

Craft Beer and Microbreweries in Ireland, 2015

A Report for the Independent Craft Brewers of Ireland

Final Report, August 2015

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Executive Summary

It is estimated that there are 63 microbreweries operating in Ireland, of which 48 are production microbreweries and 15 are contracting companies. There has been a 50% increase in the number of production microbreweries from 32 in mid-2014 to 48 in mid-2015.

As many as 22 new production microbreweries commenced production in 2014. By end year 2015, the total number of production microbreweries may have risen to approximately 58.

The output of craft beer by production microbreweries amounted to some 86,000 hl in 2014. This represents a 71% increase on the 2013 figure of 49,000hl. Between 2011 and 2014, the output of production microbreweries rose by more than threefold.

Given the influx of new firms in 2014 and capacity expansion among older firms, output is expected to rise substantially in 2015 to 145,000hl, an increase of over 70%. Microbreweries are forecasting a further 64% increase in output to 241,000hl in 2016.

Of the total microbrewery production of 86,000 hl in 2014, an estimated 21,400hl was exported, representing almost 25 % of the total. This is an almost doubling of export volumes since 2013. Some two-thirds of microbreweries are already exporting, albeit many of them on a small scale as yet. On average, microbreweries are targeting an export share of almost 50% of total production.

Given the growth in microbrewery production to 86,000hl in 2014, the share of craft beer in total beer production was 1.2% in 2014. With the current and anticipated trends in craft beer production, the Irish craft beer market share is likely to reach 2.0% and 3.3% in 2015 and 2016 respectively.

The turnover of craft beer producers in 2014 is estimated at €23m and at a projected €39.6m for 2015. Five microbreweries had a turnover of more than €1m in 2014.

In terms of the number of microbreweries per million population, Ireland has lagged behind some other countries that have a strong beer drinking culture. For example, at approximately 5 breweries per million population in 2013, Ireland had half the rate of the USA, one third that of Denmark and less than one quarter the rate of the UK.

In 2014, American craft beer production accounted for 11% by volume of all beer production, compared to 1.2% in Ireland. It is clear that, on this measure, Irish craft beer production has still some way to go, particularly as Irish microbreweries are much more export focused at 25% of total production than their American counterparts at 10%.

Microbreweries in Ireland currently (in mid-2015) employ an estimated 312 people. This means that the microbrewing sector has created 159 extra jobs in the past year. Of the total of 312 persons employed, 212 represent full time jobs. There are also 74 employed part-time and some 27 on a seasonal basis. Micro-brewing in Ireland is six times more labour intensive than macro-brewing.

Microbreweries in operation in 2015 are employing 259 persons on a full time equivalent (FTE) basis. Employment in craft brewing has more than quadrupled since 2011. It is

highly likely that output of the sector will exceed 500,000hl within four years. Even allowing for a decline in employment intensity, as firm size increases, the total direct workforce in micro-brewing could reach 700 FTEs within that time frame.

The micro-brewing industry sources over half of its brewing ingredients by value domestically. For example, in 2014, almost 90% of microbreweries sourced supplies of malted barley from within the Republic of Ireland, typically amounting to 80% to 90% of all their malted barley inputs. Distribution is another source of local spin-off activity. In 2014, 41% of the output of the sector was channelled through wholesalers/distributors. Thus, there are significant downstream benefits for the agricultural and other sectors in Ireland.

As well as employing 259 FTEs directly, indirect employment was estimated at 260 persons in 2015. This means that every person employed in micro-brewing is matched by another in the wider economy that supplies the industry. There are microbreweries in operation in 21 of the 26 counties. Employment in the micro-brewing industry is thus very widely dispersed throughout the country. Microbreweries are sited in rural as well as urban areas, which enhances the local employment effect.

While microbreweries benefit from a tax rebate, they still pay over substantial excise duties to the Revenue Commissioners. It is estimated that microbreweries will pay the Revenue Commissioners some €3.4m in excise duties in respect of 2014 production, rising to €5.4m in 2015.

In addition to the above, the wages that microbreweries pay out give rise to income tax and PRSI payments to the Exchequer. The micro brewing industry is expected to generate over €2.6m in income tax and PRSI receipts for the Exchequer in 2015. This rises to €6.7m when indirect and induced tax and PRSI revenues are taken into account. The tax and PRSI revenues arising from the microbrewery industry at 2015 production levels at €6.7m exceeds the expected excise tax rebate in respect of 2015 production.

The most common issue raised by the industry is that relating to restrictions on sale of beer to brewery visitors. This is a particular concern among the smaller breweries, who face marketing and distribution challenges. There would be benefits to the wider economy from relaxing current restrictions, as there is demand from both indigenous and foreign tourists for a craft beer experience at local microbreweries. Other marketing issues are of concern to microbrewers, including the capacity to sell their products at farmers' and other local markets and on-line.

At present, microbreweries benefit from an excise tax rebate of 50%. While this is regarded as vital to the future of microbrewing, the fact that the current tax concession for microbreweries is on a rebate basis creates cash flow problems for all breweries.

For a number of years, the ceiling below which microbreweries could benefit from a 50% tax rebate was set at 20,000hl. Budget 2015 raised the ceiling to 30,000hl. However, the headroom that this created was relatively small. An increasing number of microbreweries are engaged in substantial expansion of capacity. Consideration should be given to the introduction of the EU ceiling of 200,000hl, with a tapered reduction in the rebate rate up to that ceiling.

1.1 Introduction

This Study was prepared on behalf of the Independent Craft Brewers of Ireland (ICBI), with the support of An Bord Bia. It is the second such study commissioned by the ICBI, following publication of an initial study in 2014.¹ The findings of the latter study contributed to the government decision in Budget 2015 to raise the production ceiling below which microbreweries can avail of excise duty relief, from 20,000 to 30,000 hectolitres.

The purpose of the current Study was to:

- Provide an update on the development of the micro-brewing industry In Ireland
- Review the potential of the industry and the contribution that it is making and could make to the economy; and
- Analyse the regulatory barriers that continue to hinder the achievement of that potential.

The study focused on the micro-brewing industry in the Republic of Ireland. Based on an internet search and industry sources, a list of micro-breweries was developed and these microbreweries were subject to a Survey. Responding microbreweries are listed in Appendix 1. Data referenced in this Report are drawn from the Survey unless otherwise indicated.

Appendix 2 discusses the organisation of the Survey, the response rates achieved and the methodology by which estimates of craft beer production from the microbrewery sector were derived from Survey data. A copy of the Survey Questionnaire is available in Appendix 3.

The Report is organised as follows: Section 2 summarises the recent development of the microbrewing industry in Ireland in terms of output, revenues and market share. The operational characteristics of the industry are described in Section 3. Section 4 assesses the impact of the microbrewing industry on the economy as a whole. The regulatory barriers to further growth in microbrewing are considered in Section 5. Section 6 presents conclusions.

¹ The Development and Economic Impact of Microbreweries in Ireland. Bernard Feeney for the ICBI, August 2014.

2. Development of the Microbrewery Sector

2.1 Number of Microbreweries

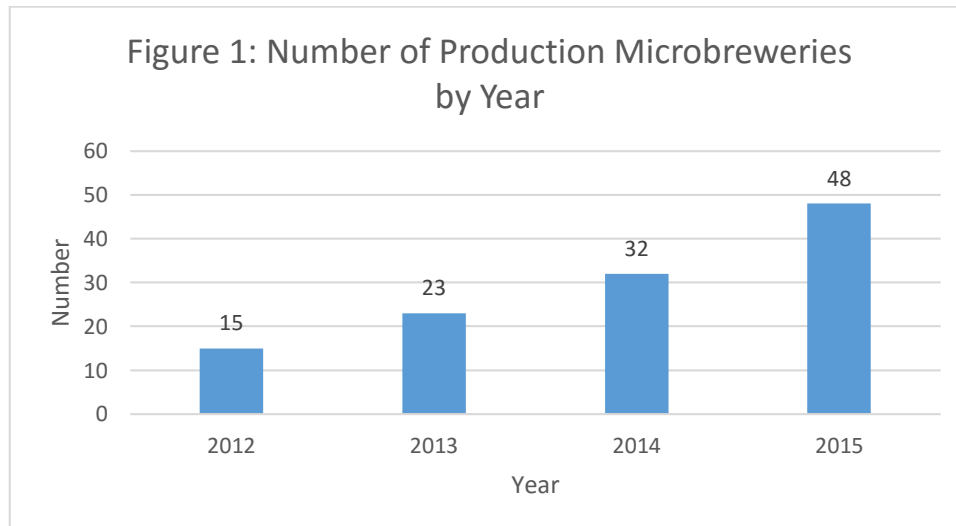
In broad terms, microbrewing comprises two different types of brewing enterprise:

- Microbreweries which produce beer on their own premises for sale on or off the premises;
- Contracting beer companies who market and sell beer products produced on their behalf by other breweries.

Throughout the report, these two categories are encompassed in the term ‘microbrewery’. Those that produce beer in their own right are referred to as “production microbreweries”, while those that contract out production are referred to as “contracting companies”. Some microbreweries that are in the process of establishing their own brewing plant go through an initial contracting phase before commencing production in their own right.

At the time of writing in June 2015, it is estimated that there are 63 microbreweries operating in Ireland, of which 48 are production microbreweries and 15 are contracting companies.²

There has been a 50% increase in the number of production microbreweries from 32 in 2014 to 48 in 2015. The number of microbreweries has more than trebled since 2012 (see Figure 1)



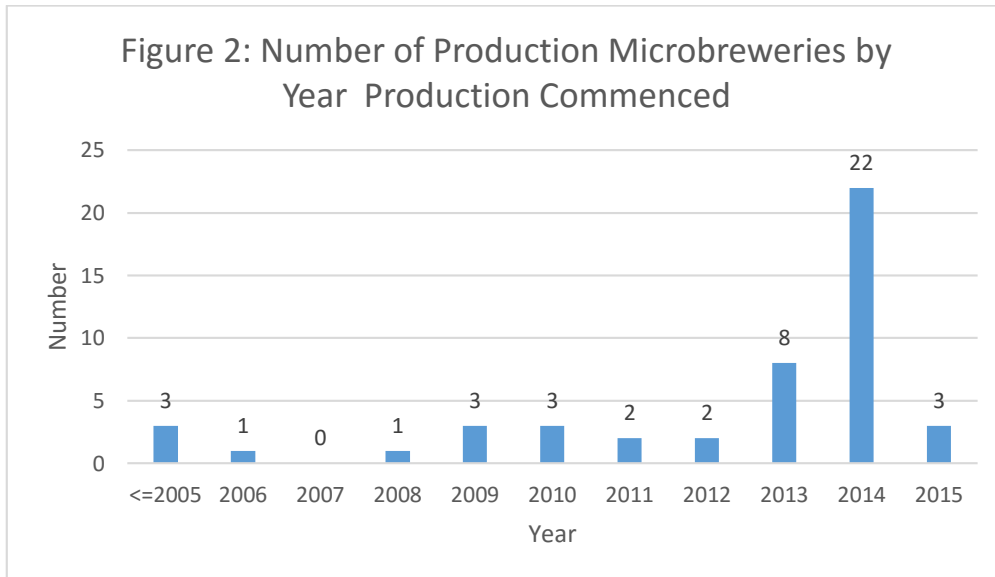
Source: Compiled by the author from survey and An Bord Bia data. Figures refer to the number of breweries in production at approximately mid-year.

It is estimated that as many as 22 new production microbreweries commenced production in 2014. Figure 2 sets out the year in which the current 48 production microbreweries first commenced production. This highlights the phenomenal growth in new enterprises

² While every effort has been made to identify all existing microbreweries, it is possible that a small number may have been missed, particularly among contracting companies.

in the last two years: 30 of the 48 production microbreweries commenced production in 2013-2014.

During the first half of 2015, only three further production microbreweries have commenced operations. There are apparently another six or seven breweries that may come on stream by end 2015, so that the high rate of new entry of 2014 will not be sustained. By end year 2015, the total number of production microbreweries may have risen to approximately 58.



Source: Compiled by the author based on survey data; refers to 48 production microbreweries in operation in mid-2015.

2.2 Output

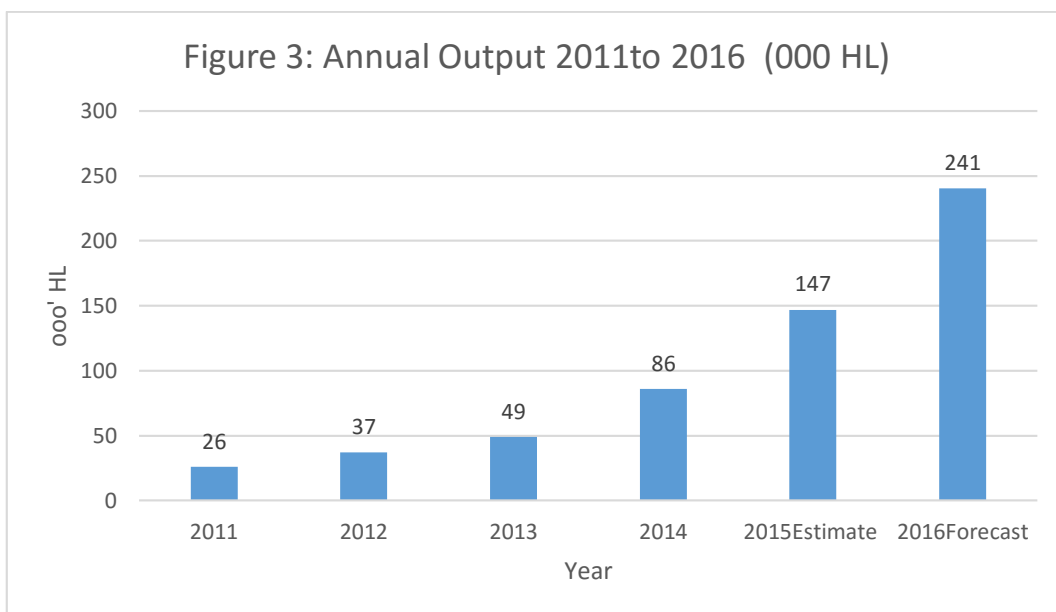
The output of craft beer by production microbreweries amounted to some 86,000 hl in 2014. This represents a 71% increase on the 2013 figure of 49,000hl. Figure 3 depicts the trend in output over the last four years. Between 2011 and 2014, the output of production microbreweries rose by more than threefold.

Of the additional output of 37, 000hl in 2014, only 3,700hl or 10% was contributed by firms that entered the market in 2014. This reflects the fact that many of these firms were in production for part of 2014 only and had yet to build up sales.

However, given the influx of new firms in 2014 and capacity expansion among older firms, output is expected to rise substantially in 2015 to 145,000hl, an increase of over 70%. This figure is based on trends in output to mid-June 2015.

The firms that responded to the Survey were also asked to forecast their 2016 output, if favourable market conditions prevail. This suggests a further 64% increase in output to 241,000hl in 2016.³ The strong growth in output over this period is expected to be largely driven by the expansion plans of the more mature medium-to-larger size microbreweries.

³ It should be noted that the 2015 and 2016 output estimates do not take account of the output of potential new entrants in the second half of 2015 and during 2016.

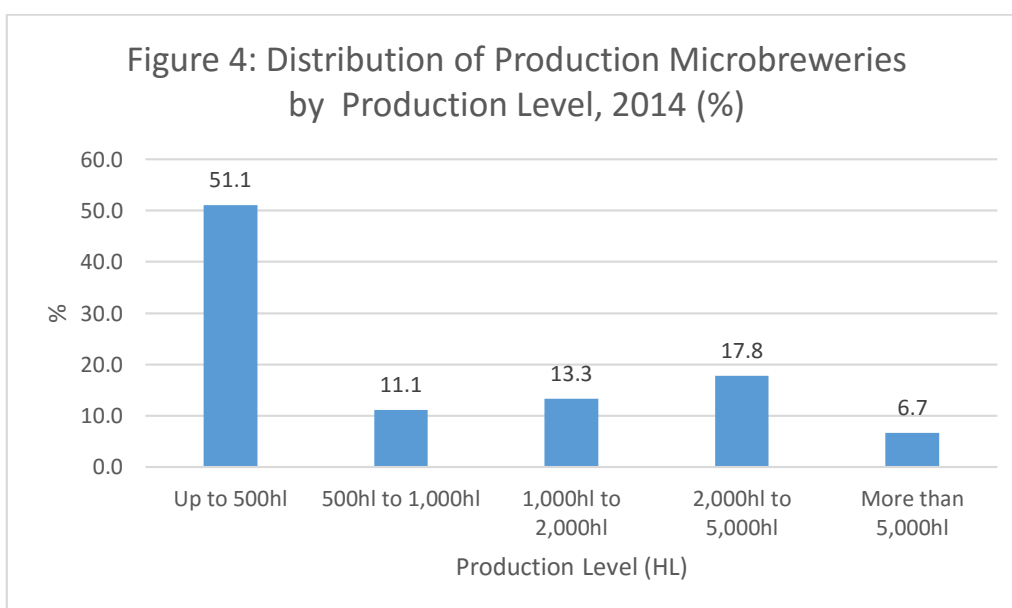


Source: Compiled by the author from survey and An Bord Bia data.

2.3 Size Structure

Of the 44 breweries in production during 2014, over 50% produced 500hl of beer or less in that year. The large number of microbreweries with very low level of production is due to the large number of new entrants that were in production for only part of the year.

In fact, the size of microbreweries is on the increase. In 2014, 11 microbreweries or almost one quarter had production in excess of 2,000hl as against only four such breweries in 2013.



Note: Compiled by the author from Survey data and other sources; based on 44 production microbreweries.

2.4 Irish Microbrewery Market Share

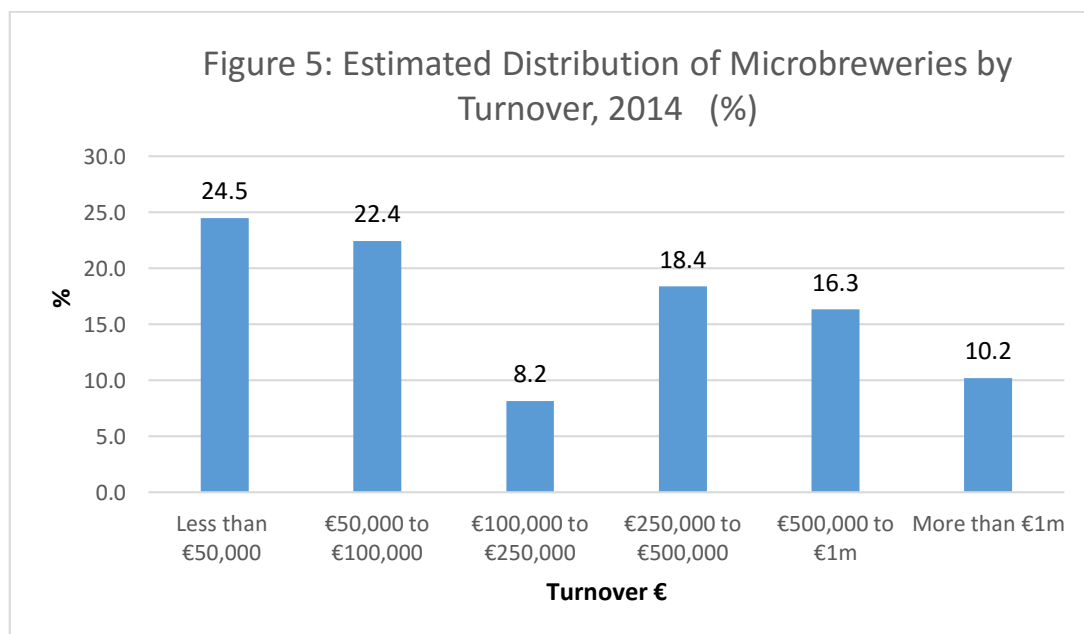
The IBA reports that total beer production in Ireland amounted to 7,288,000 hl in 2014.⁴ The microbrewery production of 86,000hl in that year represents 1.2% of the market. With the current and anticipated trends in craft beer production, the Irish craft beer market share is likely to hit 2.0% and 3.3% in 2015 and 2016 respectively.

Turning to the consumer market for beer in Ireland, the IBA estimates this at 4,481,000 hl for 2014. Of the 86,000hl produced by microbreweries in that year some 65,000 hl were sold in the domestic Irish market, indicating a microbrewery share of 1.4%. The projected Irish craft beer share of total beer consumption is predicted to rise to 2.3% by 2015 and 3.4% by 2016.

2.5 Turnover

The total turnover of craft beer producers in 2014 is estimated at €23m and at a projected €39.6m for 2015.

One quarter of all microbreweries had a turnover of less than €50,000 in 2014. This reflects the large influx of new entrants that were in production for only part of the year. Five microbreweries had a turnover of more than €1m in 2014.



Note: Estimated by the author based on Survey data; refers to 49 microbreweries.

2.6 Future Potential Growth

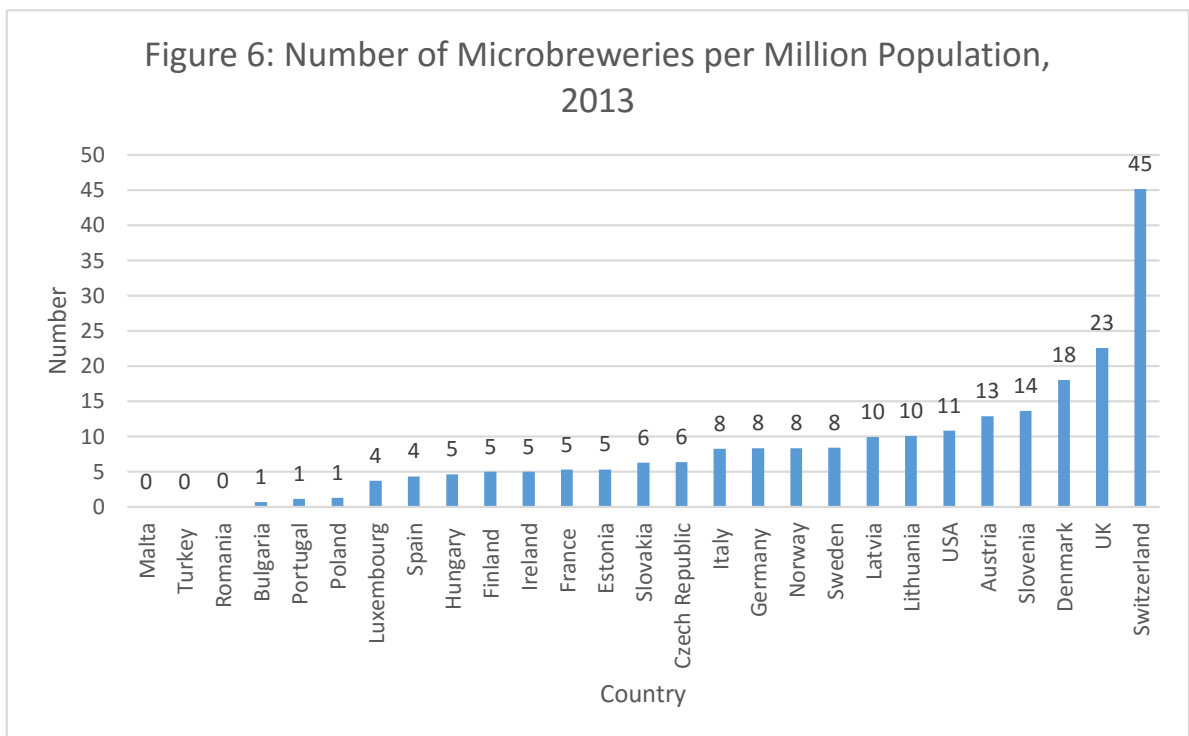
The strong increase in the number microbreweries in 2013/2014 and the current and predicted increases in Irish craft beer share of total beer production and consumption in Ireland raise the question of whether future growth will falter, as the craft beer market

⁴ IBA, Beer Market Report, 2014, 2015

matures. One way of gauging this is by considering the development of Irish microbreweries in an international context.

Looking at the number of microbreweries per million population for various countries for the year 2013, it is clear that Ireland lagged behind other countries with a strong beer drinking culture.⁵ For example at approximately 5 breweries per million population, Ireland had half the rate of the USA, one third that of Denmark and less than one quarter the rate of the UK. Switzerland has a well-developed craft industry at 45 breweries per million population, or over nine times the rate in Ireland.

The fact that the number of microbreweries has doubled between 2013 and 2015 means that Ireland has probably caught up somewhat. Nevertheless, there is clearly scope for further increases in microbrewery numbers if Ireland is to follow the development path of other countries.



Sources: compiled by the author from data provided by Beer Europe, the Brewers Association USA, United Nations statistics as well as survey data.

Another perspective is provided by comparative levels of production of craft beer at home and abroad. Such data are more difficult to obtain. However, the USA experience is well documented. In 2014, American craft beer production accounted for 11% by volume of all beer production. This compares with the equivalent figure of 1.1% for Ireland in the same year. It is clear that on this measure Irish craft beer production has still some way to go, particularly as Irish microbreweries are much more export focused at 25% of total production that their American counterparts at 10%.

⁵ 2013 is the latest year for which data are available.

The likely scenario is that the rate of new entrants to the Irish craft beer market will moderate and 2014 will be seen to be an exceptional year in that regard. However, production will continue to advance, as the sector becomes more export focussed. Already there are signs that a number of microbreweries have or about to expand capacity significantly, with export markets in mind.

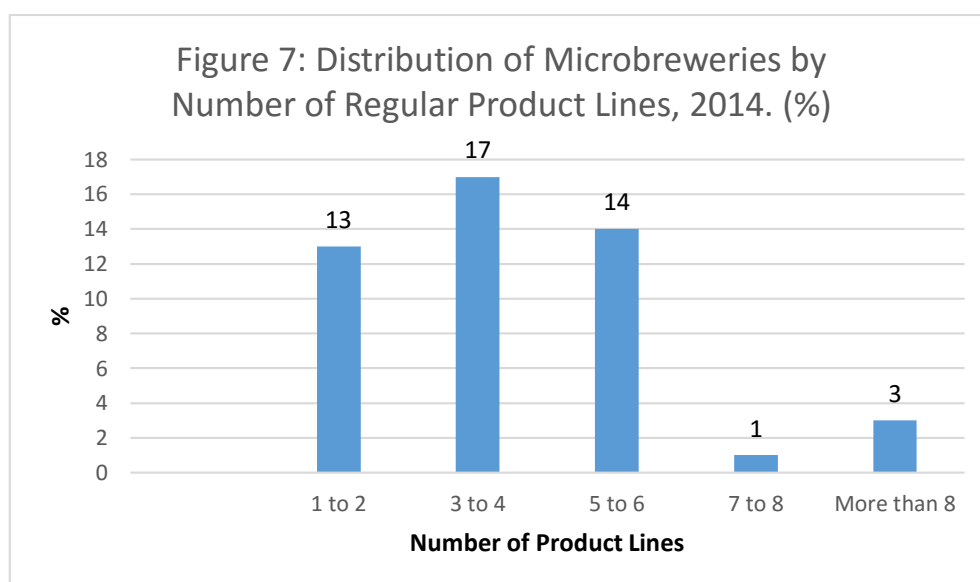
In 2014, 43% of total Irish beer production of 7,288,000 hl was exported⁶, compared to an equivalent 25% for the craft beer sector. As set out in Section 4 below, Irish microbreweries are planning to more than match the export performance of mass market beer within three years.

⁶ IBA, *op.cit.*

3. Operational Characteristics of Microbreweries

3.1 Product Lines

In 2013, it was reported that the typical microbrewery had 3 to 4 regular product lines, with 7 of the twenty-two surveyed having 5 or more.⁷ Figure 7 indicates that the situation is largely unchanged in 2014, although a larger proportion (18 out of 48) have 5 or more regular product lines.



Note: compiled by the author based on Survey and On-Line data for 48 microbreweries

As well as an average of 4 regular product lines, microbreweries have an average of 5 seasonal products.

3.2 Distribution

Microbreweries have a number of distribution channels open to them. They can distribute their product themselves or use a wholesaler/distributor. Table 1 shows that the most common form of distribution is directly through pubs, restaurants and hotels not owned by the brewery: 76.5% of microbreweries use this approach. Almost equally popular are distribution through other retail outlets such as off licences (67.6% of microbreweries) and through wholesaler/ distributors. (73.5%). A significantly lower proportion (35.3%) sell through their own pubs, restaurants and hotels.

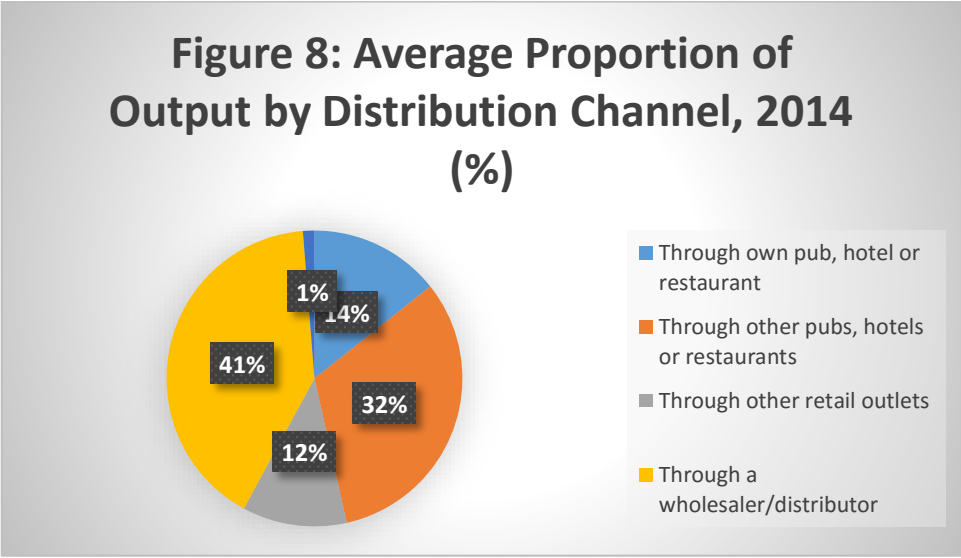
However, some distribution channels are more intensively used than others. Figure 8 shows that 45% of the output of microbreweries is sold through both brewery-owned and other pubs, hotels and restaurants, while 41% is through a wholesaler distributor.

⁷ The Development and Economic Impact of Microbreweries in Ireland. Bernard Feeney for the ICBI, August 2014.

Table 1: Number and Proportion of Product Microbreweries using Various Channels (2015)

Distribution Channel	Number of Product Microbreweries using this Channel	Proportion of Product Microbreweries using this Channel (%)
Through own pub, hotel or restaurant	12	35.3
Through other pubs, hotels or restaurants	26	76.5
Through other retail outlets	23	67.6
Through a wholesaler/distributor	25	73.5

Source compiled by the author: based on the Survey with a total of 34 production microbreweries responding



Source: compiled by the author: based on the Survey with a total of 34 production microbreweries responding

3.3 Packaging

Microbreweries have a number of ways of packaging their product: bottles, cans, kegs or casks. Table 2 sets out the number and proportion of microbreweries using each packaging option. Keg is the most frequently used packaging option (94.1% of microbreweries), with bottle a close second (82.4%). Only three microbreweries in the Survey used cans, which is a packaging option relatively recently introduced.

Table 2: Number and Proportion of Microbreweries using Various Packaging Options, 2014.

Packaging Option	Number of Microbreweries	Proportion
Bottle	28	82.4
Can	3	8.8
Cask	16	47.1
Keg	32	94.1

Note: based on Survey returns for 34 microbreweries

3.4 Employment

Microbreweries in Ireland currently (in mid-2015) employ an estimated 312 people. This means that the microbrewing sector has created 159 extra jobs in the past year.

Of the total of 312 persons employed, 212 represent full time jobs. There are also 74 employed part-time and some 27 on a seasonal basis. Of the 286 persons employed on a regular basis, 68, or almost one quarter, are female.

Some 83% of microbreweries have a staff member with a formal brewing qualification. It is estimated that there are 90 persons in the sector as a whole with formal brewing qualifications, amounting to 42% of all persons employed full-time.

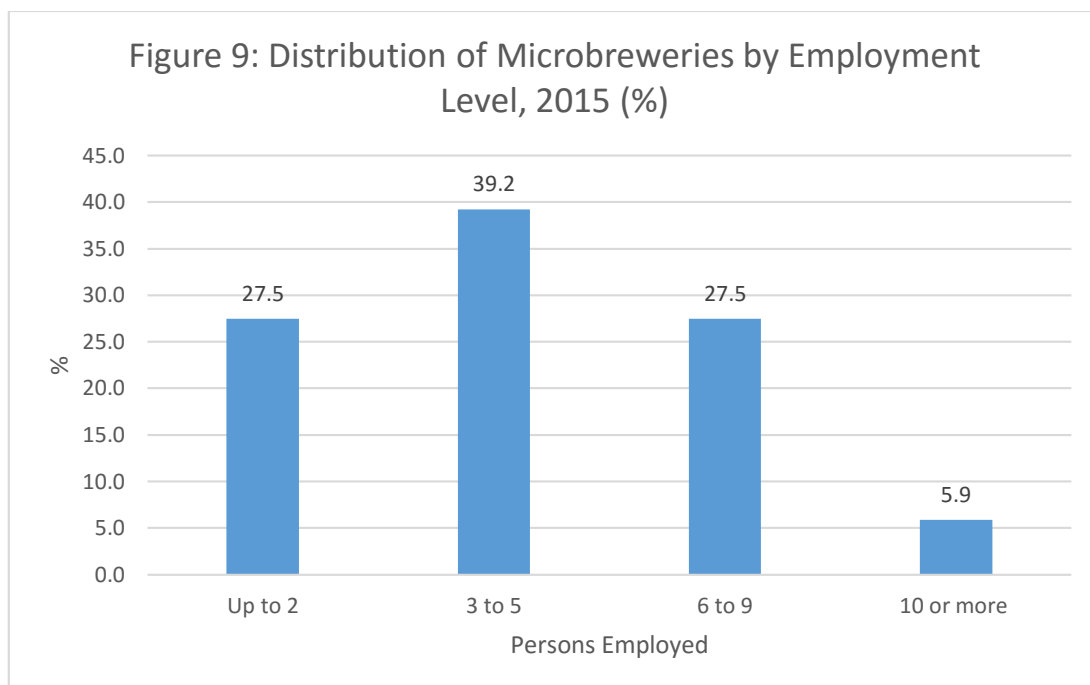
Generally speaking, individual microbreweries employ few people. Just over one-quarter (27.5%) employ two people or less, with just 6% employing 10 or more (See Figure 9).

However, microbrewing is a much more labour intensive activity than conventional large scale brewing. With regard to the brewing industry as a whole, the Irish Brewing Association (IBA) estimate that there were 2,119 full time employees in the industry in 2012 producing 7.3m hl, or 290 full time employees per m hl. ⁸At the current rate of employment, the equivalent figure for the micro-brewing industry would be 1,760⁹. This makes micro-brewing in Ireland six times more labour intensive than macro-brewing.

An associated feature of the micro brewing industry is that it is subject to substantial economies of scale. As plant size increases, operational personnel do not increase in line.

⁸ IBA. The Irish beer industry and its importance to the Irish economy IBA (undated)

⁹ Estimated by the author based on Survey results for 2015 levels of employment and output.



Note: Estimated for 51 microbreweries by the author based on Survey data

This is illustrated in the following table that relates employment in full time equivalents per 1000 hl of production to the level of output from the microbrewery. Very small breweries have high unit labour costs, which diminish somewhat as production levels increase.¹⁰

Microbreweries in the start-up phase are relatively labour intensive. While this has benefits for the economy as a whole, it means that they are subject to higher costs compared to macrobreweries. Even the largest microbreweries are five times more employment intensive than their macro counterparts. This reduces the capacity of the microbreweries to compete. Microbreweries currently benefit from an excise tax rebate of 50%. This is a significant benefit to them in maintaining competitiveness in the face of their cost structure.

Table 3: Employment Intensity of Production

Brewery Annual Output (hl)	Employment per 1,000 hl produced
< 500	8.7
>500 <= 1,000	3.5
>1,000 <=2,000	2.6
>2,000 <=5,000	1.2
>5,000	1.0

Source: compiled from the 2015 and 2014 Surveys

¹⁰ The Society of Independent Brewers in the UK has identified a similar trend: see SIBA. Local Beer Report, 2013

4. Economic Impact

4.1 Direct Employment

Microbreweries provide employment in the brewing process, in marketing and distribution of the product, as well as in general administration. Because many breweries are small or in the start-up phase, they often employ personnel on a part-time basis. Equally, because demand is subject to variation and seasonal products are produced, staff are also employed on an occasional basis.

It is estimated that at current (2015) production levels, microbreweries that are in operation are employing 259 persons on a full time equivalent (FTE) basis.¹¹ Employment in craft brewing has more than quadrupled since 2011. It is highly likely that output of the sector will exceed 500,000hl within four years. Even allowing for a decline in employment intensity, as firm size increases, the total direct workforce in micro-brewing could reach 700 FTEs within that time frame.

4.2 Indirect and Induced Employment

The micro-brewing industry sources over half of its brewing ingredients by value domestically. For example, almost 90% of microbreweries source supplies of malted barley from within the Republic of Ireland, typically amounting to 80% to 90% of all their malted barley inputs.¹² Distribution is another source of local spin-off activity. As was indicated above, 41% of the output of the sector is currently channelled through wholesalers/distributors.

Thus, there are significant downstream benefits for the agricultural and other sectors in Ireland.

By identifying the sectors from which the micro-brewing industry purchases and the use of the CSO's Input-Output tables, it is possible to estimate the wages and salaries to which these purchases give rise.¹³ An indirect employment effect can then be calculated.

This indirect employment was estimated at 260 persons. This means that every person employed in micro-brewing is matched by another in the wider economy that supplies the industry. The craft brewing labour force earns incomes that are spent on goods and services produced in Ireland. The production of these goods and services also gives rise to employment. This induced employment is estimated to amount to 114 persons in 2014. Table 4 summarises the employment created by the micro brewing industry in Ireland in 2015.

¹¹ FTEs are estimated assuming that part-time is one half of full-time and occasional is one sixth.

¹² Based on the Survey

¹³ The CSO Input-Output Tables for 2010 were used

Table 4: Employment in the Micro-brewing Industry in Ireland, 2015 (FTEs)

Category of Employment	Number of Persons Employed
Direct	259
Indirect	260
Induced	114
Total	633

Source: estimated by the author

4.3 Regional Impact

Of the 48 production microbreweries in operation in mid-2015, 9 are in County Cork, compared to 4 in Dublin. There are microbreweries in operation in 21 of the 26 counties. Employment in the micro-brewing industry is thus very widely dispersed throughout the country. It is also worth noting that microbreweries are sited in rural as well as urban areas, which enhances the local employment effect.

Table 5 depicts the current regional distribution as of mid-2015.

Table 5: Number of Production Microbreweries by County, 2015

County	Number of Microbreweries	County	Number of Microbreweries
Carlow	1	Louth	0
Cavan	0	Longford	1
Clare	1	Mayo	3
Cork	9	Meath	2
Donegal	2	Monaghan	1
Dublin	4	Offaly	1
Galway	4	Roscommon	1
Kerry	4	Sligo	1
Kildare	3	Tipperary	1
Kilkenny	0	Waterford	2
Laois	0	Westmeath	0
Leitrim	1	Wexford	2
Limerick	1	Wicklow	3

Source: compiled by the author; refers to breweries in production

4.4 Tax Revenue Benefits

While microbreweries benefit from a tax rebate, they still pay over substantial excise duties to the Revenue Commissioners. Based on an estimate of 65,000 hl produced and consumed in Ireland, it is estimated that microbreweries will pay the Revenue

Commissioners some €3.4m in excise duties in respect of 2014 production, rising to €5.4m in 2015.¹⁴

In addition to the above, the wages that microbreweries pay out give rise to income tax and PRSI payments to the Exchequer. These arise from direct, indirect and induced employment. The anticipated income tax and PRSI which will be paid by the industry and its employees in respect of production in 2015 are set out in Table 6. The micro brewing industry is expected to generate over €2.6m in income tax and PRSI receipts for the Exchequer. This rises to €6.7m when indirect and induced tax and PRSI revenues are taken into account.¹⁵

The tax and PRSI revenues arising from the microbrewery industry at 2015 production levels at €6.7m exceeds the expected excise tax rebate in respect of 2015 production.

Table 6: Summary of Anticipated Income Taxes and PRSI, 2015

Category of Payment	Income Tax (€000)	PRSI (€000)	Total (€000)
Direct	1,495	1,138	2,635
Indirect	1,502	1,338	2,841
Induced	660	589	1,248
Total	3,658	3,066	6,725

Source: estimated by the author

4.5 Contribution to Exports

Of the total microbrewery production of 86,000 hl in 2014, an estimated 21,400 hl was exported, representing almost 25 % of the total. This is an almost doubling of export volumes since 2013.

At 25% the export share of total production reflects the high level of new entrants. These typically start on a small scale and have focus initially on the domestic market, where demand is very strong.

There is evidence, however, the micro-brewing sector is very export focused. Through the efforts of the Carlow Brewing Company and the Porterhouse in particular, Irish craft beer is currently exported to approximately 25 countries.

¹⁴ Based on a 4.7% ABV content.

¹⁵ This assumes that, at the current high rate of unemployment, additional employment in micro-brewing will reduce unemployment numbers by the same amount. The net expenditure gain to the Exchequer in terms of reduced social welfare payments has not been included in the above figures.

Some two-thirds of microbreweries are already exporting, albeit many of them on a small scale as yet. Of the 34 breweries that responded to this element of the Survey, all but three indicated that they would be exporting within three years. On average, and export share of almost 50% of total production are typically being targeted by firms in the sector.

This export orientation in what are very small firms is remarkable. The export potential of the sector is substantial, particularly as Irish beer has a distinctive appeal on foreign markets.

5. Regulatory Barriers

5.1 Overview

The development of the craft brewing industry in Ireland is bringing significant benefits to the Irish economy. Craft brewing is an employment intensive activity that is becoming nationwide and provides much needed employment locally. It makes use of Irish inputs which creates employment spin-offs in the wider economy.

It continues to be a highly taxed commodity, contributing substantial excise duty revenues to the Exchequer. The substantial direct and indirect employment it creates is producing significant tax and social insurance contributions to the Exchequer. Output from the micro brewing industry is currently more than doubling every two years, so it has the potential to become a major element in the Irish drinks industry, with huge benefits to the economy, through increased exports. It has a developing role in tourism and can help to encourage more moderate drinking, with consequent health benefits.

5.2 Barriers to Development

Against this background, microbreweries were asked to indicate the major regulatory barriers that inhibit their development. Table 7 lists their responses in order of frequency of mention. The concerns of microbrewery owners centre on marketing and competition issues, the general regulatory environment and tax policy issues.

Table 7: List of Regulatory Actions Sought

- Allow sales from brewery premises without additional licence
- Reduce duty rate to 50% in place of current rebate system
- Increase the cap for tax relief
- Allow sales from farmer's markets
- Prohibit below cost selling by Macrobreweries
- Introduce legal controls on the use of the terms "craft" and "brewed in Ireland"
- Make granting of full off licences as easy as wine only off licences
- Tax allowances for investment in brewery buildings and plant
- Allow on line sales
- Reduce requirements to provide bond to the Revenue Commissioners

5.2.1 Marketing and Competition

The most common issue raised by the industry is that relating to restrictions on sale of beer to brewery visitors. This is a particular concern among the smaller breweries, who face marketing and distribution challenges. The response of microbreweries to the Survey indicates their belief that there is substantial demand from both indigenous and foreign tourists for a craft beer tasting experience at local microbreweries. Other marketing issues of concern to microbrewers, including the capacity to sell their products at farmers' and other local markets and on-line.

Below cost selling by macro beer producers is seen as a particular problem. It is apparent that some macroproducers offer incentives to pubs to stock and promote their products, through, for example, heavily discounted prices or free products. Even if they wished to do so, the economics of micro-brewing and the absence of substantial scale economies means that this approach to marketing their products is not available to them.

5.2.2 General Regulatory Environment

The industry has shown a healthy growth in start-up activity. There is some evidence that this is faltering with fewer start-ups now in planning (see Section 2 above). While the level of start-up activity that prevailed in 2014 is unlikely to be repeated, it is important that a reasonable level of start-up activity be maintained to ensure continued innovation and competition in the sector. In this context, microbrewers have highlighted the cash flow difficulties that new entrants face and identified two regulatory issues that affect cash flow.

At present, microbreweries benefit from an excise tax rebate of 50%. While this is regarded as vital to the future of microbrewing, the fact that the current tax concession for microbreweries is on a rebate basis creates cash flow problems for all breweries. This is the second most common regulatory issue that microbrewers raise. Microbrewers are seeking the establishment of an excise duty rate of 50% for microbrewers that would obviate the need for a rebate.

A bond, provided by an approved guarantee society or institution, is required by the Revenue Commissioners to cover the excise duty at risk while goods are being held in the tax warehouse. This imposes costs on microbreweries.¹⁶

5.2.3 Taxation Policy

For a number of years, the ceiling below which microbreweries could benefit from a 50% tax rebate was set at 20,000hl. Budget 2015 raised the ceiling to 30,000hl. This was timely as a small number of microbrewers were approaching the ceiling in terms of annual production levels. However, the headroom that this created was relatively small.

The Survey has indicated that an increasing number of microbreweries are engaged in substantial expansion of capacity. Some are planning for or implementing levels of

¹⁶ The Revenue Commissioners have issued new guidance in this area that may mitigate the costs imposed for some microbreweries (See: ADMINISTRATION & CONTROL OF TAX WAREHOUSES MANUAL Part 2 – Breweries, Micro-breweries and Cider Manufacturers. Revenue Commissioners, May 2015).

capacity that will exceed the ceiling as early as 2016. This expansion of productive capacity is focused to an increasing extent on the export market.

To qualify for the rebate, the quantity of beer brewed in the brewery, including beer brewed for export, for consumption and under licence or contract arrangement for another brewery, must not exceed 30,000 hl. This means that if a brewery expands to cater for the export trade, it stands to lose the rebate that it previously enjoyed once its total production exceeds 30,000hl. This, firstly, has the effect of inhibiting the expansion of microbreweries into the export trade, as financial losses accrue once the threshold is breached. Secondly, it undermines the competitiveness of Irish microbreweries as their foreign counterparts are generally subject to a higher ceiling before the rebate is withdrawn from them.

Table 8 presents a categorisation of schemes operating in the EU Member States and identifies the states that are operating different systems. Thirteen Member States operate a scheme with a maximum of 200,000 hl. For the remaining Member States that operate a reduced rate, only Latvia, Hungary and Slovakia employ lower production maxima than Ireland. However, these are countries that impose standard excise duties that are only a fraction of those applying in Ireland.

Table 8: Schemes Operated in other EU Member States

Threshold Employed	Fixed Reduced Rate	Tapered Reduced Rate
200,000hl Maximum	Bulgaria, Greece, France, Malta, Netherlands, Portugal, Romania, Slovakia	Denmark, Belgium, Poland, Luxembourg, Czech Republic
< 200,000hl Maximum	Estonia, Ireland, Latvia, Hungary	UK, Finland, Austria, Germany

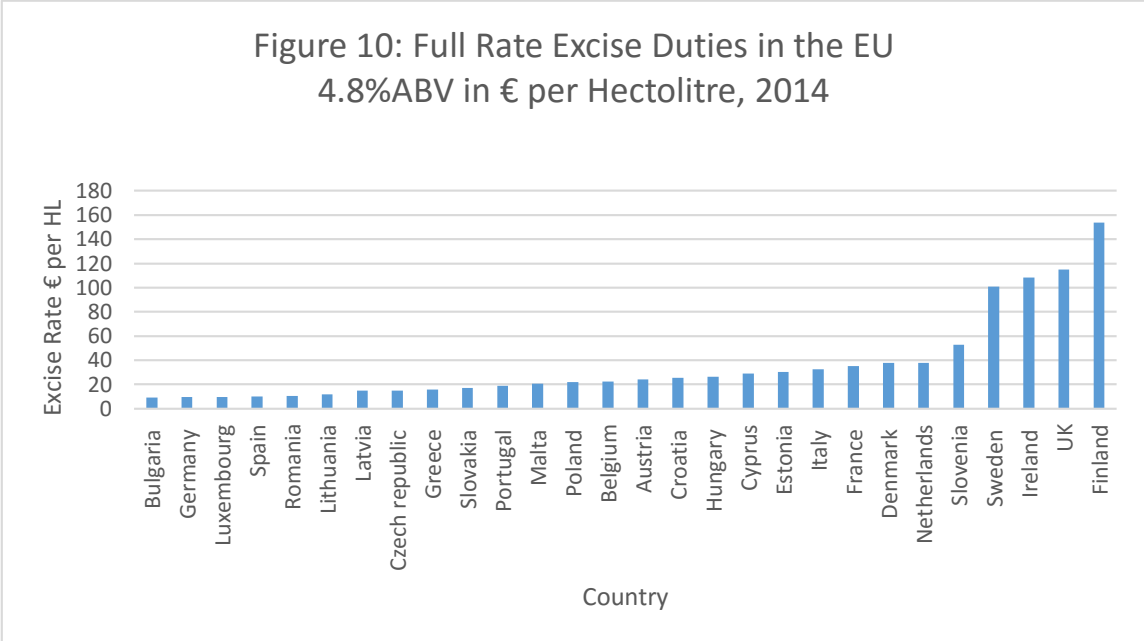
Source: compiled by the author using the European Commission's Excise Duty Tables

The current (2015) excise duty rate is € 22.55 per hl per degree alcohol. This means that beer with an ABV of, say, 4.8% is subject to an excise duty of €108.24 per hl. In addition, VAT, at a rate of 23% is also levied. When these taxes are combined, over one-quarter

of the retail price of beer is made up of tax. The excise duty rate in Ireland is over twelve times the minimum rate laid down in relevant EU legislation.¹⁷

These are very high tax rates by comparison with other EU countries. As may be seen from Figure 10 below, Irish excise duty rates are among the highest in the EU, exceeded only by those of the UK and Finland. Only Denmark, Finland and Sweden impose higher VAT rates.

Thus, with the exception of the UK and Finland, Member States that operate a rebate ceiling below 200,000hl have a lower underlying excise duty.



Source: compiled by the author using the European Commission’s Excise Duty Tables

There is a need for government to undertake a more thorough-going review of the tax rebate system, both in terms of its structure and administration. Consideration should be given to introduction a significantly higher ceiling for the 50% rebate, with a tapered reduction in the rebate up to the EU ceiling of 200,000hl.

¹⁷ Directive 92/84/EEC

6. Conclusions

Development of the Microbrewery Sector

- It is estimated that there are 63 microbreweries operating in Ireland, of which 48 are production microbreweries and 15 are contracting companies. There has been a 50% increase in the number of production microbreweries from 32 in 2014 to 48 in 2015.
- As many as 22 new production microbreweries commenced production in 2014. This exceptionally high rate of new entry of 2014 will not be sustained. However, by end year 2015, the total number of production microbreweries may have risen to approximately 58.
- The output of craft beer by production microbreweries amounted to some 86,000 hl in 2014. This represents a 71% increase on the 2013 figure of 49,000hl. Between 2011 and 2014, the output of production microbreweries rose by more than threefold.
- Given the influx of new firms in 2014 and capacity expansion among older firms, output is expected to rise substantially in 2015 to 145,000hl, an increase of over 70%.
- Microbreweries are forecasting a further 64% increase in output to 241,000hl in 2016.¹⁸ The strong growth in output over this period is expected to be driven largely by the expansion plans of the more mature medium to larger size microbreweries.
- Microbreweries in Ireland are as yet relatively small in size. Of the 44 breweries in production at any time in 2014, over 50% produced 500hl of beer or less in that year. The large number of microbreweries with very low level of production is due to the large number of new entrants that were in production for only part of the year.
- However, the size of microbreweries is on the increase. In 2014, 11 microbreweries or almost one quarter had production in excess of 2,000hl as against only 4 such breweries in 2013.
- Given the growth in microbrewery production to 86,000hl in 2014, the share of craft beer in total beer production was 1.2% in 2014. With the current and anticipated trends in craft beer production, the Irish craft beer market share is likely to reach 2.0% and 3.3% in 2015 and 2016 respectively.

¹⁸ It should be noted that the 2015 and 2016 output estimates do not take account of the output of new entrants in the second half of 2015 and during 2016.

- Turning to the consumer market for beer in Ireland, the Irish microbrewery share of this market rose to 1.4% in 2014. The projected Irish craft beer share of total beer consumption is predicted to rise to 2.3% by 2015 and 3.4% by 2016.
- The turnover of craft beer producers in 2014 is estimated at €23m and at a projected €39.6m for 2015. One quarter of all microbreweries had a turnover of less than €50,000 in 2014. This reflects the large influx of new entrants that were in production for only part of the year. Five microbreweries had a turnover of more than €1m in 2014.
- In terms of the number of microbreweries per million population, Ireland has lagged behind other countries that have a strong beer drinking culture.¹⁹ For example at approximately 5 breweries per million population in 2013, Ireland had half the rate of the USA, one third that of Denmark and less than one quarter the rate of the UK. Switzerland has a well-developed craft industry at 45 breweries per million population, or over nine times the rate in Ireland.
- The fact that the number of microbreweries has doubled between 2013 and 2015 means that Ireland has probably caught up somewhat. Nevertheless, there is clearly scope for further increases in microbrewery numbers if Ireland is to follow the development path of other countries.
- In 2014, American craft beer production accounted for 11% by volume of all beer production. This compares with the equivalent figure of 1.2% for Ireland in the same year. It is clear that, on this measure, Irish craft beer production has still some way to go, particularly as Irish microbreweries are much more export focused at 25% of total production than their American counterparts at 10%.
- The rate at which new firms enter the Irish craft beer market is expected to moderate. However, production will continue to advance, as the sector becomes more export focussed. Already there are signs that a number of microbreweries have or are about to expand capacity significantly to facilitate increased exports.

Operational Characteristics of Microbreweries

- In 2013, it was reported the typical microbrewery had 3 to 4 regular product lines. The situation is largely unchanged in 2014, although a larger proportion (18 out of 48 product microbreweries) have 5 or more regular product lines.
- Microbreweries can distribute their product themselves or use a wholesaler/distributor. The most common form of distribution is directly through pubs, restaurants and hotels not owned by the brewery: 76.5% of microbreweries use this approach. Almost equally popular are distribution through other retail

¹⁹ 2013 is the latest year for which data are available.

outlets such as off licences (67.6% of microbreweries) and through wholesaler/distributors. (73.5%). A significantly lower proportion (35.3%) sell through their own pubs, restaurants or hotels.

- However, some distribution channels are more intensively used than others. Some 45% of the output of microbreweries is sold through both brewery-owned and other pubs, hotels and restaurants, while 41% is through a wholesaler distributor.
- Microbreweries have a number of ways of packaging their product: bottles, cans, kegs or casks. Keg is the most frequently used packaging option (94.1% of microbreweries), with bottle a close second (82.4%). Only three of the microbreweries surveyed used cans, which is a relatively recently introduced packaging option.
- Microbreweries in Ireland currently (in mid-2015) employ an estimated 312 people. This means that the microbrewing sector has created 159 extra jobs in the past year.
- Of the total of 312 persons employed, 212 represent full time jobs. There are also 74 employed part-time and some 27 on a seasonal basis. Of the 286 persons employed on a regular basis, 68 or almost one quarter are female.
- Some 83% of microbreweries have a staff member with a formal brewing qualification. It is estimated that there are 90 persons in the sector as a whole with formal brewing qualifications, amounting to 42% of all persons employed full-time.
- Micro-brewing in Ireland is almost six times more labour intensive than macro-brewing.

Economic Impact of Microbreweries

- Microbreweries that are in operation in 2015 are employing 259 persons on a full time equivalent (FTE) basis. Employment in craft brewing has more than quadrupled since 2011.
- It is highly likely that output of the sector will exceed 500,000hl within four years. Even allowing for a decline in employment intensity, as firm size increases, the total direct workforce in micro-brewing could reach 700 FTEs within that time frame.
- The micro-brewing industry sources over half of its brewing ingredients by value domestically. For example, in 2014, almost 90% of microbreweries sourced

supplies of malted barley from within the Republic of Ireland, typically amounting to 80% to 90% of all their malted barley inputs.

- Distribution is another source of local spin-off activity. 41% of the output of the sector in 2014 was channelled through wholesalers/distributors. Thus, there are significant downstream benefits for the agricultural and other sectors in Ireland.
- As well as employing 256 FTEs directly, indirect employment was estimated at 260 persons for 2015. This means that every person employed in micro-brewing is matched by another in the wider economy that supplies the industry.
- There are microbreweries in operation in 21 of the 26 counties. Employment in the micro-brewing industry is thus very widely dispersed throughout the country. Microbreweries are sited in rural as well as urban areas, which enhances the local employment effect. Of the 48 production microbreweries in operation in mid-2015, 9 are in County Cork, compared to 4 in Dublin..
- While microbreweries benefit from a tax rebate, they still pay over substantial excise duties to the Revenue Commissioners. It is estimated that microbreweries will pay the Revenue Commissioners some €3.4m in excise duties in respect of 2014 production, rising to €5.4m in 2015.²⁰
- In addition to the above, the wages that microbreweries pay out give rise to income tax and PRSI payments to the Exchequer. The micro brewing industry is expected to generate over €2.6m in income tax and PRSI receipts for the Exchequer in 2015. This rises to €6.7m when indirect and induced tax and PRSI revenues are taken into account.
- The tax and PRSI revenues arising from the microbrewery industry at 2015 production levels at €6.7m exceeds the expected excise tax rebate in respect of 2015 production.
- Of the total microbrewery production of 86,000 hl in 2014, an estimated 21,400 hl was exported, representing almost 25 % of the total. This is an almost doubling of export volumes since 2013.
- Some two-thirds of microbreweries are already exporting, albeit many of them on a small scale as yet. On average, microbreweries are targeting an export share of almost 50% of total production.

Regulatory Issues

- The most common issue raised by the industry is that relating to restrictions on sale of beer to brewery visitors. This is a particular concern among the smaller

²⁰ Based on a 4.7% ABV content.

breweries, who face marketing and distribution challenges. In responding to the Survey, microbreweries indicated their belief that there is substantial demand from both indigenous and foreign tourists for a craft beer tasting experience at local microbreweries.

- Other marketing issues are of concern to microbrewers, including the capacity to sell their products at farmers' and other local markets and on-line. Below cost selling by macro beer producers is seen as a particular problem.
- At present, microbreweries benefit from an excise tax rebate of 50%. While this is regarded as vital to the future of microbrewing, the fact that the current tax concession for microbreweries is on a rebate basis creates cash flow problems for all breweries. This is the second most common regulatory issue that microbrewers raise. Microbrewers are seeking the establishment of an excise duty rate of 50% for microbrewers that would obviate the need for a rebate.
- For a number of years, the ceiling below which microbreweries could benefit from a 50% tax rebate was set at 20,000hl. Budget 2015 raised the ceiling to 30,000hl. This was timely as a small number of microbrewers were approaching the ceiling in terms of annual production levels. However, the headroom that this created was relatively small.
- An increasing number of microbreweries are engaged in substantial expansion of capacity. Some are planning for or implementing levels of capacity that will exceed the revised ceiling as early as 2016. To qualify for the rebate, the quantity of beer brewed in the brewery, including beer brewed for export, for consumption and under licence or contract arrangement for another brewery, must not exceed 30,000 hl. This means that if a brewery expands to cater for the export trade, it stands to lose the rebate that it previously enjoyed once its total production exceeds 30,000hl. This is a significant disincentive to invest in export capacity.
- There is a need for government to undertake a more thorough-going review of the tax rebate system, both in terms of its structure and administration. Consideration should be given to introduction a significantly higher ceiling for the 50% rebate, with a tapered reduction in the rebate up to the EU ceiling of 200,000hl.

Appendix 1: List of Responding Microbreweries

12 Acres Brewing Company
Black Donkey Brewing
Blacks Brewery
Bo Bristle
Bru Brewery
Burren Brewery (Roadside Tavern)
Carlow Brewing Company
Carrig Brewing Company
Dungarvan Brewing Company
Eight Degrees Brewing
Four Provinces Brewing Company
Franciscan Well Brewery
Galway Bay Brewery
Galway Hooker Brewery
Independent Brewing Company of Ireland
Jack Cody's Brewery
Kelly's Mountain Brew
Kinnegar Brewing Company
Metalman Brewing Company
Mountain Man Brewing
O Brother Brewing
Porterhouse Brewing Company
Rascal's Brewing Company
Reel Deel Brewery
Rye River Brewing Company
St. Mel's Brewing Company
Stone Barrel Brewing Company
Torc Brewing Company

Treaty City Brewing

West Cork Brewing Company

West Kerry Brewery

White Gypsy

Wicklow Brewery

Wicklow Wolf Brewing Company

Appendix 2: Organisation of the Survey

Introduction

This Appendix summarises the approach adopted to the Survey of microbrewing companies.

Identifying the Population

The first task was to identify the population of microbrewing companies to be surveyed. Although the emphasis was on the establishing the volume of craft beer produced in Ireland by production microbreweries, it was also considered useful to survey contracting companies where possible. Based on an internet search and industry sources, a list of microbrewing companies was developed. This list identified 48 production microbreweries and 15 contracting companies that were in operation in May 2015 – a total of 63 companies in all.

Survey Methodology

The Survey was undertaken electronically using Survey Monkey. A questionnaire was developed and dispatched to respondents via Survey Monkey. Respondents could then fill in the survey electronically by ticking boxes in respect of closed questions or writing in answers.

Sample Size

As the number of companies in the population was not large, the original intention was to survey all 63 companies. In the event reliable e-mail addresses could not be established for a small number, so that 56 companies were included in the sample. Of these, 48 were production breweries and 8 were contract. Thus, all the production breweries thought to be in operation were surveyed.

Questionnaire

A questionnaire was developed for use in Survey Monkey. The emphasis was on the use of closed questions, so that the response could be in the form of ticking boxes. A copy of the questionnaire is attached. It was designed so that it could be completed in approximately five minutes if respondents had the information to hand.

Survey Response

Of the total of 56 companies surveyed, 37 made a return – a response rate of over 65%. Of the 48 production microbreweries, 32 made a return, compared to five of the eight contract companies. However, in three cases the companies did not complete the questionnaire to a significant degree, reducing the fully usable returns to 30 and four respectively.

Of the 18 production microbreweries that did not make a usable return, 10 had commenced production during 2014. They may have felt that they had little to report.

Production Estimation Methodology

One of the purposes of this Report was to track the output from Irish microbreweries. As 2014 is the last full calendar year, the estimation of output in that year was a key focus of the Report. This estimate was made in the following manner.

Of the 48 production microbreweries surveyed, two had not commenced production until 2015. Of the remaining 46, 29 provided a direct estimate of 2014 production from the Survey. A further 6 breweries had responded to the 2014 Survey and an estimate was available from this source. This meant that there was a direct production estimate available for 35 of the 46 breweries. The missing 11 breweries predominately commenced production in 2014. For five of these 11 breweries, information on their production capacity was available from their website and this was used to determine their full annual output. Their 2014 output was then estimated by factoring for the number of months of operation in 2014. The output for the remaining seven breweries was obtained by comparing them to similar breweries for which data was available: for example, the production estimate for two brewpub/hotels was made by reference to Survey data for similar operations, factoring, where appropriate, for the number of operational months in 2014.

Appendix 3: Survey Questionnaire

Dear Sir/Madam

This is a survey of independent breweries being undertaken on behalf of the Independent Craft Brewers of Ireland by economic consultant Bernard Feeney. The main purpose of the survey is to obtain information to support submissions to Government for action to the benefit of craft brewers. Last year, the survey report proved to be influential in persuading Government to make budgetary changes to the benefit of micro-brewers. (a copy of the report is available at:

www.icbi.ie/uploads/4/1/0/7/41075859/economic_impact_craft_brewing_in_ireland.pdf

Given the strong growth in the industry, there is a need to update the findings to support dialogue with the media, public, other industry stake holders, etc.

The survey will take only a few minutes to complete and **the results will be treated in the strictest confidence**. Individual breweries or the data that they provide will be kept confidential by the consultant and will not be revealed to any third party or in any publication or press release arising from the survey. If you have any questions about this survey, you may contact the consultant Bernard Feeney (tel. 353-1-872933115 or email. feeneybernard@gmail.com).

1. Are you currently?

Producing some or all of your beer with your own brewing equipment?
Contracting **all** of the production of beer to another company
Still in planning and development stage

2. Please state the year in which your company commenced production of craft beer
Year

3. What was your total production of craft beer in the calendar year 2014 in hectolitres?
(Please include all beer output produced by you for other companies)
Production in hectolitres in 2014

4. What is your anticipated total production of craft beer in the calendar year 2015 in hectolitres?
(Please include all beer output produced by you for other companies)
Production in hectolitres in 2015

5. What is your projected total production of beer in the calendar year 2016 in hectolitres?
Projected production in hectolitres in 2016

6. What in hectolitres is your weekly potential production capacity with your current brewing plant?
Weekly production capacity in hectolitres

7. Please state the year in which you expect to commence production or sale of beer
Year

8. Please state the year in which your company commenced sale of beer

Year

9. How many product lines are you currently producing?

on a regular basis?
seasonal or occasional?
in total?

10. Which of the following container types do you use to deliver your beer to the market? (tick all that apply)

Bottle
Can
Cask
Keg

11. Do you currently export any of your output?

yes
No

12. If you currently export, what percentage (%) of your total output volume is exported?
%

13. What proportion (%) of your own production do you expect to be exporting in three years time?

%

14. If you do not currently export, do you have plans to do so within the next three years?

Yes
No

15. What proportion (%) of your own production do you expect to be exporting in three years' time?

%

16. How many persons are currently employed in your business?

(Please include owners/managers where appropriate)

On a full time regular basis?
On a part time regular basis?
On a seasonal or occasional basis?
In total?

17. Of all persons employed, how many are

Male
Female

18. Of all persons employed, how many have a formal brewing qualification?

Number of persons

19. What proportion (%) by value of your purchases of the following ingredients was sourced from producers in the Republic of Ireland in 2014?

Malted Barley
Hops

20. What proportion (%) of your sales by volume are sold:

Directly by your company
through your own pub, hotel or restaurant
Directly by your company through other pubs, hotels or restaurants
Directly by your company through other retail outlets (e.g., off licences, shops)
Indirectly through a wholesaler/distributor
Other

21. What was your total annual turnover from your sale of craft beer in 2014?

(Please give your answer to the nearest €000. e.g. if your revenue was €275,342, enter 275)
Amount in €000?

22. Or indicate a range of 2014 turnover value by ticking one of the boxes below.

Less than €100,000
€100,000 to €250,000
€250,000 to €500,000
€500,000 to €1m
€1m to 2m
€2m to €3m
€3m to €4m
€4m to €5m
€5m or more

23. What legislative or regulatory changes would most benefit your business? Please answer briefly in the space below)

24. If you wish to make any further comments, please do so in the box below.