SLG Economics Ltd

Economics, Regulation, Competition

Review of the government's proposals for introducing a total ban on HFSS advertising online

SLG Economics Ltd

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1 Introduction

As part of their obesity strategy, the government has published:

- A consultation[1] and impact assessment[2] (IA) on extending the restrictions on TV advertising of food that is high in fat, salt and sugar (HFSS) to the 9pm watershed and introducing similar restrictions on advertising of HFSS online (March 2019).
- A policy paper[3] on *Tackling obesity: empowering adults and children to live healthier lives* (July 2020); and
- A further consultation[4] and evidence note on *Introducing a total online advertising restriction for products high in fat, sugar and salt* (November 2020).

This report has been jointly commissioned by the Advertising Association, ISBA, IAB and the IPA, it builds on previous SLG Economics reports which reviewed the IA accompanying the March 2019 consultation[5] and the July position paper[6]. This report does not repeat the many concerns that we have with the evidence and analysis underpinning the proposed restrictions on HFSS advertising up to the 9pm watershed on television and online which were set out in our previous reports. Many of those concerns remain and have not been addressed. This report reviews the November 2020 consultation and evidence note which propose an extension to the online HFSS advertising restrictions from a 9pm watershed to a complete online ban.

2 Executive Summary

This report reviews the evidence and analysis underpinning the government's proposals for a 9pm watershed on HFSS advertising online and a total ban HFSS advertising online. It shows that:

- The government's rationale for its policy is flawed:

[1] https://assets.publishing.service.gov.uk/Government/uploads/system/uploads/attachment_data/file/786553/hfss-advertising-consultation.pdf
[2] https://assets.publishing.service.gov.uk/Government/uploads/system/uploads/attachment_data/file/786554/advertising-consultation-impact-assessment.pdf
[3] https://www.gov.uk/government/publications/tackling-obesity-government-strategy/tackling-obesity-empowering-adults-and-children-to-live-healthier-lives
[4] https://www.gov.uk/government/consultations/total-restriction-of-online-advertising-for-products-high-in-fat-sugar-and-salt-hfss
[5] *Review of the Government's Impact Assessment on proposals for introducing a 21.00-05.30 watershed on TV advertising of HFSS products and similar protection for children viewing adverts online*, SLG Economics, May 2019.
[6] *Review of the government's proposals for introducing a 9pm watershed on TV advertising of HFSS products and a total ban on HFSS advertising online,* SLG Economics, October 2020.

- The proposed restrictions are not an effective way of achieving their obesity objective. Alternative measures could have over 500 times the benefits of the proposed restrictions;
- Children are seeing fewer HFSS adverts each year, not more. While online targeting is not yet perfect, it does allow advertisers to keep children's exposure to a minimum and will continue to improve over time;
- There will be independent, industry recognised measurement of online audiences in 2021;
- The government has translated a regulatory approach designed for linear broadcast to online advertising without taking account of the differences between the two media;
- The government relies on ASA research which is not suitable as evidence to judge whether advertisers are able to avoid children viewing HFSS adverts and does not show what the government suggests;
- A policy which reduces children's calorie intake by less than ½ a glass of skimmed milk per year does not suggest that the government is determined to tackle obesity. It shows that **the government is focussed on a politically attractive policy that will not have a significant impact on obesity**.

- The government has **overestimated the benefits** of the proposals
  - It includes simple arithmetic errors in its calculations;
  - It ignores the fact that some adverts are not actually viewed by children;
  - It fails to adjust for children who consume fewer calories at one meal and then consume more calories at subsequent meals;
  - It overestimates the size of the online food and drink advertising market and underestimates the cost of Native advertising;
  - It ignores the impact of CAP restrictions on HFSS advertising online; and
  - It ignores the impact of advertising displaced to TV.
  - As a result **the reduction in calories from a ban on HFSS advertising online is likely to be about 0.13 calories per child per day (48 calories per child per year – less than ½ the calories in a glass of skimmed milk per year).**
  - **The monetised benefits to government and consumers for a total online ban are reduced from £3.13bn to £0.15bn and from £2.2bn to £0.11bn for the 9pm online watershed**.
- The government has **underestimated the costs of the proposals**. It uses incorrect estimates of mitigation, fails to account for manufacturers switching to other forms

of marketing and does not take account of the wider impacts of a reduction in advertising on the economy.

- Taking account of the corrected benefits and costs, **an online advertising ban would have a negative net benefit of £2,328m, while a 9pm online watershed would have a negative net benefit of £2,247m.**
- The evidence note does not include any sensitivity analysis. Quoting a single figure for the costs and benefits of the policy is **disingenuous and misleading.**
- The evidence note does not consider the impacts of the advertising restrictions on competition yet it would create a huge market distortion between media channels as well as distorting competition in other markets.

Therefore the evidence note is not fit for the purpose of supporting a policy decision to extend online advertising restrictions and the evidence does not support extending the restrictions on online advertising.

3 SLG Economics

SLG Economics is an economics consultancy set up in 2011 by Stephen Gibson providing specialist micro-economic policy advice to regulated companies, regulators and government. Mr Gibson has over 25 years' experience as a professional applied economist, the last 15 of which have focussed on public policy decision making and in particular cost benefit analysis and impact assessments.

Mr Gibson is Interim Chair of the government's Regulatory Policy Committee (RPC), which is the independent body responsible for scrutinising and assessing the quality of all government departments' and regulators' IAs[7]. Mr Gibson has declared his interest in all policy matters relating to the government's obesity strategy to the RPC in order to ensure that there is no conflict of interest, this is recorded in the RPC's Register of Interests[8]. He has not been a party to any information or discussions relating to the government's obesity strategy as part of his role at the RPC.

At the RPC Mr Gibson has reviewed dozens of IAs and works with departmental Chief Economists to improve the quality of IAs across government. He has chaired the Methodology Committee of the RPC, leading the development of methodological approaches to IAs and is a member of HM Treasury Chief Economist Appraisal Group responsible for reviewing and updating the Green Book guidance on policy appraisal.

Mr Gibson has been Interim Chief Economist at Ofwat, Chief Economist at Postcomm, Principal Economist at Ofcom and Head of Economics at Network Rail as well as a number of

[7] Above a *de minimis* threshold of £5m per year.
[8] https://www.gov.uk/government/collections/2020-rpc-register-of-interests.

other senior economics positions. As part of his role at Ofcom, he directed the major 2006-7 impact assessment of options for regulating HFSS food advertising to children on television which brought in the current restrictions on advertising HFSS food on TV.

Mr Gibson has been a lecturer at City University, London on their MSc in Competition and Regulation and is a lecturer at Birkbeck University on their Masters course in Industrial Economics.

4 Analysis of proposals for restriction HFSS advertising online

In this report we consider:

- The rationale for extending the online advertising restrictions;
- The benefits and costs of the proposals;
- The wider effects of the proposals on the economy;
- The failure to consider other more appropriate policy approaches;
- The lack of sensitivity analysis; and
- The impacts of the proposals on competition.

Based on these considerations, we form a view as to whether the evidence supports the proposed restrictions on advertising HFSS products online.

5 Taking account of previous consultation responses

The previous SLG Economics report[9] for the Advertising Association in response to the March 2019 consultation set out a range of concerns relating to the evidence and analysis underpinning the DHSC Impact Assessment. While some of the methodological errors pointed out in the SLG Economics report have been addressed in the evidence note (for example the impact on UK shareholders has been corrected and the multiplication of the NHS savings as a measure of opportunity cost has also been corrected), other errors and analytical concerns remain. While these points are not repeated in this report, it is important that the government responds to all the points raised in those consultation responses and addresses the important questions raised over their policy implications.

Given the arithmetic errors in the government's calculations of the impacts of their policy options in the evidence note (see Section 7.1) and the lack of transparency in the statement of their methodology, the government should publish a spreadsheet setting out their detailed workings to calculate the expected costs and benefits alongside their consultation response.

[9] *Review of the Government's Impact Assessment on proposals for introducing a 21.00-05.30 watershed on TV advertising of HFSS products and similar protection for children viewing adverts online*, SLG Economics, May 2019

6 Rationale for extending the online advertising restrictions

The government has justified its proposal to extend the restrictions on HFSS advertising online from a 9pm watershed to a total online ban based on the following reasoning:

- Obesity in children is a major problem and is growing and overconsumption, particularly of HFSS food and drink is a cause of obesity,
- Extending the restrictions to a total ban "*future-proofs*" the policy,
- Extending the restrictions will "*account for a lack of transparency and independent data*",
- Research from the ASA suggests that advertisers are unable to effectively avoid children's viewing, and
- A total ban will signal to industry, consumers and parents the government's determination to tackle obesity.

6.1 Obesity in children is a major problem, overconsumption of HFSS food and drink is a cause of obesity

Obesity is one of the greatest long-term health challenges this country faces and overconsumption of HFSS food and drink is one (alongside many other, most importantly lack of physical exercise) of the causes of obesity. We recognise the costs that obesity imposes on individuals, tax-payers and society in general and the government's objective to halve childhood obesity by 2030.

However the proposed restrictions on online advertising of HFSS products are not an effective way of achieving that objective. The government's childhood obesity strategy notes that "*on average overweight and obese children are consuming up to 500 extra calories per day*"[10]. Even if the government's policy were to achieve the full 2.84 calories/day reduction suggested (equivalent to 2/3 of a smartie per day or walking for 25 seconds), this is a drop in the ocean compared to the sort of measures that are required to get anywhere close to that objective. However the calorie reduction estimated by the government is based on arithmetic errors, a failure to adjust for compensating behaviour, an overestimate of the current volume of child HFSS impressions, ignoring the impact of CAP restrictions and ignoring the potential for advertising to be displaced to TV (see Section 7 below). Adjusting for these errors shows that the proposed restrictions will only reduce calorie intake by **0.13kcal per day** (48 calories per child per year – less than ½ of the calories in a large glass of skimmed milk every year[11]).

[10] *Childhood obesity: a plan for action*, Department of Health and Social Care, June 2018 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/718903/childhood-obesity-a-plan-for-action-chapter-2.pdf

[11] A 300ml glass of skimmed milk contains 99 calories

If the government is really serious about halving childhood obesity by 2020 then it needs to think about measures that are likely to have a meaningful impact on childhood obesity such as the Daily Mile project[12] or the Couch to 5k programme which have the potential to increase calorific expenditure by around 100 calories per day[13] - **over 500 times the benefits that are expected to be achieved from extending online advertising restrictions**. We recognise that the government sees advertising restrictions as part of a wider strategy aimed at tackling childhood obesity, however if it continues to focus on measures with a negligible impact (even if they are politically attractive) then it will fail to tackle the major problem of childhood obesity. If a reduction of over 70% in children's exposure to HFSS adverts on TV between 2005 and 2017 did not lead to a reduction in childhood obesity, there is no reason to think that the current proposals (which will have a much smaller impact on children's exposure to HFSS adverts) will have any impact.

6.2 Extending the restrictions to a total ban "future-proofs" the policy

The government is concerned that as children spend more time online and advertisers spend more on advertising online there is a need to extend the advertising restrictions to protect children. The government is suggesting that without a total ban on online adverts, children will see an increasing number of HFSS ads as they shift to online media.

Given that TV exposure is decreasing by 11% pa while online exposure is only increasing by 3.4% pa, children's total exposure is actually reducing over time – and this excludes the impact of the CAP advertising restrictions reducing the amount of HFSS advertising seen by children. As the Kantar study for DCMS on HFSS advertising states "*Despite the size of the digital advertising market, evidence suggests that it is far less popular than TV for marketing food and drink*"[14]. According to the evidence note, children currently see 0.47 minutes of HFSS adverts per day (0.22 minutes online and 0.25 on TV), therefore if the expected trends continue, they will see 0.02 minutes fewer adverts each year than the previous year[15]; as discussed in Section 7, children's exposure to HFSS advertising online is actually much smaller than the 0.22 minutes per day that the government suggests. Therefore rather than the shift to online leading to children seeing more HFSS adverts, the reverse is actually occurring.

As online targeting of adverts continues to improve, the CAP restrictions introduced in July 2017 will become increasingly effective at preventing HFSS adverts being shown to children and therefore a decreasing proportion of HFSS adverts online will be seen by children,

[12] https://thedailymile.co.uk/
[13] https://www.healthline.com/health/fitness-exercise/running-burn-calories-per-mile#per-mile
[14] *HFSS Advertising Exposure Research*, Kantar Consulting, March 2019 https://consulting.kantar.com/growth-hub/hfss-advertising-exposure-research/
[15] A 0.007 minutes increase in viewing online, offset by a 0.028 minutes reduction in viewing on TV

reducing the total volume of HFSS adverts seen by children even further. Future-proofing of policies should take account of these and other likely developments in the market.

6.3 Extending the restrictions will account for a lack of transparency and independent data

The government is concerned at the lack of a comprehensive, independent, publically available means of audience measurement and this can mean that it is difficult to identify online audiences with certainty. There is also a concern that using a 25% child audience threshold in the 2017 CAP rules may mean that a significant number of children are still exposed to HFSS adverts.

However, from January 2021 the Ipsos iris platform will include, within its independent, industry recognised measurement of online audiences enhanced modelling of children's audiences based on a regionally and socio-demographically representative single source panel of 10,000 individuals. The Ipsos iris data will form the online element of PAMCo combined and online audience data from June 2021, this will include audience data across tablets, smartphones and PCs for children under 15. Outside of the Ipsos iris project, a number of other projects exist run by both Ipsos and other companies that research online media consumption by children, for example Ipsos carry out children-focussed research for the BBC, Disney and others. There is the possibility for Ipsos iris to fit within the Project Origin framework for cross-media campaign-level reporting. One would expect the quality of online children's audience measurement to continue to improve, in the same way as audience measurement for Broadcast Video on Demand is improving (Project Dovetail). Future-proofing of policies should take account of these and other likely developments in the market.

Businesses use a range of techniques to target audiences based on interest and age group. There are sophisticated tools that can ensure that online adverts are targeted away from children and that supplement the rules of platforms that set the age restriction for HFSS adverts at 18+ and the parental controls that allow parents to block age-related adverts. While targeting is not perfect, it is designed to allow advertisers to target adults and keep children's exposure to an absolute minimum. This is similar to the current and proposed restrictions on HFSS advertising on TV and in other media, which limit but do not rule out HFSS ad exposure to children[16]. In addition, the effectiveness of online targeting is continually improving over time, fuelled by the strong financial incentive for advertisers to target the advert's intended audiences in order to boost the campaign's performance. One

[16] 72% of 11-15 year olds and 87% of 16-17 year olds watch TV after the 9pm watershed. *Review of the mandatory daytime protection rules in the Ofcom Broadcasting Code*, paragraph 3.6, Ofcom, March 2018 https://www.ofcom.org.uk/__data/assets/pdf_file/0022/112099/Review-of-the-mandatory-daytime-protection-rules-in-the-Ofcom-Broadcasting-Code.pdf

would expect that well within the 25 year appraisal period advertisers would be able to target HFSS adverts away from children with near perfect accuracy and that self-regulation measures (like the current CAP regime) would develop to accommodate those changes while still allowing adverts to be served to adults who are not the focus of these regulations.

Rather than designing an appropriate form of regulation for the online market, the government has lifted a regulatory model (time-based restrictions) which has traditionally been used for linear broadcast television and sought to impose it on the online advertising, for which it is not an appropriate approach (see Section 11 below). Rather than 'future-proofing' the restrictions by introducing a blanket ban, the government should take account of both current and future developments in the industry in designing a more appropriate regulatory approach.

6.4 Research from the ASA suggests that advertisers are unable to effectively avoid children's viewing

The government is concerned regarding the effectiveness of the targeting of dynamically served advertising and quotes research from the ASA using online child and adult avatars that showed limited differentiation in the number of HFSS adverts that they were served. They are also concerned that children can falsely report their age online.

The ASA report expressly states that "*the monitoring exercise was not intended to replicate the online behaviour of children, so it is **not** reasonable to extrapolate exposure levels from the data*"[17] (emphasis in original) – however that is exactly what the government has done. In addition the ASA found that "*more than two-thirds of the HFSS ads served to Child Avatars (647) were for products likely to be of little interest to children e.g. supermarkets, high-end cheese and condiments*". Therefore the ASA research is neither a suitable piece of evidence to reach a judgement on whether advertisers are able to avoid children's viewing, nor does it imply what the government is suggesting – that there is little difference between the proportion and relevance of HFSS adverts that are served to adults and children.

The ASA study looked at adverts that were served to avatars who were not logged in to YouTube (the 'media universe' visited by the avatars comprised 40 YouTube channels and 120 websites, therefore their results are significantly impacted by the results for YouTube). Since the ASA report was published in June 2019, Google/YouTube has taken unilateral action in October 2020 to stop any HFSS adverts being served to anyone who is not logged in with a declared age of 18+. Were the ASA study to be repeated now, it is likely that this would substantially reduce the child avatar's exposure to HFSS ads compared to when the ASA research was undertaken (November - December 2018).

[17] ASA Monitoring Report on Online HFSS Ads, June 2019
https://www.asa.org.uk/uploads/assets/uploaded/14be798d-bd30-49d6-bcfbc9ed7e66e565.pdf

The evidence note ignores the improvements that social media platforms have made to detect and remove underage users including using machine learning algorithms and moderators to flag any suspected underage account holders for review and to disable the account if it is determined that the user is underage. In addition, advertisers of products like HFSS food and drink with age concerns can target their adverts away from children to adult audiences. Even if children have signed up to the platform using a falsely declared age, they are only likely to see a limited number of HFSS adverts because their viewing patterns will not match the declared age or target audience for the products.

The targeting of adverts is continually improving – driven by strong financial incentives, therefore one would expect significant improvements both before the proposed restrictions are planned to come into effect at the end of 2022 and thereafter. When analysing the benefits over a 25 year period, the counterfactual 'Do Nothing' option of relying on existing CAP restrictions and any future developments in self-regulation should be increasingly effective at reducing HFSS adverts seen by children, and the incremental benefits from the proposed restrictions to be much lower than suggested in the evidence note.

6.5 A total ban will signal to industry, consumers and parents the government's determination to tackle obesity

A policy that even by the government's calculations, only reduces children's calorie intake by the equivalent of two-thirds of a smartie per day, and when adjusted for arithmetic calculation errors, compensating behaviour and overestimated child HFSS impressions, results in a reduction of less than ½ of the calories in a large glass of skimmed milk every year[18] (see Section 7) - does not signal the government's determination to tackle obesity, rather it shows that it is not prepared to tackle the key measures that are likely to make a significant difference to this problem, but instead focusses on measures that are politically attractive but will not have a significant impact on obesity.

7 Overestimating the benefits of the proposals

The government suggests that the proposed restriction will reduce children's calorie consumption by 2.84 calories per day. There are multiple errors and failures in the government's reasoning that mean that this is a significant over-estimate of the likely impact on calorie consumption.

7.1 Arithmetical calculation errors

The evidence note states that 0.22 minutes per child per day of exposure applied to the central estimate of additional consumption of 14.2kcal per minute of exposure equates to additional calorie consumption of 3.64 kcal per day per child. This is an arithmetical

[18] A 300ml glass of skimmed milk contains 99 calories

calculation error: 0.22 x 14.2 = 3.12, not 3.64. This arithmetical error means that the government overestimates the calorie reduction by 16.7%. Rather than an estimated 2.84 kcal/day per child calorie reduction (after displacement), the correct value is **2.44kcal/day per child** (889 kcal per child per year).

The evidence note also includes another arithmetical calculation error. The evidence note estimates the size of the total online food and drink advertising market as 14% of £5.90 billion or £743million, whereas 14% x £5.90bn = £826 million. However, industry data shows that in any case this estimate is incorrect (see Section 7.4 below).

7.2 Ignoring the fact that some adverts are not actually viewed

The evidence note quotes research from Lumen using eye tracking technology to estimate the average time that different types of advert are viewed on different interfaces. This research demonstrated that even if an advert is delivered, it is not always viewable or looked at. They also state that similar research by Inskin Media corroborates this finding. The research shows that 25% of adverts defined as viewable[19] are never looked at. The evidence note ignores this finding because it relates to adults and not children, it uses the unrealistic assumption that 100% of adverts viewable by children are actually viewed (compared to 75% for adults). In the absence of evidence to the contrary, it seems far more realistic to use a similar figure for the proportion of children actually viewing the advert as for adults. This reduces the estimated calorie reduction to **1.83kcal/child per day** (667 calories per child per year).

7.3 Failure to adjust for compensating behaviour

The DHSC consultation on *Restricting volume promotions for HFSS products*[20] notes that consumers may adjust their consumption behaviour in response to consuming fewer calories at one meal by have more calories at subsequent meals. This type of behaviour could have a significant impact on the results if children simply delay their consumption of food calories rather than reducing it. The DHSC point out that the evidence on compensating behaviour is mixed, with some studies finding no evidence of calorie compensation at subsequent meals and others finding that subjects completely compensated for the change in calorie intake[21]. Given the uncertainty, the DHSC use a range of 0% to 100% compensation, with a central estimate of 40%. Using a similar central estimate of 40% compensation reduces the estimated calorie reduction per child per day to **1.10kcal** (400 calories per child per year).

[19] Viewable adverts are defined as ones where 50% of the pixels are on the screen for at least 1 second.
[20] https://www.gov.uk/government/consultations/restricting-promotions-of-food-and-drink-that-is-high-in-fat-sugar-and-salt
[21] DHSC Impact Assessment, paragraph 186 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/770705/impact-assessment-for-restricting-volume-promotions-for-HFSS-products.pdf

7.4 Overestimate of child HFSS impressions

The evidence note suggests that 13.9% of internet advertising expenditure is for food and drink advertising[22]. As well as an arithmetic error in calculating the size of the food and drink advertising market (see Section 7.1), the evidence note assumes that the same proportion of digital display advertising is spent on food and drink advertising as for broadcast spend. However ISBA analysis based on 2019 data from Nielson and Pathmatics for 1,700 leading advertisers (covering £4.3bn of display spend and £5.2bn broadcast) shows that food advertisers' spend (from 90 FMCG/grocery/restaurant spenders) accounts for 7.5% of digital display spend, compared to 16.5% for broadcast spend. This analysis suggests that the size of the online food and drink advertising market is 7.5% of £5.9 billion, or **£442.5 million rather than the £743m**[23] suggested in the evidence note.

However even 7.5% may be an overestimate for the proportion of food and drink advertising. Nielsen AdDynamix provides an industry-wide single source estimation of online advertising spend. The 2019 Nielsen AdDynamix digital ad spend data by mid-category level for the food, drink and restaurant category is 3.5% which would imply an online food and drink advertising market of **£207m rather than £743m**. The analysis in this report uses a market size of £442.5m based on the ISBA research, however we believe that the government should also consider the Nielsen AdDynamix evidence in their analysis of the impacts of the proposals.

The evidence note assumes a cost per thousand of £0.50 cost per thousand (CPT) for Native advertising. Input from the two leading native companies in the UK market state that average CPT for native campaigns is typically $3 to $4 (£2.25 to £3); this varies depending on factors such as demand and targeting requirements (both of which would increase the cost). Given that Native is 24% of the market by adspend and 83% of the estimated impacts[24], using a value of £0.50 CPT significantly skews the results. We have therefore used a conservative CPT for Native of £2.50. Table 1 shows that this (together with the lower size of the food and drink advertising market) implies about 86.5bn food and drink impacts rather than the 433bn in the evidence note (for consistency with the evidence note this is based on 2018 IAB data for proportion of ad spend by ad category, however more recent 2019 data is available from IAB, which would make a further small difference to the results). This reduces the estimated calorie reduction per child per day to **0.22kcal** (80 calories per child per year).

[22] Evidence note, Table 5
[23] Although note the arithmetic error in the calculation of this number referenced in Section 7.1
[24] We use the term *'impacts'* rather than '*impressions'* in this report to be consistent with the use of the term in the evidence note, even though it is more usually used in the context of TV advertising

Table 1: Estimate of food and drink online advertising impacts, 2017

		Evidence Note			SLG Economics		
Ad Category	**Proportion of Adspend**	**Cost per thousand impacts (£)**	**Split of Adspend - £743m F&D ad mkt (£m)**	**Estimated Impacts (bn)**	**CPT (£) Revised cost of Native**	**Split of Adspend - £442.5m F&D ad mkt (£m)**	**Estimated Impacts (bn)**
Display banner desktop	21.0%	8	156.0	19.5	8	92.9	11.6
Display banner mobile	9.8%	8	72.8	9.1	8	43.4	5.4
Display video - pre roll	15.7%	22	116.7	5.3	22	69.5	3.2
Display video outstream	21.1%	5	156.8	31.4	5	93.4	18.7
Other display video	0.9%	10	6.7	0.7	10	4.0	0.4
Native	24.2%	**0.5**	179.8	359.6	**2.5**	107.1	42.8
Other display	2.4%	4	17.8	4.5	4	10.6	2.7
Other	2.0%	5	14.9	3.0	5	8.9	1.8
TOTAL	**97.1%***			**433**			**86.5**

* The percentages in Table 6 of the Evidence Note do not sum to 100% since they exclude sponsored content.
Source: Evidence Note, Table 6 and SLG Economics analysis

7.5 Impact of CAP restrictions

The evidence note also ignores the effect of the CAP restrictions on HFSS advertising, since they are based on 2017 figures. Even if the CAP restrictions have not prevented all viewing of HFSS adverts by children, they will still have had a significant impact in reducing the number of HFSS adverts viewed by children. We have used a conservative estimate from ISBA of CAP restrictions preventing 37.5% of child HFSS impressions. This reduces the estimated calorie reduction per child per day to **0.14kcal** (50 calories per child per year).

7.6 Impact of advertising displaced to TV

The evidence note assumes that none of the online advertising displaced would move to TV[25], this appears unlikely (particularly for online advertising that was focussed on adult audiences). Taking an illustrative assumption that 10% of displaced online advertising moves to TV after 9pm[26] which then has an impact on children's exposure (the March IA assumes this to be 50% less effective than online advertising, even though for TV advertising the

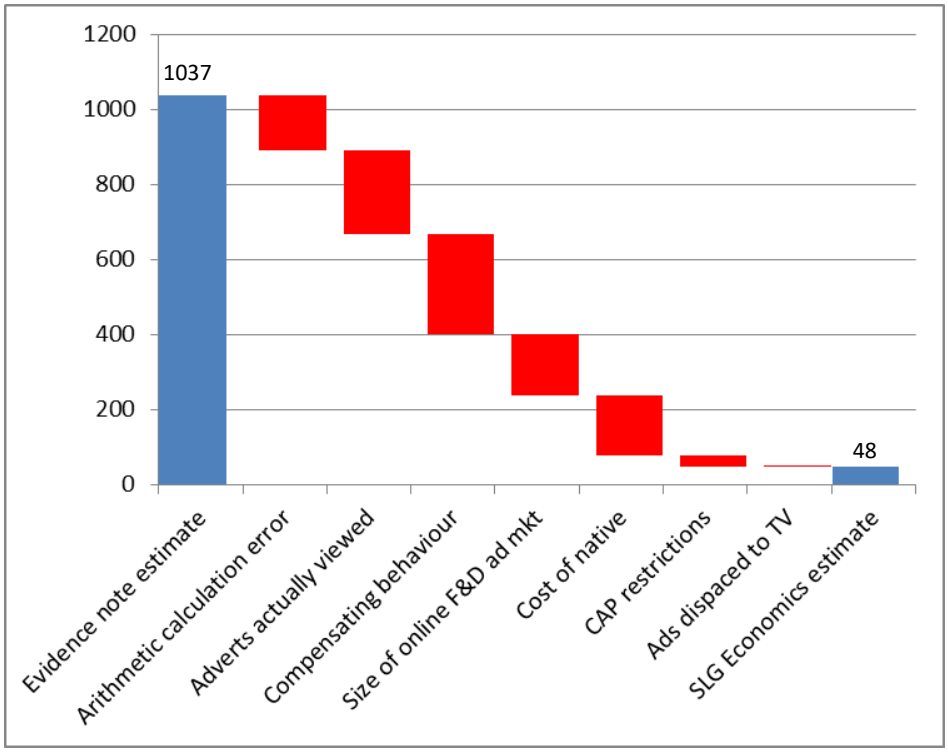
[25] Evidence note Table 12
[26] For modelling purposes, we assume that the 10% of online advertising displaced to TV replaces advertising assumed in the evidence note to be displaced to other forms of media in proportion to the assumed amount of displacement to those media.

reduction in effectiveness is likely to be lower). This would increase the impact of displacement from 22% to 24.8% and lead to a reduction of **0.13kcal** per child per day or **48 calories per child per year**.

7.7 Impact on monetised health benefits

Figure 1 below summarises the effects of the different corrections to the estimated reduction in calories per child per year from the proposed online advertising restrictions.

Figure 1: Impact of corrections to estimated calorie reduction per child per year



Scaling the monetised health benefits down to take account of these corrections, **reduces the total monetised health benefits, NHS saving, social care saving and economic output effect for a total online ban from £3.13bn[27] to £0.14bn and for the 9pm watershed option from £2.2bn to £0.10bn.**

8 Underestimating the costs of the proposals

8.1 Use of incorrect mitigation estimates

The government has repeated the error[28] that it made in the March 2019 IA of using mitigation factors and backfill and mitigation separately[29] when the mitigation estimates

[27] Evidence note Table 13
[28] See Paragraph 7.4 of May 2019 SLG Economics report
[29] Evidence note Table 9

(based on Ofcom estimates[30]) already include backfill. The government has also assumed that HFSS advertisers would be able to retain 11% of their advertising online in the event of a total ban[31]. While it is possible to retain some HFSS advertising online under a 9pm watershed option (by moving the adverts to after 9pm), we do not understand how the government expects advertisers to retain 11% of HFSS adverts under the total online ban scenario.

In Table 2 we have made the more realistic assumption of no mitigation and half of the Ofcom estimates for backfill for the total online ban and have used the Ofcom combined mitigation and backfill assumptions (80% mid, 70% low and 85% high) for the 9pm watershed scenario. This would increase the central estimate of the costs to business to **£343m (£5,849m NPV)** under a total online ban and **£305m (£5,199 NPV)** under a 9pm watershed compared to the government estimates of £271m (£4,626 NPV) and £259m (£4,420 NPV) under the two options.

Table 2: Calculation of cost to platforms

	Evidence Note			SLG Economics		
	Option 1: Total Ban Online					
	Mid	**Low**	**High**	**Mid**	**Low**	**High**
Total value of HFSS online ads (£m)	437.9	437.9	437.9	437.9	437.9	437.9
Percentage NPM selected	87%	87%	87%	87%	87%	87%
Mitigation	89%	85%	95%	-	-	-
Backfill	80%	70%	90%	90%	85%	92.5%
Cost to platforms (£m)	**271.3**	**226.7**	**325.7**	**342.9**	**323.8**	**352.4**
	Evidence Note			**SLG Economics**		
	Option 2: Online 9pm watershed					
	Mid	**Low**	**High**	**Mid**	**Low**	**High**
Total value of HFSS **online** ads (£m)	437.9	437.9	437.9	437.9	437.9	437.9
Percentage NPM selected	87%	87%	87%	87%	87%	87%
Mitigation	85%	80%	90%	80%	70%	85%
Backfill	80%	70%	90%			
Cost to platforms (£m)	**259.1**	**213.3**	**308.6**	**304.8**	**266.7**	**323.8**

[30] 2006 Ofcom analysis. The author of this report directed the Ofcom analysis and drafted the Ofcom report from which this figure is taken

[31] Evidence note Table 9

8.2 Failure to account for a switch to other forms of marketing

The evidence note assumes that all of the £4,626m lost online advertising revenue from an online ban would either move to other less restricted channels (£3,747m) or be retained by food and drink manufacturers and retailers as unspent advertising budget (£879m). This ignores the likely effect of advertisers reassigning marketing budget (that they not are no longer allowed to use on online advertising), to price promotion (discounts, lower product prices, loyalty card promotions and other marketing activities). We assume that advertisers move half of the online spend to price promotions (at an average discount of 34%[32]). Table 3 shows that this would increase the costs to business by **£994m NPV** under a total ban and **£883.8m NPV** under a 9pm watershed (using the higher estimate of lost advertising revenue).

Table 3: Impact of price promotions under online ban (£m NPV)

	Option 1: Total Ban Online		Option 2: Online 9pm watershed	
	Evidence Note	**SLG Economics**	**Evidence Note**	**SLG Economics**
HFSS Advertising revenue lost	-4626.2	-5848.9	-4419.8	-5199.0
Additional revenue from displaced adverts	3747.2	2339.6	3580.1	2079.6
Unspent advertising budget	879.0	584.9	839.8	519.9
Ad spend on price promotions		2924.4		2599.5
Lost revenue from price promotions		-994.3		-883.8
Total net impact	**0**	**-994.3**	**0**	**-883.8**

In addition, any benefit from the displaced advertising would be an indirect impact of the policy measure and therefore should not be included in the business impact target calculation of the policy measure[33].

[32] DHSC IA on Restricting volume promotions for HFSS products, paragraph 123 https://assets.publishing.service.gov.uk/Government/uploads/system/uploads/attachment_data/file/770705/impact-assessment-for-restricting-volume-promotions-for-HFSS-products.pdf

[33] RPC Guidance note: *Business Impact Target specific issues: direct versus indirect impacts*, March 2019 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/790016/RPC_case_histories_-_direct_and_indirect_impacts__March_2019__1_.pdf

9 Wider Impact on the Economy

The reason that targeting of any advertising restrictions is so important, is that advertising does not only provide income and employment for those within the industry, and fund content and media online, but by generating extra consumer expenditure and economic activity it supports the wider economy. Therefore unnecessarily restricting HFSS adverts that would be viewed by adults has a significant negative impact on economic activity (GDP) – this is not considered in the evidence note. A number of studies have looked at the relationship between advertising spend and economic activity:

- A report for Credos[34] shows a strong relationship between advertising expenditure and economic growth due to a direct multiplier, indirect and induced effects and catalytic effects however it does not quantify an overall multiplier effect.
- Econometric analysis undertaken by Deloitte for the Advertising Association[35], concludes that £1 of extra advertising leads to £6 of extra economic activity.
- A more recent report by Deloitte[36] for the World Federation of Advertisers found that across Europe, 1 Euro of advertising spend generated 7 Euros in GDP for the EU economy through its ability to support competitiveness, provide consumers with information on products and services, and ability to increase their choice of goods and services.
- A Credos report[37] on the impact of advertising in Scotland found that on average, every £1 spent on advertising generates £5 for the Scottish economy – the report notes that in Scotland the economic impact is smaller than in the UK because there is less direct activity associated with the advertising sector (since much of this takes places elsewhere in the UK).
- An IHS report on the economic impact of advertising in the USA[38] found that every dollar of ad spending will generate, on average, almost $22 of economic output (sales).

Taking these results together suggests that every £1 spent on advertising generates around £6 of extra economic activity. Therefore reducing advertising by £1 would reduce economic

[34] The Contribution of the Advertising Industry to the UK economy, A Albert and B Reid, November 2011 https://www.bl.uk/britishlibrary/~/media/bl/global/business-and-management/pdfs/non-secure/c/o/n/contribution-of-the-advertising-industry-to-the-uk-economy.pdf

[35] Advertising Pays: How advertising fuels the UK economy, Appendix A, Deloitte, 2013 https://www.adassoc.org.uk/wp-content/uploads/2019/01/p222-15108-advertising-pays-how-advertising-fuels-the-uk-economy.pdf

[36] The economic contribution of advertising in Europe: A report for the World Federation of Advertisers, Deloitte, January 2017 http://info.wfa.be/Economic_Contribution_of%20Advertising_EU.pdf

[37] Advertising Pays Scotland: How advertising fuels the Scottish economy, Credos, 2019 https://www.adassoc.org.uk/wp-content/uploads/2019/01/AdvertisingPaysScotland-FINAL-report.pdf

[38] The Economic Impact of Advertising in the United States 2012-2017, IHS Global Insight, 2013 https://www.ana.net/getfile/20391

activity by £6. In our view this relationship is more direct and the underpinning analysis is more robust than the evidence note's estimate of the value of extra health, social care and economic benefits. Advertising displaced to other media i.e. to channels that are less effective will generate less economic activity – therefore we have assumed a lower multiplier of £3 of economic activity generated for every £1 of displaced advertising.

Table 4 below shows that as a result of the advertising restrictions, one could expect a reduction in economic activity of £138m using the estimate in the evidence note of £743m[39] for the size of the online food and drink advertising market and **£81m** using the lower estimate of £442m suggested in Section 7.4 and the higher percentage displacement suggested in Section 7.6 - this is equivalent to **£1,382m** as an NPV.

Table 4: Estimate of lost economic activity from reduction in advertising

	Evidence Note	SLG Economics
Size of online food & drink ad mkt (1)	£743m	£442m
Proportion of children (2)	5.9%*	5.9%*
Size of online child F&D ad mkt (3)	£43.9m	£26.1m
Proportion of HFSS (4)	59%	59%
Size of online child HFSS ad mkt (5)	£26m	£15m
Loss of economic activity - using multiplier of six (6)	£155m	£92m
% Displaced advertising (7)	22%	24.8%**
Size of displaced advertising (8)	£6m	£4m
Extra economic activity from displaced advertising - using multiplier of three (9)	£17m	£11m
Net loss of economic activity after displacement (10)	**£138m**	**£81m**

Notes:

* Based on the ratio of Child Food & Drink impressions to Total impressions

** Higher percentage displaced advertising due to displacement to TV - see Section 7.6

(3) = (1) x (2); (5) = (3) x (4); (6) = (5) x 6; (8) = (7) x (5); (9) = (8) x 3; and (10) = (6) – (9)

10 Summary of Impacts

Annex 1 provides a full table of the costs and benefits of the two policy options comparing the figures in the evidence note with the corrected figures as discussed above. It shows that the costs to consumers (in terms of lost economic activity) are almost 10 times the total

[39] Although note the arithmetic calculation error in the calculation of this number referenced in Section 7.1

benefits to consumers and government combined, and that the health benefits are less than 2% of the costs of the options.

Figure 2 summaries the costs and benefits for the online ban between the three stakeholder groups affected: businesses, consumers and government. It shows the tiny size of the government benefits (from NHS savings and social care savings) compared to the far larger net costs to consumers and businesses (the 9pm online watershed has a similar impact on stakeholder groups).

Figure 2: Corrected costs and benefits for online ban by stakeholder group (£m NPV)

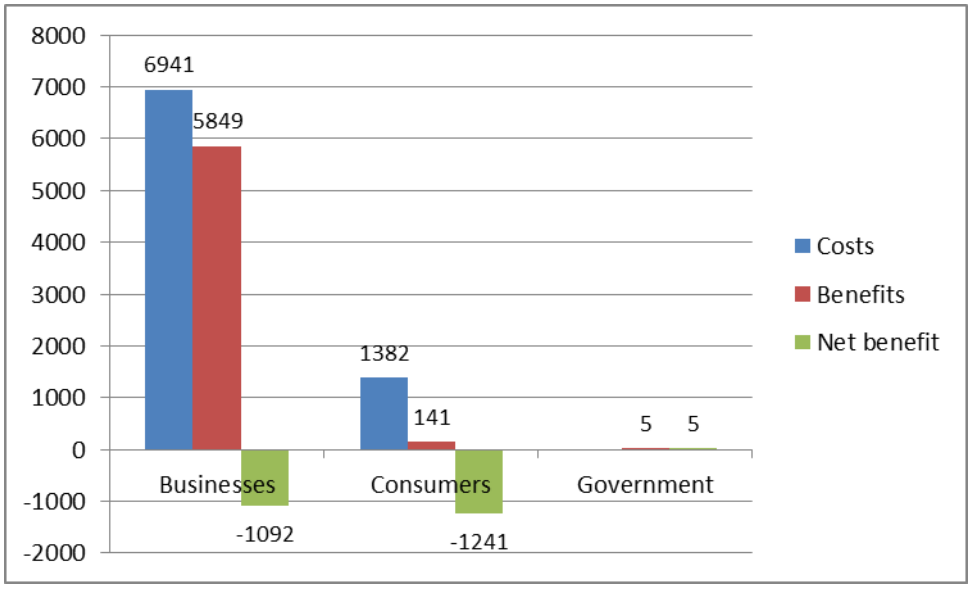
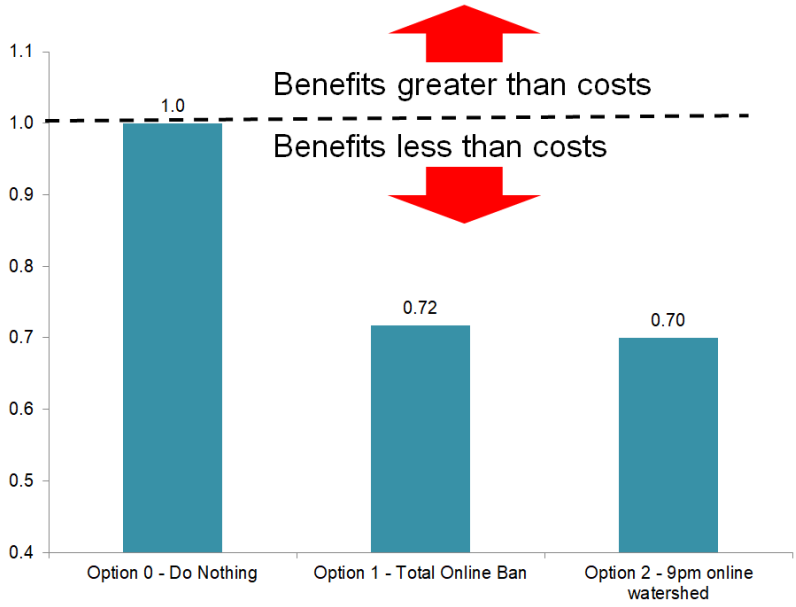


Table 5 provides a summary of the corrected costs, benefits and cost-benefit ratio of the different policy options over the 25 year assessment period – this is also shown in Figure 3. It shows that Option 0 (Do Nothing) has the most favourable net benefit and cost-benefit ratio and that **a total online ban would lead to a negative net benefit of £2,328m NPV, while the 9pm online watershed would have a negative net benefit of £2,247m**.

Table 5: Cost-benefit ratio for policy options

	Benefits (£m NPV)	Costs (£m NPV)	Net Benefit (£m NPV)	Cost-benefit ratio
Option 0 - Do Nothing	0	0	0.0	1
Option 1 - Total Online Ban	5995	8323	-2328	0.72
Option 2 - 9pm Online Watershed	5306	7552	-2247	0.70

Figure 3: Cost-benefit ratio for policy options



11 Failure to consider alternative regulatory approaches

As discussed above, the government has translated a regulatory approach (time-based restrictions) designed for traditional linear broadcast television and sought to impose it on online regulation, for which it is not well suited – just as one would not try to impose time-based restrictions on print or outdoor advertising.

As Ofcom states: "*Our experience and research suggests that the answer is **not** simply to transplant traditional broadcast regulation, unamended, into the online corpus. Clearly, the internet is fundamentally different from television and radio*"[40] (emphasis in the original). However, the government has failed to consider alternative regulatory approaches that might be more appropriate to online regulation. When the government realised that there were problems in implementing time-based restrictions appropriate to broadcasting regulation to online platforms, it simply opted for a total online ban. This fails to recognise that online media require a different approach to regulation from linear broadcasting and that designing a regulation based on the characteristics of the advertising medium is critical to an effective regulatory framework.

12 Lack of sensitivity analysis

The evidence note does not include sensitivity analysis and claims to include "*illustrative costs based on plausible assumptions*". There is a very wide range around a number of the key assumptions – for example the estimate of calories per minute of food advertising

[40] *Tackling online harm – a regulator's perspective*, Ofcom, September 2018 https://www.ofcom.org.uk/about-ofcom/latest/media/speeches/2018/tackling-online-harm

watched has the central estimate at 20 times the size of the lower 95% confidence estimate and the upper estimate 38 times the lower estimate. The evidence note suggests that the government has calculated a set of benefits that are larger than the calculated costs, whereas the calculated net benefit is simply a product of the particular value chosen within the range - other plausible values would have shown a very different picture of the attractiveness of the policy options. **In these circumstances, quoting a single figure for the costs and benefits of the policy rather than a range is disingenuous and misleading.**

13 The impacts of the proposals on competition

The evidence note does not consider the impact of online advertising restrictions on competition. There are complex questions to be considered relating to distortions of competition between manufacturers of food and drink products, between media owners and between media platforms. The consultation suggests that a policy relying on the ability to target advertisements away from children may engage issues of competition and suggests that effective and widespread targeting tools and methods would be necessary to ensure a level playing field; however it ignores the unlevelling of the playing field between online/TV and other media platforms that a media-channel focussed advertising ban would cause, or the barrier to entry that a manufacturer not being able to effectively advertise a new brand of granola, low fat crisps or frozen yogurt would face.

The consultation states that "*Measures to enable compliance* [with time-based targeting] *would have to be universally accessible and compatible in order to minimise potential risks of market distortion and competitive advantage*" and yet proposes a policy that would create a huge market distortion and competitive advantage between media channels – this is absolutely clear from the assumption in the evidence note of significant displacement from online HFSS adverts to other media channels.

14 Conclusions

Having reviewed the evidence note supporting the government's proposal for either a total ban on HFSS advertising online or a 9pm online watershed, we find that:

- The government's rationale for its policy is flawed:
    - The proposed restrictions are not an effective way of achieving their obesity objective. Alternative measures could have over 500 times the benefits of the proposed restrictions;
    - Children are seeing fewer HFSS adverts each year, not more. While online targeting is not yet perfect, it does allow advertisers to keep children's exposure to a minimum and will continue to improve over time;

- There will be independent, industry recognised measurement of online audiences in 2021;
- The government has translated a regulatory approach designed for linear broadcast to online advertising without taking account of the differences between the two media;
- The government relies on ASA research which is not suitable as evidence to judge whether advertisers are able to avoid children viewing HFSS adverts and does not show what the government suggests;
- A policy which reduces children's calorie intake by less than ½ a glass of skimmed milk per year does not suggest that the government is determined to tackle obesity. It shows that **the government is focussed on a politically attractive policy that will not have a significant impact on obesity**.

- The government has **overestimated the benefits** of the proposals
  - It includes simple arithmetic errors in its calculations;
  - It ignores the fact that some adverts are not actually viewed by children;
  - It fails to adjust for children who consume fewer calories at one meal and then consume more calories at subsequent meals;
  - It overestimates the size of the online food and drink advertising market and underestimates the cost of Native advertising;
  - It ignores the impact of CAP restrictions on HFSS advertising online; and
  - It ignores the impact of advertising displaced to TV.
  - As a result **the reduction in calories from a ban on HFSS advertising online is likely to be about 0.13 calories per child per day (48 calories per child per year – less than ½ the calories in a glass of skimmed milk per year).**
  - **The monetised benefits to government and consumers for a total online ban are reduced from £3.13bn to £0.15bn and from £2.2bn to £0.11bn for the 9pm online watershed**.
- The government has **underestimated the costs of the proposals**. It uses incorrect estimates of mitigation, fails to account for manufacturers switching to other forms of marketing and does not take account of the wider impacts of a reduction in advertising on the economy.
- Taking account of the corrected benefits and costs, **an online advertising ban would have a negative net benefit of £2,328m, while a 9pm online watershed would have a negative net benefit of £2,247m.**

- The evidence note does not include any sensitivity analysis. Quoting a single figure for the costs and benefits of the policy is **disingenuous and misleading.**
- The evidence note does not consider the impacts of the advertising restrictions on competition yet it would create a huge market distortion between media channels as well as distorting competition in other markets.

Therefore the evidence note is not fit for the purpose of supporting a policy decision to extend online advertising restrictions and the evidence does not support extending the restrictions on online advertising.

SLG Economics Ltd
December 2020

Annex 1: Summary of Costs and Benefits

Table A1: Summary of costs and benefits, Option 1 – total online HFSS advertising ban

Group affected	Impact	Evidence Note	SLG Economics
Costs		**Present value £m displacement adjusted**	**Present value £m displacement adjusted**
Online platforms	Transition costs		
Online platforms	HFSS advertising revenue lost	4626.2	5848.9
Retailers and manufacturers of food and drink	Transition costs	2.8	2.8
Retailers and manufacturers of food and drink	HFSS profit lost	27.5	27.5
Advertising agencies	Transition costs	1.4	1.4
Advertising agencies	HFSS advertising revenue lost	65.9	65.9
Retailers and manufacturers of food and drink	Lost revenue from price promotions		994.3
Consumers	Net loss of economic activity from lower advertising spend		1382.1
Present value costs		**4723.8**	**8322.9**
Benefits			
Other forms of media	Additional revenue from adverts displaced from restricted media	3747.2	2339.6
Retailers and manufacturers of food and drink	Unspent advertising budget retained / used for price promotions	879	3509.3
Government	NHS Savings	62	2.9
Government	Social Care savings	49	2.3
Consumers	Health Benefits	2886	134.2
Consumers	Economic Benefits	149	6.9
Present value benefits		**7772.2**	**5995.2**
Total Net present Value		**3048.4**	**-2327.7**

Table A2: Summary of costs and benefits, Option 2 – 9pm watershed for online HFSS advertising

Group affected	Impact	Evidence Note	SLG Economics
Costs		**Present value £m displacement adjusted**	**Present value £m displacement adjusted**
Online platforms	Transition costs		
Online platforms	HFSS advertising revenue lost	4419.8	5199.0
Retailers and manufacturers of food and drink	Transition costs	2.8	2.8
Retailers and manufacturers of food and drink	HFSS profit lost	20.3	20.3
Advertising agencies	Transition costs	1.4	1.4
Advertising agencies	HFSS advertising revenue lost	63	63
Retailers and manufacturers of food and drink	Lost revenue from price promotions		883.8
Consumers	Net loss of economic activity from lower advertising spend		1382.1
Present value costs		**4507.3**	**7552.4**
Benefits			
Other forms of media	Additional revenue from adverts displaced from restricted media	3580.1	2079.6
Retailers and manufacturers of food and drink	Unspent advertising budget retained / used for price promotions	839.8	3119.4
Government	NHS Savings	46	2.1
Government	Social Care savings	36	1.7
Consumers	Health Benefits	2106	97.9
Consumers	Economic Benefits	109	5.1
Present value benefits		**6716.9**	**5305.8**
Total Net Present Value		**2209.6**	**-2246.6**