



NAO
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Report by the
Comptroller and
Auditor General

HM Customs and Excise: Beer Duty

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National Audit Office
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The Comptroller and Auditor General is the head of the National Audit Office employing some 900 staff. He, and the NAO, are totally independent of Government. He certifies the accounts of all Government departments and a wide range of other public sector bodies; and he has statutory authority to report to Parliament on the economy, efficiency and effectiveness with which departments and other bodies use their resources.

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Summary and Conclusions

1. Beer duty generates over £2 billion a year to the Exchequer or about one and a half per cent of all Government revenue from taxation. It is charged at an early stage in the brewing process on the quantity and original gravity of worts produced (*see Footnote*). The Department are concerned that the methods used to determine the original gravity of worts have become unreliable. In addition, the six per cent wastage allowance which is part of the charging provision and is intended to cover normal production losses occurring after the point at which duty is assessed, may be generous for some brewers when compared to actual wastage rates.

2. The National Audit Office examination sought to cover the following issues:

- (a) the present method of levying beer duty and whether the six per cent allowance is still appropriate;
- (b) what consideration has been given to alternative methods of levying duty on beer and the implications any changes would have for the Department and the brewing industry.

The National Audit Office investigation involved discussions with HM Customs and Excise, the Brewers' Society, the Small Independent Brewers' Association, the Campaign for Real Ale Ltd and five individual brewers.

3. In April 1990, as this Report was being prepared, HM Customs and Excise issued a consultative paper on the structure of beer duty in the 1990s and beyond. The paper highlights the shortcomings in the present duty system and suggests ways in which they could be overcome. The Department invited interested parties to submit their views and comments by 8 June 1990. The results of the consultation exercise will be announced as soon as possible.

Main findings

4. The National Audit Office found that:

On the present worts-based duty system

(a) The wastage allowance was introduced in 1880 and cost the Exchequer £125 million in 1988–89. HM Customs and Excise do not have detailed information on brewers' wastage rates and cannot therefore satisfy themselves that the wastage allowance is currently pitched at the right level. They have from time to time undertaken limited surveys but the last of these was in 1974 (paragraphs 2.10 to 2.15).

(b) The National Audit Office could not obtain evidence from brewers' records to establish actual wastage rates; but a Brewers'

Footnote: Worts are the produce of brewing before the addition of yeast converts the liquid by fermentation to beer.

Society survey in 1984 concluded that average losses by their members were 6.7 per cent on beer sold in the UK and 7.3 per cent on export beer. The Small Independent Brewers' Association believe that small brewers' losses range from three to 10 per cent (paragraphs 1.14 and 2.16 to 2.18).

(c) The determination of the original gravity of worts is becoming more difficult and the distillation analysis method is in need of overhaul (paragraph 2.23).

(d) The present duty system is inflexible, necessitating detailed regulation of the brewing process and an unwieldy system of allowances and reliefs. This rigidity makes it difficult to accommodate technological innovations (paragraph 2.24).

(e) The European Commission consider that flat rate wastage allowances inevitably lead to some degree of unfair competition between Member States (paragraphs 2.25 and 2.26).

(f) The Brewers' Society and the larger brewers visited by the National Audit Office were generally satisfied with the present system and considered that it worked quite well in practice. The Brewers' Society also felt that the system was simple to operate. They considered that the wastage allowance was pitched at the right level and was fair as between one brewer and another (paragraphs 2.27 and 2.30).

(g) The Small Independent Brewers' Association, the Campaign for Real Ale Ltd and the smaller brewers visited by the National Audit Office felt that the current system needed bringing up to date. They believed that the six per cent wastage allowance discriminated against the smaller brewer. And they told the National Audit Office that the early duty point causes cash flow problems and is detrimental to beer quality (paragraphs 2.28 to 2.30).

On the alternatives to the present system

(h) Changes to the existing structure of beer duty are limited either to reform of the present worts-based system or to the introduction of an end product duty regime (paragraph 3.2).

(i) Reform of the present system would remedy or reduce some of its unsatisfactory features but:

- inaccuracies inherent in the methods for obtaining representative samples and measuring the original gravity of worts would remain;
- the early duty point would continue to create problems when new developments arose;
- administration and monitoring costs would increase (paragraphs 3.3 to 3.5).

(j) Introduction of an end product duty system would:

- bring the duty into line with the Department's strategy for the control of other Excise duties, based on audit of

commercial records and systems rather than physical inspections;

- provide flexibility to deal with future developments in the brewing industry;
- enable the unwieldy system of allowances and reliefs to be eliminated;
- reduce official interference in day to day brewing operations;
- improve cash-flow for the brewing industry;

but it could also:

- increase the number of premises which would need to be registered with HM Customs and Excise;
- involve greater revenue risk from the circulation of a larger amount of beer upon which duty had not been paid (paragraphs 3.6 to 3.12).

(k) The Department recognise the advantage of moving to an end product duty system but are awaiting the completion of the consultation process before determining the administrative and compliance costs of such a regime as compared with the present or a reformed worts-based system. For the same reason they have yet to quantify the increased revenue risk involved or the benefits to industry of possible changes (paragraph 3.13).

Overall conclusions

5. On the limited and contradictory evidence available the National Audit Office found that it was not possible to establish whether the current six per cent allowance is too high or too low. There is strong evidence to suggest, however, that wastage rates vary considerably between one brewer and another. Variations in losses between individual brews and between individual brewers depend on the nature and extent of the processing required to prepare the beer for sale as well as the efficiency of the brewer. In the National Audit Office's view, therefore, a fixed rate deduction inevitably favours some brewers and disadvantages others.

6. HM Customs and Excise have identified a number of weaknesses in the present beer duty system which have been exacerbated by recent developments in the brewing industry. The Department are now undertaking a fundamental review of the system. This would seem particularly timely as the European Commission seek to harmonise the various national Excise duty systems of the Member States in the build up to the single European market in 1992.

7. The National Audit Office note the operational advantages seem to point very strongly to the introduction of an end product duty system although the costs and benefits of such a system are not yet fully identifiable. However, when they are identified and quantified they will become important elements in the Department's consideration of possible changes in the light of responses to the consultative paper.

Part 1: Introduction

1.1 Beer has been taxed for hundreds of years. A form of ale tax existed at the time of the Magna Carta and Excise duty on beer was first imposed in 1643 — as a temporary measure — to provide funds for the Civil War. In 1988–89 HM Customs and Excise collected some £2,200 million from this source, about one and a half per cent of all Government revenue from taxation. The duty on a typical pint of beer is around 21 pence and accounts for some 70 per cent of the production cost or about 20 per cent of the retail price.

1.2 Beer is made by mixing malted barley with hot water to produce a sweet extract called “wort”. Hops are added and the mixture boiled. After cooling, the wort is run into fermenting vessels where yeast is added. The yeast works for several days after which time the wort has become beer. After a period of maturing, the beer passes through a number of conditioning and finishing processes before being put into bottles, cans, kegs, casks or tanks.

1.3 Beer duty is charged on the wort in the collecting or fermenting vessels prior to fermentation. The quantity and original gravity of the wort determine how much duty is to be paid. When calculating the duty payable, brewers deduct a wastage allowance of six per cent from the quantity collected. This allowance, instituted in 1880, is intended to cover normal spoilage and losses incurred in processing and packaging beer subsequent to the duty point. In 1988–89 it reduced the duty liability by about £125 million.

1.4 In recent years the Department have become increasingly concerned as to the reliability of the methods used to determine the original gravity of worts. They also believe that, for some brewers, the wastage allowance may be too generous, taking into account the improvement in production methods since 1880, together with the greater concentration of production.

The scope of the National Audit Office study

1.5 Against this background, the National Audit Office sought to examine:

- (a) the present method of levying beer duty

and whether the six per cent allowance is still appropriate (Part 2 of the Report);

- (b) what consideration has been given to alternative methods of levying duty on beer and the implications any changes would have for the Department and the brewing industry (Part 3).

1.6 In the National Audit Office’s view, the key requirements for administering a system for levying tax or duty are that:

- (a) the system should be cost-effective for the Department to administer and control;
- (b) compliance with the law should involve the minimum of disruption to legitimate trade; and
- (c) taxpayers should be treated equitably under the law.

1.7 In April 1990, as the National Audit Office Report was being prepared, HM Customs and Excise issued a consultative paper on the structure of beer duty in the 1990s and beyond. The paper focuses on the shortcomings of the present structure; explores ways to resolve some of the problems within the framework of the existing system; and examines the merits of an alternative “end product duty” system (a duty on the finished beer). The Department invited interested parties to submit their views and comments by 8 June 1990. The results of the consultation exercise will be announced as soon as possible.

The statutory framework

1.8 The Alcoholic Liquor Duties Act 1979 and the Beer Duty Regulations 1985 contain the main legislation relating to beer duty. The annual Finance Acts specify any changes to duty rates. Since December 1985, brewers have been required by law to calculate and record their own duty liability each time they brew and to make a monthly declaration and payment to HM Customs and Excise.

1.9 Currently, duty is charged on the quantity and original gravity of the worts produced (less the six per cent wastage allowance) at a rate of 97 pence per hectolitre for each degree of original gravity

above 1000 degrees — equivalent to the specific gravity of pure water. Beer with an alcoholic strength not exceeding 1.2 per cent by volume is not chargeable with duty.

Other reviews

1.10 Over the last year, beer duty has been a subject of two important initiatives:

(a) In 1989 the Monopolies and Mergers Commission reported on the supply of beer for retail sale in the United Kingdom. Although primarily concerned as to whether a monopoly existed in the industry, their report did cover aspects of the beer duty structure.

(b) The European Commission have been seeking progressively to harmonise the various national Excise duty systems and rates for tobacco, spirits, wine and beer in the build up to the single European market in 1992.

The brewing industry

1.11 The UK brewing industry has changed radically since the turn of the century when there were around 1,500 commercial brewers with an annual production of 37 million barrels (a barrel is a standard measure equivalent to 36 gallons). In 1988–89 annual production was much the same at 36 million barrels but mergers, amalgamations and closures had reduced the brewing population to about 220. In their 1989 report, the Monopolies and Mergers Commission categorised these present-day brewers into five groups:

(a) Six national brewers with an extensive brewer-owned retail estate and whose business extends over much of the United Kingdom. These six largest brewers account for over 75 per cent of UK beer production.

(b) Three brewers without a tied retail estate whose main business is the brewing of beer for sale to other brewers or wholesalers. These three supply 8 per cent of production.

(c) Eleven regional brewers whose business is

mainly concentrated in one part of the country and who account for a further 11 per cent of production.

(d) Forty-one local brewers whose main business is in one locality and who account for 6 per cent of production.

(e) About 160 small brewers, often serving just one public house, and representing less than 1 per cent of total production.

All the brewers in the first four categories belong to the main trade association, the Brewers' Society. Most of the remainder belong to the Small Independent Brewers' Association.

1.12 The changes in the structure of the industry have been accompanied by significant changes in the types of beer produced and in beer processing. For example, lager production has increased from less than 10 per cent of beer production in 1971 to about 50 per cent in 1988. There has also been a move in recent years towards high gravity brewing. This involves the production of beer with a high alcoholic content which is then diluted with water.

Sources of information

1.13 The National Audit Office examination involved visits to HM Customs and Excise headquarters and a selection of local offices. To gain a broader view of the subject matter in this report the National Audit Office also discussed the main issues with the Brewers' Society, the Small Independent Brewers' Association and the Campaign for Real Ale Ltd. The National Audit Office also visited five individual brewers, nominated by the Society and the Association, ranging from the very large to the very small.

1.14 However, the Comptroller and Auditor General does not have statutory rights of access to traders' records. The National Audit Office were therefore unable to verify any wastage rates recorded within Departmental files or provided by the various bodies contacted or by individual brewers.

Part 2: The present method of levying beer duty

2.1 This Part of the Report examines the current worts-based method of levying beer duty. The National Audit Office sought views and comments from HM Customs and Excise and the brewing industry on the advantages and disadvantages of the present system.

The worts-based system of levying beer duty

2.2 Almost the entire brewing process is prescribed by Customs and Excise law. Before starting to manufacture beer, a commercial brewer must apply to the Department for a licence to become a "brewer for sale". The licence is issued free and brewing operations may commence when the brewery premises and brewing vessels, calibrated to an acceptable standard, have been notified to the Department.

2.3 The materials to be used in brewing must be notified to the Department and the brewer must give 48 hours' notice of his intention to brew. Once the brewer has begun to collect worts in the collecting or fermenting vessel, the whole collection should be completed within 12 hours, or such other period as agreed by the Department. Worts must then remain in this vessel for a further period of 12 hours or until the Excise Officer has taken account of the worts, whichever is earlier.

2.4 Within one hour of the completion of collection, the brewer must measure the volume and original gravity of the worts and declare this to HM Customs and Excise. Original gravity may be measured directly using a saccharometer or, if fermentation has begun due to the early addition of yeast, determined by distillation analysis. Standard conversion tables are available for this calculation.

2.5 At the end of each month, the brewer is required to work out and compare the duty payable in two ways:

- (a) from the measurements of the volume and original gravity of the worts collected;
- (b) from the total volume of worts deemed to have been produced from the materials used (known as the materials charge).

Duty is payable on the higher of these two quantities. It is extremely rare for duty to be levied on the basis of the materials charge.

2.6 The brewer then makes a return to HM Customs and Excise of the duty owing. Under duty deferment arrangements, duty payment is required no later than the 25th day of the following month. Very occasionally the deferment period is extended for some high gravity beers which take longer to ferment and mature. If duty is not paid by the due date, deferment can be withdrawn and immediate payment required on each collection of worts.

2.7 In calculating his duty liability, the brewer deducts a statutory six per cent flat rate wastage allowance. In addition, he may be eligible to claim the following:

- (a) lost or spoilt beer relief;
- (b) alcoholic ingredients relief;
- (c) drawback of duty, for example on exported beer.

The purposes and costs of these items are given in paragraphs 2.10 to 2.12 and 2.19 to 2.21 below.

HM Customs and Excise control

2.8 Departmental control of brewers and beer is exercised by a mixture of regular physical and documentary checks, according to the assessed degree of risk to the revenue. These checks include inspecting the brewer's premises, plant and operations; checking declarations and returns by, for example, measuring the volume and original gravity of worts; sampling of materials and produce for analysis by the Government Chemist; and examining the brewer's brewing, stock and commercial records.

2.9 In exercising control, the Department's main objectives are to ensure that:

- (a) all beer production is correctly assessed for duty by the brewer;
- (b) all the amounts due are collected; and
- (c) relief is afforded only in eligible cases.

The Department recognise the need for their controls to be carried out as efficiently and effectively as possible and with the minimum imposition on legitimate trade.

The six per cent wastage allowance

2.10 The six per cent wastage allowance was introduced in 1880. It is intended to cover normal spoilage and losses incurred in processing and packaging beer subsequent to the duty point. The Department do not know the exact reasons why the allowance was set at six per cent but they believe that it reflected the average of such losses which were current for the industry and brewing technology of the time.

2.11 The legislation does not specify the types of loss covered by the six per cent allowance. However, HM Customs and Excise consider that the allowance should cover:

- (a) normal losses during the fermentation, conditioning, racking and packaging of beer;
- (b) yeast pressings and beer contained in or recovered from yeast slurries which are not returned to collecting or fermenting vessels or otherwise added back to beer in the course of manufacture;
- (c) filter washings and beer recovered from tank sediments which are not added back to beer in the course of manufacture;
- (d) beer displaced when finings are added to casks, irrespective of whether it is subsequently recovered;
- (e) beer used to flush out bottling plant;
- (f) beer missing from damaged, underfilled or leaking containers;
- (g) remnants of quality control samples.

2.12 The standard deduction of six per cent is allowed on every brew irrespective of the actual loss or whether or not a brewer has or employs plant to recover beer. Over the last ten years the allowance has reduced tax liability by the following amounts:

Year	£ million
1979-80	56.1
1980-81	64.2
1981-82	83.0
1982-83	93.5
1983-84	101.7
1984-85	110.3
1985-86	117.9
1986-87	118.2
1987-88	119.8
1988-89	125.2

Wastage rates

Evidence from HM Customs and Excise

2.13 Current legislation does not require brewers to monitor or record wastage rates, nor to provide HM Customs and Excise with such information. Although the Department do not therefore have comprehensive verifiable information on wastage rates, they have from time to time attempted to assess their level.

2.14 The Department undertook their first formal review of the wastage allowance in 1968 when they surveyed 55 breweries, out of a total of 220 in operation at the time. The brewing losses covered by the survey were based on estimates by local control staff, supplemented in some cases by information volunteered by brewers. As a result of this exercise, the Department estimated wastage rates at between 1.2 and 9.2 per cent. They considered, however, that it would be very difficult to apply weightings reliable enough to produce an accurate average figure for percentage loss after the duty point, having regard to such factors as size of brewery, the varying losses between different beer types and the number and extent of processes involved. As a result of this survey the Department concluded in 1970 that a detailed investigation into the appropriateness of the six per cent allowance was not justified. Membership of the European Economic Community was in prospect and the Department thought that the method of charging duty might anyway need to be changed if the UK joined the Community.

2.15 In 1974 the Department compared their records of duty paid with the results of a survey of beer sales. This exercise produced an implied average wastage rate of 5.2 per cent. The Department have not carried out any detailed survey of wastage rates since this date.

Evidence from the brewing industry

2.16 In December 1983 the Brewers' Society commissioned a survey of wastage rates amongst their members. The survey covered 83 breweries accounting for over 80 per cent of beer produced in the UK. In their resulting report of August 1984, they estimated average wastage rates to be 6.7 per cent on beer sold in the UK and 7.3 per cent on export beer. The Brewers' Society told the National Audit Office that they had not carried out any further work on this subject since then. However, they saw no reason to suppose that there had been any significant change in average wastage levels since 1984.

2.17 The Small Independent Brewers' Association told the National Audit Office that they considered that, for the small brewer, wastage rates could range from three to 10 per cent. During 1987-88 they had attempted to identify more precisely wastage rates amongst their members. Twelve brewers from their 100 or so members responded to the Association's survey. The average wastage rate of these brewers was around seven per cent.

2.18 The National Audit Office also asked the individual brewers they visited about their wastage rates. One large brewer estimated his average losses at below three per cent. All the other brewers thought that their losses were around or just above the six per cent level.

Reliefs and drawback

2.19 In addition to the six per cent wastage allowance, which is deducted before paying duty, brewers may also subsequently claim relief on beer which is lost or spoilt. This relief is available for beer which is:

- (a) lost or spoilt due to unavoidable accident at the brewer's premises; or
- (b) returned to the brewer after becoming spoilt or unfit for consumption.

For beer lost or spoilt on the brewer's premises, the brewer cannot claim relief for any losses covered by the six per cent wastage allowance (see paragraph 2.11 above) including any worts, beer or solution which have traditionally been regarded as waste. The cost to the Exchequer of this relief in 1988-89 was £4 million for beer lost or spoilt on brewers' premises and £10 million for beer spoilt after leaving brewers' premises.

2.20 Alcoholic ingredients relief enables the brewer to claim back the duty paid on beer used for producing drinks with an alcoholic strength not exceeding 1.2 per cent. The cost to the Exchequer of this relief in 1988-89 was £29 million.

2.21 Drawback of duty may be claimed in respect of beer which is exported or shipped as stores. Payment of drawback of beer duty in 1988-89 amounted to £50 million.

Operation of the present system

2.22 Since the introduction of the present beer duty system in 1880, the industry has changed substantially and there have been significant technological developments. Beer production has become more concentrated with most beer coming from a small number of highly automated breweries. The introduction of efficient skimming, improved yeast pressing and beer recovery machinery, together with automatic racking and cask filling apparatus, will have resulted in the progressive reduction of production losses. However, such savings will have been offset to some extent by new types of losses, for example, through the introduction of new conditioning and packaging operations.

2.23 The accurate determination of the original gravity of worts is becoming increasingly difficult both for the brewer and the inspecting Excise Officer. Representative sampling has become more difficult as brewery vessels have grown in size and brewing methods have changed. In addition the pitching of yeast into worts at an earlier stage in the process may invalidate the saccharometer reading making it necessary to test samples by distillation analysis. The results using this technique may be unreliable because it involves determining the alcohol content and arriving at the original gravity by using conversion tables. These were last revised in 1914, and because of subsequent developments in brewing the Department have doubts as to their present accuracy.

2.24 More generally, the Department consider that the present beer duty structure is too rigid. Thus new developments, such as the introduction of low alcohol beers, can only be accommodated with difficulty. The early duty point leads to an unwieldy system of reliefs for losses occurring after the duty point and for low alcohol and de-alcoholised products. The complexities of the system involve Excise staff in close monitoring throughout the brewing process to protect the revenue. This method of control is resource intensive and the Department estimate the total

current cost of administering beer duty to be in the region of £2 million a year. They have little information, however, on the cost to the brewing industry of complying with the present system.

2.25 The European Commission consider that flat rate wastage allowances inevitably lead to some degree of unfair competition in trade between Member States. The Commission contend that some brewers — probably the larger, more efficient ones — will achieve lower production losses than are provided for by the allowances in the duty systems. Such brewers generate a duty free margin not available to their competitors.

2.26 In the early 1980s, the Commission issued challenges, in the form of “reasoned opinions”, to the six Member States operating flat rate wastage allowances, based on their contention that the average of actual processing losses was less than the allowances given. Their views were robustly contested by each Member State and infraction proceedings against the UK were suspended following the Government’s response to the reasoned opinion in 1987. A similar position obtains in Ireland and Italy, but the Commission’s challenges to the Benelux countries were referred to the European Court of Justice in 1989. The Court has yet to deliver its judgements.

2.27 The Brewers’ Society told the National Audit Office that their members were ready to consider the merits of an end product duty system envisaged by HM Customs and Excise (see paragraph 3.6) if the Department provided them with more details. They nevertheless considered the present system simple to administer. They regarded the cost of compliance as low since most of the operations carried out to comply with the law also needed to be done for the brewer’s own control purposes. In their view, the wastage allowance was pitched at about the right level. They considered that improvements in technology since the last century, which may well have reduced wastage, had been off-set by the increased variety of beer types and packages, which would have increased wastage. They also considered that, because all brewers used

much the same technology, use of an average wastage rate was not inequitable as between one brewer and another.

2.28 In the opinion of the Small Independent Brewers’ Association, the present six per cent wastage allowance discriminated against the small brewer. The early duty point meant having to pay duty before receiving payment. This caused cash flow problems and made it difficult for the smaller brewer to finance increases in production or to brew strong ales or lagers which took longer to mature. The Association also felt that it discouraged the setting up of new small breweries.

2.29 The Campaign for Real Ale Ltd considered that the current system was out of date and did not take full account of the changes in brewing techniques that had taken place over the last century. They felt that the early duty point discouraged the longer conditioning of beers with a consequent detrimental effect on beer quality.

2.30 The views of the brewers the National Audit Office visited were mixed. The larger brewers were generally satisfied with the present system and felt that, despite its faults, it worked quite well in practice. The smaller brewers considered that there were inequities in the six per cent wastage allowance. They were also concerned at having to pay duty at such an early stage which caused cash flow problems.

2.31 During their visits to individual brewers and meetings with the Brewers’ Society and the Small Independent Brewers’ Association, the National Audit Office enquired whether there was any information available on the industry’s current compliance costs. The National Audit Office were informed that this was not specifically monitored. However, one major brewer visited by the National Audit Office subsequently estimated his costs at one of his breweries to be in the region of £115,000 a year (0.15 per cent of the duty payments from this brewery). Another major brewer estimated his costs at one particular brewery to be £25,000 a year (0.06 per cent of the duty payments from this brewery).

Part 3: Alternatives to the present system

3.1 This Part of the Report identifies the alternative regimes which could be used in the administration of Excise duty on beer. It also briefly examines other UK Excise duty structures, draws comparisons with systems in other countries and considers the impact of initiatives by the European Commission.

3.2 Because of the European Commission's drive towards harmonisation, possible alternative regimes are restricted in practice either to a reform of the present worts-based system or to a form of end product duty.

Reform of the present worts-based system

3.3 The existing duty system could be adjusted to remedy or reduce some of its unsatisfactory features, such as the flat rate wastage allowance and the determination of original gravity. To reform the present system:

(a) the six per cent flat rate wastage allowance would need to be replaced by the use of actual wastage rates at individual breweries; and

(b) the accuracy of original gravity determination would need to be improved.

This could be achieved by:

(i) a ban on the early pitching or addition of yeast to worts, until after the declaration to Customs for duty purposes; or

(ii) a review of the system of measuring original gravity by distillation analysis, including revalidation of the standard gravity loss conversion tables.

3.4 If the present system were reformed in this way, the six per cent wastage allowance could be abolished. However, there would have to be put in place a mechanism to record actual production losses which thereafter would have to be declared to and checked by HM Customs and Excise to obtain the appropriate credit.

3.5 Whilst the reform of the worts-based system along the lines of that outlined above would remedy some of the unsatisfactory features of the present system, the Department recognise that it

would not solve all of the problems and would in addition create some new ones. Thus, many of the inaccuracies inherent in the methods for obtaining representative samples and measuring the original gravity of worts would remain. And the early duty point would continue to create administrative and legal difficulties when new developments and innovations arose. Reforming the worts-based system by replacing the flat rate wastage allowance with a system based on actual wastage rates, whilst fairer, would add significantly to administration and monitoring costs.

End product duty

3.6 Under an end product regime, duty would be assessed and declared on the finished beer product instead of at the worts stage. As a result, production losses would have occurred prior to the duty point and would not need to be considered in determining duty liability. Virtually all other Excise duty regimes are based on an end product duty structure of one sort or another. Indeed, those covering cider and perry producers and UK makers of wine and made wine were designed as end product systems.

3.7 The Department have recently completed a thorough review of their Excise business. As a result they are seeking to make Excise systems of control more homogeneous by:

(a) overhauling each Excise duty system with a view to its simplification and standardisation;

(b) drawing up a new Excise trader law to rationalise the legal obligations on all firms and individuals in the Excise business and the Department's powers to control them;

(c) using an Excise audit team to control large traders (perhaps, where appropriate, making joint visits with VAT staff).

This forms part of an overall Departmental strategy aimed at monitoring trader compliance through audit techniques based on commercial records and systems rather than physical inspections. The Department consider that this strategy will reduce their control costs and traders' compliance costs and enable them to target their resources at the areas of highest risk.

3.8 There are several different forms in which an end product system for beer duty could be introduced:

(a) **Quantity measurement.** On quantity, measurement could be taken either at the last bulk stage of production (prior to delivery for packaging), or after packaging. The latter would probably have to be based on an average container size or capacity and, in the case of bottles or cans, could be tied into the existing requirements of consumer legislation.

(b) **Strength measurement.** For strength, measurement could continue on the basis of original gravity or could be changed to alcohol content by volume.

(c) **The tax point.** A brewery gate system would mean duty being payable at the last production process prior to the beer product leaving the brewery. However, where a brewer has remote packaging arrangements, the tax point would be outside of the brewery itself. Alternatively, duty could be collected at the point of sale.

(d) **Duty rates.** The present linear or continuous rate of Excise duty could be retained or duty could be charged on a banded or percentage point basis similar to that used for Excise duties on wines and spirits. In addition, a sliding scale to reflect particular levels of production could overlay the duty rating system with a cut off point below which no duty would be paid.

3.9 HM Customs and Excise have considered changing to an end product duty system once before, in 1980, when they issued a consultative paper to the trade on possible changes to beer duty. However, most of the brewers and organisations consulted were strongly opposed to changing the worts-based system at that time and the Department decide not to proceed with an end product duty regime.

3.10 An end product duty system would be suitable for the present brewing industry and would cope with possible future changes. In particular, there would be no need for the system of reliefs for duty paid production losses and spoilings and for beer used in the production of low and non alcohol products. Nor would there be any need for drawback of duty on the majority of beer exports, which would come from duty free stock. The Department would also have scope to simplify and reduce their overall revenue control of the brewing industry.

3.11 There would also be a number of benefits to the trade of an end product duty. The system would enable the deregulation of brewing methods and products; simplification of the registration of premises and plants; and would mean reduced official interference in day to day brewing operations. Simplification of control and deregulation would reduce brewers' compliance costs. As far as possible, brewers' normal commercial records could be used to account for the duty and the Department could attempt to tie their requirements in with other legislative requirements. The industry's cashflow would be improved by moving the duty point from the early stages of production to nearer the point of sale and hence receipt of payment.

3.12 If the duty becomes payable at a tax point outside the brewery, many more premises than at present would have to be registered with HM Customs and Excise. This would clearly be a significant disadvantage over the previous arrangements. There would also be an increase in revenue risk because of the greater amount of beer on which duty had not yet been paid circulating within the larger duty free ring. Moving to an end product duty would entail a one-off loss to the Exchequer in the first year of roughly one-twelfth of the annual beer duty receipts, equivalent to about £175 million at current rates. The Chancellor of the Exchequer could, of course, recover this amount by increasing the rates of duty. Apart from this one-off loss, the Department estimate that a move to end product duty would have an overall neutral effect on the level of beer duty receipts.

3.13 The Department told the National Audit Office that they are awaiting the completion of the consultation process before determining the full administrative and compliance costs of an end product duty regime as compared with the present or a reformed worts-based system. This was because these costs would be dependent upon the precise structure of a new system which could not be designed until the consultation process was completed. For the same reason the Department had not attempted to quantify in financial terms the value to the industry of the benefits listed at paragraph 3.11 nor to quantify the increased revenue risk noted at paragraph 3.12. However, the Department believe that an end product system would at worst be no more costly to administer than the present system and could show some savings on current costs.

3.14 Pending completion of the consultation process the Department have not defined the precise structure of how they would see an end

product duty system operating nor reached a firm view on the various alternative options given in paragraph 3.8. However, they believe that assessing duty on the basis of alcoholic strength would be preferable to original gravity. They are against a sliding scale of duty rates on the grounds that it would raise considerable administrative difficulties in its application to imports of beer from other Member States. It would involve the administrative burden of keeping copious records of the production levels at breweries abroad.

International comparisons

3.15 Table 1 (page 13) summarises the types of beer duty systems operated in the 12 Member States of the European Community, plus Australia, Canada and the USA, together with their effective rates of duty.

3.16 Of the 15 countries listed in Table 1, one raises duty on the quantity of malt used in production, six operate some form of worts-based duty and the remaining eight operate a form of end product duty. Additionally, seven countries incorporate preferential rates into their duty regimes to provide assistance to their smaller breweries.

3.17 The six Member States operating a worts-based duty system each apply flat rate allowances to

compensate for production losses arising after the duty point. These allowances range from four to ten per cent. In Ireland and Italy, as in the UK, they are deducted from the quantity of worts before duty is calculated. In the Benelux countries the allowances apply to imports (as a levy) and exports (as a relief) to put these products on a competitive basis in their destined markets; they do not apply to home-produced beers sold to their respective home markets.

3.18 In part due to the pressure being exerted by the European Commission through the infraction proceedings (paragraph 2.26), the Netherlands are intending to change to an end product duty system in 1993. It seems increasingly likely that Belgium and Luxembourg may subsequently follow a similar course. Should this happen there would be increased pressure for those countries still using a worts-based system to follow suit.

3.19 As this Report was being drafted, HM Customs and Excise issued a consultative paper on the structure of beer duty in the 1990s and beyond (paragraph 1.7). Views and comments from interested parties were due to be received by 8 June 1990. The results of the consultation exercise will be announced as soon as possible.

Table 1
Beer Duty systems and effective rates of duty

Country	Type of system	Whether any relief for small breweries	Effective rate of duty per pint — 1989 (approx)
EC			
Belgium	Declared worts with no allowances for production losses except on imports and exports	Yes	4p
Luxembourg		Yes	2p
Denmark	End product based on alcoholic content by weight	Yes	25p
Germany	End product based on wort content by weight	Yes	3p
Greece	Net weight of malt used in production	No	3p
France	End product based on alcoholic strength	No	$\frac{1}{2}$ p
Ireland	Based on quantity of worts with allowance of 6% for losses	Yes	34p
Italy	Based on quantity and strength of worts with allowance of 10% for losses	No	5p
Netherlands	Based on quantity and strength of worts with no allowance for losses except on imports and exports	Yes	7p
Portugal	End product	No	3p
Spain	End product	No	1p
UK	Based on quantity and strength of worts with allowance of 6% for losses	No	19p
Non-EC			
Australia	End product based on alcoholic strength	No	13 $\frac{1}{2}$ p
Canada	End product based on alcoholic content by volume	No	5p
USA	End product	Yes	1 $\frac{1}{2}$ p