

Too big to ale? Globalization and consolidation in the beer industry

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Abstract

The global beer industry has transformed dramatically in recent decades. Two key trends include 1) consolidation resulting from mergers, acquisitions and joint ventures, and 2) the largest firms expanding into new regions. While beer was previously a very local product, these trends have combined to result in approximately half of global sales being controlled by just four firms: AB InBev, SABMiller, Heineken, and Carlsberg. Notably, these top four companies are all headquartered in Western Europe. The primary products of the largest firms are pale lagers, with ales and numerous other potential beer varieties produced only in much smaller quantities, if at all. Why are these changes occurring now? Many other industries, including soft drinks, have seen a small number of companies achieve global dominance earlier than the beer industry. Recent policy and technological changes, however, have eroded many barriers to consolidation and geographic expansion for beer firms. They have enabled the largest firms to exert more political and economic power, and to move closer to the endgame of a global monopoly. These trends are not inevitable, however, and are countered by 1) the rise of specialty brewers and their much more diverse selection of beer varieties, and 2) cultural barriers to the global branding and marketing of beer.

Introduction

Just four firms accounted for approximately half of the volume of global beer sales, and 70% of revenues, in 2012 (SABMiller 2012). This is a dramatic change from even a decade ago, when ten firms combined made up less than half of global sales (Nugent 2005). Although some of these changes are due to sales growth within firms, much of this consolidation is a result of mergers, acquisitions and joint ventures, frequently with a goal of expanding into new geographic areas.

Why are these changes occurring? Many other industries, including soft drinks, have seen a small number of companies achieve global dominance earlier than the beer industry. The motivations behind these strategies are apparent: with the primary goal of increasing profits, firms have strong incentives to expand their market share, reduce the number of competing firms, reduce input costs and exert greater leverage over prices. By acquiring or merging with other firms they increase the likelihood of achieving all of these goals.

The beer industry faced more barriers to consolidation and geographic expansion than, for example, airplane and automobile manufacturing, but these barriers are rapidly being eroded by recent economic, political and technological changes. The largest beer firms are now able to exert more power, reinforce these trends, and to move closer to the endgame of a global monopoly (although a duopoly of two firms is more likely, to maintain an appearance of competition). Such an outcome would likely increase prices for consumers, and decrease both the quality of beer and the number of choices currently available (Lynn 2012). Although there are numerous types of beer

(The Great American Beer Festival, for example, has 56 categories) (Hannaford 2007), the market is increasingly dominated by pale lagers, which are indistinguishable to most people in blind taste tests (V. J. Tremblay and Tremblay 2007). In recent years the European Union has investigated leading firms for price-fixing, and the U.S. has observed price increases immediately following major acquisitions.

Beer has a number of attributes that have historically contributed to the viability of numerous small firms in the industry. It is mostly water, and therefore very heavy and expensive to store and transport. It is also a relatively simple product, with the primary ingredients, in addition to water, including malted grains, hops and yeast. This made it difficult for larger firms to gain a market advantage through innovation. Two additional barriers that had to be overcome to globalize the industry were distance and durability (Friedmann 1992). Early commercial brewers made ales and stouts that spoiled quickly, and thus were not as durable as other goods (e.g. wine, pickled vegetables, salted meat). This made it difficult to move beer long distances in time to remain fresh enough for consumption, and prevented most breweries from expanding their markets beyond limited geographic areas.

These barriers have decreased over time. In the 1800s, for example, lager yeasts, which ferment at the bottom of the brewing vessel, were recognized in Germany. This required a longer brewing time and more storage capacity (*lagern* means to store in German), but resulted in a product that took longer to spoil (Van Munching 1997). Even today ales and other non-lager beers tend to be produced by specialty brewers with much smaller market shares, or by skunkworks that are separate from the main production facilities (yet are able to take advantage of the parent firms' extensive distribution networks). Other technological innovations helped expand geographic markets for commercial beer brewers in the late 1800s and early 1900s. These included improvements in durability through the technologies of pasteurization, cheaper glass bottles, ice houses and refrigeration, as well as reducing the barrier of distance through faster forms of transportation, such as railroads and automobiles (Ascher 2012).

The World Wars and Prohibition also contributed to the declining number of, and increasing size of breweries in the U.S. and Europe. The largest breweries were able to survive Prohibition in the U.S. (1919–1933) by producing alternative products (e.g. non-alcoholic beers, soft drinks, candy, ice cream, yeast), and were better positioned when the markets reopened (Van Munching 1997). In Europe, many firms that had been damaged during the wars merged in order to scale up, obtain the necessary capital to invest in new technologies, and modernize their operations (Poelmans and Swinnen 2011). Barley shortages on both continents during the 1930s and 40s led to use of substitutes like corn and rice. Consumers developed a taste for these lighter colored or “American” lagers, and these more industrial, standardized varieties increased their market share (Poelmans and Swinnen 2011).

After World War II governments aided the consolidation and geographic expansion of the beer industry through numerous subsidies and policy changes. These included the development of highways, which reduced transportation costs, and granting public airwaves to television companies, which in turn gave larger beer firms access to cheaper per capita advertising than smaller firms (George 2011; V. J. Tremblay and Tremblay 2005). In the United States, the enforcement

of antitrust legislation enacted early in the 20th century had been weakened by the 1970s, and large mergers and acquisitions that had previously been blocked were allowed to go through. In addition, a ban on home brewing that was not repealed until 1979 helped keep new competitors out of the industry. By this time there were only 48 brewing companies remaining in the U.S. (Shin 2011).

This chapter describes the current global beer industry structure, and changes in the last few decades that have accelerated previous trends toward consolidation and geographic expansion. It then focuses on the top four firms, all headquartered in Western Europe, and the more specific means by which they achieved their current positions. The direction of these changes are not inevitable, however, and are countered by 1) the rise of specialty brewers and their much more diverse selection of beer varieties, and 2) cultural barriers to the global branding and marketing of beer.

The Global Beer Industry Structure

Figure 1 shows the global market share of the leading firms, with the size of the rectangles proportional to the percentage of the market controlled by each firm. These estimates are from Euromonitor International, and are more conservative than other sources that attribute as much as 55% of the market to the top four firms¹ (Schultes 2012). Multiple estimates, however, agree on the rank ordering of the top four firms, and that fact that they now control more than 40% of global sales, which is the classic definition of an oligopoly (a market dominated by a small number of sellers).

These market share figures underestimate the concentration in the industry because they do not include joint ventures or partial ownership stakes. Some examples include AB InBev's partial ownership of Grupo Modelo (at the time), SABMiller's joint venture with MolsonCoors in the U.S., SABMiller's joint venture with China Resources Enterprises (Snow Breweries) in China, and Asahi's partial ownership of Tsingtao (acquired from AB InBev). These figures also do not represent beer brewed under contract for other firms, such as SABMiller's production of nearly all of Metropoulos & Co. (Pabst) brands of beer in the U.S.

¹ Sales estimates are subject to error, because they rely on self-reporting, and firms have an incentive to inflate or deflate these figures to mislead their competitors, or to withhold them entirely.

Figure 1. Global market shares of leading beer firms, 2011. Data: (Euromonitor International 2012)

EUROPEAN FIRMS		ASIAN FIRMS				N. AMERICAN	
AB InBev 18.3%		China Resources Enterprise 5.4%	Tsingtao 3.6%	Beijing Yangjing 2.9%	Kirin 2.6%	Grupo Modelo 3.0%	Molson Coors 2.7%
SABMiller 9.8%		combined market share of smaller firms 35.8%					
Heineken 8.8%							
Carlsberg 5.6%							

Economies of scale that reduce per unit costs are frequently invoked as an incentive for industry consolidation. Although these do exist, few mainstream economists recognize the role of government subsidies in artificially enhancing economies of scale (Carson 2008). The power to inflate retail prices is another incentive that deserves greater attention. In industries controlled by a small number of firms, competition may remain fierce in some areas, such as lowering input costs and spending on advertising, but they may be far more cooperative in keeping prices at profitable levels. When there are a small number of competitors, firms are able to avoid costly price wars by signaling to others their intention to raise prices, and/or following suit when other firms make such a move (Baran and Sweezy 1966). These “monopoly” prices were observed in the 1960s in industries characterized by four firms controlling more than 40% of the U.S. market (Carson 2006). Firms may even gain unilateral power to increase prices with consolidation, if demand becomes less elastic because consumers have fewer options to switch to competing products (Slade 2011).

While the global beer market is now controlled by a small number of brewers, most national markets outside of Europe are dominated by even fewer firms. A stable duopoly is the most common pattern, but in some countries there is a near monopoly, with approximately 70% or more of sales accruing to one firm. Examples of the latter include SABMiller in South Africa, Turkey and Colombia, as well as AB InBev in Brazil and Uruguay (Ascher 2012; Jernigan 2009).

As firms increase in size they gain more power to engage in anticompetitive practices, and in a positive feedback loop, increase the likelihood that they will become even larger. These practices

may be legal or illegal, and include exerting control over suppliers, distributors, retailers and competitors. The larger the firm, the more power it has when negotiating contracts with suppliers, which is likely to result in lower input costs. In markets like the U.S., where distribution is often legally separated from brewing firms, the largest firms give distributors exclusive contracts, and use this leverage to pressure them into minimizing offerings from smaller competitors.

When dealing with retailers, size gives brewers a number of advantages. They can better afford “slotting fees” charged by many supermarkets to place products on their shelves when compared with smaller firms. Retailers also frequently turn over responsibility for planning and stocking the entire beer section to the leading firm (or their distributor). Even without direct control of the shelves, larger firms can dominate crowd out competitors by offering a huge number of slight variations on the pale lager theme, based on familiar brand names. One example is Budweiser’s U.S. offerings that include Bud Light, Bud Light Ice, Bud Light Platinum, Bud Light Chelada, Bud Light Lime, Bud Light Lime Straw-ber-Rita, and many other line extensions (Hannaford 2007).

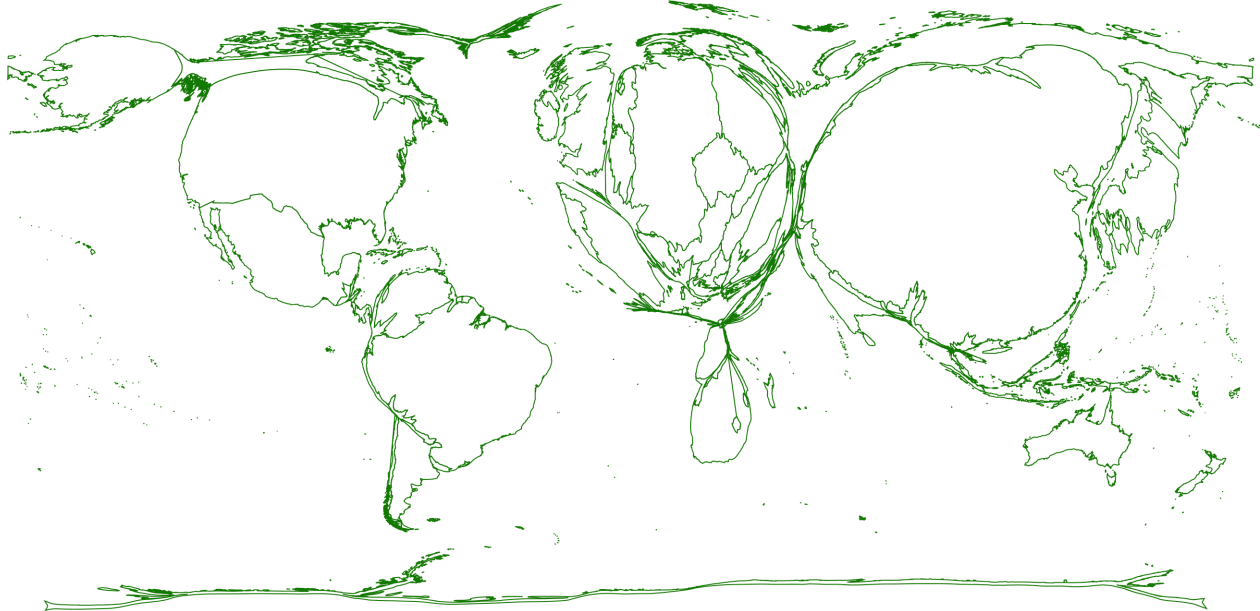
As mentioned above, a market characterized by a few large competitors can effectively use signaling to increase retail prices and profitability, but sometimes firms take a more direct route to engage in price fixing. In the late 1990s, for example, the EU investigated Heineken, Bavaria, Grolsch and InBev for holding secret meetings to divide markets and fix prices in the Netherlands. The first three firms were assessed a total of \$370 million in fines in 2007, although InBev avoided penalties by providing information about the cartel (Associated Press 2013). Grolsch later won an appeal to overturn their fines by disavowing responsibility for the price-fixing actions of their Dutch subsidiary (by that time Grolsch had been acquired by SABMiller) (Bouckley 2013).

Global beer consumption is more than six times higher than wine consumption (Poelmans and Swinnen 2011), but since the 1980s a number of geographic areas, most coinciding with high incomes, have experienced flat or even declining per capita beer consumption. These are described as mature markets, and they include Western Europe, North America and Japan. In order to increase profits the largest firms are increasingly relying on expanding into new geographic areas, particularly those described as emerging markets and characterized by increasing beer sales. Some of the most important include China, India, and many countries in Latin America, Eastern Europe and Africa. Entering these markets can be much easier and cheaper via acquisitions or joint ventures with domestic firms, rather than increasing imports or constructing new brewing facilities.

Figure 2 is a cartogram (i.e. value-by-area map) that distorts national boundaries relative to beer consumption. It shows the importance of China’s market from a global perspective. Despite lower per capita consumption of beer than Western Europe and some former colonies (e.g. the U.S. and Australia), China has a much larger population. In addition, the popularity of beer in China is increasing, and it became the world’s largest beer market in 2002 or 2003 (Colen and Swinnen 2011). The country accounted for 45% of the growth in global beer sales by volume in the early 2000s (Marin Institute 2009). Currently China’s market is nearly twice as large as the U.S., and

totals more than one-fifth the world's sales (Ascher 2012). Africa, the Middle East and southern Asia are also expanding markets as a result of marketing non-alcoholic beers to Muslim populations (Bates 2009).

Figure 2. Global beer consumption, 2010. Data: (Kirin Holdings 2011)]



Accelerating Consolidation and Geographic Expansion

Policy and technological changes near the turn of the century have greatly accelerated processes of consolidation and globalization that were occurring in the previous 100 years. Some of the most significant involve recent trade agreements. The North American Free Trade Agreement (NAFTA) of 1994 removed tariffs on beer traded between the U.S., Canada and Mexico. This helped facilitate the merger between the Canadian firm Molson and the U.S. firm Coors to form MolsonCoors in 2005. It has also contributed to the construction of new plants, such as the Mexican firm Grupo Modelo's malting plant in Idaho in 2002, and their brewery in Piedras Negras (on the Texas border) that is expected to be the world's largest by 2016. The World Trade Organization (WTO) is facilitating increasing global dominance for the largest brewers as well. A WTO tribunal ruled against the government of India for levying excessive tariffs on beer imports, for example, and increased market access for foreign firms. After China joined the WTO, firms from Europe, Japan and the U.S. acquired Chinese breweries or established joint ventures with them. Formerly state owned breweries in Africa and the former Soviet Union have also been privatized in recent decades, with many sold to foreign-based firms.

Just as increasing size may increase economic strength, as described above, large firms may have a greater influence on policy, which can also reinforce consolidation. For example, several leading brewers have threatened to close operations in the U.S. if proposals to raise their taxes were

enacted, (Marin Institute 2009). Transnational firms have also exploited policies that allow them to have lower tax rates than smaller competitors, such as the use of tax havens (Ascher 2012). **Reduced antitrust enforcement** has enabled the largest firms to successfully advocate for much more rapid approvals of proposed acquisitions and mergers (Marin Institute 2009). The National Beer Wholesalers Association, for example, which is aligned with the big firms on most issues, is the currently third largest political action committee in the U.S (Ascher 2012). In addition, AB InBev and SABMiller themselves spent more than \$5 million on lobbying the U.S. government in 2010 (New America Foundation 2012).

The top firms and their subsidiaries have also moved closer to global dominance through technological advantages that have reduced costs and increased the effectiveness of their marketing relative to competitors (McCafferty and Bhuyan 2012). Robotics and other automation technologies have been used to reduce labor costs, while information technologies have enabled just in time delivery and reduced storage costs. Information technologies, such as data mining have also enhanced marketing efforts. One example is the use of planograms to design and implement product placement on retail shelves with a goal of increasing sales. Planograms for the beer refrigerator case, for example, show exactly where each brand, variety and size of product is to be stocked, and can be tailored to a particular store (e.g. stocking more single beers in areas where these are purchased more frequently). The development of on-demand video has helped **marketing efforts** as well, as product placement in television and movies is used to subtly improve brand recognition and appeal, as well as increase beer consumption rates (Jernigan 2009).

Industry consolidation has proceeded in a geographically uneven manner, however. The case of **Germany illustrates how some nations, as well as regions within nations, have been more resistant to these trends.** The *Reinheitsgebot*, a law dating to 1516 that prohibited all but a few ingredients (water, barley, and hops; yeast and malted wheat were allowed later) and kept prices for imports higher than domestic beer. Although it was overturned in 1987 and imports have since increased their market share, they remain at less than 10%, and approximately one thousand local brewers continue to cater to unique local tastes (Van Tongeren 2011). Other factors that prevented international firms from dominating the German market as easily as surrounding regions included, 1) taxes that favored smaller firms, 2) an inadequate infrastructure for television advertising until 1990, and 3) a consumer preference for glass bottles that imposed greater transportation costs on more distant breweries (Adams 2011). Even within Germany, there are more firms in the southern part of the country than in the northern region (Adams 2011). The highest concentration of breweries is found in Bavaria, where the *Reinheitsgebot* originated and beer consumption per capita leads the nation.

Western European Dominance: The Top Four Global Beer Firms

The four leading global beer firms are AB InBev, SABMiller, Heineken and Carlsberg. Figure 3 shows the locations of the headquarters for each firm; all are in Western Europe, and within 1000 km of each other. It is slightly misleading to characterize all of these transnational corporations as European, however. One of AB InBev's precursor firms was AmBev, itself a merger of the Brazilian firms Brahma and Antarctica in 1999. Within a few years of the firm's acquisition by Belgium's Interbrew, most of the top management positions, including CEO, were filled by Bra-

zilians (MacIntosh 2011). Similarly, SABMiller's precursor firms included South African Breweries, and its current and incoming CEOs are both South Africans.

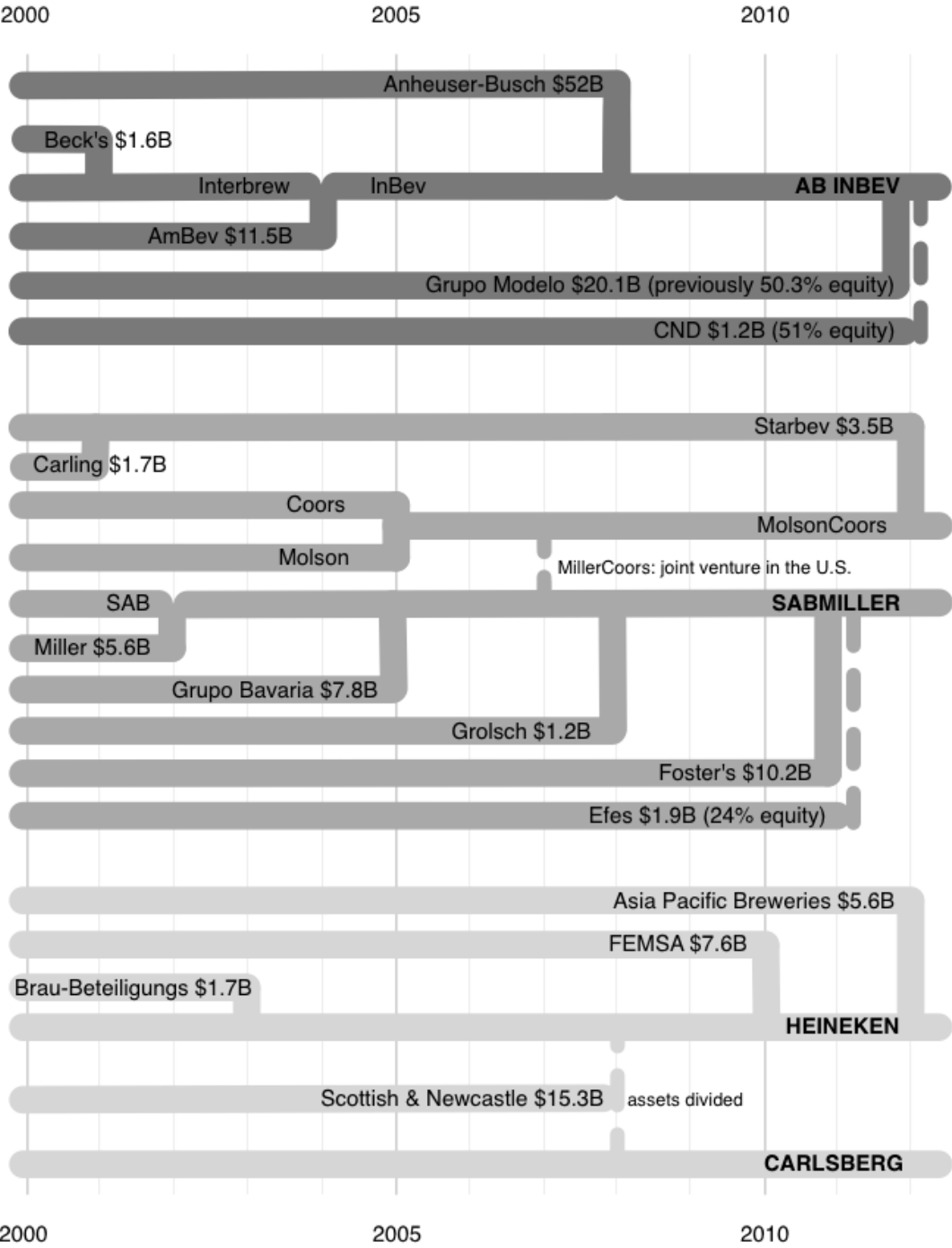
Figure 3. Headquarters of the world's four largest beer firms



Figure 4 details some of the ownership changes made by the four largest firms from 2000 to 2012, focusing on those costing over \$1 billion. The amount spent on these mergers, acquisitions and joint ventures totals nearly \$150 billion, and does not include another \$50 billion in transactions involving smaller firms in the industry (Ascher 2012). AB InBev's most expensive acquisition was the \$52 billion purchase of Anheuser-Busch in 2008. Its most recent moves include a majority stake in the Dominican Republic-based brewer CND in 2012, and 100% equity of Mexico's Grupo Modelo in 2013. SABMiller's largest acquisition to date was purchasing the Australian firm Foster's for \$10.2 billion in 2011. Heineken and Carlsberg jointly purchased the U.K. firm Scottish & Newcastle in 2008 for \$15.3 billion, and divided its assets between them. Heineken has more recently acquired the Mexican firm FEMSA (2010), and increased its equity in

Asia Pacific Breweries (2012). The specific strategies and geographic emphases of each of these top four firms are described further below.

Figure 4. Timeline of significant ownership changes leading to the top four global beer firms, 2000-2012



AB InBev

Anheuser-Busch InBev, headquartered in Leuven, Belgium, is currently the dominant brewer in North America, Russia and Brazil, and has a strong position in China. Its global brands include Budweiser, Stella Artois and Beck's. InBev's acquisition of Anheuser-Busch in 2008 resulted in the name change, and shocked many U.S. beer drinkers, who did not foresee a company that controlled approximately half of the country's beer sales as vulnerable to a takeover by a foreign firm. Although the company was highly profitable, these profits were not increasing fast enough to satisfy their investors. Many analysts suggest that Anheuser-Busch's unwillingness to make acquisitions in growing markets on other continents played a key role in this outcome (MacIntosh 2011). Executives and major shareholders also had strong financial incentives for the move, with the former CEO August Busch III receiving \$103 million, and the last CEO August Busch IV receiving \$88.6 million for their shares (Marin Institute 2009).

InBev's dramatic acquisition of AB was aided by the availability of credit (just before an economic downturn), and little resistance from anti-trust regulators.² Anheuser-Busch's relatively few foreign investments included acquisitions of several Chinese firms, and approximately 50% of Grupo Modelo. In 2012 AB InBev proposed to spend \$20.1 billion to fully acquire Grupo Modelo, but in early 2013 the U.S. government filed a suit to block it. The Department of Justice noted that when AB InBev raised prices, the second-ranked MillerCoors usually followed, but Grupo Modelo, in a distant third-place position did not. Regulators expressed concern that gaining a controlling share of the Mexican firm would lead to further price increases and less innovation (Kendall and Bauerlein 2013). By April 2013, however, an agreement was reached that allowed the acquisition to be completed. A key concession was that the Piedras Negras brewery and the rights to all of Modelo's brands in the United States would be purchased by Constellation Brands (also a dominant player in the wine and spirits industries) for approximately \$4.75 billion.

InBev demonstrates how a strategy of mergers and acquisitions can consolidate an industry, but Anheuser-Busch, before its takeover, illustrates other strategies that can be used to achieve this goal. Strong U.S. antitrust enforcement in the 1950s and 60s forced AB to find alternative means to increase market share. National television advertising was one such response, and another was product proliferation (V. J. Tremblay and Tremblay 2007). Its Michelob brand currently has two dozen different varieties, for example. Although the company once lobbied against Miller for concealing their ownership of "Plank Road Brewery," AB later imitated this strategy with faux-microbrews like Shock Top, and several organic beers that were labeled under the "Green Valley Brewing Company" label. Anheuser-Busch used other practices to hurt competitors, such as pressuring distributors to drop, or at least not promote, other firms' products (Van Munching 1997). More recently, AB was a leader in utilizing data mining to increase sales, with a system they called BudNET. The data collection involved wholesalers and retailers, and helped the firm target particular ethnic groups, and recognize shifting consumer preferences (Kelleher 2004).

² The firm was required to divest only Labatt USA as a condition of the sale. InBev had already acquired the larger Canadian operations of this brand.

³ The "three-tier" system required separately owned production, distribution and retail stages for alcoholic beverages

When InBev took over AB they immediately increased prices on their least-expensive brands in the U.S, and CEO Carlos Brito announced an intention to raise prices even higher two years later (Frankel 2010). The firm also increased the pressure on their distributors to focus on the AB InBev portfolio, and to set prices where the firm wanted them (Heffernan 2012; New America Foundation 2012). AB InBev has been buying distributorships in U.S. states where this is allowed,³ and is currently the largest beer distributor in the country. Firm executives have suggested changing the laws in many states that prevent them from distributing directly to powerful retailers like Walmart and Costco, in order to increase profits (Lynn 2012).

SABMiller

SABMiller, headquartered in London, is currently the dominant brewer in South Africa and parts of South America, with strong positions in China, Australia and the U.S. Its global brands include Miller Genuine Draft, Pilsner Urquell, Grolsch and Peroni Nastro Azzuro. The second-largest U.S. firm, Miller, was owned by the tobacco company Philip Morris until it was acquired by South African Breweries (SAB) in 2002, and renamed SABMiller (Philip Morris retained 25% of shares, however). In 2007 it established a joint venture with MolsonCoors in the U.S. and Puerto Rico. As mentioned previously, the combined MillerCoors also brews nearly all the beer sold by Metropoulos & Co., including Pabst and nearly two dozen other brands that have been consolidated under this firm.

Its proliferation strategies in the U.S. include marketing specialty or “craft” type brands. Leinenkugel’s, for example, was acquired by Miller in 1988, but these ownership ties are not apparent to consumers. Blue Moon is another faux-microbrew, a Belgian-style wheat ale that was developed by Coors in a smaller, separate brewery. Both of these brands are now part of a craft and import division of MillerCoors called Tenth and Blake.

SABMiller was able to gain 98% of Colombia’s beer market, and significant shares of the markets in other Latin American countries with its acquisition of Grupo Bavaria in 2005 (Jernigan 2009). More recently it picked up 45% of Australia’s sales with the acquisition of Foster’s in 2011, but this move was criticized by analysts—although profitable, beer consumption is no longer increasing in this country. That same year the firm also acquired a stake in an emerging market firm, Efes, which is based in Turkey and has strong sales in Russia and surrounding countries. SABMiller’s U.S. joint venture partner, MolsonCoors, also increased its presence in Central and Eastern Europe with its acquisition of Starbev in 2012.

SABMiller has been charged with using tax havens to reduce the amounts due to governments of several nations in Africa, as well as India, although the firm denies any wrongdoing (Ascher 2012). The firm was also charged with colluding with distributors to divide market, fix prices, block rivals in South Africa in 2004. SABMiller filed its own anti-competitive claims against other firms in Mexico, charging Grupo Modelo and FEMSA with payments to retailers and restaurants in exchange for excluding other brands (Ascher 2012).

³ The “three-tier” system required separately owned production, distribution and retail stages for alcoholic beverages following Prohibition. Some of these regulations have been relaxed, most notably in the State of Washington in 2011.

Heineken

Heineken, headquartered in Amsterdam, The Netherlands, has strong market shares in Europe and Mexico. Its global brands include Heineken and Amstel. Until recently it has engaged in many partial equity transactions, and few large acquisitions (Madsen, Pedersen, and Lund-Thomsen 2011). It picked up the pace in 2008 when it acquired the Newcastle brand from its portion of a Scottish & Newcastle buyout. In 2010 Heineken acquired FEMSA, which is one of two firms that now dominate Mexico's beer market, and owns brands including Tecate, Sol and Dos Equis. In 2012 it significantly increased its investment to take a controlling stake in Asia Pacific Breweries (with plans to fully acquire the firm in early 2013), and increase its Chinese market share. Acquisitions were likely hindered due to the fact that it is a family-owned firm, and obtaining financing for the FEMSA purchase required ceding some equity (Madsen, Pedersen, and Lund-Thomsen 2011).

Although small in comparison to AB InBev in the U.S., the firm was also able to put pressure on suppliers to conform to parent company demands, and influence media coverage due to its high advertising expenditures (Van Munching 1997). It was fined for price fixing in France that occurred in 1996, as well as in the Netherlands case mentioned previously. Its FEMSA subsidiary includes a chain of convenience stores that refuse to carry beer from any other firms (Ascher 2012).

Carlsberg

Carlsberg, headquartered in Copenhagen, Denmark, is the most dominant firm in Eastern Europe, and has a strong position in Western Europe. Its global brands include Carlsberg and Tuborg. It is the least global of the top four firms, however, and does not have a strong focus on Africa or the Americas (Madsen, Pedersen, and Lund-Thomsen 2011). The company divides its markets into just three areas: Western Europe, Eastern Europe, and Asia (Carlsberg Group 2013). It now owns the brand San Miguel, as well as Baltic Beverages Holding in Russia as a result of its half of the Scottish & Newcastle buyout. The firm has also acquired breweries in Latvia, Poland and China. Until recently it was controlled by a foundation, which put it at a disadvantage for financing acquisitions (Madsen, Pedersen, and Lund-Thomsen 2011). Carlsberg may therefore be the most vulnerable to takeover if the industry consolidates further.

Toward a Global Duopoly?

According to some estimates, approximately three quarters of carbonated soft drink sales globally are made by just two firms, Coca-Cola and Pepsi (Pham 2012). Will the beer industry eventually follow this model of a global duopoly? Will consumers face a market characterized by fewer choices and higher prices as a result? Comparisons with other industries suggest that beer will edge closer to this model, but is unlikely to fully reach it. While barriers to consolidation discussed above are likely to continue to erode, several important barriers remain. These include cultural barriers to global brands in emerging markets, and the rising consumer interest in varieties produced by smaller specialty brewers in mature markets.

Beer consumption has a much longer history than soft drink consumption, so it is not surprising that local preferences are more difficult to change. When China opened up its beer industry to foreign investment in the mid-1990s, all of the leading firms rushed to enter this important market. Most experienced a number of setbacks though, and payoffs for a select few took much longer than expected. Common errors included underestimating consumer loyalty to local brands, and overestimating their willingness to pay higher prices. One of the firms to achieve some success, SABMiller, recognized the heterogeneity of the country, and used a geographically differentiated approach, involving joint ventures and building on local brands. The firm invested in increasing production capacity for the local brand Snowflake, in the northeastern city of Shenyang, for example, and now controls 90% of the market in this area (Heracleous 2001). These lessons have been incorporated by the remaining beer giants, who use a dual approach to market a small number of global brands, as well as a diversity of local brands tailored to specific markets.

An important counter-trend to the globalization and consolidation of beer firms has been the dramatic rise in sales of beer from specialty brewers, which offer varieties that differ substantially from industrial-style pale lagers (C. H. Tremblay and Tremblay 2011). Although these products are usually priced even higher than premium brands or imports from the largest firms, sales have been aided by narrowing price differentials. This is occurring at both ends, as the remaining big brewers enact price increases, and the most successful specialty brewers reduce costs and pass along the savings to consumers. Although new technologies are frequently barriers to entry for smaller firms due to their capital-intensive nature, this is not always the case. Packaging beer in aluminum cans has become much cheaper for smaller firms, and a number of specialty brewers are now using these and other technologies to reduce transportation costs, for example. Interestingly, U.S. specialty or craft brewers are increasing their exports to European countries such as the U.K. and Sweden, despite their relatively small size (Kelly 2013).

For consumers who seek out alternatives to the homogenous pale lagers of the beer industry giants, abundant choices will likely remain—if they are willing to pay a price premium. As with many other highly consolidated industries, smaller firms will survive by exploiting niches that large firms are less capable of filling, and by reacting more quickly to changing consumer tastes. This includes breweries that focus on ales, porters, stouts, sour beers and other varieties that are more difficult to industrialize at the present time, and firms that stay small enough to avoid distribution bottlenecks through direct marketing (e.g. brewpubs).

Conclusion

While beer has long been exchanged across continents, in recent decades the industry has become increasingly global, as well as dominated by increasingly fewer firms. This chapter described some of the economic, political and technological changes that have reduced previous barriers to a global oligopoly. The markets of industrialized countries of Western Europe, North

America and Japan remain important to the industry, but few firms remain as targets for acquisitions in these regions. The focus has instead shifted to emerging markets in Asia, Africa, Eastern Europe and Latin America.

Among the top four firms, AB InBev and SABMiller are best positioned to benefit from further consolidation, although Heineken has also managed to make some very large acquisitions in recent years. Carlsberg has a high market share in Europe, but a similar position in the U.S. failed to keep Anheuser-Busch from being acquired by a more globally focused firm. Although the global mass market for pale lagers has consolidated, spaces have opened up for regional and national specialty brewers.

A recent U.S. lawsuit to block AB InBev's proposed acquisition of Grupo Modelo may signal a shoring up of some of the regulatory barriers to consolidation that have been eroding over the past few decades. Although the settlement kept Modelo's brands out of the hands of AB InBev in the U.S. market, this action only addresses some of the dramatic changes that have occurred during this time. A return to stronger antitrust enforcement may simply shift firms' efforts to consolidate the global beer industry in other, equally effective directions, just as they did in the U.S. in the 1950s and 60s.

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