

**A small, global adventure:  
mapping Norwegian beer exports in the 19<sup>th</sup> century**

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## 1. Introduction

In the second half of the 19<sup>th</sup> century, Norwegian beer was sold literally all over the world: the beverage could be enjoyed everywhere from China to South Africa to Brazil. Norway thus took part in the international trade in beer in this period, together with the UK, Germany, the Netherlands, Denmark and the USA. This trade has been little studied and we have few systematic and detailed accounts of the beer exports of individual countries. Exports from Norway have not received any attention at all, reflecting that the brewing sector of this country has not previously been the subject of academic study.

This paper is based on an ongoing PhD project about the Norwegian brewing sector in the 19<sup>th</sup> and early 20<sup>th</sup> centuries. The main aim of the paper is to map the peak in exports that we shall see occurred between 1870 and 1890, and thus provide a basis for further analysis of this aspect of the sector's development. The paper gives an overview of the scale and geographical scope of foreign sales in these two decades, as well as a discussion of who the main actors were, what type of products was exported and how the export business was organised.

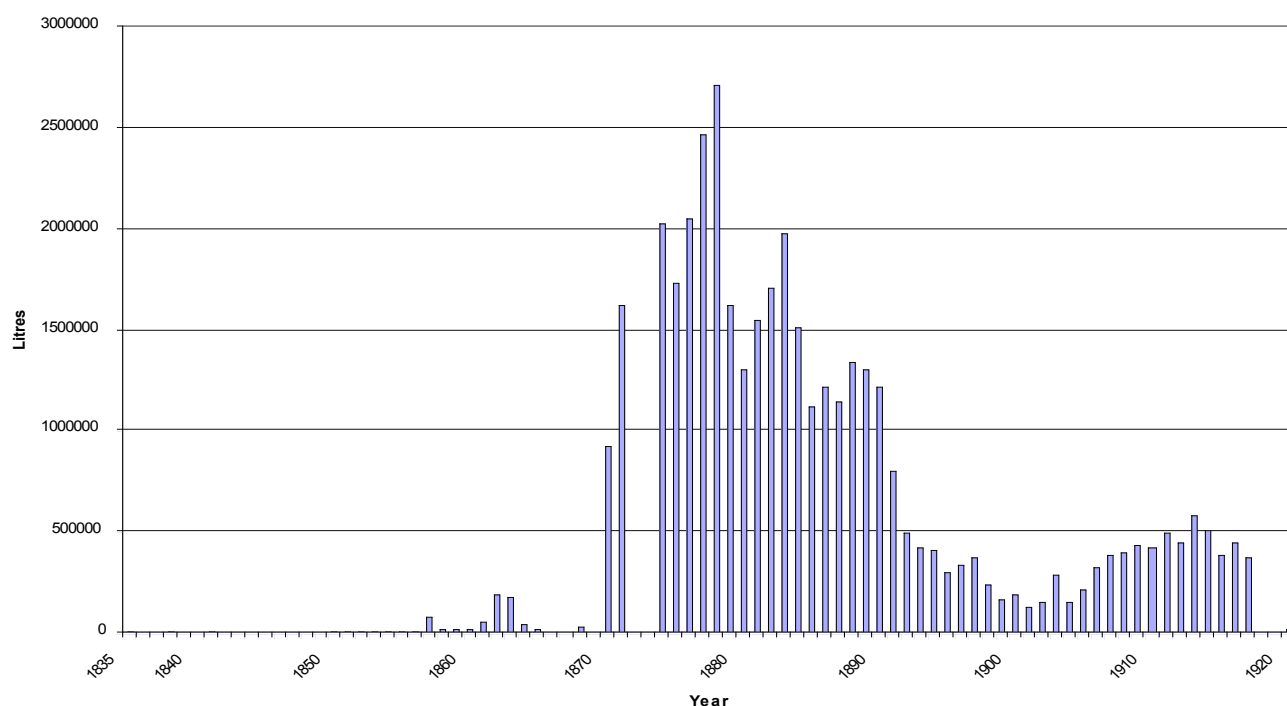
The paper draws on a number of different sources. These include official trade and industry statistics, the annual reports that the Norwegian government received from the country's consulates in the period, and jubilee publications for individual export breweries.

Unfortunately, the historical archives of individual breweries contain very little material about exports. We do however have three export books for Frydenlund Brewery, which was one of the largest Norwegian exporters. These books provide detailed information about a total of 1674 export shipments from this brewery between 1877 and 1890. The volume, destination, port of forwarding, date of dispatch from Norway, and date of arrival in the final destination of these shipments have been compiled in a data base which is used here to quantify key aspects of the Norwegian export trade.

## 2. “The golden decades”, 1870-1890

Beer exports appear in official Norwegian trade statistics from 1835. Figure 2.1.gives an overview of the annual volume that was exported from this year to 1920.

**Figure 2.1 Annual Norwegian beer exports, 1835-1920**



Source: *Tabeller vedkommende Norges Handel, 1835-1920* (trade statistics)

Comment: The figure reflects a lack of data for the following years: 1836, 1837, 1839, 1840, 1842, 1843, 1845, 1846, 1848, 1849, 1866, 1867, 1869, 1872, 1873, 1918

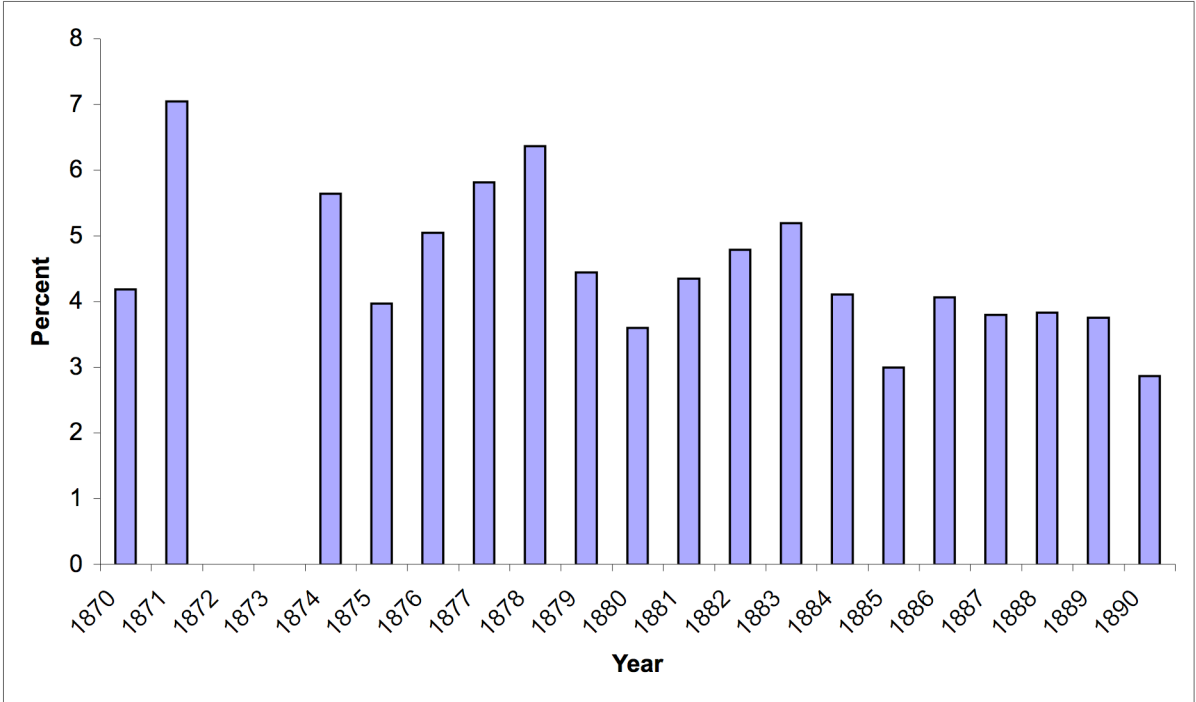
The figure clearly shows that exports on a significant scale were limited to the period between 1870 and 1890. While Norwegian beer had found its way to foreign markets as early as in the 1830s, exports were generally very small up to 1870. This year, there was a sudden increase to unprecedented high levels. Between 1868 and 1870 annual export volume almost tripled, from 377 800 to 926 960 litres, and in the following two decades exports never dropped below one million litres per year. In some years during the 1870s they even exceeded two million litres, with a peak of 2,7 million in 1878.

Almost equally striking as the sharp increase in 1870, is the drop in exports around 1890. Although there had been a downward trend in the 1880s, 1890 marked a clear shift to substantially lower export levels. From that year to the next, exports dropped from 1,2 to 0,8 million litres. By 1892 they had been more than halved and in the course of the next nine years dropped as low as to 128 000 litres. And even though there was a certain recovery in the period up to the First World War, exports at no point reached more than around half a million litres – and thus remained far below the levels of the 1870s and 1880s.

In order to say something about the significance of these levels, we must first see them in a broader context. For example, how big were exports compared to total domestic production? And how big were they in an international context?

Figure 2.2 shows annual exports as percentage share of total national production of beer.

**Figure 2.2 Exports as percentage share of total domestic output of beer, 1870-1890**



Source: The estimates are based on annual national output figures given in *Statistisk Aarbog for Kongeriget Norge* for 1880 and 1917 (statistical yearbooks), and annual export figures from *Tabeller vedkommende Norges Handel, 1870-1890* (trade statistics)

Comment: The figure reflects a lack of export data for 1872 and 1873.

We see that exports never accounted for more than around seven per cent of total production. This level was reached in the early 1870s, after which the share decreased. The annual average for the whole period was 4,6 per cent. So, even when foreign sales were at their highest, they were of significantly less importance to the Norwegian brewing sector as a whole than domestic sales.

As for the international context, it should be noted that we lack a comprehensive overview of the international trade in beer in the second half of the 19<sup>th</sup> century. We know that several countries took part in this trade, including the UK, Germany, the Netherlands, Denmark and the USA.<sup>1</sup> However, the lack of national export figures in the literature prevents us from establishing the relative size of the individual countries' exports. It is however clear that the UK and Germany were by far the largest actors throughout this period, with German exports taking the lead over British in the early 1880s.<sup>2</sup>

It is also clear that Norway was a tiny player. The UK on average exported more than 76,5 million litres beer per year between 1870 and 1890.<sup>3</sup> The Norwegian average was 1,5 million litres.<sup>4</sup> However, it must be taken into consideration that both the UK and Germany were in a completely different league than Norway also in terms of national output. An average of 4,2 billion litres of beer were produced in the UK every year during the period,<sup>5</sup> compared to only 35 million litres in Norway.<sup>6</sup> As for Germany, Bavaria alone produced around 1,3 billion litres in 1886.<sup>7</sup>

It should be noted that the difference in national output levels between the UK and Norway was bigger than the difference in export levels. This is reflected in the fact that Norway was exporting a substantially higher share of total national output than the UK throughout the 1870s and 1880s. While we have seen that Norwegian exports on average accounted for 4,6

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<sup>1</sup> Gourvish, T.R. and Wilson, R.G., *The British Brewing Industry 1830-1980*, Cambridge: Cambridge University Press, 1994; Wilson, R.G. and Gourvish, T.R. (eds.), *The Dynamics of the International Brewing Industry since 1800*, London: Routledge and New York, 1998; *Uddrag af Consulateretninger vedkommende Norges Handel og Skibsfart, 1872-1891* (consular reports)

<sup>2</sup> Gourvish, T.R. and Wilson, R.G., *The British Brewing Industry 1830-1980*, Cambridge: Cambridge University Press, 1994, p. 175

<sup>3</sup> Gourvish, T.R. and Wilson, R.G., *The British Brewing Industry 1830-1980*, Cambridge: Cambridge University Press, 1994, p. 608

<sup>4</sup> *Tabeller vedkommende Norges Handel, 1870-1889*

<sup>5</sup> Gourvish, T.R. and Wilson, R.G., *The British Brewing Industry 1830-1980*, Cambridge: Cambridge University Press, 1994, p. 601

<sup>6</sup> *Statistisk Aarvog for Kongeriget Norge, 1880 and 1917*

<sup>7</sup> *Uddrag af Consulateretninger vedkommende Norges Handel og Skibsfart, 1886*, p. 385

per cent of national output, the British average was only 1,6 per cent.<sup>8</sup> Foreign markets thus played a relatively more important role for the Norwegian brewing sector than the British.

There were other countries that Norway was on a more equal footing with in terms of absolute export levels. Judging from available data for Denmark, exports from the two Scandinavian neighbours were of comparable size. Danish exports were started up in the late 1860s and had by the early 1890s reached an annual average of 2,1 million litres.<sup>9</sup> We lack national figures for the previous two decades, but it is clear that Carlsberg Brewery exported 8000 barrels – which equals 1,3 million litres – in 1885.<sup>10</sup> Since we know that the other major Danish export brewery in the 19<sup>th</sup> century, Tuborg, only started to export on a significant scale after 1885,<sup>11</sup> there is reason to believe that Carlsberg's exports that year more or less equalled total national exports.

To sum up: even in the two “golden decades” between 1870 and 1890, Norwegian beer exports were small compared to total domestic production. And compared to the exports of the leading countries, Germany and the UK, they were microscopical. But we have seen that these two countries were also producing beer on a far larger scale, and that Norway exported a significantly higher share of total national production than the UK. Norway was moreover exporting at similar levels as Denmark, and was thus one of two Scandinavian countries that succeeded in establishing a position for themselves as small-scale beer exporters in this period.

## **2. Frydenlund Brewery leads the way onto global markets**

Very little information exists about the markets for the earliest Norwegian beer exports, but we know that the first foreign sales were to Copenhagen and Hamburg.<sup>12</sup>

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<sup>8</sup> Gourvish, T.R. and Wilson, R.G., *The British Brewing Industry 1830-1980*, Cambridge: Cambridge University Press, 1994, pp. 601, 608

<sup>9</sup> Boje, Per and Johansen, Hans Chr., “The Danish brewing industry after 1880”, in Wilson, R.G. and Gourvish, T.R. (eds.), *The Dynamics of the International Brewing Industry since 1800*, London: Routledge and New York, 1998, p. 61

<sup>10</sup> Boje, Per and Johansen, Hans Chr., “The Danish brewing industry after 1880”, in Wilson, R.G. and Gourvish, T.R. (eds.), *The Dynamics of the International Brewing Industry since 1800*, London: Routledge and New York, 1998, p. 64

<sup>11</sup> Thomsen, Birgit Nüchel, *Tuborg 1873 – 13. Mai . 1973. Tuborg og bryggeriindustrien under skiftende markedsvilkår 1873-1973*, København, 1973, p. 157

<sup>12</sup> Hambro, C.J. (ed.), *Frydenlunds Bryggeri*, Oslo, 1934, pp.11, 106

The first Norwegian brewery to expand beyond European markets was Frydenlund. The brewery was established in Oslo in 1859, and the following year a newspaper described it as “The largest of all Norwegian and one of Europe’s most significant establishments of its kind”.<sup>13</sup> The size reflected that Frydenlund was founded with the intention of supplying foreign markets as well as the home market. While exports were started up in the first year of operations, they were initially limited to Europe, and more specifically to Germany, Sweden, Holland and Spain.<sup>14</sup>

Then, in 1862, Frydenlund came into contact with the company H. M. van Hengel in Holland that expressed an interest in importing the brewery’s beer to Indonesia. While this seems to have been the incentive to start up overseas exports, at least three years went by before it became a reality. The reason for the delay was that Frydenlund during the first two years of exports had experienced problems with the keeping properties of the beer, and thus wanted to develop a distinct beer that was especially suited for long-distance transport to markets in tropical climates. This process is discussed in further detail later in this paper. The point here is that it was only after Frydenlund had achieved a good result with the new beer in 1865 that exports to overseas markets were started up.

It appears that it was only after Frydenlund had made its entry onto overseas markets, that a larger number of Norwegian breweries became interested in exporting. From the overview of Norwegian export breweries in table 3.1, we see that Christianssand’s Brewery is the only one we with certainty can say started up exports around the same time as Frydenlund. The others seem to have followed only around - or after - 1870.

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<sup>13</sup> Hambro, C.J. (ed.), *Frydenlunds Bryggeri*, Oslo, 1934, pp. 2-3

<sup>14</sup> Hambro, C.J. (ed.), *Frydenlunds Bryggeri*, Oslo, 1934, p. 109

**Table 3.1 Norwegian export breweries**

name	location	year of establishment	year exports were started up
Aass Brewery	Drammen	1834	1871
Christiania Joint Stock Brewery	Oslo	1872	by 1880
Christiania Brewery	Oslo	1855	by 1870
Christianssand's Brewery	Kristiansand	1859	by 1862
E.C. Dahl's Brewery	Trondheim	1856	around 1870
Fredrikstad Brewery	Fredrikstad	1877	1877
Frydenlund Brewery	Oslo	1859	1860
Hamar Brewery	Hamar	1857	by 1871
Laurvig's Brewery	Larvik	1857	-
the Railway Brewery	Hamar	-	-
Ringnes Brewery	Oslo	1876	1877
Schou Brewery	Oslo	1837	around 1870
Tønsberg Brewery	Tønsberg	1856	by 1872

Sources: Apenes, Christian B., *En historie om øl skrevet i anledning av 75-års-jubileet i Fredrikstad bryggeri A.S. 1877 - 21.juni - 1952*, Fredrikstad, 1952, pp. 42, 43, 47-48  
Hambro, C.J. (ed.), *Frydenlunds Bryggeri*, Oslo, 1934, pp. 22, 47  
Lillevold, Eyvind et al, *Hamar Bryggeri gjennom 100 år*, Hamar, 1957, pp. 48-49  
Lorentzen, R.A., *Bryggeriet ved Nedre Sund A/S P. Ltz. Aass. En Drammenbedrift gjennom et hundreår*, Drammen, 1946, p. 38  
Schulerud, Mentz, *Ringnes Bryggeri gjennom 100 år*, Oslo, 1976, p. 33  
Solheim, Bjarte, *Mit øl gjør overalt lykke. E.C. Dahls bryggeri 1856-1882*, hovedfagsoppgave i historie, NTNU, 1998, pp. 107-109  
Vogt, Nils (ed.), *Schous Bryggeri. Mindeskrift til Hundreaarsjubileet 1921*, Oslo, 1921, p. 19  
*Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart*, 1872, p. 53  
*Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart*, 1880, p. 264

Existing information about Norwegian export breweries is scarce and fragmented, so it is difficult to give a detailed and systematic account of individual companies.

The table above shows that, as far as we know, 13 breweries took part in the export trade of the 1870s and 1880s. With a total of around 50 breweries in the country in this period, this was a relatively large part of the sector as a whole. It is also clear from the table that while the majority of the breweries had been in operation for a while before they began exporting, there were some who like Frydenlund supplied foreign markets from the very outset. This was true



for Ringnes and Fredrikstad Brewery, both established in the second half of the 1870s, and most likely also for Christianssand's Brewery. It should also be noted that some breweries withdrew from foreign markets before 1890. E.C. Dahl more or less gave up exports in the middle of the 1870s,<sup>15</sup> and Fredrikstad Brewery stopped exporting altogether in 1885.<sup>16</sup> Schou's Brewery also threw in the towel some time before 1890,<sup>17</sup> although the exact year is not known.

Lack of export data for individual firms makes it impossible to establish the relative size of the exports of the different breweries. Yet, there is reason to believe that the breweries in Oslo, who dominated the domestic market in this period, were also the largest exporters. Frydenlund had a key position: we have reliable data for both total Norwegian exports and exports from Frydenlund for three years: 1871, 1874 and 1875. These data show that Frydenlund accounted for close to one fifth of total Norwegian exports in 1871, had increased its share to 26 per cent in 1874, and to 34 per cent the following year.<sup>18</sup> In comparison, the only other brewery for which export figures exist for these years, E.C. Dahl, only accounted for 4,3 per cent of total exports in 1871, 1,7 in 1874, and 1,2 in 1875.<sup>19</sup>

Once Norwegian beer had found its way to overseas markets, exports became global in scope very quickly. When Frydenlund's export beer for the tropics was ready around 1865, samples were sent not only to H.M. van Hengel, but also to South America. By the early 1870s, the brewery was exporting to Europe, Asia, Africa and South-America. Markets in South America, and more specifically Argentina and Brazil, were of particular importance.<sup>20</sup>

Schou was in the first half of the 1870s exporting "not only to South America, but also to Singapore, Havana and other places."<sup>21</sup> E.C. Dahl was in the same period exporting mainly to Brazil, but also to Peru and Japan.<sup>22</sup> South America and Japan were also important markets

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<sup>15</sup> Solheim, Bjarte, *Mit øl gjør overalt lykke. E.C. Dahls bryggeri 1856-1882*, hovedfagsoppgave i historie, NTNU, 1998, p. 123

<sup>16</sup> Apenes, Christian B., *En historie om øl skrevet i anledning av 75-års-jubileet i Fredrikstad bryggeri A.S. 1877 - 21 juni - 1952, Fredrikstad, 1952*, p. 47

<sup>17</sup> Vogt, Nils (ed.), *Schous Bryggeri. Mindeskrift til Hundreaarsjubelæet 1921*, Oslo, 1921, p. 196

<sup>18</sup> *Tabeller vedkommende Norges Handel, 1870-1889*, Statistics Norway; Hambro, pp. 47, 51, 111

<sup>19</sup> *Tabeller vedkommende Norges Handel, 1870-1889*, Statistics Norway; Solheim, p. 109

<sup>20</sup> Hambro, C.J. (ed.), *Frydenlunds Bryggeri*, Oslo, 1934, p. 111

<sup>21</sup> Vogt, Nils (ed.), *Schous Bryggeri. Mindeskrift til Hundreaarsjubelæet 1921*, Oslo, 1921, p. 19

<sup>22</sup> Solheim, Bjarte, *Mit øl gjør overalt lykke. E.C. Dahls bryggeri 1856-1882*, hovedfagsoppgave i historie, NTNU, 1998, p. 108

for Ringnes,<sup>23</sup> while Hamar Brewery operated on a wide range of markets spanning from Asia and Australia to Africa and North and South America. Chile, Peru and Bolivia were the most significant markets over time.<sup>24</sup>

South America appears to have played a particularly important role. Although we cannot establish the exact geographical distribution of Norwegian exports, the annual reports of the consulates provide interesting information. While they report on large quantities of Norwegian beer being imported to European cities, especially Hamburg and London, it is underlined that the beer for a large part was shipped on to overseas markets. The report from Hamburg for 1874 states that: “The quite substantial quantities of beer that (...) are imported from Norway are mainly shipped to overseas ports, especially South-America, but also to Asia, and more specifically, China.”<sup>25</sup> Reports for subsequent years confirm that this continued to be the case. The same is true for the reports from London: the report for 1885 states that of total imports of Norwegian beer that year, “[t]he by far largest part (...) is re-exported to overseas countries.”<sup>26</sup>

This does not mean that Norwegian beer was not consumed in Europe at all. There was an emerging British market for Norwegian beer in the early 1880s. The consular report from London for 1882 states that “The consumption of Norwegian beer in Great Britain is said to increase”,<sup>27</sup> and in the following two years approximately 66 000 and 80 000 litres respectively were imported “especially to London and for consumption here”.<sup>28</sup> Norwegian beer was moreover consumed in Belgium, France, Italy, Spain and Portugal, albeit in relatively small quantities.<sup>29</sup> It is striking that these were all countries that either were typical wine producers that lacked a significant indigenous brewing industry or, as in the case of the UK and Belgium, produced beers of a fundamentally different kind than Norway. This difference in European beer production is elaborated on later in this paper.

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<sup>23</sup> Schulerud, Mentz, *Ringnes Bryggeri gjennom 100 år*, Oslo, 1976, p. 102

<sup>24</sup> Lillevold, Eyvind et al, *Hamar Bryggeri gjennom 100 år*, Hamar, 1957, p. 51

<sup>25</sup> *Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart*, 1874, p. 38

<sup>26</sup> *Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart*, 1885, p. 121

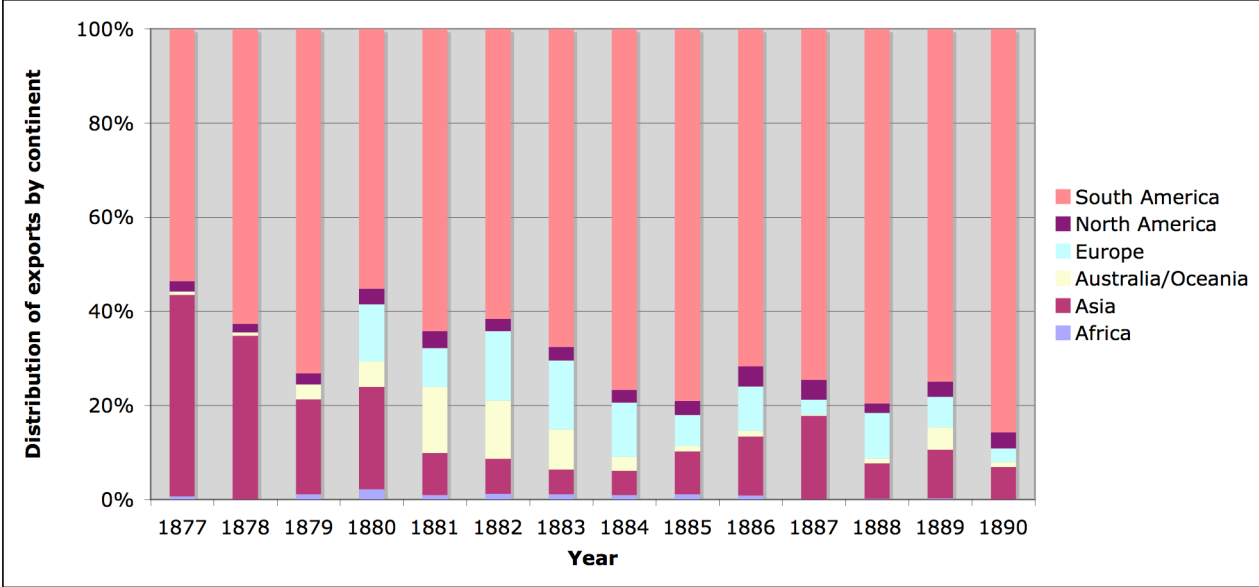
<sup>27</sup> *Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart*, 1882, p. 65

<sup>28</sup> *Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart*, 1883, p. 61; *Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart*, 1884, pp. 124-125

<sup>29</sup> *Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart*, 1872-1891

The export data base for Frydenlund allows us to quantify the geographical distribution of the exports of this one brewery for the years 1877-1890. Figure 3.1 shows the distribution of Frydenlund’s exports between continents in this period.

**Figure 3.1 Annual geographical distribution of exports from Frydenlund, 1877-1890**



Source: Export books for Frydenlund Brewery, 1877-1898

Evidently, South America played a particularly important role. Throughout the years 1877-1890, more than half of Frydenlund’s exports went that continent; in some years, the share was close to 80 per cent. Asia was the second most important continent if we see the period as a whole. Australia/Oceania and Europe played relatively significant roles from the beginning of the 1880s, and especially in first half of that decade.

The Frydenlund data confirm that little of the exports were intended for consumption in Europe. Most of the brewery’s European sales went to individuals or companies who clearly intended to re-export the beer to overseas markets.<sup>30</sup> This means that even the share of exports that according to figure 3.1 went to Europe, for a large part was based on overseas demand.

One key point must be made in connection with South America’s dominant position as market for Norwegian beer: the continent has a tropical climate. The same is true for parts of Asia.

<sup>30</sup> Export books for Frydenlund Brewery, 1877-1890

This is highly relevant because at the time Norwegian exports were started up, it was for technical reasons impossible to brew beer in tropical climates. Brewing depended on low temperatures, and it was only with the introduction of mechanical cooling in the last quarter of the 19<sup>th</sup> century that it became technically feasible for countries in the tropics to establish an indigenous brewing sector. Generally, brewing first began to spread in South America and Asia in the 1880s.<sup>31</sup>

What we have learnt in this section, is that the unprecedented high levels of Norwegian beer exports between 1870 and 1890 were intimately linked to the expansion of foreign sales to non-European, overseas markets. Markets in South America and Asia played a particularly important role. European markets on the other hand were relatively insignificant. We have seen that the large quantities of Norwegian beer that were imported to Europe were mainly re-exported to other continents. In part, these re-exports were carried out by external actors who bought beer from Norwegian breweries with the intention of supplying overseas markets. More generally however, the observed imports to and re-exports from Europe seem to reflect that the Norwegian breweries, as we shall see in section 6, for transport depended on the trans-continental shipping services that were available in the major European ports.

We have also seen that the importance of markets in South America and Asia can be linked to the fact that countries on these continents only developed indigenous brewing sectors from the 1880s. This, in combination with a demand for beer that we in the next section shall see was linked to European colonialism and emigration, was no doubt a decisive, underlying factor in the boom in Norwegian beer exports from 1870.

### **3. High-quality export beer to European expatriates**

Before starting up overseas exports Frydenlund had developed a beer especially suited for exports to tropical climates. The reason was that the brewery had experienced problems with the keeping properties of the beer that had been exported to Europe. Beer is a perishable product, and keeping properties is thus of key importance if it is to be transported over long distances. This was not least true in the period studied here, when transport was relatively slow. Moreover, it was before the introduction of mechanical cooling made it possible to

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<sup>31</sup> Gourvish, T.R. and Wilson, R.G., *The British Brewing Industry 1830-1980*, Cambridge: Cambridge University Press, 1994, p. 175

effectively regulate temperatures on board ships and other means of transport, and the beer was thus exposed to varying temperatures which in turn increased its chances of turning bad.

Keeping properties was a major concern for Frydenlund when exports were started up in 1860: when the brewery got its first orders from Germany during the summer of that year, it made it clear that shipments should be postponed to early September “when the heat is less strong, and the beer thus stand in less danger of going bad.”<sup>32</sup> In spite of these precautions, numerous complaints over the quality of the beer came from foreign customers during the first few years, and the major reason was that the beer had turned bad during transport. This was not least caused by poor communications between Oslo and the export destinations – for example: “Existing communications with Lübeck (...) occasioned the shipments to that destination to be stored in Copenhagen for eight days.”<sup>33</sup>

Exports to overseas markets in tropical climates implied that the challenge with both transport time and the exposure of the beer to varying temperatures became even more daunting. On average it took 127 days – or more than 4 months – from a shipment of beer left Oslo until it arrived in South America or Asia.<sup>34</sup>

While it took Frydenlund several years to develop a beer for the tropics, the brewery was obviously very confident about the quality of the product once a good result had been achieved in 1865. When samples were sent to van Hengel in Holland, they were asked “to expose the bottles to all difficulties, since we feel convinced about the keeping properties of the beer under strongly varying temperatures.”<sup>35</sup> And the product appears to have lived up to the expectations: the samples that were sent to South America are reported to have “turned out to keep very well and to please the palate.”<sup>36</sup>

Frydenlund’s example was followed by other breweries: distinct export beers were developed by Schou’s, E.C. Dahl’s and Hamar Brewery.<sup>37</sup> In general, little detailed information exists about how these beers were produced, but in the case of Schou it is clear that it involved the

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<sup>32</sup> Hambro, C.J. (ed.), *Frydenlunds Bryggeri*, Oslo, 1934, p. 108

<sup>33</sup> Hambro, C.J. (ed.), *Frydenlunds Bryggeri*, Oslo, 1934, p. 109

<sup>34</sup> Export books for Frydenlund Brewery, 1877-1890

<sup>35</sup> Hambro, C.J. (ed.), *Frydenlunds Bryggeri*, Oslo, 1934, p. 110

<sup>36</sup> Hambro, C.J. (ed.), *Frydenlunds Bryggeri*, Oslo, 1934, p. 110

<sup>37</sup> Lillevold, Eyvind et al, *Hamar Bryggeri gjennom 100 år*, Hamar, 1957, p. 49; Solheim, Bjarte, *Mit øl gjør overalt lykke. E.C. Dahls bryggeri 1856-1882*, hovedfagsoppgave i historie, NTNU, 1998, pp. 96-97, 108; Vogt, Nils (ed.), *Schous Bryggeri. Mindeskrift til Hundreaarsjubilaet 1921*, Oslo, 1921, p. 195

use of novel raw materials as well as production methods. Schou had looked abroad for knowledge about how to produce a beer suitable for exports and had sent an employee on a study trip to a German brewery by the name of Kaiserbräuerei. What was learnt during the trip was that a good export beer could be achieved by first, replacing up to 30 per cent of the malt with rice - more specifically so-called "Bruchreis"; second, the malt should be made out of high quality barley that during malting was allowed to germinate long enough for the rootlets to attain a substantial length; third, a large amount of hops should be used. What was thus achieved was "a very mature beer with the highest possible degree of pre-fermentation."<sup>38</sup> The method was successfully adopted and the beer not only had excellent keeping properties but also very good clarity and taste and could "in every respect (...) compete with the German export beer".<sup>39</sup>

It is difficult to establish whether the beer that was developed especially for exports was one distinct beer or rather a broader category of beers characterised by distinct production methods. While many breweries did export beer under the label "Export beer", they were also exporting "Pilsner beer", "Lager beer", "Bock beer", "Culmbacker beer", "Schützenbier", and "Pale Ale".<sup>40</sup> In any case, it is evident that the beer that was exported from Norway in this period generally had excellent keeping properties and soon gained an international reputation for its high quality.

With reference to Norwegian export beer, the consular report from Hamburg for 1874 states that "As proof of this beer's keeping properties, it can be noted, that there from Egypt was sent us a small quantity that was left of a shipment that had arrived there in the year 1869, and that it still was quite good."<sup>41</sup> The quality of the Norwegian beer was early on also recognised from other quarters. In a 1875 issue of the British *The Brewers' Journal*, an article about the Vienna Universal Exhibition refers to "three exhibitors of the famous Christiania export beer" who all "secured medals for merit".<sup>42</sup> Christiania was the name of the Norwegian capital at the time. International exhibitions were in fact attended regularly by most Norwegian export breweries throughout the 1870s and 1880s and the fact that they frequently were rewarded

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<sup>38</sup> Vogt, Nils (ed.), *Schous Bryggeri. Mindeskrift til Hundreaarsjubilæet 1921*, Oslo, 1921, p. 195

<sup>39</sup> Vogt, Nils (ed.), *Schous Bryggeri. Mindeskrift til Hundreaarsjubilæet 1921*, Oslo, 1921, p. 195

<sup>40</sup> Hambro, C.J. (ed.), *Frydenlunds Bryggeri*, Oslo, 1934, p.112; Lillevold, Eyvind et al, *Hamar Bryggeri gjennom 100 år*, Hamar, 1957, p. 50; Schulerud, Mentz, *Ringnes Bryggeri gjennom 100 år*, Oslo, 1976, pp. 33-34; Solheim, Bjarte, *Mit øl gjør overalt lykke. E.C. Dahls bryggeri 1856-1882*, hovedfagsoppgave i historie, NTNU, 1998, p. 108

<sup>41</sup> *Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart*, 1874, p. 38

<sup>42</sup> *The Brewers' Journal*, March 15, 1875, p. 68

high distinctions for their export beers,<sup>43</sup> testifies to the international recognition of their quality more generally.

As for the question of who the consumers were, the consular reports indicate that overseas sales did not primarily go to the local population. According to the report from Rio de Janeiro for 1878, imported beers were in Brazil first and foremost consumed by foreigners.<sup>44</sup> Reports from Shanghai in the 1870s explicitly state that the consumers of Norwegian beer in that location were not the Chinese but Europeans, and in Turkey in 1891, Norwegian beer is reported to have been in particular demand by Englishmen.<sup>45</sup>

The extensive European colonialism and emigration of the second half of the 19<sup>th</sup> century meant that there was a large group of Europeans living abroad at the time. This was not least true in parts of the world where local production of beer only was started up in the 1880s. It is moreover clear from the literature on British beer exports in this period that European expatriates did play a central role in overseas demand: studies by both Ian Donnachie and Gourvish and Wilson emphasise the importance on the demand side of Britons who had moved to other continents bringing with them the taste for “the native drink of their homeland”.<sup>46</sup>

There is thus reason to believe that Norwegian beer exports for a large part were catering for an overseas demand created by European expatriates. We have also seen that the Norwegian breweries succeeded in developing a high-quality export beer. This was most likely of key importance for their ability to compete on overseas markets. The same is true for a general switch in taste from so-called top-fermented beer to bottom-fermented beer that occurred in the period studied here, and to which we turn next.

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<sup>43</sup> Hambro, C.J. (ed.), *Frydenlunds Bryggeri*, Oslo, 1934, pp.112, 115; Lillevold, Eyvind et al, *Hamar Bryggeri gjennom 100 år*, Hamar, 1957, p. 50; Lorentzen, R.A., *Bryggeriet ved Nedre Sund A/S P. Ltz. Aass. En Drammenbedrift gjennom et hundreår*, Drammen, 1946, p. 53

<sup>44</sup> *Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart*, 1878, p. 323

<sup>45</sup> *Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart*, 1891, pp. 632-633

<sup>46</sup> Donnachie, Ian, “Following the flag. Scottish brewers and beers in imperial and international markets, 1850-1939”, in Wilson, R.G. and Gourvish, T.R. (eds.), *The Dynamics of the International Brewing Industry since 1800*, London and New York: Routledge, 1998, p. 124; Gourvish, T.R. and Wilson, R.G., *The British Brewing Industry 1830-1980*, Cambridge: Cambridge University Press, 1994, p. 169

## 5. Increasing popularity of bottom-fermented beer

We know that British and German breweries, and to a lesser extent Danish, Dutch and American breweries, were operating in the same markets as the Norwegian export breweries. It is also clear that British and German beers had a dominant position.<sup>47</sup>

A key point here is that the period saw an overall increase in the popularity of German beer at the cost of British.<sup>48</sup> This reflected that there was a fundamental difference between the beers of these two countries. In the UK, production was dominated by traditional top-fermented beers, like porter and ales. In Germany on the other hand, top-fermented beer had from the 1830s gradually been replaced by so-called bottom-fermented beer. Due to different methods employed in the production of this beer in terms of mashing, fermentation and storage, bottom-fermented beer was lighter, brighter and more carbonated than top-fermented beer. In addition, it had superior keeping properties.<sup>49</sup> This last quality was of course a major advantage when it came to exports.

The general change in preferences from British top-fermented beer to German bottom-fermented beer was presumably of great importance for the ability of Norwegian breweries to establish a position for themselves on international markets. Norway had been very quick to follow Germany's example in switching production to bottom-fermented beer: this beer had in fact been successfully introduced as early as in 1842, and appears to have dominated national production by the 1850s.<sup>50</sup> And it was bottom-fermented beer that formed the basis for Norwegian exports between 1870 and 1890. While we have seen that exports included pale ale, which was a British-style top-fermented beer, it was bottom-fermented beer that dominated foreign sales in the period. It can be noted that this most likely was true also for Danish, Dutch and American exports. We know that bottom-fermented beer gained ground in

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<sup>47</sup> *Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart, 1872-1891*

<sup>48</sup> Gourvish, T.R. and Wilson, R.G., *The British Brewing Industry 1830-1980*, Cambridge: Cambridge University Press, 1994, p. 175

<sup>49</sup> Glamann, Kristof, *Beer and Brewing in Pre-industrial Denmark*, Odense: Syddansk Universitetsforlag, 2005, p. 171

<sup>50</sup> Schulerud, Mentz, *Ringnes Bryggeri gjennom 100 år*, Oslo, 1976, pp. 33-34, 37; Vogt, Nils (ed.), *Schous Bryggeri. Mindeskrift til Hundreaarsjubelæet 1921*, Oslo, 1921, p. 19; export books for Frydenlund Brewery, 1877-1890



Denmark from the 1850s,<sup>51</sup> and subsequently in the Netherlands and the USA from the second half of the 1860s.<sup>52</sup>

It is however clear that as time went by, the Norwegian export breweries increasingly suffered from competition in terms of price and that the main threat in this respect came from the German exporters. In the consular reports from in the 1880s, there are repeated statements from various locations about Norwegian beer being well liked, but that it was too highly priced to be able to compete with German beers.<sup>53</sup>

## **6. Organising global sales: Agents, consignment sales and trans-continental shipping services**

Agents played a central role in the organisation of Norwegian beer exports. Although it is difficult to establish the exact roles and responsibilities of these agents, their main function was to be intermediaries between the export breweries and their foreign markets. This involved everything from establishing business connections and overseeing distribution and sales to monitoring and reporting on developments in markets in terms of competition, consumption patterns, etc.<sup>54</sup>

Each export brewery seems to have had several agents working for them and the agents could be based in Norway as well as abroad. Hamar Brewery and the Railway Brewery, both located in the town of Hamar, for a time shared an export agent in Oslo.<sup>55</sup> Hamar Brewery also had an agent in Hamburg, as did Frydenlund, E.C. Dahl, Schou, and Ringnes.<sup>56</sup> The central role played by agents in this city must be understood in light of Hamburg's position as a key junction for trans-continental shipping and trade. As shown later in this section, the majority

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<sup>51</sup> Boje, Per and Johansen, Hans Chr., "The Danish brewing industry after 1880", in Wilson, R.G. and Gourvish, T.R. (eds.), *The Dynamics of the International Brewing Industry since 1800*, London: Routledge and New York, 1998, p. 60

<sup>52</sup> Kerr, K. Austin, "The American brewing industry, 1865-1929", in Wilson, R.G. and Gourvish, T.R. (eds.), *The Dynamics of the International Brewing Industry since 1800*, London: Routledge and New York, 1998, p. 176; Unger, Richard, "Dutch brewing in the nineteenth century", in Wilson, R.G. and Gourvish, T.R. (eds.), *The Dynamics of the International Brewing Industry since 1800*, London: Routledge and New York, 1998, pp. 19-23

<sup>53</sup> *Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart, 1872-1891*

<sup>54</sup> Schulerud, Mentz, *Ringnes Bryggeri gjennom 100 år*, Oslo, 1976, pp. 33-34, 37; export books for Frydenlund Brewery, 1877-1890

<sup>55</sup> Lillevold, Eyvind et al, *Hamar Bryggeri gjennom 100 år*, Hamar, 1957, p. 49

<sup>56</sup> Hambro, C.J. (ed.), *Frydenlunds Bryggeri*, Oslo, 1934, p. 108; Lillevold, Eyvind et al, *Hamar Bryggeri gjennom 100 år*, Hamar, 1957, p. 50; Schulerud, Mentz, *Ringnes Bryggeri gjennom 100 år*, Oslo, 1976, p. 37; Solheim, Bjarte, *Mit øl gjør overalt lykke. E.C. Dahls bryggeri 1856-1882*, hovedfagsoppgave i historie, NTNU, 1998, p. 108; Vogt, Nils (ed.), *Schous Bryggeri. Mindeskrift til Hundreaarsjubilæet 1921*, Oslo, 1921, p. 19

of Norwegian exports appears to have been shipped via Hamburg, and it was thus of strategic importance to have intermediaries based in that location.

Another central feature of how exports were organised is that the beer for a large part was sold in consignment. This meant that the breweries assigned the task of selling their beer to an external actor whilst retaining ownership of and not receiving settlement for the beer until it was sold.<sup>57</sup> The external actors – the consignees – were typically international trading houses that were based in large European ports, like Hamburg, London and Amsterdam, and that had consignment warehouses in overseas ports where the goods they traded in were stored until they were sold.<sup>58</sup>

Sales in consignment meant that the organisation of distribution and sales was put in the hands of professional actors with well-established international trade connections. Given the importance of geographically dispersed, overseas markets in Norwegian beer exports, this was clearly a major advantage. There were however several downsides to this sales arrangement. First, it involved letting the consignee keep a percentage share of every sale. Second, the consignee sometimes operated on terms that limited the breweries' freedom to make use of other sales arrangements. This is evident from a consular report from Bahia in Brazil for 1877 which states that some Hamburg firms were making monthly deliveries of bottled beer to that market "on the terms that the suppliers in Norway do not on their own account ship the same products directly to Brazil."<sup>59</sup> Third, and most serious, sales in consignment meant that the breweries upon shipping the beer off had no guarantee that it would be sold or, it can be assumed, that it would be sold with a profit.

There clearly was some scepticism towards consignment sales among the Norwegian export breweries. Hamar Brewery made a conscious effort to limit this type of sales to situations where the brewery attempted to break into new markets.<sup>60</sup> At Ringnes, there was strong controversy among the managers over whether or not the brewery should make use of consignment sales. Sales of this type dominated the brewery's exports in the first years after they were started up in 1877. In 1885 Axel Heiberg, who together with the brothers Ellef and

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<sup>57</sup> Lillevold, Eyvind et al, *Hamar Bryggeri gjennom 100 år*, Hamar, 1957, p. 50; Schulerud, Mentz, *Ringnes Bryggeri gjennom 100 år*, Oslo, 1976, p. 35; export books for Frydenlund Brewery, 1877-1890

<sup>58</sup> Export books for Frydenlund Brewery, 1877-1890

<sup>59</sup> *Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart*, 1877, p. 187

<sup>60</sup> Lillevold, Eyvind et al, *Hamar Bryggeri gjennom 100 år*, Hamar, 1957, p. 50

Amund Ringnes made up the management group, made it clear that he was opposed to consignment sales and that he wanted exports to be based on regular sales. Ellef Ringnes on the other hand argued in favour of continuing consignment sales, emphasising their importance when it came to breaking into new markets. The controversy in fact resulted in Heiberg withdrawing from the management group for a shorter period. It was however Heiberg's view that won out in the end: exports were in the second half of the 1880s increasingly based on regular sales, and in 1890 the decision was made that sales in consignment were to be given up entirely.<sup>61</sup>

We see that consignment sales were given up by Ringnes only towards the end of the “golden decades” of Norwegian beer exports. While we can not establish the exact balance between this type of sales and regular sales in total Norwegian exports between 1870 and 1890, it is clear in the case of Frydenlund that consignment sales were by far the most important throughout the period.<sup>62</sup> This indicates that despite the weaknesses that were associated with it, this sales arrangement was all in all considered to be favourable. The reason is likely to have been that it saved the breweries from the challenge of identifying and dealing with distributors and buyers in each and every market. Even with the help of agents, this can be assumed to have been an impossible task due to the global scope of exports.

As for transport, we know little about the exact shipping arrangements that were used. It is however clear that transport to a very limited extent was direct in the sense that the beer was shipped directly from Norway to the export markets. The export books for Frydenlund show that the beer from that brewery almost without exceptions was shipped via European ports. These included Hamburg and Bremen in Germany, Antwerp in Belgium, Amsterdam and Rotterdam in the Netherlands, Havre in France, and London, Liverpool and Hull in England. Hamburg was however by far most important, as can be seen in figure 6.1 below.<sup>63</sup>

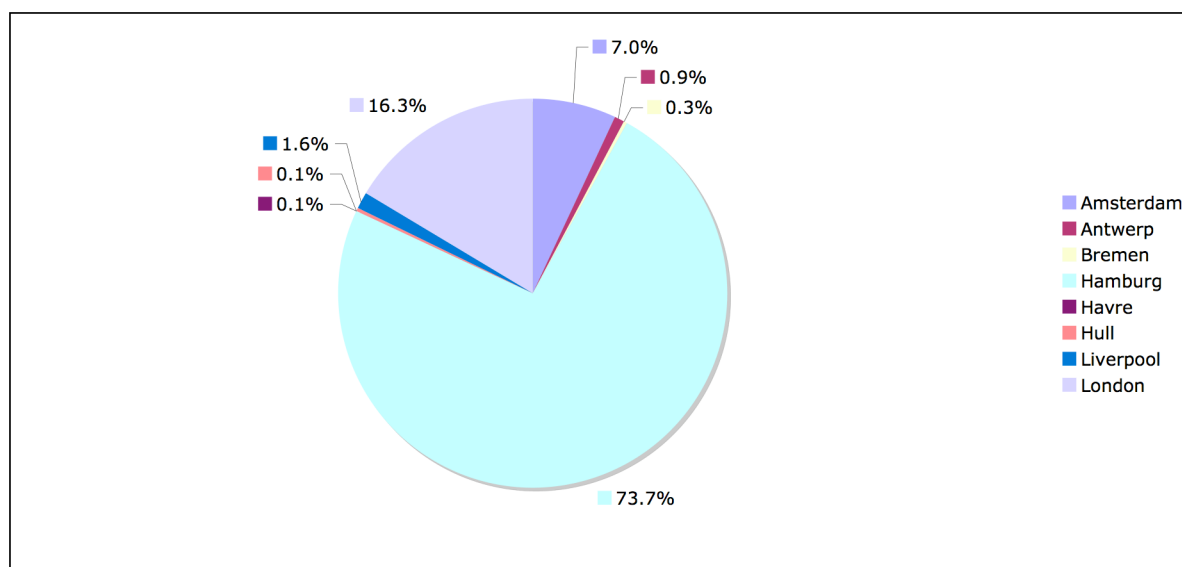
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<sup>61</sup> Schulerud, Mentz, *Ringnes Bryggeri gjennom 100 år*, Oslo, 1976, pp. 35-36

<sup>62</sup> Export books for Frydenlund Brewery, 1877-1890

<sup>63</sup> Export books for Frydenlund Brewery, 1877-1890

**Figure 6.1 Distribution of Frydenlund’s exports between ports of forwarding, 1877-1890**



Source: Export books for Frydenlund Brewery, 1877-1890

That transport predominantly was indirect, reflected a general lack of direct shipping connections between Norway and the breweries’ major overseas markets. The breweries thus relied on the trans-continental shipping services that were available in larger European ports. Lack of direct shipping routes was in fact a problem even within Europe. We have already seen that shipments from Oslo to Lübeck in the early 1860s had gone via Copenhagen. Even a decade later, in the early 1870s, shipments to Havre in France had to be transported via Hamburg or London. By 1877, this had changed: a Norwegian shipping company – *Det norske søndenfjeldske damskipselskap* – was at that point running a regular service between Oslo and Havre “throughout most of the year” which was used for Norwegian beer exports.<sup>64</sup> Transport to other European destinations was however still indirect as late as in the middle of the 1880s: when Frydenlund started up exports to Bilbao in Spain in 1885, we know that the beer had to be shipped via Hamburg.<sup>65</sup>

The general lack of direct shipping connections between Norway and the major export markets for beer does not mean that such connections did not exist at all. We know that E.C. Dahl’s Brewery in Trondheim in the first half of the 1870s shipped beer directly to Brazil on

<sup>64</sup> *Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart*, 1872, p. 26; *Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart*, 1877, p. 147

<sup>65</sup> *Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart*, 1886, p. 48

ships that were catering for the trade in dried fish and coffee between the two countries.<sup>66</sup> There is moreover evidence of smaller shipments of beer having been transported directly to places such as Buenos Aires, Honolulu, Cape Town, Sydney and Washington.<sup>67</sup> It is however evident that the direct shipping connections that were available to the Norwegian export breweries were relatively inefficient. The direct route between Norway and Brazil that E.C. Dahl made use of was carried out by sailing-ships. According to the consular report from Rio de Janeiro for 1873, these ships were increasingly losing out in competition with steam ships from Hamburg – it is pointed out that the efficiency of the latter was the reason why “the direct exports of beer and fish from Norway as well as the export of Rio coffee with sailing-ships seem to be decreasing.”<sup>68</sup>

To sum up: in organising their export business, the Norwegian breweries made extensive use of external actors. These included agents, both at home and abroad, international trading houses, and providers of trans-continental shipping services in major European ports. What the breweries in effect did was to take advantage of existing international networks, and this can be seen as a way of meeting the challenges involved in operating on a global scale.

## **7. A short comment on the role of government polices**

One central issue that has not been addressed so far is the role played by tariffs and government policies more generally. There is not room here for a thorough investigation of the tariff levels in all the foreign markets of the Norwegian export breweries in the period between 1870 and 1890. We do however know that when exports were started up on a significant scale around 1870, the free trade regime that had been built up from the middle of the century was still standing strong. And while the Great Depression that set in from the 1870s eventually led to a return to protectionism,<sup>69</sup> free trade principles continued to have a strong position in Norway and the country’s main trading partners until the end of the century.<sup>70</sup> The Norwegian government was moreover providing direct support to the country’s

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<sup>66</sup> E.C. Dahls bryggeri 1856-1956, Trondheim, 1956, pp. 26-27

<sup>67</sup> Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart, 1872-1891

<sup>68</sup> Uddrag af Consulatberetninger vedkommende Norges Handel og Skibsfart, 1873, p. 95

<sup>69</sup> Cameron, Rondo, *A Concise Economic History of the World From Paleolithic Times to the Present*, New York and Oxford: Oxford University Press, 1993, pp. 277-284

<sup>70</sup> Hodne, Fritz and Grytten, Ola Honningdal, *Norsk økonomi i det nittende århundre*, Bergen: Fagbokforlaget, 2000, p. 276

export sectors.<sup>71</sup> This included the brewing sector. The production of beer was at the time taxed on the basis of the amounts of malt that were used. In connection with an increase in this so-called malt tax in 1860, the government introduced a reduction in this tax for beer that was exported on the condition that each export shipment amounted to a minimum of around 460 litres.<sup>72</sup>

## 8. Conclusion

While Norwegian beer exports were never a long-lasting, large-scale phenomenon, we have seen that around a dozen breweries succeeded in selling their beers world wide between 1870 and 1890. In doing so, they took advantage of a demand for beer created by European expatriates living on continents where tropical climates stood in the way of local beer production for most of this period. Despite their global scope, there was thus a strong “European” dimension to foreign sales.

The early adoption in Norway of bottom-fermented beer and the development of high quality export beers have been shown to have played a key role in the success of the Norwegian export breweries. The same is true for the active use they made of existing international networks in organising foreign sales. As for the question of why the success turned out to be relatively short-term, we have seen that two factors must be taken into consideration: first, that Norwegian export beer was increasingly losing out to German beer in terms of price; and second, that the 1880s saw the emergence of local breweries in the all-important overseas markets. However, a more thorough investigation of the factors involved in the rise and fall of 19<sup>th</sup> century Norwegian beer exports needs to be carried out in future work.

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<sup>71</sup> Hodne, Fritz and Grytten, Ola Honningdal, *Norsk økonomi i det nittende århundre*, Bergen: Fagbokforlaget, 2000, p. 276

<sup>72</sup> Hambro, C.J. (ed.), *Frydenlunds Bryggeri*, Oslo, 1934, p. 109

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