Modelling the impact of proposed policies on pubs and the pub sector

A report to the Department for Business, Innovation and Skills

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LE London Economics

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About London Economics

London Economics is one of Europe's leading specialist economics and policy consultancies and has its head office in London. We also have offices in Brussels, Dublin, and Cardiff, and associated offices in Paris and Valletta.

We advise clients in both the public and private sectors on economic and financial analysis, policy development and evaluation, business strategy, and regulatory and competition policy. Our consultants are highly-qualified economists with experience in applying a wide variety of analytical techniques to assist our work, including cost-benefit analysis, multi-criteria analysis, policy simulation, scenario building, statistical analysis and mathematical modelling. We are also experienced in using a wide range of data collection techniques including literature reviews, survey questionnaires, interviews and focus groups.

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Introduction

This report has been delivered by London Economics to the Department for Business Innovation and Skills on the basis of commercially confidential data that the pub companies (pubcos) generously permitted London Economics to have access to for the purpose of this study. This data is designed for corporate financial purposes, not necessarily for research purposes. In a number of cases we have had to take key aggregate data and disaggregate this using the best assumptions available to deliver a pub-by-pub assessment of the tied pub sector.

This approach delivers a model which we have calibrated to the existing state of the market, specifically the existing rate of closures, but which is therefore no more than our best achievable estimate of reality. ***As with any 'generated' data the assumptions used in allocating costs to pubs could be very powerful in determining the outcome of the analysis.***

As such, whilst we believe the conclusions we draw below present a significant step-forward in the debate in terms of explaining in some depth the market dynamics faced both by pubcos and individual pubs, in terms of the potential impact of the reforms proposed in the consultation we feel it is necessary to introduce a measure of caution.

The tied pub system is one of the most inter-woven industrial relationships you can identify in the UK, with multiple streams of payments running in both directions, from the pub tenant to the pubco and vice versa, generally negotiated on a pub-by-pub basis. Unravelling these streams, including 'special commercial or financial advantages' (SCORFA) which, by common (dis)agreement are extremely difficult to quantify, has forced us to develop an approach based on testing key assumptions through running multiple scenarios to produce a range of outputs as we do not feel that any model based on the current state of knowledge could be trusted to deliver a valid 'point-estimate'[1], especially in the light of fundamental underlying re-alignments in drinking behaviour in the UK.

In short, these estimates should be used to inform the policy debate, and to provide insight into the financial positions of pubs and pubcos, but cannot be taken to provide a 'cast-iron' estimate of potential impacts of policy reform. One of our key assumptions is the transfer required to deliver the 'no worse off' condition. This cannot be estimated directly so instead we have modelled four scenarios that represent the range of feasible possible values. Importantly, this means the scenarios presented in this report estimate the full possible range of impacts rather than being direct estimates of what will happen.

[1] A 'point-estimate' is a single number output from a model, such as 'my model predicts a team will score one goal' as opposed to a range-estimate, such as 'my model predicts a team will score between zero and three goals'. A 'point-estimate' reflects far higher certainty in the modelling than we feel we can deploy in this case.

The tied pub model

Although pubs constitute an important part of Britain's small business network and are based on a long-standing tradition, the British pub sector has faced considerable hardship throughout recent decades. Some of the problems originate in short-term factors such as the ongoing economic recession, but there are also longer-term factors at play, such as the introduction of the smoking ban, competition from supermarkets, an increased tendency towards alcohol consumption at home, as well as other social and demographic changes[2]. As a result of these developments, the pub industry has witnessed a significant contraction, from almost 70,000 pubs in 1980 to 51,000 today, with 18 (net) pubs closing every week over the last six months[3].

Nearly half of pubs in the UK are tied pubs; a historic if unusual business model where the tenant landlord pays a lower property rent (dry-rent) to their pub company (pubco) landlord, and receives 'special commercial or financial advantages' (SCORFA), such as free satellite television or subsidised buildings insurance. In return for this, they commit to only purchase beer from the pubco, often at above market prices (where the surplus is labelled the 'wet-rent').

Reviews by the OFT[4] have identified that competition in the pub market is sufficient to ensure consumers are not disadvantaged, and that the tied pub system brings advantages, particularly in contributing to improving the production or distribution of goods or in terms of promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit through:

- The maintenance of a vibrant and diverse domestic brewery sector, particularly related to non-lager products, through guaranteed sales leading to economies of scale in production,
- The maintenance of small, wet-led[5] pubs which form a community hub and provide social cohesion, and,
- The maintenance of a larger number of pubs to compete with each other.

The proposed reforms aim to deliver a healthy pubs sector, where pub companies treat their tenants fairly, where 'fairly' is defined in that tied tenants are no worse off than free-of-tie tenants, as measured by the share of profits they are able to retain.

Our objectives

This study has the following objective:

- To provide an **independent analysis** of the impact of the consultation proposals on gross and net pub closures and employment levels within the pub industry, using whatever robust evidence can be accessed, **to inform the final stage impact assessment** of the likely costs and benefits of the proposals. In particular, the analysis should model the

[2] Office of Fair Trading, 2010
[3] Department for Business, Innovation and Skills, 2013a
[4] Noting the OFT's finding that because the pub sector was competitive this meant that consumers were not facing artificially inflated prices (Office of Fair Trading, 2010, sections 2.31-2.33).
[5] A pub which receives the majority of its income from the sale of alcoholic and carbonated beverages is 'wet-led'. One which receives most of its income from food sales is 'dry-led'.

potential impact of a mandatory free-of-tie option and the impact of introducing a Statutory Code on pub closures and employment levels.

To deliver this, the Department has asked us to set out an **economic model of the pub industry** which facilitates the estimation of the main impacts of the reforms on the costs and revenues of pubs and pub companies, to allow us to estimate:

- The **number of pubs which might close**, and
- The **potential impact on employment** levels.

Finally there is a requirement to **test the sensitivity of modelling results to changes in key assumptions**.

Results and conclusions

The proposals under discussion are generally characterised as simply re-allocating profit from the pub company (pubco) to the tenant, so if we are doing nothing more than re-directing profit from one agent to another, why should this change the viability of the pub?

The answer is that the discussion does not revolve around 'profit' but rather around 'operating margin', which is a different concept.

Profit is the residual from revenue after *all* costs have been covered. Operating margin is the revenue remaining after *front-line operational* costs have been paid. The difference is that whilst a pub may be viable from the tenant's perspective in terms of the revenue exceeding the operating costs and the cost of sale goods the tenant faces, there are further costs, which are currently borne by the pubco and that must also be paid for.

The most significant of these are any capital costs (e.g. maintenance), which are carried by the pubco, and debt servicing costs (i.e. the interest on the debt used to purchase the property). The basic argument here is directly paralleled by the fact that many private households' finances would look significantly better if they were not paying the interest on their mortgage, or paying all the costs of repairs and improvements to the property.

For the pubco, the position is relatively simple. Income from the pub needs to be sufficient to cover both these costs, and the management costs which the pubco faces around these elements and the contract with the tenant, as well as covering the cost of any SCORFA provisions. If the income from the pub falls below the aggregate of these, the pub may continue to *appear* viable to the tenant but would no longer be viable for the pubco, which would be forced to divest this asset.

Modelled options and results

We have modelled five options to reflect the proposals put forward in the consultation:

- The current base-case
- Implementing the Code, but not allowing a guest beer option
- Implementing the Code with the guest beer option
- Allowing tenants to go free-of-tie, with all tenants taking this option

- Allowing tenants to go free-of-tie, but only doing so if it improved their financial position[6].

We have modelled the consultation proposals using 36 scenarios, based on the key variables of the value of SCORFA, the divisible balance percentage and the dry-rent adjustment. The results presented provide the impact of the alternative scenarios relative to the current baseline scenario.

Table 1: The impact on pub closures and employment (first order effects only)

Min-max ranges	Option 1 – no guest beer	Option 1 – guest beer	Option 2 – free-of-tie (all)	Option 2 – free-of-tie (optimised)
Percentage of all pubs closing	5-14%	11-23%	14-19%	14-20%
Percentage of tied pubs in scope of code closing	11-36%	28-58%	35-48%	35-50%
Number of pubs closing	1,500-4,800	3,800-7,700	4,600-6,400	4,600-6,700
Number of jobs lost	7,500-23,700	18,800-38,100	23,000-31,600	23,000-33,100

However, this table only accounts for the 'first order effects', or the direct effects of the change. With this number of pubs potentially closing, we need to also consider the 'second order effects', or knock-on implications of the change. The most important of these is the behaviour of consumers who previously would have used a closed pub and who now have a choice:

- Stop drinking
- Stop using a pub and drink at a different venue (home, club, bar etc)
- Visit a different pub

The literature on 'pub-switching behaviour' is very thin. We have assumed that 60% of customers whose pub shuts move to another pub. We have added in this residual demand (and therefore revenues) to the pubs modelled to see what impact we could expect this to have. As shown below, this acts to bring the range of pubs estimated as closing downwards.

Table 2: The impact on pub closures and employment (second round effects)

Min-max ranges	Option 1 – no guest beer	Option 1 – guest beer	Option 2 – free-of-tie (all)	Option 2 – free-of-tie (optimised)
Percentage of all pubs closing	0-1.4%	0.9-3.3%	1.5-2.6%	1.5-2.8%
Percentage of tied pubs in scope of code closing	0-5.3%	3.2-12.3%	5.7-9.9%	5.5-10.7%
Number of pubs closing	0-700	400-1,600	700-1,300	700-1,400
Number of jobs lost	0-3,500	2,100-8,100	3,700-6,500	3,700-7,000

[6] The vast majority of free-of-tie pubs are responsible for maintenance and do not receive SCORFA, which means the additional income from being free of the wet-rent needs to exceed the sum of these for a tenant to wish to use the option.

Finally, another type of 'second-order effect' which could occur is that pubcos could reduce their management costs and maintenance budgets and refinance their debt to reduce their costs in the face of this reform. We anticipate they would attempt to do this, but given the degree to which the pubcos have faced losses in recent years, we believe they may now find it difficult to go significantly deeper in terms of efficiencies. As such, we have not modelled this effect. In part we have not attempted to estimate this effect because both closure and pubs turning free-of-tie could reduce the economies of scale that pubcos currently achieve, driving in additional cost pressures on those tied pubs which remain.

Conclusions

The tied pub model is one of the most complex industrial relationships remaining in UK industry and aims to deliver a system to ensure floor levels of demand for British brewers, sustaining diversity and the traditional family brewery model. In recent times, this has become increasingly necessary, as the consumption of beer in pubs has declined, with the numbers of barrels sold falling dramatically as consumption patterns have changed, both due to lower prices in supermarkets and the emergence of alternatives such as restaurants, clubs, and bars. A number of stakeholders interviewed noted that the UK is probably still operating excess pub supply of approximately 6,000 pubs, suggesting a sustainable number of pubs of approximately 45,000.

This over-supply has led to low profitability, both for many tenants and pubcos, particularly in a climate where servicing debt has become difficult. The key finding of this study is not the number of pubs which may close as a result of one policy or another, but rather the high number of pubs that currently appear to be at the margin of viability. Irrespective of what changes may be proposed or considered, the interlocking nature of a large variety of revenue-streams, and the high level of costs being faced by pubcos, suggest that almost any policy reform may have noticeable and unpredictable effects.

In the estimates we produce of the impact of the consultation proposals, even taking account of second order effects, of the 13,300 pubs we believe will be in scope of the Code, up to 2,400 or 18 percent could become unviable for their pubco owners, on top of those already unviable (c.1,300)[7] within the base case scenario, although we estimate a third of these would re-open under alternative management.

The threat that the number of tied pubs currently operated by the pubcos may diminish by between 25-30% due to closures, even if these pubs subsequently re-open under a different owner, and disregarding any who may wish to take up the free-of-tie option, may be sufficient to eliminate the economies of scale in purchasing that many tied tenants in this sector (unknowingly) benefit from. This suggests that there is a real possibility that each of the proposed policy reforms, except possibly the code without permitting guest beer, instead of delivering the policy objective of ensuring tied tenants are treated fairly, i.e, 'no worse off' than free of tie tenants, may lead to the end of a large scale tied pub system.

This, however, may not be as disastrous as it initially sounds. The tied pub model is very similar to more standard franchising arrangement, albeit one where the pubco supplies the sales product

[7] It must be noted that this figure is driven by our assumptions in the calibration exercise and is therefore entirely an artefact of our modelling process.

and leases the property to the franchisee, and this model is already being attempted by some pubcos and may be worthy of further consideration.

In the short-term, it is also worth noting that the PICAS/PIRRS system, which is the most concrete element of the current voluntary framework, is now becoming an established part of the infrastructure, and appears to be having some effect in starting to address the worst tenant circumstances[8], although some stakeholders have raised the point with us that some tenants are wary of taking the PICAS/PIRRS route in case the discretion available ends up *increasing* their rental, even though it is recognised in the BIS Committee report that there are flaws in the current system too.

It is our conclusion that the reforms proposed in the consultation will close up to 1,600 pubs, although there is very great uncertainty about the precise value; In particular, the size of the transfer from pubcos to tenants resulting from the 'no worse off' principle is very hard to estimate, our results reflect the impact of a range of possible transfer values; However, there is clearly surplus pub capacity, in quite a volatile market where, with so many pubs on the margin of viability it is hard to determine which pubs will close. Stakeholders raised with us that that there may be up to 6,000 surplus pubs in the UK forming 12% of the market, and if this policy did deliver several thousand closed pubs it would act as a substantial fraction of this long-term trend which is likely to occur unless major changes to tax policy and social norms take place.

If one assumes, as we have done, 60% of consumers move to another pub that implies that, on average pubs which remain will see footfalls 7.2% higher than present. This would be sufficient to turn a poorly performing pub into a more attractive prospect if it can see the immediate future out. As such it may deliver enough of a boost to other pubs to reduce closure rates in the medium term.

[8] Business, Innovation and Skills Committee (2011).

1 Introduction

1.1 Context: the British pub industry

Although pubs constitute an important part of Britain's small business network and are based on a long-standing tradition, the British pub sector has faced considerable hardship in recent decades. Some of the problems originate in short-term factors such as the ongoing economic recession, but there are also longer-term factors at play, such as the introduction of the smoking ban, competition from supermarkets, an increased tendency towards alcohol consumption at home, as well as other social and demographic changes[9]. As a result of these developments, the pub industry has witnessed a significant contraction, from almost 70,000 pubs in 1980 to approximately 51,000 today, with 18 pubs (net) closing every week over the last six months[10].

Within the sector, due to its longevity, community role and close relationship with domestic brewers, a bespoke operating model - the tied pub - has come into existence. The tied pub is an entity where the tenant landlord pays a lower property rent (dry-rent) to their pub company (pubco) landlord, and also receiving 'special commercial or financial advantages' (SCORFA), such as free satellite television or subsidised buildings insurance. In return for this, they commit to only purchase beer from the pubco, often at above market prices (where the additional surplus is labelled the 'wet-rent').

Reviews by the OFT[11] have identified that competition in the pub market is sufficient to ensure consumers are not disadvantaged, and that the tied pub system brings advantages, particularly in contributing to improving the production or distribution of goods or in terms of promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit through:

- The maintenance of a vibrant and diverse domestic brewery sector, particularly related to non-lager products, through guaranteed sales leading to economies of scale in production,
- The maintenance of small, wet-led[12] pubs which form a community hub and provide social cohesion, and,
- The maintenance of a larger number of pubs to compete with each other.

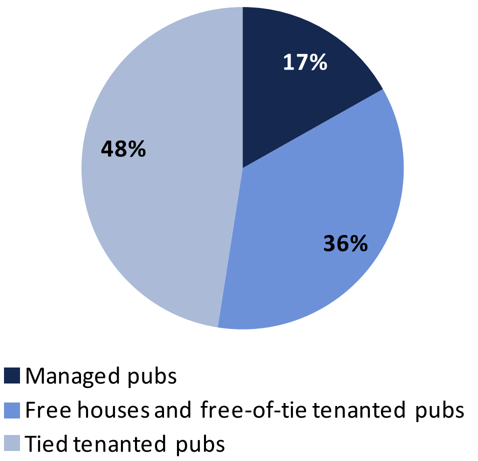
As Figure 1 shows, nearly half of pubs in the UK are 'tied', as opposed to the three main alternatives; managed pubs where a pub company places a member of staff in as a 'manager', or a free-of-tie tenant, where the tenant pays a commercially set property rent and is free to sell whichever beer products he wishes, or freehold pub where the landlord owns the property and chooses the beer to sell.

Within this landscape, the relationship between large pub-owning companies and their tied tenants constitutes an important issue for the Department for Business, Innovation and Skills

[9] Office of Fair Trading, 2010
[10] Department for Business, Innovation and Skills, 2013a
[11] Noting the OFT's finding that because the pub sector was competitive this meant that consumers were not facing artificially inflated prices (Office of Fair Trading, 2010, sections 2.31-2.33).
[12] A pub which receives the majority of its income from the sale of alcoholic and carbonated beverages is 'wet-led'. One which receives most of its income from food sales is 'dry-led'.

(BIS)[13]. In recent years, tied tenants have filed numerous calls, including some grievances about the fairness of this relationship to the British Institute of Innkeeping, Members of Parliament, the Office of Fair Trading, and the Department for Business and Innovation Select Committee. Reported mistreatments of tenants by pub companies, such as unannounced large rent increase demands, are primarily caused by an imbalance in the relationship between these two types of market actors. In particular, pub companies are considered to have access to more information and to have resources at their disposal to afford legal and surveyor fees in case of disputes with their tenants, granting them the possibility to extract large shares of their tenants' profits[14]. It is commonplace to hear in the debate sources claiming the average income to a pubco from its tied pubs to be in the region of £60,000. In contrast, surveys indicate that the average tenant retains approximately £15,000 of profit.

Figure 1: The composition of the British pub industry



Note: The data draw no distinction between free houses and free-of-tie tenanted pubs
Source: Department for Business, Innovation and Skills (2013b).

While this discrepancy in resources and information exists between pub companies and their tenants in general, BIS is particularly concerned about the potential for and repercussions of mistreatment of tied tenants. Beer prices change more frequently than rents, thus providing pubcos (who compel their tenants to purchase beer only from the pubco (the beer tie)) with an additional route of potential abuse. Further, the tie complicates the relationship between tenants and their pub companies by increasing the amount of information to consider in the tenant's decision-making process. Finally, recent evidence suggests that tied tenants also face a higher probability of financial distress, with 46 per cent of tied publicans earning less than £15,000 a year, compared to only 23 per cent of free-of-tie tenants[15]. All of these considerations suggest the need for BIS to put particular focus on the fair treatment of publicans who are restricted by a beer tie.

However, this debate has two sides. The pubcos provide a number of services to tied tenants that may be difficult for the tenant to observe, such as debt-financing on the purchase of the freehold

[13] Managed pubs and free houses are not subjected to the described problems between pub owner and tenant; therefore, these types of pubs are of lesser relevance to this study.

[14] Department for Business, Innovation and Skills, 2013a

[15] CAMRA surveys quoted by BIS, 2013a

(without which there would not be a pub to rent), as well as maintenance and support systems (such as those delivered via SCORFA). These are either unobserved by tenants, or may indeed be entirely unobservable (examples of which include the differential in insurance costs when this is purchased centrally and in bulk by the pubco against the cost the tenant would have to pay were he to purchase this in isolation).

Until recently, the Department relied on pubcos to govern this complex relationship themselves, by implementing voluntary **self-regulatory approaches** to treat their tenants, specifically tied publicans, more fairly. Since 2004, the Business, Innovation and Skills Select Committee and its predecessors have published four pub company reviews[16]. The reports have scrutinised the difficulties regarding the relationship between pub companies and their tenant publicans and urge pub-owning firms to implement meaningful reform. BIS granted a final chance for pub companies to voluntarily make the necessary changes in 2011.

A call for evidence on the performance of self regulation in the industry in 2012[17], found that the voluntary code of practice (i.e. the Industry Framework Code of Practice) had been able to induce some modest improvements to the problematic relation between pub companies and tenants. In addition, BIS acknowledged the beneficial role of the Pubs Independent Review Scheme (PIRRS) and its Pubs Independent Conciliation and Arbitration Service (PICAS) in providing tenants with a cost-effective solution to resolve disputes and obtain redress. However, it was concluded that the self-regulatory approach was not sufficiently effective at relieving tenants' hardship; it was felt that the situation could not be suitably improved without a significant culture change and a co-ordinated long-term effort to inform tenants of their rights and possibilities[18]. Therefore, in January 2013, the Secretary of State announced that the British pub industry will be subjected to statutory intervention instead.

1.2 Objectives

The proposed reforms aim to deliver a healthy pubs sector, where pub companies treat their tenants fairly, where 'fairly' is defined in that tied tenants are no worse off than free-of-tie tenants, as measured by the share of profits they are able to retain.

This study has the following objective:

- To provide an **independent analysis** of the impact of the consultation proposals on gross and net pub closures and employment levels within the pub industry, using whatever robust evidence can be accessed, **to inform the final stage impact assessment** of the likely costs and benefits of the proposals. In particular, the analysis should model the potential impact of a mandatory free-of-tie option and the impact of introducing a Statutory Code on pub closures and employment levels.

To deliver this, the Department has asked us to set out an **economic model of the pub industry** which facilitates the estimation of the main impacts of the reforms on the costs and revenues of pubs and pub companies, to allow us to estimate:

- The **number of pubs which might close**, and
- The **potential impact on employment** levels.

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[16] Trade and Industry Committee, 2004; Business and Enterprise Committee, 2009; Business, Innovation and Skills Committee, 2010; Business, Innovation and Skills Committee, 2011

[17] Department for Business, Innovation and Skills, 2012

[18] Department for Business ,Innovation and Skills, 2013a, 2013b

Finally there is a requirement to **test the sensitivity of modelling results to changes in key assumptions**.

2 Overview of the proposed policy options

In April 2013, the Department initiated a consultation among main stakeholders in the British pub industry on the policy measures available to address the perceived problematic relationship between pub companies and their tied tenants. This section will provide a detailed description of the two main suggested policy options, whose impact constitutes the focus of the analysis at hand.

2.1 Policy Option I: A Statutory Code of Practice and Adjudicator

2.1.1 Contents of the Statutory Code

The introduction of a Statutory Code, along with an independent Ombudsman to enforce it, constitutes the first policy option put forward by BIS. The Statutory Code is intended at governing the relationship between pub companies and their tenants, putting particular emphasis on the issues of risk and reward, which should be shared appropriately among the two parties concerned in order to ensure the fairness of their agreements. Recognising the continuous change of conditions and requirements of the pub industry in the United Kingdom, BIS proposes that the new Code will be subjected to periodic reviews.

The most recent version of the Industry Framework Code (Version 6), which has been established for pub companies in the industry as part of its self-regulatory approach, constitutes the envisioned basis for the new and legally binding Statutory Code of Practice. However, BIS has identified two areas for the potential strengthening of this current Framework Code of Practice to include **two core principles**:

1. An overarching **principle of fair and lawful dealing** aims at warranting that pub companies treat all of their tenants[19] *fairly*, i.e. that risk and reward are shared to an appropriate extent between themselves and their lessees, as well as *lawfully*, implying that any unlawful behaviour by the pub company towards a tenant constitutes a *de facto* breach of the Statutory Code. This principle includes the understanding that pub companies should conduct its relationships with tenants in good faith, without duress, and without distinguishing between formal and informal arrangements.

2. The **principle that the tied tenant should be no worse off than the free-of-tie tenant** relates to tied lessees more specifically, postulating the latter may not be disadvantaged compared to those tenants who are not subjected to a tie by their pub company. BIS recognises that compliance with this principle requires precision on how this provision is to be applied to rental calculations of tenants, considering the balance between wet and dry-rent as well as SCORFA. It is currently envisioned that this second overall principle should imply that the projected post-rent balance of a tied tenant should be at least equal to the projected post-rent balance, which the same tenant would receive under a free-of-tie lease, assuming the same lease or tenancy conditions.

[19] This includes both tied and free-of-tie publicans.

Putting particular emphasis on the second of these core principles BIS has brought forward two suggestions on how to achieve the equal treatment of tied tenants as compared to free-of-tie lessees.

- For the Code to require that higher beer prices due to the tie must directly be compensated for by lower rents and/or genuinely quantifiable countervailing benefits provided through SCORFA, thus making the post-rent balance of a tied tenant at least equal to what he or she would retain under a free-of-tie agreement, all else being equal.
- The additional introduction of a mandatory free-of-tie option, which is a more rigorous measure to achieve fulfilment of the second core principle. This proposal constitutes the second policy option in its own right and will be outlined in more detail in the next section.

In addition to the two major principles just outlined, BIS suggests further areas in which the current self-regulatory Industry Framework Code should be strengthened to establish the new Statutory Code of Practice.

1. It is proposed that the new Code should stipulate a **right to request an Open Market Rent Review** to for all tenants, independent of the conditions of their current lease agreements, in order to ensure their fair treatment by the respective pub company. The conditions for a tenant to request the Open Market Rent Review are that he or she has not been subject to a similar rent assessment throughout the last five years; that their pub company recently significantly increased the price of their tied products; or the recent occurrence of an event which was outside of the lessee's control and which was unanticipated at the last rent review, but which involves a significant impact on the tenant's ability to trade, such as the closing of a large employer nearby, dramatically reducing footfall and custom in the area.

2. The new Statutory Code should include provisions that increase the **transparency** of the relationship between pub companies and their tenants, requiring pub companies to provide potential lessees with a range of relevant information on the costs and risks of trading before a tenancy agreement is made. Of particular relevance, pub companies should calculate tied and free-of-tie ex-ante rent assessments, using the same set of assumptions for both, and explicitly stating the turnover, gross profit, costs, divisible balance and SCORFA, thus demonstrating to each potential tenant that he or she would be at least equally as well-off under a tied agreement than under a free-of-tie lease.

3. The Government has, on several previous occasions, proposed to **remove the gaming machine tie** currently in operation, and reinforces this proposal by suggesting the inclusion of a provision stating that no product other than drinks may be tied by the pub companies in the Statutory Code of Practice. This proposal has since been superseded by changes to the Voluntary Code, such that we will therefore consider the impact of this in the base case for our analysis.

4. BIS is considering the introduction of a **guest beer option** in the Code, granting tied tenants the option to purchase and sell one draught beer from any supplier, without any controls or restrictions imposed by the pubco.

5. Finally, the installation of **flow monitoring equipment** by pub companies to control their tenants' compliance with purchasing obligations remains a subject of controversy within the British pub industry. It is currently suggested that the Code should restrict the

potential for use of data collected with the help of this equipment, by including a provision stating that such information may not be used to determine whether a tenant is complying with purchasing obligations, or considered as evidence for the enforcement of such obligations.

2.1.2 Threshold of application

In spite of its proposals to intervene in the industry, BIS aims to comply with better regulation principles and minimise the policy impact on those pub companies that already treat their tenants fairly and are complying with the Voluntary Code, but obliging those firms which 'exploit' their tenants to make fast and significant improvements. In accordance with this objective, it is currently perceived that the new Statutory Code of Practice outlined above should apply to all **British pub companies that own more than 500 pubs.** One of the justifications for this approach concerns the Government's overall intention to reduce regulation and grant more influence to market forces, therefore minimising the burden on smaller pub companies that appear to have acted responsibly. In addition, the threshold targets the suggested policy measures to those pub companies that have the greatest market power within the industry, with 500 pubs constituting approximately 1% of the market. Finally, it is argued that bigger pub-owning firms will find it easier than small companies to bear the costs of their compliance with the Statutory Code. In order to limit pub companies' ability to circumvent being restricted by the Code by splitting up into a group of smaller firms, the threshold of 500 pubs will be applied at the top level of a group of related companies.

For those companies proposed to be covered by the Code, the new rules and regulations will then apply to *all* of their tenanted (i.e. non-managed) pubs, for two reasons. First, this is to ensure that a fair treatment is granted to both tied as well as free-of-tie publicans. Second, a scenario where the Code only applies to tied pubs could provide pub companies with an opportunity to avoid regulation by removing the tie and instead increasing free-of-tie pubs' rents beyond current market rent values. BIS prescribes that the Statutory Code will be incorporated in all lease and tenancy agreements between pub companies and their publicans, to warrant that the latter are aware of their rights.

2.1.3 An independent Adjudicator

In order to ensure pub companies' compliance with the Statutory Code, an additional component of the policy option considered by the Department for Business, Innovation and Skills consists of an independent ombudsman responsible for the enforcement of the new rules and regulations. It is suggested that the role of the proposed Adjudicator be based on the model of the Groceries Code Adjudicator, postulating two main functions for the pub industry's new ombudsman:

1. **Arbitration function:** In the context of this function, the Adjudicator will have the power to deliver redress to individual tenants in their relationship with the pub companies. In particular, the Adjudicator will have the ability to deliver Open Market Rent Reviews in accordance with guidance published by the Royal Institution of Chartered Surveyors (2010) and the new Statutory Code of Practice, thus establishing that rent levels are calculated fairly and not artificially inflated. The tenant can thus approach the Adjudicator for arbitration, provided that the respective tenant has given the pub company 21 days to resolve the dispute to the tenant's satisfaction. While this possibility is granted to any tenant who is dissatisfied with the calculation of his or her rent, the Code provides for the

possibility for the Adjudicator to impose fines on those tenants whose complaints have been found to be vexatious or entirely unmerited.

2. **Investigatory function**: This second main function allows the Adjudicator to undertake proactive investigations based on reasonable grounds of suspicion that a pub company was acting in breach of the Statutory Code of Practice. In the course of such an investigation, the ombudsman will have the ability to demand information from the pub companies, and to impose a range of sanctions on them in case that the result of the investigation evidences an actual breach of the Code.

Note that, in addition to these two main functions, the Adjudicator will provide general advice and guidance to pub companies (to ensure their compliance with the Code) and tenants (to keep them informed about their rights) in order to encourage the overall effectiveness of the Code.

The investigatory function of the Adjudicator is particularly important in ensuring that pub companies comply with the new rules and regulations set out in the Statutory Code, by giving the Adjudicator the possibility to detect and tackle more systematic breaches of the Code that would not be resolved by individual tenants through the means of arbitration. For example, in case that the pub company does not provide preparatory training to its tenants, the latter might not be informed about the rights which the Code grants them, and would not opt for arbitration of their own accord. Such a scenario would require the Adjudicator's power to investigate and impose sanctions on the respective pub company. In addition, it appears possible that a pub company might over-estimate the projected turnover of an individual pub during a rent review in order to generate higher rent from the given publican. In this case, the single tenant might refrain from approaching arbitration, since actual turnover is influenced by a variety of factors and a conscious artificial inflation of sales volumes by the pub company is difficult to detect at the individual pub level. In contrast, an Adjudicator with the above powers to investigate would benefit from a more holistic level of information, obliging the pub company to supply rent assessment information on a large number of pubs, and thus being able to detect systematic breaches of the Code more easily.

It is suggested that the new Adjudicator would have a range of sanctions at his disposal to penalise pub companies that are found to be in breach of the Code, providing them with flexibility to tailor their punishments to the severity of the breach. First, the Adjudicator will have the possibility to advance recommendations regarding the treatment of a given tenant by the respective pub company, which would be imposed in case of minor breaches of in combination with more severe punishments. Secondly, the Adjudicator will be empowered to require pub companies in breach of the Code to publish information[20] about the offence to the public through appropriate channels. This sanction would serve to warn stakeholders in the pub industry about the committed breach of the Code, and thus act as a deterrent by influencing future interactions between the respective pub company and other players in the industry. Finally, in the most severe or in case of repeated offences, the Adjudicator will be able to impose financial penalties on pub companies, which are considered a strong deterrent to the offending firm and to other companies in the industry.

The funding needed for the introduction and operation of the independent ombudsman will be guaranteed through a financial industry levy, with each of the covered pub companies covering a share of the estimated total annual cost of the Adjudicator of £900,000.[21] To ensure a fair and

[20] This sanction is also referred to as the 'name and shame' power of the Adjudicator.

[21] BIS (2013b)

effective structure of levies on the pub-owning firms, each company's first year share will be based on the proportion of all pubs which the respective firm owns. In contrast, in the second year and onwards, those firms who have been detected to breach the Code more frequently will have to pay a proportionately larger share of the costs of the Adjudicator.

Finally, as a means to ensure the continuous accountability and effectiveness of the Adjudicator, he will be required to report on the investigations and arbitrations conducted and evidenced breaches of the Statutory Code of Practice on an annual basis. Further, the Secretary of State will implement a review of the effectiveness of and the necessity for the Code and its enforcement authority every three years.

2.2 Policy Option II: A mandatory free-of-tie option

The mandatory free-of-tie option is defined as "an option in which the tenant is subject to no purchasing obligations of any form and therefore the only sum paid to the pub company is the dry-rent"[22]. As addressed above, the additional introduction of a mandatory free-of-tie option constitutes the more rigorous alternative among the two policy options to ensure the fulfilment of the core principles, particularly the second one, to be included in Statutory Code. BIS recognises the particular uncertainties involved in this possible removal of the tie, which constitutes the basis of pub companies' business model, and, if removed, might increase the potential for instability within the industry. However, albeit more rigorous, it is argued that this second suggested measure involves less complexity for tied tenants, who might find it difficult to decide whether their pub company is in breach of the Code under the first option (i.e. whether their post-rent balance is at least equal to what they would retain under a free-of-tie agreement, all else being equal).

The mandatory free-of-tie option would be included in the Statutory Code and enforced by the Adjudicator described above. BIS (2013a) acknowledges the particular importance of the Adjudicator's sufficient enforcement of the Code's principles under this option, since it is expected that pub companies will increase their tenants' rent under the free-of-tie option in order to make up for their reduced profit levels on pubs for which the beer tie is removed. As a result, the introduction of this second option would require the Adjudicator to ensure that free-of-tie rents will not increase beyond fair open-market levels (i.e. comply with RICS guidance).

[22] Department for Business, Innovation and Skills, 2013a, p.29

3 Research methodology

3.1 The BIS approach

The consultation document issued by BIS provided a worked example of how to carry out the calculations to derive a 'no worse-off' tied rent compared to the same pub in a free-of-tie position. In this section we describe this process in some depth because it is worth understanding the concepts in detail, and where and why we have deviated from such an approach, mainly due to data issues.

This section is not a critique of BIS's approach; instead it is merely an attempt to clearly elucidate where we have been consistent with the approach as initially laid out by BIS and where we have implemented changes. It is worth explicitly stating that there are a number of key assumptions that must be made, which we have found almost impossible to validate in a consistent way across the range of stakeholders (often simply because no authoritative dataset exists, has existed or is subject to any current plans to collect). To a degree this data, being only required for this exercise, would be a waste of public funding to secure, as the proposed Code itself recognises that assessment will need to be carried out on a pub-by-pub basis, which would not necessarily benefit from information on national averages. It is nonetheless a key weakness of any and all attempts to analyse this question.

The BIS approach takes a rent assessment on a tied pub and creates a hypothetical rent assessment if the same pub were free-of-tie.

3.1.1 Pub income in the BIS Model

In the BIS approach, in both the tied and free-of-tie scenarios, revenue is broken down into the following headings:

- Various categories of alcoholic and soft drinks
- Food
- Accommodation
- Other
- Net machine income

Gross profit to the tenant after the costs of purchasing these items is identified. These costs include the wet-rent paid to the pubco. The residual is the gross profit.

It should be noted that no effort is made to identify whether a tied tenant moving to a free-of-tie situation, and benefiting from a higher income (because the wet-rent is removed), might pass some of these benefits on to consumers in the form of lower prices because of the previous OFT work which demonstrated the consumer market was competitive.

3.1.2 Other costs

The BIS approach then identifies a number of cost categories[23], assuming these are constant across the two scenarios. To these, in the free-of-tie option, are added the value of SCORFA payments, which in the tied scenario represents goods and services that are received for free. In essence, the idea is that the costs of operating remain constant, but that these costs are shared in the tied scenario, whereas they are wholly the free-of-tie tenants' responsibility in this scenario.

The key issue here is how to value the SCORFA in the two scenarios, when the pubco will demonstrate significantly more buying power than an individual tenant. If cost is taken as a proxy for value (and indeed, in reality, how do we expect the pubco to provide an assessment of what it would cost someone else to purchase equivalent services without benefitting from the economies of scale of the pubco), then this implies that the value of the SCORFA added to the costs of operating in a free-of-tie scenario needs to be higher than those used in the tied scenario. In line with economies of scale we have observed in other industrial contexts, we consider it likely that a pubco buying services for several hundred pubs should be able to secure prices at least a third lower than each individual pub making their own arrangements. For example, the BBPA have quoted to us that where the average cost of providing SCORFA for one of their members to a tied pub is around £13,000, the cost to an individual tenant of the same services in the open market is estimated at around £20,000, which is broadly in line with this.

SCORFA is an incredibly contentious figure, with a wide variety of estimates from different sources, which probably differ in a large part according to which elements of the pubcos' support are included. We have identified the following estimates in our study:

- In 2009, a number of the smaller brewing pub companies suggested valuation of SCORFA of £15,000 per pub (Independent Family Brewers of Britain submission to European Commission Directorate-General for Competition, cited in Department for Business, Innovation and Skills, 2013b)
- In 2009, in a submission by pub companies to the OFT in response to CAMRA's super-complaint, an estimate of £6,000-8,000 on average per pub per year (quoted in Department for Business, Innovation and Skills, 2013b)
- In the OFT's final decision on CAMRA's super-complaint[24], SCORFA was calculated on the basis of including items such as buying discounts (for items other than drinks), business development assistance (such as training and legal support through business development manager), investment and centralised technical and compliance services, including business planning, development and marketing advice, and training but excluding costs related to building repairs (which is in line with our inclusion of these costs in the capital expenditures). The OFT estimated that the average costs to pub companies of providing this support is £1,500 per year[25], although they note that this might be substantially higher in individual cases.

[23] Wages, salaries and other staff costs, rates, utilities, repairs, maintenance and renewals, building insurance, marketing and promotion costs, telephony, consumables, cleaning, professional fees, bank charges, depreciation and interest, and miscellaneous costs

[24] Office of Fair Trading, 2010

[25] See paragraph 5.154, p. 123 of Office of Fair Trading (2010).

3.1.3 The divisible balance calculation

Gross profit (revenue after the cost of purchasing sales goods) minus operating costs gives what is termed in the tied pub sector 'the divisible balance'. This sum represents the profit which can be shared (divided) between the tenant and the pubco.

In the BIS example, in the tied scenario this sum is lower than the free-of-tie scenario because the wet-rent is greater than the SCORFA. In the tied scenario, the wet-rent is part of the costs removed from revenue to generate the divisible balance, whereas in the free-of-tie scenario it is not. Similarly, in the free-of-tie, SCORFA is added into the costs, whereas in the tied scenario it is not.

The divisible balance is divided in two parts. In the worked example, in a 50:50 share, one part forms the dry-rent, and the remainder forms the tenant's income. As a result of the fact that the divisible balance in the free-of-tie scenario increases, as the pubco is no longer receiving a wet-rent, the tenant's income is therefore also higher. In which case, to achieve a 'no worse off' situation for a tied tenant, the tied tenant's dry-rent is reduced so that the tied tenant's income is equivalent to that which would be earned in the free-of-tie sector.

3.1.4 The drivers of closure

In paragraph 43 of the impact assessment[26], the Department states: '*No pub should become unviable as a result of this policy as it just moves profit from one party to another. If a pub was viable prior to the policy the licensee and pub owning company could reach a negotiation that maintained the pub's viability. It is possible that the policy could have an impact on the viability of pub-owning companies, as opposed to individual pubs.*'

This statement is partial, and the reason for this is that whilst a pub may be *operationally viable* in terms of the revenue exceeding the operating costs and cost of sale goods, there are further costs which must be considered that are currently faced by the pubco, which are not reflected in the example described above.

The most significant of these are any capital costs (e.g. maintenance) that are carried by the pubco, and debt servicing costs (i.e. the interest on the debt used to purchase the property). The basic argument here is directly paralleled by the fact that many private household's finances would look significantly better if they were not paying the interest on their mortgage, or paying all the costs of repairs and improvements to the property. Inclusion of these costs would make the apparent financial position of the household significantly less attractive.

For the pubco, the position is relatively simple. Income from the pub needs to be sufficient to cover these and the management and tenant contractual costs that the pubco bears, as well as covering the cost of any SCORFA provisions. If the income from the pub falls below the aggregate of these, the pub may continue to appear viable to the tenant but would no longer be viable for the pubco, which would be forced to divest this asset.

From the pubco's perspective allocating a larger share of the operating margin to the tenant is identical to the application of a sales tax; adding an additional cost pressure which reduces the

[26] Department for Business, Innovation and Skills, 2013b

'profit' which the pubco receives from the pub in question. If it reduces profit to a point that it is negative then the pub is no longer viable, even given the same level of operating margin. We can illustrate this in the following simple example based on the worked example in the BIS consultation[27]:

Table 3: Example balance sheet, based on BIS sample rent assessment statement

Costs / Revenue category	Revenue /profit	Costs	Commentary
Sales revenue	£265,000		
Sales costs – excluding wet-rent		*(£93,500)*	
Operating costs		*(£85,065)*	
Operating margin	**£86,435**		**This is the sum shared between the pubco and the tenant**
Corporate operation & management fees (including SCORFA)		*(£14,500)*	Indicative estimate based on average of data supplied by pubcos.
Maintenance costs		*(£10,000)*	Indicative estimate based on average of data supplied by pubcos.
Debt servicing costs		*(£30,000)*	Indicative estimate based on average of data supplied by pubcos.
Overall margin	**£31,935**		This is the total profit after the total costs
Tenant profit share	£28,518		
Pubco profit share	£3,417		

Note: London Economics calculations

Whilst it is important to note that these broad averages have been simply applied to a pre-existing example from the BIS consultation, that is not to say that this pub is necessarily a perfect 'average' pub in terms of its income and operating costs. The worked example from the BIS Consultation, which proposed for this pub a transfer of £10,875 from the pubco to the tenant to deliver a 'no worse off' outcome would involve driving the pubco into a loss-making position on this pub. As such, the view that the pubco '*takes x thousand pounds out of a pub*' has to be measured against the costs they face from this pub. One should look to estimate the profit they make per pub to determine whether the tenant is being treated fairly. Nevertheless, when pubs become unviable for the pubco, it is necessary to presume that at least some of those pubs will shut.

The pubco will necessarily need to take a long-term view in this type of situation on a pub-by-pub basis, taking account of long-term profitability, but also alternative land usage values, particularly if a pub becomes loss-making, and looks likely to remain loss-making for the foreseeable future. In this example, a transfer of this type in a medium term tenancy (such as we see in the tied sector), would result in this pub becoming unviable for the pubco to continue to operate *unless the existing debt servicing, maintenance and corporate costs faced were reduced.*[28]

A pub becoming unviable for the pubco has two effects:

[27] Department for Business, Innovation and Skills (2013a), p.48.
[28] Primary amongst these, and on average larger than the other costs covered by the pubco combined, is the cost of servicing the debt. Whilst some of the pubcos we have talked to are currently in the process of re-financing their general debt portfolio, we anticipate that this is likely to make a difference of at most a few thousand pounds

- Pubcos are likely to divest themselves of a pub they do not find viable, but it does not necessarily shut. It may instead be taken on by a different organisation or individual, who may be able to access favourable terms on the debt required to purchase the asset. To maintain consistency and comparability with previous studies, we have assumed that, about two-thirds of divested pubs end up leaving the sector. However, this sector has been through a period of divestment for those pubs where revenues have not been sufficient to cover total costs (including debt servicing and maintenance), whereas this policy compels pubs to devote a greater share of their revenue to profit rather than covering costs. As such there has to be an expectation that open and honest negotiations, based on the transparent sharing of data will lead to moderated requests for reduced rentals by tenants in the face of an expectation of closure if they push too far in their request. There is clearly a middle-ground for many pubs where 'profits' could be more equitably shared, although one must consider the profit made by the tenant and the pubco in the same light; after the full coverage of costs.
- The shutting of pubs forces consumers to move to a different venue. These may include another pub, an alternative venue (e.g. club), or the home. Alternatively, pub closure may result in the individual stopping drinking entirely. Despite these numerous leakages of demand from the pub sector, it is still necessary to assume that the remaining pubs may see sales increase to some degree, compensating both the pubco and the tenant more than before. We have attempted to model this effect, which would mitigate the number of unviable and thus closed pubs, as a result of this proposed reform.

3.2 The London Economics approach

Our approach has to be driven by the available data. At the present time, none of the relevant pubcos systematically collect data from their tenants on the value of sales, or the cost-base of their operation. It is therefore not possible to observe an accurate estimate of the divisible balance.

The pubcos do, however, collect actual values for wet-income, including wet-rents, dry-rent, gaming income and other income, which we can make use of. However, this data is insufficient to produce a bottom-up costing of the free-of-tie alternative.

It is worth noting at this point that several stakeholders interviewed by us have their doubts whether a ***'comparable free-of-tie' estimate*** can exist conceptually. One major point drawn from these conversations is that dry-rents are calculated by RICS surveyors using comparable local pubs as benchmarks, but the idea of 'comparable' means that a tied pub would not be considered comparable to a free-of-tie pub and vice versa, because of the large number of (potentially unquantifiable) countervailing effects, such as wet-rents, SCORFA, and whether or not the tenant would become responsible for maintenance in the free-of-tie option. ***We do consider that a key risk to BIS in relation to this policy is exactly how such assessments will be carried out*** in a transparent way that is not overly reliant on assumptions that may not materialise or change over time.

The lack of a bottom-up costing to estimate the impact of moving from a tied to a free of tied state, or what level of transfer would be required to deliver the 'no worse off' status targeted by the proposed regulatory change, means that we have had to assume a range of feasible values for this transfer to test potential impacts. Providing an evidential base or a theoretical rationale for these is extremely challenging, in part because:

- Identifying any feasible data source to use to create an estimate has been challenging

- Conceptually, should we model a flat 'average' transfer for all pubs, or should we scale this by size? Simply put, if a tenant in a small tied pub is £5,000 worse off than a free-of-tie equivalent, should he receive less transfer than a tenant similarly worse off in a large tied pub that accrues more revenue? Is it fair to assume that tenants in smaller pubs have a smaller gap between their current position and a 'no worse off' position than a tenant in a larger pub? It is actually easier to make the opposite argument, that in a large revenue pub, there is more profit to share, so the tenant in a large tied pub should have a smaller gap between his current income and a 'no worse off' income than a low revenue pub, where the pubco will still be looking to cover their costs, which may not be correlated with revenue:
    - Maintenance costs are expected to be correlated with pub square footage, which may not be correlated with revenue, and depend on location and neighbouring facilities.[29]
    - Contract management costs may be a fixed cost, and therefore constant irrespective of revenue.
    - There is an argument that large pubs already accruing large revenues are able to cope with the costs that fall on them with greater ease than smaller pubs, and it may be logical therefore to argue that where pubcos provide support through SCORFA to pubs this is likely to be targeted on smaller pubs.[30]
    - Debt servicing costs are likely to be correlated to revenue.

As can be seen, there is no unambiguous answer to the question 'will the transfer from pubco to tenant be correlated with revenue?' We cannot even *a priori* identify whether this relationship, if it does exist, is positive or negative.

- Can dry-rents go negative? If a tenant in a small tied pub is £5,000 worse off than a free-of-tie equivalent, but his dry-rent is only £2,000 (possibly because in his case the negotiated settlement is a high wet-rent and low dry-rent), then can dry-rent only be reduced to zero, or can it go negative to make him 'no worse-off'?

Our approach, therefore, is based on comparing pubco revenue and costs in a simple breakeven analysis. At the margin, when we apply a transfer from the pubco to the tenant we can then identify where pubs move from delivering positive net revenues to negative net revenues. This analysis therefore identifies these pubs that are potentially likely to be divested under each scenario. The following points arise:

- In the baseline data there are already a number of pubs which have costs exceeding revenues and are therefore candidates for divestment. This is because the pub sector is experiencing long term shifts in consumer behaviour that are reducing demand. We exclude these from our results as it would be inaccurate to allocate any resultant closures from within this group to being caused by the policy. Instead, we identify only those pubs which move from positive net profits to negative net profits as a result of the introduction of the above-described policy options.

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[29] Two pubs with the same footprint, one in a city centre and the other in an isolated village, will have very different revenues.

[30] This argument implies the gap between wet-rent and SCORFA in pubs with lower revenues may be lower and would support the case that we should scale by size.

- In the baseline data there are some pubs with negative income for the pubco. In consultation with the pubcos we believe these to be those which are currently transitioning from one tenancy to another, or otherwise in some form of special measures. As this is a normal churn within the sector, including those which may be divested, we have taken these into account by retaining them in our sample, as part of the baseline. As they already demonstrate negative profits, they will not show a change in state as a result of the policy.

3.3 Data collection

3.3.1 Collection process

London Economics has received data from a number of pubcos, with responses each containing a random sample of 300-400 anonymised pubs. This sample has been designed as follows:

- We asked pubcos to provide a sample with 30-40 pubs from each decile of their population of pubs, where the pubs are ordered by income for the pubco.
- We asked pubcos to ensure that there was a geographical spread of pubs representative of their distribution.

Information collected from pub companies for each pub was:

- Wet-rent
- Dry-rent
- Gaming revenue
- Other revenue
- Rent paid to freeholder where the pubco does not own the property
- Management and operation costs incurred by the pubco in relation to the pub
- Maintenance costs
- Debt servicing costs

It is worth addressing each of these in more detail, as the definition of each is important:

- **Wet-rent** – this is taken as the revenue for the pubco from wet sales by the pub. This can be negative as this is a net figure. In the case where beer sales are low, for example if the pub is undergoing a period of maintenance, costs relating to the rental of the beer line assets can exceed the revenues, which we see in a small number of cases for each pubco.
- **Dry-rent** – this is taken as the property rental paid by the tenant to the pubco.
- **Gaming revenue** – this is the income for the pubco from the gaming machines in the pubs. The operational position on gaming income changed during the duration of our study, with the pubcos voluntarily agreeing to remove the gaming income from the divisible balance calculation under their voluntary codes. Broadly, older leases where the rent has not recently been reviewed may still be paying a rent that was assessed in a different way, but income is now generally split three ways between the tenant, the pubco and the machine supplier, and does not feed into divisible balance calculations. However, if the site is free of tie for machines, 100% of the machine income was included in the calculation of rent, as no machine income would be taken at source by the pubco.
- **Other revenue** – Special cases and other incomes for the pubco from a pub.

- **Rent paid to freeholder where the pubco does not own the property** – some pubcos, as well as using debt to finance the acquisition of pub properties, or indeed have reached the point of having paid these debts off, also lease pub properties from a third party, paying the rental on these in lieu of debt servicing costs. For pubcos that were able to provide this information to us we allocated the lease costs in place of debt servicing costs for that pub. For those pubs that were not able to break this cost out, this cost was included in management and operation costs and allocated across all pubs.
- **Management and operation costs incurred by the pubco in relation to the pub** – These were provided as either aggregates for the whole firm, or broken down on a pub by pub basis.
- **Maintenance costs** - These were provided as either aggregates for the whole firm, or broken down on a pub by pub basis. The key difficulty is that the capital costs of the firm fall into three main parts:
  - Maintenance on existing pubs
  - Renovation of pubs in the estate to bring them back into a serviceable condition and remain a pub
  - Purchasing new pubs

  Whilst there is little activity in the third of these categories, the first two exist and there is an argument that we should attempt to exclude the costs of renovating run-down pubs from the costs incurred on serviceable pubs in operation, as this cost in not reflective of the true costs of operating and running this pub to work out a fair division of profits. We have included this cost for two reasons. First, in a practical sense, it is not possible from the data we have to separate out this cost, and therefore we would need to apply a 'rough and ready' assumption of what share of a pubco capital costs is renovation costs, weakening the robustness of our analysis. Secondly, from a general theoretical point, we cannot think of a pub's profitability and a fair allocation of profits without recognising that there is a temporal dimension to this question, and that a long-term property owner (the pubco) has to have a longer term perspective than a short-term tenant. The pubco has to fund renovation work of this type or watch a decline in their estate. It can either do this by laying aside cash every year into a 'sinking fund' to pay these costs as they emerge, or pay these costs as they are incurred. Either way, this long-term cost has to be funded from the pubco's revenue streams from its pubs. This appears to us to be the core difference between those who argue tenants have a bad deal and those who argue the pubcos are struggling; the first group conceptualise the pub as an operation in the present, whereas the pubco conceptualises the pub as an operational unit of a larger business, which also has to maintain an estate and fund corporate branding, marketing and other services. This second view appears to us to be justified, so we have allocated all capital costs to the pubs.
- **Debt servicing costs** - These were provided as either aggregates for the whole firm, or broken down on a pub by pub basis. Again here, in the same way as described with maintenance and renovation costs above, there is an argument to suggest that the debt servicing costs should be limited to interest payments, leaving the principal to one side. This appears to us to suffer from the same arguments as presented above for the maintenance costs. Whilst the pubco could only cover the interest charges from their pubs, and indeed for those pubs that become unviable this may be a sensible first-step approach, the long-term principal of the debt must be repaid for the pubco to reach a position where it can *significantly* improve the long-term viability of the pubco by significantly reducing debt servicing payments. Indeed, during the current period of low

> and stable interest rates this is almost the optimal time to reduce debt levels before interest rates rise. In the case where debt principal is not paid off, if interest rates then rose we would expect to enter another cycle of divestments by pubcos, affecting the long-term stability of the sector. Taking a long-term view, as such, it is appropriate for us to include the full debt servicing costs in this analysis.

In some cases, negative or null values are given for revenue figures. We have brought these to the attention of pubcos and sought clarification on their interpretation. In general, these appear to be net costs derived by a pub needing to pay service charge or beer line charges for a period whilst a pub is not in operation (i.e. closed for maintenance or between tenants). In general, these negatives are small.

3.3.2 Cost allocation

Because many pubcos provided their cost data in aggregate form we carried out the following steps to create pub-level data for each data item.

The aggregate costs are divided by the aggregate number of pubs owned by the firm, and multiplied back up by the number of pubs in the sample to produce a sample aggregate cost.

As a first step, management and operations costs, and maintenance costs are divided equally between all pubs in the sample, except that the maintenance cost on leasehold pubs is down-weighted by a quarter to reflect the transfer of some maintenance risk to the freeholder. The total debt servicing cost is scaled according to the number of non-leasehold pubs in the sample and divided equally between all non-leasehold pubs. For leasehold pubs, we assume no debt servicing costs, however, we do include the amount of rent paid by the pubco to the freeholder as a cost.

This process delivers an aggregate imputed cost to the pubco for each pub to be compared against the aggregate declared revenue. This linear transformation of the cost data produces a larger number of unviable pubs, than expected.

3.3.3 Cost calibration

Expected rates of unviability

Using evidence from the BIS consultation document that net pub closures are 18 a week, from a base of 51,000 pubs, this suggests an annual net closure rate of 939 pubs a year, or 1.8% of the base.

As discussed above, assuming that tied pubs shut at the same rate as freehold and free-of-tie pubs, with two-thirds of unviable pubs remaining closed, this implies an un-viability rate of 2.7%. However, assuming pubcos take a longer-term view (demonstrated through renovation expenditure etc), and with the capacity to support a pub for a short period of lower revenue through covering only the interest on the debt servicing costs, we have made an assumption that a pubco will only release a pub which is not able to return to profit within four years[31]. We thus calculate a base un-viability rate of 10.8%[32].

Given that in a flat allocation of costs to pubs, far more pubs would be unviable than this target number, we calibrated the data by applying an adjustment factor onto the cost allocation, scaled according to the revenue of each pub, with the costs multiplied by the adjustment factor for each pub so that higher income pubs take a larger share of the costs. This is intuitive, as higher income pubs would be likely to have a larger footfall, and be located in high-cost areas (town centres etc), implying higher debt servicing costs (and maintenance costs). The key constraint on this re-allocation of costs to deliver the target un-viability rate in the base-case is that the average adjustment factor must be 1, so that the total costs across all pubs is equivalent to the imputed sample aggregate cost base

3.4 Model set-up

3.4.1 Scenarios

Three of the model inputs have been constructed to take a range of values to allow us to generate scenarios to reflect the uncertainty in the evidence we have collected. These three factors are as follows:

SCORFA

SCORFA takes basic values of £1,000, £1,500, and £2,000 reflecting on the OFT estimate and an up-rate on this to reflect inflationary pressures since 2010, and a down-rate to account for any cost-saving efficiencies the pubcos may have been able to generate in this period.

In addition, industry stakeholders interviewed for the purpose of our analysis indicated arguments in favour of a negative relationship between the value of SCORFA a pubco provides to a tenant and the income which that tenant's pub produces for the firm. Particularly, it appears that pubcos grant larger financial support to those pubs which accrue less income and are therefore less likely to be able to cover the expenses included in SCORFA themselves. To account for this possibility, we divided the sampled pubs into three groups depending on their income (i.e. based on 33rd income percentiles). Whereas those whose income ranged between the 33rd and 66th percentile of income would simply receive one of the basic SCORFA values listed above, those in the low-income group would receive 150% of this basic value; in contrast, those in the high-income group would be assigned only 50% of the basic value[33].

Hence, to provide a realistic and wide range of SCORFA, we allow for variations in the basic SCORFA estimates to account for inflation, potential pubco saving efficiencies, as well as individual pub income.

[31] The four year assumption is based on our consultation with stakeholders.

[32]

[33] To provide a numerical example, assuming a basic SCORFA value of £1,000, a low-income pub would receive £1,500, a middle-income pub £1,000, and a pub with high income only £500 in SCORFA.

Divisible balance percentage

The divisible balance percentage is an estimate of the degree to which a pubco may be able to increase the dry-rent that the tenant would face in the event of the tenant going free of tie and ceasing wet-rent payments. The standard approach here is that the removal of the wet-rent would increase the divisible balance by an equivalent amount, and this assumption tests how large a share of this divisible balance increase the pubco would retain through its dry-rent, with values of 35%, 50% or 65%.

So, a simple worked example would be:

- A tenant goes free of tie and ceases wet-rent payments of £10,000 p.a. If the divisible balance increase was 65%, this means the dry-rent would increase by £6,500, and the tenant would retain £3,500. We anticipate the pubcos would be forced to maximise dry-rent increases in these circumstances *not just on formerly tied tenants but also existing free-of-tie tenants* to be able to secure sufficient revenue to cover costs. It is a key point here that in this case the transfer of profits would not be from the pubco to the tied tenant, but would be from the existing free-of-tie tenant to the currently tied tenant, although presently this is mitigated by the relevant pubcos having far fewer free-of-tie pubs than they currently have tied pubs

Dry-rent adjustment

The dry-rent adjustment is the assumption we use to calculate the transfer from the pubco to the tenant to deliver the 'no worse off' condition. This cannot be estimated directly so instead we have modelled four scenarios that represent the range of feasible possible values. Importantly, this means the scenarios presented in this report estimate the full possible range of impacts rather than being direct estimates of what will happen. We tested using fixed values to estimate this range (£1,000, £2,000, etc), but determined that percentages of total pub revenue presented the most effective way of calculating this taking account of scale effects. We use values of 1%, 5%, 10% and 15%[34].

The divisible balance and dry-rent adjustment in combination proxy for the potential outcomes from negotiation, as well as the uncertainty about the potential of the pub to deliver 'no worse-off.' The scenarios use different assumptions about dry rent adjustments as a fraction of the divisible balance and therefore attempts to act as the range of potential negotiation outcomes. As such, we assume negotiation will occur and will be seen in the scale of the changes agreed. It is important to note that there is an in-built inconsistency around 'flexibility to negotiate'. The aim of the policy is to deliver an outcome where the tenant is 'no worse-off' than a free-of-tie tenant. Negotiation inherently delivers an outcome which is not the policy objective, but is some compromise between the current allocation of profit and a 'no-worse-off' outcome.

[34] This is not and does not attempt to disguise itself as a bottom-up calculated figure. Our scenarios model the different potential impact of a negotiation between the two parties, working from a top-down assumption that if a pubco lost 15% of its revenue from a pub it would struggle to keep that pub running. The 15% is derived from the highest average profit margin (profit/revenue) experienced by any of the pubcos in the datasets provided; in short it is an upper bound on what share of the pubco's revenues the tenant could take before the negotiation would stall as a result of compelled closure. We therefore use the four values to merely indicate the range of outcomes which occur within the feasible set.

These three inputs can be combined to construct ***36 distinct scenarios*** representing different potential outcomes.

3.4.2 Modelling the suggested policy options

We have modelled five distinct options

- Status quo
  - Revenue and costs remain the same and the percentage of unviable pubs is calibrated to 10.8%
- Policy option 1 without guest beer
  - Dry-rent is adjusted downward under the "no worse off" rule
- Policy option 1 with guest beer option
  - Wet-rent decreases by 38% which is the assumed guest beer share[35]
  - Dry-rent increases by a proportion of the increase in the pub's divisible balance (equal in this case to the decrease in wet-rent)
  - Dry-rent is adjusted downward under the "no worse off" rule using the dry-rent adjustment assumption
- Policy option 2 where all pubs go free-of-tie
  - Wet-rent is zero for all pubs but now tenants have to pay SCORFA and capital costs themselves[36]
  - SCORFA is assumed to be 1.5 times more costly to tenants than to pubcos due to economies of scale
  - Dry-rent increases using the divisible balance assumption
- Policy option 2 where some pubs go free-of-tie
  - Pubs go free-of-tie if what they would gain in wet-rent exceeds what they would have to pay in SCORFA and capital costs
  - Pubs that go free-of-tie have the same outcome as in option (d) and pubs that do not have the same outcome as in option 1 without guest beer.

3.5 Employment effects of closure

When a pub closes a relatively simple equation calculates the number of jobs lost. Using data from the BBPA's Beer and Pub Sector Regional Impact Assessment completed by Oxford Economics[37] ,

[35] It is assumed that pubs will seek to make their top selling brand (almost invariably a lager) their guest beer. Whilst the policy may be designed to support craft beers and local real ales we see this as exceedingly unlikely. Data we have seen from expert sources suggest standard lager sales are normally between 35% and 40% of wet sales

[36] Taking an example of a pubco that retains responsibility for repairs to the pub, and which delivers this through a large facilities management operation to several thousand pubs, we can see the *value* to the tenant of this service, but we cannot easily impute the *cost* for a free-of-tie tenant (who may ultimately be asked to take this responsibility on themselves and would be forced to pay in the open market). As such, we consider that for the options where the tied pub remains a tied pub (the activation of the code), there would be no change in the contractual model and the pubco would still incur the maintenance costs. For the free-of-tie option, we would need to attempt to model the increase in costs a pub would face if it was attempting to purchase these services themselves, as under the standard free-of-tie contractual terms. This would have a key secondary effect in that we should assume that cost savings delivered by the pubco's buying power to any tied pubs which remain tied pubs would fall, but would fall *less than proportionately* due to the pubco losing economies of scale and therefore buying power, which would imply higher unit costs. Other sectors we have reviewed suggest that a drop in demand for a service of 7% would increase unit prices by around 1%, but we have not included this in our analysis to as we felt it was important to focus on the key secondary effect of demand shifting.

which identified an average of five full-time direct employees per pub[38]. This figure excludes indirect employment, but given many of these are in support industries that may not reduce in scale (a delivery van still needs the same driver and crewman even if they undertake one less delivery), we have decided to not take into account the potential indirect labour effects, or the second order effects of the alternative use of the property or the alternative spending of the 40% of sales that moves outside the pubs sector.

[37] Oxford Economics, 2012

[38] Note that the original data provide full-time direct employment for the UK pub and brewery industry, in total and by region. For the purpose of our analysis, based on the geographical range of the suggested policy options we took a simple average of full-time direct employment per pub across all English regions and Wales, thus excluding Scotland and Northern Ireland.

4 Results and conclusions

4.1 Why might a pub close?

The proposals under discussion are generally characterised as simply re-allocating profit from the pub company (pubco) to the tenant, so if there is only a re-direction of profit from one agent to another, why should this change the viability of the pub? The answer is that the discussion does not revolve around ‘profit’ but rather around ‘operating margin’, which is a different concept.

Profit is the residual from revenue after all costs have been covered. Operating margin is the revenue remaining after front-line operational costs have been paid. The difference is that whilst a pub may be operationally viable in terms of the revenue exceeding the operating costs and the cost of sale goods that are faced by the tenant, there are further costs that must be considered, which are currently borne by the pubco, including, as explained above, capital costs (e.g. maintenance), and debt servicing costs (i.e. the interest on the debt used to purchase the property).

For the pubco, the position is relatively simple. Income from the pub needs to be sufficient to cover these costs, and the management costs which the pubco faces around these elements and the contract with the tenant, as well as covering the cost of any SCORFA provisions. If the income from the pub falls below the aggregate of these, the pub may continue to *appear* viable to the tenant but would no longer be viable for the pubco, which would be forced to divest this asset.

4.2 Modelled options and results

We have modelled five options:

- The current base-case
- Implementing the Code, but not allowing a guest beer option
- Implementing the Code with the guest beer option
- Allowing tenants to go free-of-tie, with all tenants taking this option
- Allowing tenants to go free-of-tie, but only doing so if it improved their financial position[39].

We have modelled these using 36 scenarios, based on the key variables of the value of SCORFA, the divisible balance percentage and the dry-rent adjustment. The following tables present the number of pubs which become unviable, the number of pubs we expect to close and the number of jobs we expect to be lost as a result of the policy and per scenario, taking into account only the first order effects.

4.2.1 First order effects

[39] The vast majority of free-of-tie pubs are responsible for maintenance and do not receive SCORFA, which means the additional income from being free of the wet-rent needs to exceed the sum of these for a tenant to wish to use the option.

Table 4: Number of tied pubs becoming unviable and divested by pubcos (first order effects) under different scenarios

Scenario	SCORFA value (£)	Divisible balance value	Dry-rent adjustment value	Option 1 – no guest beer	Option 1 – guest beer	Option 2 – free-of-tie (all)	Option 2 – free-of-tie (optimised)
1	1,000	35%	-1%	2,300	8,000	9,500	9,600
2	1,000	35%	-5%	4,100	9,000	9,500	9,700
3	1,000	35%	-10%	6,800	10,400	9,500	9,900
4	1,000	35%	-15%	7,200	11,500	9,500	10,000
5	1,000	50%	-1%	2,300	6,800	8,500	8,600
6	1,000	50%	-5%	4,100	8,200	8,500	8,700
7	1,000	50%	-10%	6,800	9,500	8,500	8,900
8	1,000	50%	-15%	7,200	10,700	8,500	9,000
9	1,000	65%	-1%	2,300	5,700	6,900	7,000
10	1,000	65%	-5%	4,100	7,300	6,900	7,100
11	1,000	65%	-10%	6,800	8,700	6,900	7,300
12	1,000	65%	-15%	7,200	9,900	6,900	7,300
13	1,500	35%	-1%	2,300	8,000	9,400	9,500
14	1,500	35%	-5%	4,100	9,000	9,400	9,600
15	1,500	35%	-10%	6,800	10,400	9,400	9,800
16	1,500	35%	-15%	7,200	11,500	9,400	9,900
17	1,500	50%	-1%	2,300	6,800	8,400	8,500
18	1,500	50%	-5%	4,100	8,200	8,400	8,600
19	1,500	50%	-10%	6,800	9,500	8,400	8,800
20	1,500	50%	-15%	7,200	10,700	8,400	8,900
21	1,500	65%	-1%	2,300	5,700	6,900	7,000
22	1,500	65%	-5%	4,100	7,300	6,900	7,100
23	1,500	65%	-10%	6,800	8,700	6,900	7,300
24	1,500	65%	-15%	7,200	9,900	6,900	7,400
25	2,000	35%	-1%	2,300	8,000	9,200	9,400
26	2,000	35%	-5%	4,100	9,000	9,200	9,500
27	2,000	35%	-10%	6,800	10,400	9,200	9,800
28	2,000	35%	-15%	7,200	11,500	9,200	9,900
29	2,000	50%	-1%	2,300	6,800	8,300	8,400
30	2,000	50%	-5%	4,100	8,200	8,300	8,500
31	2,000	50%	-10%	6,800	9,500	8,300	8,800
32	2,000	50%	-15%	7,200	10,700	8,300	8,900
33	2,000	65%	-1%	2,300	5,700	6,900	6,900
34	2,000	65%	-5%	4,100	7,300	6,900	7,100
35	2,000	65%	-10%	6,800	8,700	6,900	7,300
36	2,000	65%	-15%	7,200	9,900	6,900	7,400

Source: London Economics' analysis

The next table takes account of the fact that current best estimates suggest that around two-thirds of those pubs divested by pubcos will close, with one third being re-opened as a pub by a different agent. The table above, therefore, shows the impact on the pubcos, and the table below shows the impact on the pub sector as a whole.

Table 5: Total number of tied Pubs closing as a result of the policy (first order effects)

Scenario	SCORFA value (£)	Divisible balance value	Dry-rent adjustment value	Option 1 – no guest beer	Option 1 – guest beer	Option 2 – free-of-tie (all)	Option 2 – free-of-tie (optimised)
1	1,000	35%	-1%	1,500	5,300	6,400	6,400
2	1,000	35%	-5%	2,700	6,000	6,400	6,500
3	1,000	35%	-10%	4,600	6,900	6,400	6,600
4	1,000	35%	-15%	4,800	7,700	6,400	6,700
5	1,000	50%	-1%	1,500	4,600	5,700	5,700
6	1,000	50%	-5%	2,700	5,500	5,700	5,800
7	1,000	50%	-10%	4,600	6,400	5,700	5,900
8	1,000	50%	-15%	4,800	7,100	5,700	6,000
9	1,000	65%	-1%	1,500	3,800	4,600	4,700
10	1,000	65%	-5%	2,700	4,900	4,600	4,700
11	1,000	65%	-10%	4,600	5,800	4,600	4,800
12	1,000	65%	-15%	4,800	6,600	4,600	4,900
13	1,500	35%	-1%	1,500	5,300	6,200	6,300
14	1,500	35%	-5%	2,700	6,000	6,200	6,400
15	1,500	35%	-10%	4,600	6,900	6,200	6,600
16	1,500	35%	-15%	4,800	7,700	6,200	6,600
17	1,500	50%	-1%	1,500	4,600	5,600	5,700
18	1,500	50%	-5%	2,700	5,500	5,600	5,700
19	1,500	50%	-10%	4,600	6,400	5,600	5,900
20	1,500	50%	-15%	4,800	7,100	5,600	5,900
21	1,500	65%	-1%	1,500	3,800	4,600	4,600
22	1,500	65%	-5%	2,700	4,900	4,600	4,700
23	1,500	65%	-10%	4,600	5,800	4,600	4,900
24	1,500	65%	-15%	4,800	6,600	4,600	4,900
25	2,000	35%	-1%	1,500	5,300	6,100	6,200
26	2,000	35%	-5%	2,700	6,000	6,100	6,300
27	2,000	35%	-10%	4,600	6,900	6,100	6,500
28	2,000	35%	-15%	4,800	7,700	6,100	6,600
29	2,000	50%	-1%	1,500	4,600	5,500	5,600
30	2,000	50%	-5%	2,700	5,500	5,500	5,700
31	2,000	50%	-10%	4,600	6,400	5,500	5,800
32	2,000	50%	-15%	4,800	7,100	5,500	5,900
33	2,000	65%	-1%	1,500	3,800	4,600	4,600
34	2,000	65%	-5%	2,700	4,900	4,600	4,700
35	2,000	65%	-10%	4,600	5,800	4,600	4,900
36	2,000	65%	-15%	4,800	6,600	4,600	5,000

Source: London Economics' analysis

Table 6: Job losses from pub closures (first order effects)							
Scenario	SCORFA value (£)	Divisible balance value	Dry-rent adjustment value	Option 1 – no guest beer	Option 1 – guest beer	Option 2 – free-of-tie (all)	Option 2 – free-of-tie (optimised)
1	1,000	35%	-1%	7,500	26,500	31,600	31,900
2	1,000	35%	-5%	13,500	29,900	31,600	32,300
3	1,000	35%	-10%	22,600	34,300	31,600	32,900
4	1,000	35%	-15%	23,700	38,100	31,600	33,100
5	1,000	50%	-1%	7,500	22,700	28,200	28,500
6	1,000	50%	-5%	13,500	27,200	28,200	28,800
7	1,000	50%	-10%	22,600	31,600	28,200	29,400
8	1,000	50%	-15%	23,700	35,500	28,200	29,700
9	1,000	65%	-1%	7,500	18,800	23,000	23,200
10	1,000	65%	-5%	13,500	24,300	23,000	23,500
11	1,000	65%	-10%	22,600	28,900	23,000	24,100
12	1,000	65%	-15%	23,700	32,800	23,000	24,300
13	1,500	35%	-1%	7,500	26,500	31,100	31,500
14	1,500	35%	-5%	13,500	29,900	31,100	31,800
15	1,500	35%	-10%	22,600	34,300	31,100	32,600
16	1,500	35%	-15%	23,700	38,100	31,100	32,800
17	1,500	50%	-1%	7,500	22,700	27,900	28,200
18	1,500	50%	-5%	13,500	27,200	27,900	28,500
19	1,500	50%	-10%	22,600	31,600	27,900	29,300
20	1,500	50%	-15%	23,700	35,500	27,900	29,500
21	1,500	65%	-1%	7,500	18,800	23,000	23,100
22	1,500	65%	-5%	13,500	24,300	23,000	23,500
23	1,500	65%	-10%	22,600	28,900	23,000	24,300
24	1,500	65%	-15%	23,700	32,800	23,000	24,500
25	2,000	35%	-1%	7,500	26,500	30,600	31,000
26	2,000	35%	-5%	13,500	29,900	30,600	31,600
27	2,000	35%	-10%	22,600	34,300	30,600	32,400
28	2,000	35%	-15%	23,700	38,100	30,600	32,700
29	2,000	50%	-1%	7,500	22,700	27,500	27,700
30	2,000	50%	-5%	13,500	27,200	27,500	28,200
31	2,000	50%	-10%	22,600	31,600	27,500	29,100
32	2,000	50%	-15%	23,700	35,500	27,500	29,400
33	2,000	65%	-1%	7,500	18,800	23,000	23,000
34	2,000	65%	-5%	13,500	24,300	23,000	23,500
35	2,000	65%	-10%	22,600	28,900	23,000	24,400
36	2,000	65%	-15%	23,700	32,800	23,000	24,700

Source: London Economics' analysis

Table 7 shows a summary of the range of the share of the current stock of 51,000 pubs we estimate would close under each option, over and above those which would close in the base-case. We have modelled a number of scenarios to reflect the diversity of opinion amongst stakeholders in relation to certain key assumptions.

Table 7: The impact on pub closures and employment (first order effects only)				
Min-max ranges	Option 1 – no guest beer	Option 1 – guest beer	Option 2 – free-of-tie (all)	Option 2 – free-of-tie (optimised)
Percentage of all pubs closing	5-14%	11-23%	14-19%	14-20%
Percentage of tied pubs in scope of Code closing	11-36%	28-58%	35-48%	35-50%
Number of pubs closing	1,500-4,800	3,800-7,700	4,600-6,400	4,600-6,700
Number of jobs lost	7,500-23,700	18,800-38,100	23,000-31,600	23,000-33,100

Source: London Economics' analysis

However, Table 7 only accounts for the 'first order effects', or direct effects of the change. With this number of pubs closing we need to also consider the 'second order effects', or knock-on implications of the change. The most important of these is the behaviour of consumers who previously would have used a closed pub and who now have a choice:

- Stop drinking
- Stop using a pub and drink at a different venue (home, club, bar etc)
- Move to a different pub

The literature on 'pub-switching behaviour' is very thin. We have assumed that only 60% of customers whose pub shut move to another pub. We have added this demand (and therefore wet-revenues) to the pubs modelled to see what impact we could expect this to have. As shown below this acts to reduce the range of pubs estimated as closing.

4.2.2 Why does the guest beer option give the worst closure estimates?

In relation to why the guest beer option appears to give the worst results, in terms of pub closures, this is because the introduction of a guest beer option leads to distinct differences in several of the key parameters which affect the profit which a pubco can derive from a given tenant under Policy Option I (Introduction of a Statutory Code and Independent Adjudicator):

Under the guest beer option, compared to the scenario without this option, it is assumed that the tenant will be allowed to buy its standard lager (which constitutes an estimated 38% of total beer sales) from a supplier other than the pub company itself. As a result of this switching of some beer purchases to another supplier, the wet rent which the pub company receives from the given tenant reduces by 38%, i.e. *the wet rent received by the pubco is lower under the guest beer option than otherwise.*

In order to partially compensate for this loss in wet rent, it is assumed the pubco will increase the dry rent (before adjustments under the Code) which it charges to the tenant. In particular, it is assumed that the pub company increases its dry rent by a given percentage (35, 50 or 65%) of the difference in the wet rent paid by the tenant without and with the guest beer option. Particularly, since the tenant pays a lower wet rent to the pub company under the guest beer option, this increases the divisible balance accrued by the tenant. In accordance with the BIS approach taken in the consultation document, the pubco takes a share of this increase in the divisible balance in dry rent, adding it to the dry rent which the tenant would have to pay under the 'no guest beer' option.

Summarising these effects, whereas the pubco receives a lower amount of wet rent from the tenant under the guest beer option, it *partially* recovers this loss in wet rent by charging a higher dry rent (before the adjustment required under the new Code) than under the situation with no guest beer option. As a result, the total revenue accrued by the pubco from a given pub before taking account of the necessary dry rent adjustment required under the Code is lower under the guest beer scenario.

As a result, for every pub and every scenario considered in our model, the revenue which the pubco accrues from a given pub is lower when introducing a guest beer option along with the Statutory Code and Adjudicator. Since the modelled costs to the pubco are the same under both scenarios, this implies that the profits to the pubco from a given pub are also lower for every pub and scenario when considering the guest beer option. Hence, whereas a given pub might currently be at the margin of viability for the pub company, the introduction of the guest beer option might result in a negative profit for the pubco for the same pub, thus making it unviable for the pubco.

4.2.3 Second order effects

The following tables outline the modelled number of pubs become unviable, those closing and the resultant job losses once second order effects are taken into account.

We tested scenarios using between 60% and 90% retention of drinkers in the pub sector and the results only changed marginally. This demonstrates how many pubs, given the data we can access and the assumption we have made, are close to the margin of viability, such that the changes modelled in the first round effects are large enough to cause significant numbers of closures, but that also the second order effect of a few percent increase in demand is sufficient to bring many of them back into viability again. This is a key result; how potentially volatile the number of pubs closing is to assumption changes.

Table 8: Tied pubs becoming unviable and divested by pubcos (second order effects)							
Scenario	SCORFA value (£)	Divisible balance value	Dry-rent adjustment value	Option 1 – no guest beer	Option 1 – guest beer	Option 2 – free-of-tie (all)	Option 2 – free-of-tie (optimised)
1	1,000	35%	-1%	-	1,400	2,000	2,000
2	1,000	35%	-5%	100	1,800	2,000	2,000
3	1,000	35%	-10%	800	2,200	2,000	2,100
4	1,000	35%	-15%	1,000	2,400	2,000	2,100
5	1,000	50%	-1%	-	1,100	1,500	1,600
6	1,000	50%	-5%	100	1,600	1,500	1,600
7	1,000	50%	-10%	800	1,900	1,500	1,600
8	1,000	50%	-15%	1,000	2,200	1,500	1,700
9	1,000	65%	-1%	-	600	1,100	1,100
10	1,000	65%	-5%	100	1,200	1,100	1,200
11	1,000	65%	-10%	800	1,700	1,100	1,200
12	1,000	65%	-15%	1,000	2,000	1,100	1,200
13	1,500	35%	-1%	-	1,400	1,900	2,000
14	1,500	35%	-5%	100	1,800	1,900	2,000
15	1,500	35%	-10%	800	2,200	1,900	2,100
16	1,500	35%	-15%	1,000	2,400	1,900	2,100
17	1,500	50%	-1%	-	1,100	1,500	1,500
18	1,500	50%	-5%	100	1,600	1,500	1,500
19	1,500	50%	-10%	800	1,900	1,500	1,600
20	1,500	50%	-15%	1,000	2,200	1,500	1,600
21	1,500	65%	-1%	-	600	1,100	1,100
22	1,500	65%	-5%	100	1,200	1,100	1,200
23	1,500	65%	-10%	800	1,700	1,100	1,200
24	1,500	65%	-15%	1,000	2,000	1,100	1,300
25	2,000	35%	-1%	-	1,400	1,800	1,900
26	2,000	35%	-5%	100	1,800	1,800	1,900
27	2,000	35%	-10%	800	2,200	1,800	2,000
28	2,000	35%	-15%	1,000	2,400	1,800	2,000
29	2,000	50%	-1%	-	1,100	1,500	1,500
30	2,000	50%	-5%	100	1,600	1,500	1,500
31	2,000	50%	-10%	800	1,900	1,500	1,600
32	2,000	50%	-15%	1,000	2,200	1,500	1,700
33	2,000	65%	-1%	-	600	1,100	1,100
34	2,000	65%	-5%	100	1,200	1,100	1,100
35	2,000	65%	-10%	800	1,700	1,100	1,200
36	2,000	65%	-15%	1,000	2,000	1,100	1,300

Source: London Economics' analysis

Table 9: Total number of tied pubs closing (second order effects)

Scenario	SCORFA value (£)	Divisible balance value	Dry-rent adjustment value	Option 1 – no guest beer	Option 1 – guest beer	Option 2 – free-of-tie (all)	Option 2 – free-of-tie (optimised)
1	1,000	35%	-1%	-	1,000	1,300	1,300
2	1,000	35%	-5%	100	1,200	1,300	1,400
3	1,000	35%	-10%	500	1,400	1,300	1,400
4	1,000	35%	-15%	700	1,600	1,300	1,400
5	1,000	50%	-1%	-	700	1,000	1,000
6	1,000	50%	-5%	100	1,000	1,000	1,100
7	1,000	50%	-10%	500	1,300	1,000	1,100
8	1,000	50%	-15%	700	1,500	1,000	1,100
9	1,000	65%	-1%	-	400	700	800
10	1,000	65%	-5%	100	800	700	800
11	1,000	65%	-10%	500	1,100	700	800
12	1,000	65%	-15%	700	1,300	700	800
13	1,500	35%	-1%	-	1,000	1,300	1,300
14	1,500	35%	-5%	100	1,200	1,300	1,300
15	1,500	35%	-10%	500	1,400	1,300	1,400
16	1,500	35%	-15%	700	1,600	1,300	1,400
17	1,500	50%	-1%	-	700	1,000	1,000
18	1,500	50%	-5%	100	1,000	1,000	1,000
19	1,500	50%	-10%	500	1,300	1,000	1,100
20	1,500	50%	-15%	700	1,500	1,000	1,100
21	1,500	65%	-1%	-	400	700	800
22	1,500	65%	-5%	100	800	700	800
23	1,500	65%	-10%	500	1,100	700	800
24	1,500	65%	-15%	700	1,300	700	800
25	2,000	35%	-1%	-	1,000	1,200	1,200
26	2,000	35%	-5%	100	1,200	1,200	1,300
27	2,000	35%	-10%	500	1,400	1,200	1,300
28	2,000	35%	-15%	700	1,600	1,200	1,400
29	2,000	50%	-1%	-	700	1,000	1,000
30	2,000	50%	-5%	100	1,000	1,000	1,000
31	2,000	50%	-10%	500	1,300	1,000	1,100
32	2,000	50%	-15%	700	1,500	1,000	1,100
33	2,000	65%	-1%	-	400	700	700
34	2,000	65%	-5%	100	800	700	800
35	2,000	65%	-10%	500	1,100	700	800
36	2,000	65%	-15%	700	1,300	700	800

Source: London Economics' analysis

Table 10: Job losses as a result of pub closures (second order effects)

Scenario	SCORFA value (£)	Divisible balance value	Dry-rent adjustment value	Option 1 – no guest beer	Option 1 – guest beer	Option 2 – free-of-tie (all)	Option 2 – free-of-tie (optimised)
1	1,000	35%	-1%	-	4,700	6,500	6,600
2	1,000	35%	-5%	500	6,000	6,500	6,700
3	1,000	35%	-10%	2,700	7,200	6,500	6,900
4	1,000	35%	-15%	3,500	8,100	6,500	7,000
5	1,000	50%	-1%	-	3,600	5,100	5,200
6	1,000	50%	-5%	500	5,100	5,100	5,300
7	1,000	50%	-10%	2,700	6,400	5,100	5,400
8	1,000	50%	-15%	3,500	7,400	5,100	5,500
9	1,000	65%	-1%	-	2,100	3,700	3,800
10	1,000	65%	-5%	500	4,100	3,700	3,800
11	1,000	65%	-10%	2,700	5,700	3,700	4,000
12	1,000	65%	-15%	3,500	6,600	3,700	4,100
13	1,500	35%	-1%	-	4,700	6,400	6,500
14	1,500	35%	-5%	500	6,000	6,400	6,600
15	1,500	35%	-10%	2,700	7,200	6,400	6,900
16	1,500	35%	-15%	3,500	8,100	6,400	7,000
17	1,500	50%	-1%	-	3,600	5,000	5,000
18	1,500	50%	-5%	500	5,100	5,000	5,100
19	1,500	50%	-10%	2,700	6,400	5,000	5,400
20	1,500	50%	-15%	3,500	7,400	5,000	5,500
21	1,500	65%	-1%	-	2,100	3,700	3,700
22	1,500	65%	-5%	500	4,100	3,700	3,800
23	1,500	65%	-10%	2,700	5,700	3,700	4,100
24	1,500	65%	-15%	3,500	6,600	3,700	4,200
25	2,000	35%	-1%	-	4,700	6,100	6,200
26	2,000	35%	-5%	500	6,000	6,100	6,400
27	2,000	35%	-10%	2,700	7,200	6,100	6,600
28	2,000	35%	-15%	3,500	8,100	6,100	6,800
29	2,000	50%	-1%	-	3,600	4,900	4,900
30	2,000	50%	-5%	500	5,100	4,900	5,000
31	2,000	50%	-10%	2,700	6,400	4,900	5,300
32	2,000	50%	-15%	3,500	7,400	4,900	5,500
33	2,000	65%	-1%	-	2,100	3,700	3,700
34	2,000	65%	-5%	500	4,100	3,700	3,800
35	2,000	65%	-10%	2,700	5,700	3,700	4,100
36	2,000	65%	-15%	3,500	6,600	3,700	4,200

Source: London Economics' analysis

Table 11: The impact on pub closures and employ (second round effects)				
Min-max ranges	**Option 1 – no guest beer**	**Option 1 – guest beer**	**Option 2 – free-of-tie (all)**	**Option 2 – free-of-tie (optimised)**
Percentage of all pubs closing	0-1.4%	0.9-3.3%	1.5-2.6%	1.5-2.8%
Percentage of tied pubs in scope of code closing	0-5.3%	3.2-12.3%	5.7-9.9%	5.5-10.7%
Number of pubs closing	0-700	400-1,600	800-1,300	700-1,400
Number of jobs lost	0-3,500	2,100-8,100	3,700-6,500	3,700-7,000

Source: London Economics' analysis

4.2.4 Why does the no guest beer option give such low numbers of closures?

Where the tables indicate a value of zero, this is because the number of closures was lower than in the baseline (i.e. negative closures as a result of the policy). This is caused by the following:

- In the baseline, to reflect recent changes taken forward by the pubcos, we removed the gaming income from the divisible balance calculation.
- Unfortunately, there is a noticeable number of cases where the pubcos gaming income was negative (costs exceeded revenue, as gaming income is a net figure). In these cases the pubcos sacrificing of gaming income *makes the tenant worse off.*

In such cases, most clearly exposed in option 1 when small transfers are made to the tenant under the 'no worse-off' policy (i.e. the policy impact is the smallest), the net effect of the two changes is to leave tenant income lower than presently for pubs with negative gaming income for the pubco. The implication of this is that in such cases pubco incomes increase under the introduction of the code and pubs become more viable, thus reducing closures by transferring operating margin from tenants to pubcos – the exact opposite of the policy intent. Because we anticipated that this would be prevented from actually happening through negotiation we set cases where total closures went negative to zero closures, on the assumptions

Finally, the second 'second-order effect', which could occur, is that pubcos could reduce their management costs and maintenance budgets and refinance their debt to reduce their costs. We anticipate they would attempt to do this, but given the degree to which the pubcos have faced losses in recent years, we believe they may now find it difficult to go significantly deeper in terms of efficiencies. As such, we have not modelled this effect. In part, we have not attempted to estimate this effect because both closure and pubs turning free-of-tie could reduce the economies of scale that pubcos currently achieve, driving in additional cost pressures on those tied pubs which remain.

4.3 Conclusions

The tied pub model is one of the most complex industrial relationships remaining in UK industry and aims to deliver a system to ensure floor levels of demand for British brewers, sustaining diversity and the traditional family brewery model. In recent times, this has become increasingly necessary, as the consumption of beer in pubs has declined, with the numbers of barrels sold falling dramatically as consumption patterns have changed, both due to lower prices in supermarkets and the emergence of alternatives such as restaurants, clubs, and bars. A number of stakeholders interviewed noted that the UK is probably still operating excess pub supply of approximately 6,000 pubs, suggesting a sustainable number of pubs of approximately 45,000.

This over-supply has led to low profitability, both for many tenants and pubcos, particularly in a climate where servicing debt has become difficult. The key finding of this study is not the number of pubs which may close as a result of one policy or another, but rather the high number of pubs that currently appear to be at the margin of viability. Irrespective of what changes may be proposed or considered, the interlocking nature of a large variety of revenue-streams, and the high level of costs being faced by pubcos, suggest that almost any policy reform may have noticeable and unpredictable effects.

In the estimates we produce of the impact of the consultation proposals, even taking account of second order effects, of the 13,300 pubs we believe will be in scope of the Code, up to 2,400 or 18 percent could become unviable for their pubco owners, on top of those already unviable (c.1,300)[40] within the base case scenario, although we estimate a third of these would re-open under alternative management.

The threat that the number of tied pubs currently operated by the pubcos may diminish by between 25-30% due to closures, even if these pubs subsequently re-open under a different owner, and disregarding any who may wish to take up the free-of-tie option, may be sufficient to eliminate the economies of scale in purchasing that many tied tenants in this sector (unknowingly) benefit from. This suggests that there is a real possibility that each of the proposed policy reforms, except possibly the code without permitting guest beer, instead of delivering the policy objective of ensuring tied tenants are treated fairly, i.e, 'no worse off' than free of tie tenants, may lead to the end of a large scale tied pub system.

This, however, may not be as disastrous as it initially sounds. The tied pub model is very similar to a more standard franchising arrangement, albeit one where the pubco supplies the sales product and leases the property to the franchisee. This model is already being attempted by some pubcos and may be worthy of further consideration.

In the short-term, it is also worth noting that the PICAS/PIRRS system, which is the most concrete element of the current voluntary framework, is now becoming an established part of the infrastructure, and appears to be having some effect in starting to address the worst tenant circumstances[41], although some stakeholders have raised the point with us that some tenants are wary of taking the PICAS/PIRRS route in case the discretion available ends up *increasing* their rental.

[40] It must be noted that this figure is driven by our assumptions in the calibration exercise and is therefore entirely an artefact of our modelling process.

[41] Business, Innovation and Skills Committee (2011).

It is our conclusion that the reforms proposed in the consultation will close up to 1,600 pubs, although there is very great uncertainty about the precise value; In particular, the size of the transfer from pubcos to tenants resulting from the 'no worse off' principle is very hard to estimate, our results reflect the impact of a range of possible transfer values; However, there is clearly surplus pub capacity, in quite a volatile market where, with so many pubs on the margin of viability it is hard to determine which pubs will close. Stakeholders raised with us that that there may be up to 6,000 surplus pubs in the UK forming 12% of the market, and if this policy did deliver several thousand closed pubs it would act as a substantial fraction of this long-term trend which is likely to occur unless major changes to tax policy and social norms take place.

If one assumes, as we have done, 60% of consumers move to another pub that implies that, on average pubs which remain will see footfalls 7.2% higher than present. This would be sufficient to turn a poorly performing pub into a more attractive prospect if it can see the immediate future out. As such it may deliver enough of a boost to other pubs to reduce closure rates in the medium term.

5 References

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