervesa amb alcohol. Aquest article analitza l'evolució de la producció i la rendibilitat de les empreses cerveseres després de la prohibició de la cervesa forta el 1923. Les empreses cerveseres van intentar trobar altres oportunitats d'alta rendibilitat, per exemple, augmentant la producció de begudes no alcohòliques i arribant a altres segments del públic consumidor. Tanmateix, tant la producció com la rendibilitat van disminuir, i per això la diversificació sembla haver estat més aviat negativa per a la indústria de la cervesa, encara que no fou així per al conjunt dels seus actors. L'article conclou que, si bé la diversificació va proporcionar a les empreses cerveseres una manera d'arribar a altres consumidors, van ser els actors més grans els que van estar més ben situats per obtenir els beneficis d'un entorn de mercat tancat. Així, doncs, l'article mostra com la diversificació de la producció pot ser el resultat d'una intervenció governamental, que afectarà negativament o positivament els resultats de les empreses, depenent de l'estructura del mercat, la competència i l'estructura de costos.

PARAULES CLAU: història de l'empresa, política sobre l'alcohol, cerveseries, Suècia

Codis JEL: C18, D22, L66, N84

Producción y rentabilidad en las cervecerías suecas, 1924-1950

RESUMEN

La política sueca en materia de alcohol durante el siglo XX fue una de las más estrictas de Europa y afectó a los productores, como fue el caso de los fabricantes de cerveza con alcohol. Este artículo analiza la evolución de la producción y la rentabilidad de las empresas cerveceras tras la prohibición de la cerveza fuerte en 1923. Las empresas cerveceras intentaron encontrar otras oportunidades de alta rentabilidad, por ejemplo, aumentando la producción de bebidas no alcohólicas y llegando a otros segmentos del público consumidor. Sin embargo, tanto la producción como la rentabilidad disminuyeron, por lo que la diversificación parece haber sido más bien negativa para la industria de la cerveza, aunque no para el conjunto de sus actores. El artículo concluye que, si bien la diversificación proporcionó a las cerveceras una forma de llegar a otros consumidores, fueron los mayores actores los mejor situados para cosechar los beneficios de un entorno de mercado cerrado. Así pues, el artículo muestra cómo la diversificación de la producción puede ser el resultado de una intervención gubernamental, que afectará negativa o positivamente a los resultados de las empresas, dependiendo de la estructura del mercado, la competencia y la estructura de costes.

PALABRAS CLAVE: historia de la empresa, política alcoholera, cervecerías, Suecia.

Códigos JEL: C18, D22, L66, N84



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