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THE ONLINE ADVERTISING TAX AS THE FOUNDATION OF A PUBLIC SERVICE INTERNET

Christian Fuchs

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The Online Advertising Tax as the Foundation of a Public Service Internet

A CAMRI Extended Policy Report

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The Online Advertising Tax as The Foundation of a Public Service Internet

1. Introduction: Public Service Internet Platforms and the Online Advertising Tax

This report introduces a new possibility and policy innovation for taxing online advertising and introducing a public service Internet funded by the online advertising tax. Prof Christian Fuchs (director of CAMRI, the Communication and Media Research Institute at the University of Westminster) has established a critical theory of digital media that provides a framework for the analysis of online companies' political economy, including a theory of digital labour and a digital labour theory of value (Fuchs 2008, 2015, 2017a). Insights from this theory shed new light on the question how to establish models for taxing online advertising and digital corporations and how to use such revenue for fostering public service Internet platforms.

Public service Internet platforms are online platforms run by public service media organisations. They do not have a for-profit imperative, which constitutes a major

difference to Google, Facebook, Twitter and other corporate platforms that use targeted advertising for accumulating capital. One of the key points that this report makes is that thus far no viable alternative to the for-profit corporations which dominate the Internet has been created. At the same time, however, Europe has a strong public service media tradition. Building on this tradition, an alternative Internet can be created: Public service media are well situated to offer their own online platforms that do not follow a for-profit logic, but serve the public interest. In addition, non-profit commons-based platforms (so-called platform co-operatives[1] run by civil society organisations can also help to challenge the power of for-profit online corporations).

Google and Facebook dominate the online advertising market in the form of a duopoly and avoid paying an adequate and fair share of taxes. In the age of austerity, there has been increased public criticism of the comparatively low level of tax contributions that are paid by large transnational corporations. This report first presents data that show the growing importance of online advertising (section 2). Second, it discusses Google and Facebook's online advertising duopoly (section 3). Third, Google and Facebook's tax avoidance strategies are analysed (section 4). Fourth, an overview of the British Parliament's Public Account Committee's inquiry into tax avoidance is discussed in respect to Google and Facebook (section 5). Fifth, some specific policy measures and ideas of how to counter online corporations' tax avoidance are discussed (section 6): voluntary corporate self-regulation, the 'Google tax'

(diverted profits tax), and the concept of the digital permanent establishment. Sixth, a new model of how to tax online advertising based on the theory of digital labour is introduced (section 7). Seventh, suggestions for how a public service Internet could be created based on an online advertising tax are introduced (section 8). Finally, the report draws conclusions and discusses their implications (section 9).

2. The Rise of Online Advertising

Google and Facebook are among the world's largest transnational corporations. In the 2017 Forbes ranking of the 2000 biggest global companies, Google/Alphabet came 24th with an annual profit of 19.5 billion US dollars.[2] With a profit of 9.5 billion US dollars, Facebook was in 119th place.[3] Neither company sells communication services; what they sell is online advertising. In economic terms, it is thus inaccurate to refer to Google and Facebook as communications companies. Rather, they are two of the world's largest advertising businesses.

> ***In economic terms, it is thus inaccurate to refer to Google and Facebook as communications companies. Rather, they are two of the world's largest advertising businesses***

Google and Facebook's profitability is linked to profound changes within the advertising industry. According to data gathered by Ofcom (Office of Communications), the British regulatory body for media, global advertising turnover increased by 23.0% to 308.1 billion pounds (361.2 billion euros) between 2011 and 2015. Television

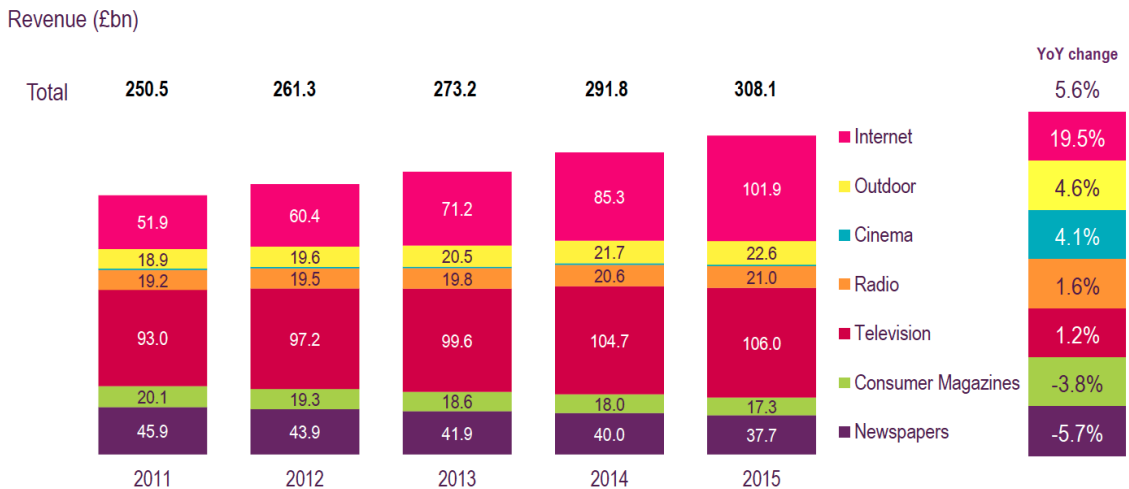


Figure 1: The development of global advertising expenditure according to data gathered by the British media regulatory authority Ofcom (Office of Communications), data source: Ofcom (2016a, p. 28, fig 1.21).

	2011	2012	2013	2014	2015
Online	20.7	23.1	26.1	29.2	33.1
Outdoor advertising	7.5	7.5	7.5	7.4	7.3
Radio	7.7	7.5	7.2	7.1	6.8
Television	37.1	37.2	36.5	35.9	34.4
Magazines	8.0	7.4	6.8	6.2	5.6
Daily newspapers	18.3	16.8	15.3	13.7	12.2
Cinema	0.6	0.5	0.6	0.5	0.5

Table 1: Various advertising forms' share of global advertising revenue in % (source: based on data from Figure 1).

advertising is the dominant form of advertising, but its share of global advertising turnover fell from 37.1% in 2011 to 34.4% in 2015 (Table 1). The most significant trend is the marked increase of online advertising and sharp decline in newspaper advertising: newspaper advertising's share of global advertising turnover decreased from 18.3% in 2011 to 12.2% in 2015 (Table 2). At the same time, online advertising rose from 20.7% in 2011 to 33.1% in 2015 (Table 2).

If these trends continue, online advertising will soon also constitute the economically dominant form of advertising at the global level. As advertising taxation usually excludes online, and Internet advertising is becoming increasingly significant in economic terms, it is of key importance that any debate about the taxation of advertising includes discussions on how online advertising can be taxed.

Table 2 shows comparative data gathered by the World Advertising Research Center (WARC).

Year	Total	Newspapers	Magazines	Television	Radio	Cinema	Outdoor advertising	Online	Mobile phones
2005	388,560.1	119,302.7	46,379.5	142,068.0	33,443.4	1,732.3	23,207.9	22,426.3	261.3
2006	415,576.5	121,333.1	48,152.8	150,625.9	34,338.1	1,829.0	24,779.3	34,518.3	336.1
2007	457,407.2	125,263.3	51,493.6	166,606.4	36,238.3	2,184.4	27,856.5	47,764.6	530.7
2008	470,382.8	118,981.9	51,025.0	175,739.6	35,315.2	2,181.7	29,696.7	57,442.6	889.6
2009	409,496.4	95,173.2	38,677.9	159,807.1	30,173.0	2,043.5	25,991.7	57,630.0	1,109.1
2010	453,867.9	96,596.6	39,078.7	185,346.5	32,557.6	2,304.4	27,672.9	70,311.1	1,394.3
2011	493,427.8	98,032.5	39,622.4	201,078.7	33,855.3	2,464.9	29,983.6	88,390.4	3,705.7
2012	502,152.8	90,327.7	35,782.1	207,035.4	34,160.9	2,527.1	30,544.4	101,775.2	7,328.2
2013	511,383.5	83,692.9	33,307.5	209,100.1	34,314.3	2,422.3	30,314.1	118,232.2	14,781.1
2014	524,478.5	75,538.5	29,993.1	212,897.1	34,217.2	2,342.5	30,537.9	138,952.2	27,847.7
2015	499,692.0	62,872.7	24,885.7	194,730.7	31,892.2	2,445.8	28,135.9	154,728.8	47,501.8

Year	Total	Newspapers	Magazines	Television	Radio	Cinema	Outdoor advertising	Online	Mobile phones
2005	100%	30.7	11.9	36.6	8.6	0.4	6.0	5.8	0.1
2006	100%	29.2	11.6	36.2	8.3	0.4	6.0	8.3	0.1
2007	100%	27.4	11.3	36.4	7.9	0.5	6.1	10.4	0.1
2008	100%	25.3	10.8	37.4	7.5	0.5	6.3	12.2	0.2
2009	100%	23.2	9.4	39.0	7.4	0.5	6.3	14.1	0.3
2010	100%	21.3	8.6	40.8	7.2	0.5	6.1	15.5	0.3
2011	100%	19.9	8.0	40.8	6.9	0.5	6.1	17.9	0.8
2012	100%	18.0	7.1	41.2	6.8	0.5	6.1	20.3	1.5
2013	100%	16.4	6.5	40.9	6.7	0.5	5.9	23.1	2.9
2014	100%	14.4	5.7	40.6	6.5	0.4	5.8	26.5	5.3
2015	100%	12.6	5.0	39.0	6.4	0.5	5.6	31.0	9.5

Table 2: Global advertising revenue and various advertising forms' share thereof according to WARC data (data source: https://www.warc.com), in millions of US dollars and %.

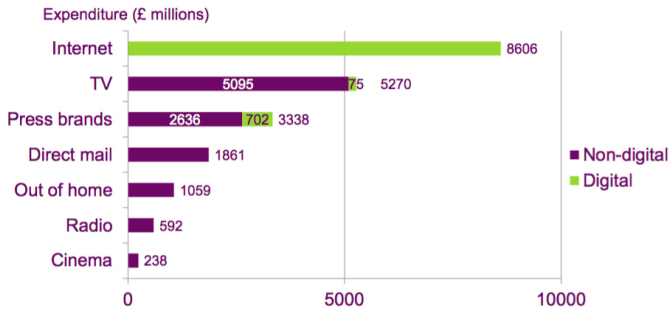
WARC estimates the 2015 volume of global advertising at almost 500 billion US dollars (around 478 billion euros or 408 billion British pounds). By contrast, Ofcom sets global advertising revenue at 361.2 billion euros (308 billion British pounds). This shows that different sources often provide different data where advertising is concerned. However, the WARC data also confirm the trend that newspaper and magazine advertising's share of the total volume has fallen sharply and online advertising's share has risen strongly. One interesting aspect of Table 2 is that the WARC data also provide the share of mobile advertising (advertisements on mobile phones). Mobile advertising is seen as a subcategory of online advertising. According to these data, 30.6% of all online advertising in 2015 was mobile advertising. Mobile advertising made up 9.5% of global advertising turnover.

The United Kingdom is particularly significant for the debate on taxing online advertising in several regards:

- According to WARC data, the United Kingdom has the highest advertising turnover in Europe: according to this information, total advertising turnover in the UK was 26.4 billion US dollars in 2016. In Germany and France, which are both countries with a higher population than the United Kingdom, the total advertising expenditure was lower in comparison at 22.0 billion US dollars and 11.97 billion US dollars respectively.
- Great Britain is one of the countries in which online advertising makes up the largest share of advertising revenue (Table 3). In France and the USA, broadcasting advertising (TV and radio) accounted for the largest share of advertising revenue in 2015, while in Germany and Austria advertising in newspapers and magazines made up the largest share (Table 3). In the United Kingdom,

however, online advertising was by far the most important branch of advertising: 47.4% of the total British advertising turnover in 2015 was made through online advertising, and 30.9% through broadcasting advertising (Table 3). Figure 2 confirms this information on the basis of data gathered by Ofcom. This structural specificity of the British advertising market has to do with the fact that there is no advertising on the public service TV and radio broadcaster BBC. The BBC's channels are the UK's most popular for both TV and radio. The broadcasting market for advertising in Great Britain is thus limited, and so the online market is of particular importance to advertisers. Online advertising's dominance in the UK makes this country particularly interesting for the question of whether and how Internet advertising can be taxed. The situation in the United Kingdom, where we see a dominance of online advertising, is one that will probably occur globally in the near future.

- In 2012 and 2013, the British parliamentary Public Accounts Committee carried out an inquiry into the topic of tax avoidance in which Google played an important role and as part of which Google representatives were interrogated. This led to important parliamentary and public debates on the question of whether and how global online advertising companies such as Google avoid paying taxes and what can be done to prevent this.
- In April 2015, a law introducing a diverted profits tax came into force in the UK. The idea behind this is that profits generated in Britain and diverted to other countries are subject to a 25% tax. As corporate income tax is lower than 25%, this measure aims to encourage companies to tax profit generated in the United Kingdom in the UK. In public discussion, the tax on diverted profit was also referred to as the 'Google tax', highlighting that the untaxed online advertising sector is of particular importance. This debate is



Source: AA/WARC Expenditure Report, April 2016
Note: 'Press brands' is a consolidation of magazine brands and national and regional news brands. Total digital advertising spend is double-counted in digital TV spend (broadcaster VOD revenue), and in 'press brands' digital spend.
Note: The AA/WARC data are net of discounts, and includes agency commission, but excludes production costs.

Figure 2: Distribution of British advertising expenditure in 2015 based on Ofcom data (source: Ofcom 2016b, p. 211, fig 5.30).

	France	Germany	Austria	United Kingdom	USA
Newspapers and Magazines	21.9%	35.4%	46.91%	14.5%	13.8%
Broadcasting (Television and Radio)	34.3%	28.9%	32.1%	30.9%	46.4%
Cinema	0.7%	0.5%	0.4%	1.3%	0.5%
Outdoor Advertising	10.1%	5.6%	6.9%	5.8%	3.9%
Online	32.9%	29.5%	13.7%	47.4%	35.4%

Table 3: Share of % of total advertising revenue from various forms in selected countries in 2015 (data source: WARC).

thus particularly instructive concerning the question of whether and how it is possible to tax online advertising within a national context. The United Kingdom's example also provides information on

whether companies such as Google have attempted to avoid such national regulations and what can be done to combat this.

Section 2 has shown the rising economic importance of online advertising. The next section will demonstrate that there is a concentration of economic power in the online advertising industry.

3. The Google and Facebook Online Advertising Duopoly

Google and Facebook enjoy a duopoly in the field of online advertising: Google is estimated to have controlled 55.2% of global advertising revenue in 2016, and Facebook 12.3%.[4] Google, which gave itself the new company name Alphabet in 2015, had a turnover of 74.99 billion and a profit of 16.35 billion US dollars in the 2015 financial year (data source: Alphabet 2015). Facebook's 2015 turnover was 17.93 billion US dollars, its profit 3.69 billion US dollars. According to WARC, advertising turnover worldwide was 499.69 billion US dollars and global online advertising turnover 154.73 billion US dollars in 2015 (see Table 2). According to these data, Facebook and Google's[5] joint 2015 turnover (91.34 billion US dollars) made up 59.9% of global advertising turnover and 18.3% of global advertising turnover. According to the Forbes list of the 2000 largest transnational corporations, the British advertising and public relations company WPP was the 301st largest company in the world and the largest advertising business with a profit of 1.8 billion US dollars in the 2015

financial year.[6] In 2015, however, both Google's and Facebook's profits were larger than WPP's: Google's was nine times higher, Facebook's twice as high. This illustrates the fact that Google and Facebook are the world's most important advertising companies, not traditional advertising corporations. Google and Facebook are not just communication and Internet companies; they are the world's largest transnational advertising corporations.

A *Financial Times* article sums the situation in online advertising up as follows: 'Google and Facebook are the new advertising kingpins and Amazon is waiting in the wings. […] This matters because digital is fast becoming advertising's biggest source of revenue. It will eclipse television in the US next year, according to eMarketer, the research firm, with the lion's share likely to go to the digital duopoly of Facebook and Google. […] Facebook and Google are 'hegemons that could soon be taking campaigns away from television', says Brian Wieser, analyst with Pivotal Research.'[7]

Google and Facebook's duopoly has negative impacts on public service media. In Austria, there is an advertising tax, from which online media are exempt. Austria's public service broadcaster (Austrian Broadcasting Corporation, ORF) has repeatedly raised public concerns over Google and Facebook and has suggested the introduction of an online advertising tax, which makes Austria a particularly interesting case. In the publication *Thesen zum Medienstandort Österreich* (*Theses on the Austrian Media Landscape*, Austrian Broadcasting Corporation. 2017), the ORF Director General, Alexander Wrabetz, sets out ORF's suggestions for basic media policy innovations and argues for the 'application of the advertising tax

to online-advertising' (Austrian Broadcasting Corporation 2017, 15) because currently online 'providers such as Google and Facebook' (Austrian Broadcasting Corporation 2017, 15) are exempt by Austria's 5% tax on advertising revenue, which gives these global corporations an unfair advantage. Drawing on the idea of the public service Internet, the *Theses* also argue that as a 'correction to the algorithm-driven filter politics on Facebook, the ORF should, as counterpoise, again be allowed to organise (advertising-free) online debates' (Austrian Broadcasting Corporation 2017, 11).

Google and Facebook's online advertising duopoly poses a threat to those public service media institutions that are funded by a combination of broadcasting licence fees and advertising, which can lead to a gap in their finances. The Austrian Broadcasting Corporation in 2015 had a revenue of 931.1 million euros (ORF 2016). Licence fees made up 593.6 million euros (63.8%), advertising income in the narrower sense 221 million euros (23.7%) (ORF 2016). The income generated by special forms of advertising was 42.7 million euros, that of online advertising 13.5 million euros (ORF 2016). If the proportion of online advertising in Austria continues to rise and broadcasting advertising drops, it seems likely that the Google-Facebook online advertising duopoly will lead to a loss of advertising income for the ORF. The trend towards a monopoly or duopoly in the increasingly important online advertising sector may have negative consequences for public service media such as the ORF. If no countermeasures are taken, this could lead to a financing gap or the need to raise broadcasting fees significantly, which could prove an unpopular measure.

Google	70.85%
Bing	11.61%
Baidu	8.14%
Yahoo	7.48%
Ask	0.24%
AOL	0.13%
Excite	0.01%
Other	1.54%

Table 4: Share of the world's online searches carried out on desktop computers in 2016 (data source: NetMarketShare: Market Share Statistics for Internet Technologies, http://www.netmarketshare.com, last accessed 31 December 2016).

Tables 4 and 5 show that Google is the world's dominant search engine and Facebook the dominant social network.

The Herfindahl-Hirschman Index (HHI) is a mathematical, statistical method that can be used to calculate a market's concentration. The following formula is used for this (Noam 2009, p. 47):

$$HHI_j = \sum_{i=1}^{f} S_{ij}^2$$

f = number of companies in industry j
S_{ij} = the market share of company i in industry j

Normalisation to 10,000 (that is, the maximum value is 10,000, standing for the greatest possible concentration: if the index equals 10,000, then there is only one company with a market share of 100%):

1	**Facebook**	1,590
2	**WhatsApp**	1,000
3	**Facebook Messenger**	900
4	**QQ**	853
5	**WeChat**	697
6	**QZone**	640
7	**Tumblr**	555
8	**Instagram**	400
9	**Twitter**	320
10	**Baidu Tieba**	300
11	**Skype**	300
12	**Viber**	249
13	**Sina Weibo**	222
14	**LINE**	215
15	**Snapchat**	200
16	**Yy**	122
17	**VKontakte**	100
18	**Pinterest**	100
19	**BBM**	100
20	**LinkedIn**	100
21	**Telegram**	100

Table 5: Number of globally active users (in millions) on social media in April 2016 (data source: SmartInsights, http://www.smartinsights.com/social-media-marketing/social-media-strategy/new-global-social-media-research/, last accessed 31 December 2016).

$HHI < 1{,}000$: low market concentration
$1{,}000 < HHI < 1{,}800$: medium market concentration
$HHI > 1{,}800$: high market concentration

The Herfindahl-Hirschman Index can be applied to the data represented in Tables 4 and 5 to approximate the

Rank	Company	Search engine(s)	Country	Share (a):	a^2
1	Google	Google	USA	70.85%	5019.7
2	Microsoft	Bing	USA	11.61%	134.8
3	Baidu	Baidu	China	8.14%	66.3
4	Yahoo	Yahoo	USA	7.48%	56.0
5	IAC	Ask, Excite	USA	0.25%	0.1
6	AOL Inc.	AOL	USA	0.13%	0.0
		Other		1.54%	
				HHI:	> 5276.8

Table 6: Calculation of the search engine concentration index.

degree of concentration in the global search engine and social network markets. To do so, the data need to be ordered by company. If a company owns several platforms, the respective shares of users from each platform need to be added. This is important in the case of Facebook, for example, as WhatsApp, Facebook Messenger and Instagram are all owned by this company. To calculate the degree of social network concentration, we can take the number of global active user profiles on which data are available according to Table 5 as our population. The results for search engine concentration and social network concentration are given in Tables 6 and 7.

It is striking that the fields of search engines and social networks are both dominated by American companies. The Chinese corporation Tencent (QQ, WeChat, Qzone) also plays an important role in the social network field, as it controls three large social networks and thus contributes to the concentration of this global market. Chinese networks do not usually pursue a global strategy. They are

Rank	Company	Number of accounts (in millions)	Platform(s)	Country	Proportion a	a^2
1	Facebook	3890	Facebook, WhatsApp, FB Messenger, Instagram	USA	42.9%	1842.3
2	Tencent	2190	QQ, WeChat, Qzone	China	24.2%	583.9
3	Yahoo!	555	Tumblr	USA	6.1%	37.5
4	Microsoft	400	Skype, LinkedIn	USA	4.4%	19.5
5	Twitter	320	Twitter	USA	3.5%	12.5
6	Baidu	300	Baidu	China	3.3%	11.0
7	Rakuten	249	Viber	Japan	2.7%	7.5
8	Sina	222	Sina Weibo	China	2.4%	6.0
9	Naver	215	LINE	South Korea	2.4%	5.6
10	Snap Inc.	200	Snapchat	USA	2.2%	4.9
11	Yy	122	yy	China	1.3%	1.8
12	Mail.ru Group	100	Vkontakte	Russia	1.1%	1.2
13	Pinterest	100	Pinterest	USA	1.1%	1.2
14	BlackBerry	100	BBM	Canada	1.1%	1.2
15	Telegram Messenger LLP	100	Telegram		1.1%	1.2
	Total:	9,063			**HHI:**	**2536.1**

Table 7: Calculation of the social network concentration index, data source: www.statista.com, accessed on 2 January 2017.

instead restricted to services in the Chinese language that target users in China.

The major players in search engines and social media do not include any European Internet platforms. In Europe, attempts were made for quite a long time to copy the Silicon Valley Internet model: start-up businesses are set up using venture capital, they gradually increase their number of users, and finally they are floated on the stock market and a profit-generating economic model is introduced. This strategy only works in some cases, such as Google and Facebook, and entails the risks inherent to financialised capitalism, namely financial bubbles and crises such as those of the 'New Economy' in 2000 (the so-called Dotcom Crisis), when the Internet economy's financial bubble burst.

In 2000, the EU formulated the Lisbon Strategy: part of this strategy was to become 'the most competitive and dynamic knowledge-based economy in the world' by 2010 (European Council 2000). At least where the Internet economy is concerned, this goal has not been reached: the Internet remains dominated by American corporations, primarily from California. The EU failed to recognise that simply imitating and adapting the Californian model to Europe cannot work, as the European media landscape is structured differently to the North American one. In Europe, public service media and alternative media (such as the non-commercial 'free radios') are important. In regard to public service media, this means that there is a very large and hitherto scarcely used potential to create public service Internet platforms to combat the dominance of Google, Facebook and similar Internet businesses in Europe.

there is a very large … potential to create public service Internet platforms to combat the dominance of Google, Facebook and similar Internet businesses in Europe

In the field of search engines, the Herfindahl-Hirschman Index is larger than 5276.8, and in the field of social networks it is 2536.1. This means that these two economic areas are very strongly concentrated. Google's dominance among search engines and Facebook's among social networks means that there is a trend towards monopolisation. Google and Facebook follow the same economic strategy, namely to use personalised advertising (cf Fuchs 2017a, chapters 5 and 6). They operate different types of platforms and accordingly offer different information services, but use the same capital accumulation online advertising model, leading to a duopoly in the field of online advertising.

The online advertising duopoly gives Google and Facebook tremendous economic power. In addition, these two corporations have avoided paying taxes, which is in most countries not illegal, but considered immoral by most members of the public. Global corporations amass huge profits and economic power that is further extended by tax avoidance that is tolerated by the state. While many everyday people suffer under wage stagnation and austerity measures' cuts to public services, many large corporations do not much contribute to the funding of the public good. The next section discusses strategies of tax avoidance.

4. Google and Facebook's Tax Avoidance Strategies

Since 2012, when a committee investigating global corporations' tax avoidance took up its work in the British House of

Commons Public Accounts Committee, this topic has been strongly debated in the British public sphere. This reflects a general European development: the EU Commission found against Ireland for illegal state aid to Apple. Apple massively undercut Ireland's corporate tax, which was already low at 12.5%: in 2003, Apple only paid tax corresponding to 1% of the profit made by its Ireland-based subcontractors, and in 2014, this had dropped to a mere 0.005% (European Commission 2016b). The Commission ruled that Ireland had to demand 13 billion euros in back taxes from Apple. Ireland and Apple appealed against this decision (Taylor 2016). In January 2016, the Italian tax authorities demanded that Google pay 227 million euros in back taxes (Sheffield 2016). In May 2016, the French police searched Google's Paris headquarters, looking for evidence of suspected tax avoidance; in June 2016, the company's Spanish headquarters in Madrid were searched (The Week 2016). In December 2016, the French parliament approved an amendment to the budget according to which a 2% online advertising tax is to be levied on YouTube advertisements (Le Monde 2016, Digital TV Europe 2016). An exception is to be made for videos showing the news. This levy, which discussions referred to as the 'YouTube tax', would also apply to platforms such as Netflix, Dailymotion and Vimeo (Roberts 2016).

Tables 8 and 9 show the turnover, profit and tax data of the British subsidiaries of Facebook and Google.

Over recent years, such balance sheet data have repeatedly led to public debate on tax avoidance strategies. Facebook UK had a turnover of over 450 million pounds between 2007 and 2015, but claimed losses of over 100 million pounds and received tax credits amounting

	2016	2015	2014	2013	2012
Turnover	842,429,955	210,762,610	104,951,999	49,851,557	34,616,042
Pre-tax profit	58,415,172	–52,490,051	–28,480,502	–11,648,466	–2,420,679
Taxes paid	2,577,082	–11,322,063	4,327	–182,027	3,914,910
Post-tax profit	55,838,090	–41,167,988	–28,484,829	–11,466,439	–6,335,589
	2011	**2010**	**2009**	**2008**	**2007**
Turnover	20,413,542	13,000,579	10,084,225	4,794,921	4,794,921
Pre-tax profit	–13,928,926	1,074,563	777,626	439,422	439,422
Taxes paid	–3,699,057	396,563	273,232	147,884	147,884
Post-tax profit	–10,229,869	678,000	504,394	291,538	291,538

Table 8: Balance sheet information of Facebook UK, 2007–2016, in GBP, data source: https://beta.companieshouse.gov.uk.

	July 2015 –June 2016	2014 – June 2015	2013	2012	2011	2010
Turnover	1,037,260,024	1,178,055,299	642,445,149	506,044,506	395,757,534	239,486,082
Pre-tax profit	148,777,577	110,795,883	70,844,971	36,805,567	–20,717,565	–23,004,701
Taxes paid	25,083,289	100,384,039	21,626,127	30,835,926	3,448,446	4,967,409
Post-tax profit	123,694,288	10,411,844	49,218,844	5,969,641	–24,166,011	–27,056,378
		2009	**2008**	**2007**	**2006**	**2005**
Turnover		169,486,065	149,696,428	104,161,241	64,549,244	27,080,578
Pre-tax profit		–11,471,736	–26,336,921	–3,424,171	–1,583,859	520,217
Taxes paid		–1,815,019	–2,732,559	607,106	–5,029,209	150,000
Post-tax profit		–13,286,755	–29,069,480	–4,031,277	3,445,350	1,142,094
		2004	**2003**	**2002**	**2001**	
Turnover		11,104,996	5,095,273	1,360,653	190,328	
Pre-tax profit		382,000	205,150	100,790	13,660	
Taxes paid		150,000	32,648	38,605	8,470	
Deferred tax		239,877	67,375	5,190		
Total tax						
Post-tax profit		471,877	239,877	67,375	5,190	

Table 9: Balance sheet information of Google UK, 2007–2016, in GBP, data source: https://beta.companieshouse.gov.uk/.

to 10 million pounds in total. At the same time, however, Facebook was in the process of becoming the 188th largest transnational company in the world, with a profit of 3.7 billion US dollars in 2015 (data source: Forbes 2000, 2016 list). Corporations such as Facebook, whose business model consists of the algorithm-based sale of advertising, do not lead to a leap in employment, such that in 2015, Facebook UK had 682 employees.[8] Google UK employed 2,329 people in 2015.[9] In 2011, Google UK had losses of more than 24 million pounds with a turnover of 395.8 million dollars, while globally Google made a profit of 9.7 billion US dollars[10] and was the world's 103rd largest company (Fuchs 2017a, 154). Because of all this, doubts concerning their balance sheets were raised.

Google paid some back taxes for 2015 and therefore a total tax of around £100 million for that financial year. In 2016, the taxes the corporation paid amounted to around £25 million, which was lower than the amount paid in 2012. As early as 2009, the British newspaper *The Sunday Times* reported on Google's suspected tax avoidance, setting in motion a public discussion that only increased over the years:

> GOOGLE, the Internet giant with the motto 'don't be evil', avoids paying more than £100m a year in UK tax despite pulling in annual revenues of more than £1.25 billion. Even though the web search engine operates as Google UK Ltd in London, British firms which advertise with it pay their subscriptions to a subsidiary based in Ireland, where corporation tax is far lower than in the UK. This structure, condemned this weekend as 'unfair' and 'unacceptable', allowed Google legally to avoid paying £110m of UK tax in 2007, according to research by an expert

> on corporate tax avoidance. […] Google's accounts show that the highly profitable search engine paid just £600,000 of UK corporation tax in 2007, despite generating revenues of more than £1.25 billion in this country. More than 90% of Google's UK revenues are channelled through Ireland, where corporation tax is levied at 12.5%, compared with 28% in Britain. […] (Watts 2009)

In order to visualise this extent of tax avoidance, Figure 3 presents the amount of taxes paid and avoided by Google in the year 2007 in relation to its UK revenue.

The reason why taxes paid are almost invisible in this figure is that the amount of taxes paid in the UK was such a small percentage (0.048% to be exact) of Google's UK revenue that year that it almost cannot be observed in a standard pie chart visual representation.

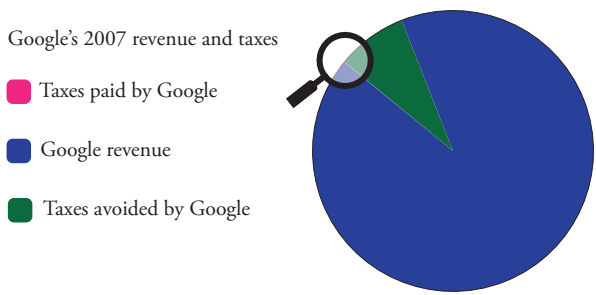


Figure 3: Google's UK revenue, UK tax payments and UK taxes avoided in 2017 (source: data from Watts 2009).

The *Sunday Times* report goes on to explain that Google's Irish subsidiary is part of one of two companies set up by Google in the tax haven of Bermuda. It quotes the tax researcher Richard Murphy asking whether it was

'morally right that a company can hoover up £1.25 billion of revenues from the UK in a single year and pay back just £600,000 of tax?' (Watts 2009).

Public debate on tax avoidance in the UK reached its interim high point in 2013, when 1,062 articles on tax avoidance mentioning Google or Facebook were printed in British newspapers.[11] Google was once again the target of criticism:

> Google is back in the firing line over its tax affairs after the giant Internet firm revealed it paid only £11.6m to the Treasury last year, despite generating $5.5bn (£3.4bn) of business in the UK. […] Google's complex tax arrangements, under which sales are booked in Ireland but revenues funnelled to a subsidiary in the tax haven of Bermuda, help the group pay minimal tax on the billions it earns outside the US. Google UK said in its latest accounts that it earned pre-tax profits of £37m on a turnover of £506m. But the company's most recent annual report revealed that the UK accounted for 11% of its global revenues, worth $55bn in 2012.' (Rankin, O'Carroll & Monaghan 2013)

According to this report, the reason for the disparity between the amount of taxes paid in the UK and the earnings gained in the UK, is that Google's sales are booked in Ireland. However, even for Ireland this arrangement does not lead to substantially increased revenues:

> the Internet search company's accounts show that last year it paid €19m (£15.9m) tax to the Irish exchequer despite the Irish subsidiary handling the €15.5bn of revenues generated last year in Europe, the Middle East and Africa. (Rankin, O'Carroll & Monaghan 2013)

Facebook, too, was repeatedly criticised. Thus, *The Guardian* reported in 2012:

> Facebook has become the latest multinational to come under the spotlight for its tax affairs after figures revealed it paid just £2.9m in tax on profits of more than more than £800m. […] Facebook is structured so that companies buying advertisements on the website in the UK, or anywhere outside of the US, have to pay Facebook Ireland. This allowed Facebook Ireland to make gross 2011 profits of £840m – or £3.1m per each of its 287 staff. (Neate 2012)

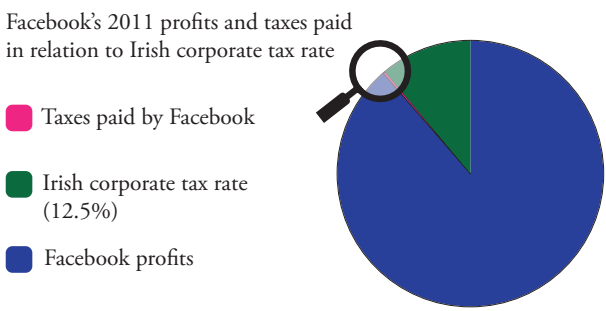


Figure 4: Facebook's 2011 Ireland profits, tax payments in Ireland and Irish corporate tax rate (source: data from Neate 2012).

The above chart shows Facebook's Ireland revenues and tax payments from the year 2011 in relation to the corporate tax rate in Ireland (set at 12.5%). It shows how the taxes paid by Facebook were below the Irish corporate tax rate which itself is already one of the lowest corporate tax rates in comparison with other European countries.

The *Guardian* report illustrates how – despite Facebook's high gross profits – an accounting method called the 'Double Irish' enabled Facebook Ireland to

reduce its taxes to €3.2m. This system makes use of royalty payments as tools to move substantial sums of money to other subsidiaries. It was used by Facebook to transfer almost '£750m to the Cayman Islands and its Californian parent in licensing and royalty payments.' After this, Facebook Ireland reported an annual loss of £15m even though 44% of Facebook's $3.15bn (£1.95bn) revenues could be attributed to Facebook Ireland.

'Like Apple and Google, Facebook uses its Irish subsidiary to reduce its liabilities to HM Revenue & Customs and other European tax regimes. Amazon and Starbucks also cut their British tax bills by using the same technique via other European countries. Last year Facebook paid just £238,000 in UK corporation tax – less than the average pay and bonus of its UK-based staff. Its estimated UK revenues amounted to £175m last year' (Neate 2012).

In 2013, *The Financial Times* wrote:

> A Dublin-based company at the heart of Facebook's international tax structure used a complex tax avoidance scheme to limit its Irish corporation tax bill to €1.9m last year, despite generating turnover of more than €1.7bn. Facebook Ireland Limited, which employed 382 people in Dublin, generated a gross profit worth €1.75bn in the year to the end of December 2012. This profit turned into a pre-tax loss of €626,000 when the company paid Facebook Holdings Limited, its Irish-based parent company, €770m in administrative expenses for the use of intellectual property central to its technology platform. The parent company's annual report, which was filed recently with Ireland's Company's Registration Office, shows several of its shareholders are Facebook subsidiaries based in the Cayman Islands, which does not levy corporation tax. (Smyth, 2013)

Jim Stewart, a tax expert interviewed for the report in the *Financial Times*, states that it was very likely that Facebook used a tax avoidance strategy named the 'Double Irish' because returns from its Irish-based companies showed that they were steered by a Caymans subsidiary. This strategy requires two incorporated companies based in Ireland. One of these companies would pay royalties for the use of intellectual property, the expenses of which can be used to reduce the amount of tax paid in Ireland. The second company – incorporated in Ireland but not Irish tax resident – would then collect 'the royalties in a tax haven such as Bermuda or the Caymans, thereby avoiding Irish taxes' (Smyth 2013).

In 2012 and 2013, the House of Commons' Public Accounts Committee conducted a parliamentary investigation into the tax avoidance phenomenon. The next section will look at some of the main arguments advanced in that debate.

5. The Tax Avoidance Inquiry in the British House of Commons

If a tax on online advertising is to be implemented, then we need to enquire how global tax avoidance can be circumvented and what legal framework is required for doing so. Thus, a closer investigation of the debate on tax avoidance in the British House of Commons' Public Accounts Committee, which dealt with this topic in 2012 and 2013, seems pertinent.

The Public Accounts Committee of the House of Commons published two reports (House of Commons Committee of Public Accounts 2012, 2013a) dealing directly

with Google's tax avoidance. Matt Brittin, Google's Vice-President for Northern and Central Europe (now President of Business and Operations for Europe, the Middle East and Africa) was interrogated. The Select Committee's key conclusions can be summarised as follows:

- In regard to the British tax authority HMRC: 'HMRC needs a change in mindset in the way it approaches collecting tax from multinationals. At the moment there is a pervasive acceptance of the status quo by the top officials in HMRC and we have seen little evidence of a desire to be more assertive. […] There is currently a complete lack of transparency about why multinationals pay so little corporation tax. Global companies structure their companies in ways that are impenetrable to the public and HMRC disclose very little about their approach to collecting tax from them' (House of Commons Committee of Public Accounts 2012, 3). 'HMRC needs to be much more effective in challenging the artificial corporate structures created by multinationals with no other purpose than to avoid tax. HMRC should now fully investigate Google in the light of the evidence provided by whistleblowers' (House of Commons Committee of Public Accounts 2013a, 5).
- In regard to Google:
  'Google accepted that profits should be taxed in the jurisdictions where the economic activity generating those profits occurred but it asserted that its underlying economic activity arose from the innovative software technology underlying its Google search engine generated by the US company. Google also confirmed that it had an entity based in Bermuda to protect its intellectual property. We consider that the company undermined its own argument since it remits its non-USA profits (including from the UK) not to the USA but to Bermuda and therefore may be depriving the USA of legitimate tax revenue as well as the UK' (House of

> Commons Committee of Public Accounts 2012, 10). 'Google generated US $18 billion revenue from the UK between 2006 and 2011. Information on the UK profits derived from this revenue is not available but the company paid the equivalent of just US $16 million of UK corporation taxes in the same period. Google defends its tax position by claiming that its sales of advertising space to UK clients take place in Ireland – an argument which we find deeply unconvincing on the basis of evidence that, despite sales being billed from Ireland, most sales revenue is generated by staff in the UK. […] It was clear to us that it is Google Ltd's UK staff who add the value in generating revenue in the UK from their close working with its high-value clients, from whom Google Ltd generates 60-70% of its revenue' (House of Commons Committee of Public Accounts 2013a, 5, 9).

Google's Matt Brittin was questioned by the Committee's inquiry on 12 November 2012 and 16 May 2013. Margaret Hodge (Labour), who chaired the committee, commented during Brittin's interrogation that Google's strategy was 'rather devious' and constituted 'calculated and [...] unethical behaviour in deliberately manipulating the reality of your business to avoid paying your fair share of tax to the common good' (House of Commons Committee of Public Accounts 2013a). Brittin's key statements are summarised in the following:

- Interrogation of Matt Brittin, Google Vice-President for Northern and Central Europe, on 12 November 2012:
  'For the services we provide, the consumers are based on the computer science that drives search and other technology such as Google Maps and so on. That is all done in California. […] But the bigger

thing here is that all the technology that creates the economic value, and all the innovation that powers Google search, comes out of California. […] The 17,000 engineers in California who build and continue to invest in developing the technology create the economic value for Google. […] What creates economic value for Google is the technology and the computer science. […] Tax law suggests that you need to pay tax where the economic value is created, and we believe that that is there. […] the activity and innovation is in the US, which is appropriate. […] The advertising, though, just to be clear, is not the same as buying a double-page spread in The Sunday Times. It is a much more complicated, algorithmically-driven system that is almost as complicated as the system of search itself, because anybody can target any keyword, anywhere in the world, any phrase that is typed, across the multiple domains of Google. […] the business in the UK is people providing services to Google Ireland […] What I would say is, as an international business that is a US-owned business, we make choices about where we locate and how we set up our structure, in order to ensure we can operate successfully and to minimise the costs and do the efficient things to run our business. That is what we are required to do by shareholders and by law, and that is what we do: play by the rules and manage our business efficiently. […] The fundamental issue for us is that our economic activity, which generates the algorithms that make a lot of products work, comes from engineering that is all coming from California. That is why we pay tax where the profits are generated, which is how the tax system operates' (House of Commons Committee of Public Accounts 2012).

- Interrogation of Matt Brittin, Google Vice-President for Northern and Central Europe, on 16 May 2013: '[T]he people in the UK can encourage people to use our products and can show them the business

> opportunity, but no money changes hands. There is no transaction that can be executed by the people in the UK, because the transaction is executed with the system in a live auction. […] They buy advertising from a platform that is built outside the UK, and because 90% of the money they spend is on an auction basis, the prices are set by the platform. […] 90% of the spend by British companies with Google is on an auction basis […] the substance of the sale, when the money is spent and changes hands, happens at the moment somebody searches on the technology platform. […] when we chose where to operate the lower tax regime was one factor in establishing us in Ireland. […] The piece that takes place in the UK could be that we might come and meet with you and talk to you about how many people are searching for your product or category on Google; we might tell you, typically, how much might it cost to show up and pick up clicks on those words' (House of Commons Committee of Public Accounts 2013a)

Accordingly, Google's key arguments are as follows:

1. **Computer technology creates value:** Google's value derives from its algorithm, technology and software.
2. **Google's value is created in California:** This software is developed by engineers in California. Accordingly, the creation of Google's economic value takes place in California.
3. **Google should pay taxes in California:** Taxes should be paid where value is created. In Google's case, that is California.
4. **Online advertising is placeless and thus eludes national tax legislation:** Google's advertising trade takes place in the placeless Internet, not in a particular country. Advertising sales do not take place in a specific country, but via an auction algorithm that is operated by algorithms whose physical location is

not clearly defined. Google's European invoices are drawn up in Ireland and there is a trade between Google in Ireland and European advertising clients.

5. **Google is not acting illegally but is following the law:** Google uses locational advantage and a low-tax system to operate efficiently, successfully and within the law. Google follows tax laws. This same point is emphasised by Alphabet/Google's Executive Chairman Eric Schmidt: 'I think the most important thing to say about our taxes is that we fully comply with the law and we'll obviously, should the law change, we'll comply with that as well' (BBC 2013).

However, there are counterarguments to these claims:

1. **Only human beings communicate, creating the practical and economic value of the Internet:** Only humans can create economic value, technology cannot. If there were only machines and no human beings, no goods could be produced, distributed and consumed. Fully automated production without human beings would break down as soon as machines stalled and could not be repaired. Unlike human beings, machines have no morals, no creativity and are unable to anticipate the future state of society, and are thus only capable of limited action. In a technologised society, practical and economic value can only be created by humans who act as social and societal beings and use technology as a tool in doing so.
2. **Google and Facebook's users create the value with which these companies operate and which they sell as Big Data:** Google's software platforms are not commodities. We do not pay to use Google's search engine. Google does not sell its search service to users. If something is not a commodity and is not sold, then its value is unclear. For this reason, the argument that Google's Californian software engineers create the company's entire value is not

convincing. Google sells advertising space on the Internet using algorithmic auctions. The audience commodity theory states that in advertising in general, the audience's attention is sold to advertisers as a commodity; in the case of data commodities, the users' personal data are sold to enable personalised advertising (Fuchs 2017a). Without the users' online activity, which is precisely monitored and about which the Internet corporations collect, store and analyse data and metadata, personalised advertising on Google and Facebook would not be possible. The data commodities and attention to advertising are created by the users themselves. The theory of digital labour assumes that Google and Facebook's users thus create a significant part of the value of these platforms, and that this value is not produced by the software engineers alone (Fuchs 2017a): the software engineers only create the technological platform that the users employ to produce content, communicate with one another and gather information online, which is how social media actually become 'social' and how the Internet becomes alive, informative and communicative in the first place. Without the users' activity, there would thus be no communication and no social network – and no profit generated by personalised advertising, either. Google and Facebook's users create economic value that is expressed in these companies' profits.

3. **Google and Facebook should pay for sold online advertisements in the country where these advertisements were personalised:** If Google and Facebook's value creation takes place where the users are and where they create the value of online advertising, then taxes need to be paid in the country where the users are when they look at the advertisements (in the case of cost-per-view advertising) or click upon it (in the case of cost-per-click advertising).
4. **Online advertising is personalised according to countries and locations and therefore is not**

placeless: While the auction algorithms used by Google and Facebook operate on the Internet, at each specific point in time that a user accesses Google or Facebook, he or she is in a specific country that has specific tax legislation. The user gives his or her attention to the advertising on Google or Facebook from this country, sometimes clicking on the ad, which leads to a sale of the advertisement. Both Google and Facebook personalise advertising according to place, that is, for every placement of personalised advertising a user sees, that user's location is identified and stored. In purely technological terms, it is possible to ascertain which percentage of seen and clicked-upon ads occurred in which country. As attention, online activity and clicks create value for Google and Facebook, taxation should be based upon the share of Google and Facebook advertising clicks in the respective countries.

5. **Tax avoidance is immoral and should thus be legally prohibited and sanctioned:** Eric Schmidt and Matt Brittin are right that global corporations that avoid taxes usually do not break any laws. However, as many human beings see such conduct as immoral, tax avoidance should be legally prohibited and laws created that enable the taxation of Google and Facebook on a national level. At present, there is no such legal foundation.

How precisely does online advertising on Google and Facebook work? This is an important question if we are to understand where profits are made. In order to place personalised advertisements on Google and Facebook, advertising customers first need to log into Google or Facebook's advertising platform and provide the content of the advertisement, details on personalisation and credit card information. Accordingly, step one is to log in on http://adwords.google.com/ or https://www.facebook.com/ads.

The second step is to enter personalisation options:

Figures 5 and 6 show the personalisation options available on Google and Facebook. These personalisation dialogues force advertising clients to specify the location of the users to be targeted by the advertisement. On Google, one country is pre-set, but it is possible to select all countries. On Facebook, one has to select at least one country, but it is possible to add several more. Selecting all countries is complicated and takes a lot of time.

The third step is to select a payment option (see the examples in Figures 7 and 8): a principal distinction is made between cost-per-click and cost-per-view online advertising. In the cost-per-click model, advertising clients only pay for adverts that viewers click upon. In the cost-per-view model, advertising customers pay for a certain number of advertisements presented in personalised form on profiles (e.g. 'cost per thousand impressions', which means that the client pays per 1,000 views of the ad).

Usually a daily or total budget and a maximum offer are specified. The online advertising space available on a profile, a wall, a search and so on is algorithmically auctioned to all suppliers with matching targeting options. Accordingly, the price is not set in advance. In the cost-per-click model, advertising clients only pay if users click on their adverts. In the cost-per-view model, customers pay for the presented ads. Usually the cost-per-click model is used much more frequently than the cost-per-view model.

As seen above, Google argues that the trade in online advertising does not take place in a specific country

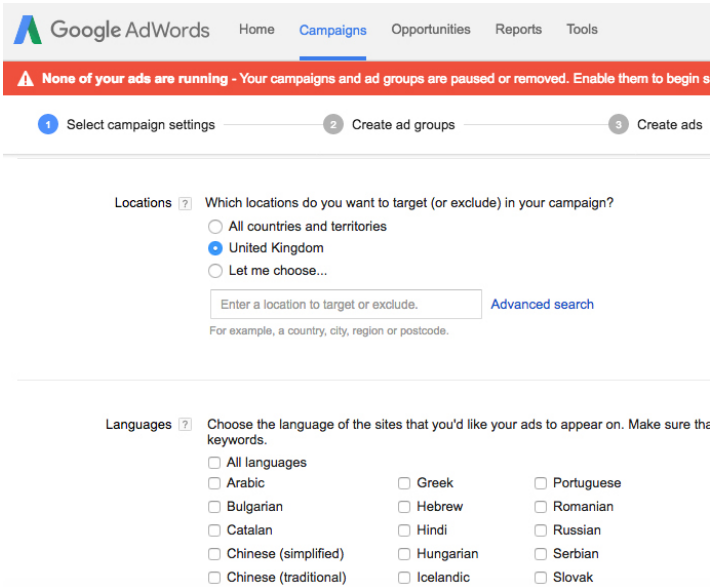


Figure 5: Advertising personalisation in Google.

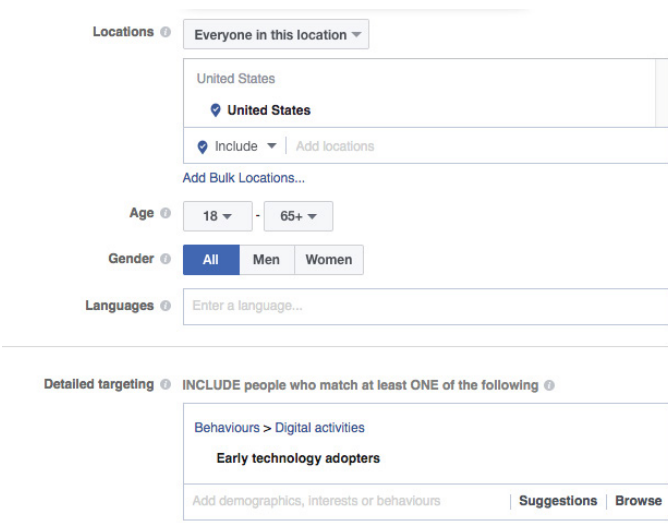


Figure 6: Advertising personalisation on Facebook.

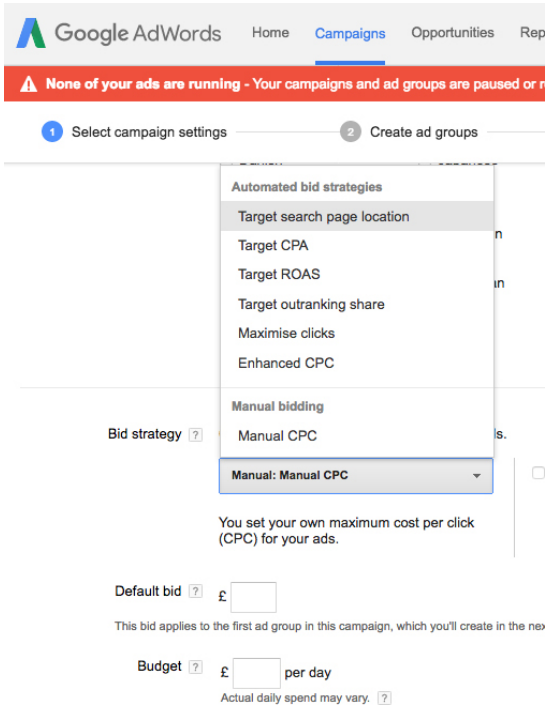


Figure 7: Advertising model selection on Google.

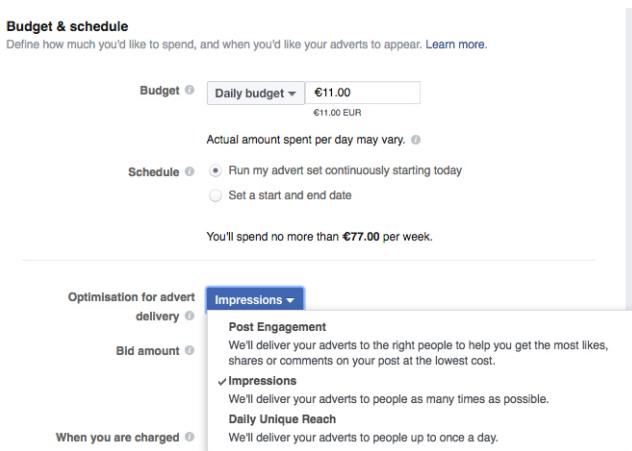


Figure 8: Advertising model selection on Facebook.

but on the placeless Internet, that the software development takes place in California, and that the intellectual property rights to the technology are registered on Bermuda. Because of this territorial complexity, the question of which country is responsible for taxing the profits is a complicated one. The same applies to the taxation of online advertising: where and in which country does online advertising take place? In the country where the client is? In the country from which the online advertising company operates? In the country where the software and algorithms are developed? In the country where the intellectual rights to the software and algorithms are registered? Or elsewhere?

Section 5 has pointed out arguments that global online corporations use for justifying tax avoidance. A number of counter-arguments have been formulated. The next section will discuss a number of measures that have been suggested in the public debate in response to the tax avoidance strategies of online corporations and other global companies. It will also point out the limits of these measures.

6. Example Policy Measures for Countering Online Corporations' Tax Avoidance: Voluntary Corporate Self-Regulation, the 'Google Tax' (Diverted Profits Tax), and the Digital Permanent Establishment

Thus far, the public policy discourse on tax avoidance has focused on several suggested measures. These have for example included voluntary corporate self-regulation (6.1), the diverted profits tax/'Google tax' (section 6.2), or

the digital permanent establishment (section 6.3). These example measures and their limits will be discussed step-by-step in this section.

6.1. Voluntary Corporate Self-Regulation

In late-2017, Facebook announced that it would stop routing advertising through Ireland in European countries where it has a local branch (Guardian 2017). Facebook's chief financial officer Dave Wehner said: 'We believe that moving to a local selling structure will provide more transparency to governments and policymakers around the world who have called for greater visibility over the revenue associated with locally supported sales in their countries' (Guardian 2017).

But this suggestion has three flaws:

- It is a voluntary measure by Facebook that is not based on legislation and clear policy rules that determine where Facebook has to pay taxes for what activities and to which amount.
- Facebook does not have branches in all countries of the world, which means that it will continue to avoid paying taxes. In 2018, Facebook's European offices were located in Belgium, Denmark, France, Germany, Ireland, Italy, the Netherlands, Poland, Spain, Sweden, Switzerland, and the UK. According to the United Nation's classification, there are 44 countries in Europe, which means that according to its own rules, Facebook would continue not to pay taxes in 36 European countries.
- There is still no policy rule that determines which amount of value shall be taxed in what country.

6.2. The 'Google Tax' (Diverted Profits Tax)

In the United Kingdom, the diverted profits tax was introduced as part of the Finance Bill 2015, entering into force on 1 April 2015. It can be seen as a reaction to public debate on transnational corporations' tax avoidance, including online corporations. Will this new measure help to effectively tax online advertisements of global Internet corporations such as Google and Facebook? This section discusses this question.

In public discussions, the diverted profits tax is often referred to as the 'Google tax', as Google was the prime example of a transnational corporation involved in tax avoidance. The use of the name 'Google tax' suggests that this legislation has made it possible to tax Google on a national basis. The diverted profits tax is relevant to the debate on online advertising tax, as the latter's implementation would probably raise similar questions to those arising in connection with the former.

The basic idea behind the diverted profits tax is that profits generated in the UK and diverted to other countries are taxed, so tax avoidance becomes less attractive. Diverted profit is taxed at 25%. By contrast, British corporation tax for 2017, 2018 and 2019 is 18% and 17% for 2020. The fact that corporation tax is lower than the diverted profits tax is supposed to encourage companies not to divert profits generated in the United Kingdom abroad to avoid taxes but instead tax them in the UK.

The key legislative regulation in the Finance Bill 2015 states:

> '§79 Charge to tax:
> (1) A charge to diverted profits tax is imposed for an accounting period by a designated HMRC officer issuing to the company a charging notice in accordance with section 95 or a supplementary charging notice in accordance with section 101(8).
> (2) The amount of tax charged by a notice is the sum of –
> (a) 25% of the amount of taxable diverted profits specified in the notice, and
> (b) the interest (if any) on the amount within paragraph (a) determined under subsection (4).'[12]

Then Chancellor George Osborne said in the 2014 autumn statement in which he announced the diverted profits tax:

> Some of the largest companies in the world, including those in the tech sector, use elaborate structures to avoid paying taxes. […] Today I am introducing a 25% tax on profits generated by multinationals from economic activity here in the UK which they then artificially shift out of the country. That's not fair to other British firms. It's not fair to the British people either. Today we're putting a stop to it. My message is consistent and clear. Low taxes; but taxes that will be paid. Britain has led the world on this agenda. And we do so again today. This new Diverted Profits Tax will raise over £1 billion over the next 5 years (Osborne 2014).

Then Economic Secretary to the Treasury Andrea Leadsom specified the details of the tax (House of Commons 2015a):

> Specifically, the diverted profits tax applies in two situations. The first is where a foreign company carries out activities in the UK in connection with the supply of goods or services to UK customers in such

> a way that it avoids creating a permanent establishment, and the main purpose of that arrangement is to avoid UK tax, or a tax mismatch is secured such that the total tax derived from UK activities is significantly reduced. The second situation is where a UK company, or a foreign company with a UK permanent establishment, creates a tax mismatch by using transactions or entities that lack economic substance.

At the second and third reading of the draft legislation in the House of Commons, politicians in the opposition raised the following points of criticism:

- The Act does not apply to credit agreements whereby multinational corporations give credit to their subsidiaries in countries with a higher corporation tax so that the interest can be deducted from tax, the subsidiaries are granted tax relief, and the interest payments are diverted to offshore havens (Fiona O'Donnell, Labour Party).
- The new Act was introduced into parliament too quickly, so there was insufficient time available to evaluate and discuss in detail the complex legal texts necessary to prevent tax avoidance (Chris Leslie, Labour Party/Co-operative Party).
- Internet companies constitute a particular problem as they can operate from anywhere in the world. They function differently from companies that sell physical goods. Territorial jurisdiction is a particular problem and difficult to implement. It is not the country's jurisdiction where the company's server is located which is responsible, but the country where the client is. There is still much more that needs to be done to regulate Internet corporations in this way (Ian Swales, Liberal Democrats).

The Finance Bill 2015 was passed by the House of Commons on 25 March 2015 with 307 yea votes to 226 nays;

it was confirmed on 26 March by the House of Lords and subsequently granted Royal Assent. The diverted profits tax thus entered into force on 1 April 2015.

In January 2016, HMRC and Google reached an agreement that the Internet company would pay 130 million pounds in back taxes covering the period from 2005 to 2015. Google UK's tax statement for January 2014 to June 2015 thus contains a back-tax payment of 69,230,747 pounds, referenced as 'Tax audit settlement in respect of prior periods'. This settled part of the agreed back tax payment. Then Chancellor George Osborne commented in January 2016: 'When I became the chancellor, Google paid no tax. Now Google is paying tax and I have introduced a new thing called a diverted profits tax to make sure they pay tax in the future. I regard that as a major success' (Mason, Weaver and Kirchgaessner 2016).

The tax expert Prem Sikka, Professor of Accounting at the University of Essex, made the following calculation (Sikka 2016). He estimated that Google had made a profit of 7.2 billion pounds in the United Kingdom between 2005 and 2015 (Boffey and Treanor 2016). According to Sikka (2016), Google's back tax payment and the actual taxes paid amounted to 200 million pounds for the period in question. According to this estimate, the actual tax paid was only 2.8% of profit, even though the average corporation tax was 25%. Sikka (2016) thus concludes that Google should have paid 1.8 billion pounds rather than just 200 million in taxes: 'The settlement seems to be a sweetheart deal by HMRC to collect something rather than what may be owed' (Sikka 2016).

Shadow chancellor John McDonnell (2016) of the Labour Party criticised the diverted profits tax as ineffective:

> This deal looks like mate's rates for taxes. It's totally unacceptable that while most of us pay the taxes expected of us – recognising that part of living in a civilised society is ensuring that everyone who can makes a fair contribution to vital public services – a major multinational can, first, pay virtually no corporation taxes for a decade, and then pay what is a tiny amount relative to its deep pockets. […] The so-called Google tax had its sights set on precisely those major tech firms making most assiduous use of accountancy devices. […] The Google tax is a dead letter: and if Google can so easily duck this tax, with its own Tory tax deal, what exactly will stop any other tech firm doing the same? (McDonnell 2016).

The House of Commons Committee of Public Accounts (2013b) reported in 2013 that the four major accounting firms Deloitte, Ernst and Young, KPMG and PricewaterhouseCoopers (PwC) had massive resources that they could muster to advise corporations on how to use international tax legislation to pay as little tax as possible. By contrast, HMRC had comparatively few resources to combat tax avoidance at its disposal. The Committee furthermore had the impression that these four firms had close links to the government and were thus able to unduly influence the tax system. Accountancy firms negotiated secret tax deals with financial authorities, as revealed by the Luxembourg tax scandal in which such files had been leaked (House of Commons Committee of Public Accounts 2015).

The House of Commons Public Accounts Committee also examined the compromise between Google and HMRC, criticising it sharply in one of its reports:

> The lack of transparency about tax settlements makes it impossible to judge whether HMRC has

> settled this case for the right amount of tax. […] The small amount of tax paid in proportion to the scale of Google's UK activities means that there are legitimate questions about this settlement; we still do not know if Google paid the right amount of tax. […] Google was not required to pay any penalty as part of the settlement. HMRC told us that the current penalty legislation does not work in relation to large businesses in the way that it should. […] The international tax rules are not working, such that HMRC seems unable to collect a fair share of corporation tax from global companies with activities in the UK. […] Multinational companies seem to be able to control how much corporation tax they pay in each country by the way they structure their business and allocate profits between their overseas entities. The fact that companies can do this within the rules shows that the corporation tax system is in urgent need of reform. (House of Commons Committee of Public Accounts 2016)

One decisive point of criticism made in this report is that it is obviously legal for transnational corporations not to enter the turnover generated in a particular country in that country, but instead to allocate parts of their overall turnover to various international subsidiaries as they see fit. We have seen that Internet companies argue that their revenue is generated in the global, placeless Internet, not in specific countries, and that therefore certain subsidiaries merely provide services to the headquarters in another country and no sales take place in the countries in which these subsidiaries are located. In Google's 2012 interrogation, the British Public Accounts Committee already drew attention to this problem: 'Chair [Margaret Hodge]: Mr Brittin, we are not naive. The revenues in the UK are those that you choose to put through the UK. What we

are interested in is the actual revenues you earned in the UK' (House of Commons Committee of Public Accounts 2012, 10). The 2016 report of the Public Accounts Committee shows that this problem has not been solved by the tax on diverted profits but continues to exist.

In a parliamentary debate on tax avoidance by multinational corporations, John McDonnell expounded on this topic further on 3 February 2016:

> We cannot allow the Government to go on like this. Trust and confidence in our tax system is being undermined. Every pound in tax avoided by these large corporations is a pound taken from the pockets of honest taxpayers. It is also a pound not spent on our schools, our NHS and our police. We need a real tax reform agenda, based on the principle of complete openness and transparency. First, that means, as a start, the publication of the details of this deal [between HMRC and Google] in full, so that we and our constituents can judge whether it is fair enough. Secondly, we need real country-by-country reporting of a company's activities, and not just a secret exchange of information between tax authorities, but full publication so that we can all judge. [...] Thirdly, we need an end to mates' rates and sweetheart deals with major corporations. Tax law should be applied fairly whatever the size of the company. Fourthly, we need full transparency in the relationship between Ministers and companies, so I want to see publication of all the minutes of all such meetings. Fifthly, we need firmer action to curb the tax avoidance industry, so action should be taken against the advisers when the tax avoidance schemes they designed are found to be unlawful by tax tribunals and courts. The same advisers advise Her Majesty's Treasury and help write our tax laws. That is unhealthy and unacceptable. […] Sixthly, we clearly need independent

> scrutiny of HMRC and the implementation of taxation policy overall. (House of Commons 2016)

One key point made in these elaborations is the demand that the activities of transnational corporations need to be analysed country by country. Where online advertising is concerned, the implication is that it is important to divide up and account for advertising turnover and advertising profit according to country, in line with the users' actual online activity.

In September 2016, Facebook submitted its 2015 tax statement. It was drawn up and certified by Ernst and Young, one of the four large accounting firms that attracted public criticism in the UK. Facebook claimed to have had a turnover of 210,762,610 pounds in United Kingdom in 2015. This turnover was the result of 'the provision of sales support, marketing services and engineering support to the Facebook group' (p. 16). Over 255 million pounds of 'administrative expenditure' were deducted from this income (p. 7), so that Facebook made a loss of 52,491,963 pounds and thus received tax credits of 11,322,063 pounds. In 2015, Facebook's global turnover was 17.928 billion US dollars and a profit of 3.688 billion US dollars.[13] Doubts concerning the credibility of these UK losses were voiced, given Facebook's high international profit (Bowers 2016). Tax expert Richard Murphy commented: 'Facebook's UK accounts do not represent its real sales in this country, which are actually booked in Ireland with their true value never being disclosed. […] The Facebook UK accounts just record the costs it incurs in the UK, with a bit of profit added on to keep HMRC happy. That's not good enough in the current climate. Facebook UK's

accounts are an exercise in opacity when what we really need is transparency. If accountants continue to refuse to provide what users of accounts need then it will be time for the government to act' (Johnston 2016).

Even after the introduction of the diverted profits tax, transnational corporations may be continuing to shift their turnover between their international subsidiaries. John McDonnell's demand that transnational corporations structure their finances according to individual countries and their real activities there thus seems particularly pertinent.

The public debate raised further points of criticism on the diverted profits tax:

- Only large corporations with a British turnover of at least 10 million pounds are affected, while the Act does not apply to small and medium-sized enterprises or one-off transactions (Murphy 2014).
- Individual tax arrangements between corporations and financial authorities are not affected by the tax (Murphy 2014).
- It remains unclear whether HMRC, with its scant resources, will actually be able to monitor compliance with this law adequately (Murphy 2014).
- As corporation tax is being lowered continuously at the same time as the introduction of the diverted profits tax (2013: 23%, 2014: 21%, 2015/2016: 20%, 2017/2018/2019: 19%, 2020: 17%), there is a risk that state income from corporation tax will continue to sink drastically if it turns out that transnational companies' tax avoidance cannot be curbed effectively.

Several conclusions for our topic of online advertising tax can be drawn from the debate on the British diverted profits tax:

- The British government has made a notable attempt to prevent the tax avoidance of transnational corporations on a national level in the form of the diverted profits tax. This attempt could boost other countries' attempts to introduce taxation on a national level, such as the introduction of an online advertising tax. We often hear that there is no point in taxing capital, as capital is flexible, global and networked and is thus able to elude any national attempt at regulation. The alternative would be to wait until there is a global capital tax; however, there are no correspondingly global political institutions that could implement such a tax. The example of the diverted profits tax shows that the national level can attempt to take a first step towards taxing global corporations. Initiatives such as this could then lead to similar developments in other states or on a regional level (such as the EU).
- Thanks to non-transparent agreements between Google and the British tax authorities, Google's corporation tax back payments have been low, nor was any kind of sanction imposed. Large international accountancy firms construct tax avoidance strategies for transnational corporations and are often able to successfully lobby governments, leading to business-friendly arrangements being made. The British Treasury possesses only limited resources to counter tax avoidance effectively and efficiently. Where online advertising tax is concerned, this case teaches us that its implementation will require both the creation of sanction regulations that are applied in the case of non-compliance as well as a significant strengthening of the financial authorities' resources so they can carry out the monitoring and administrative work necessary.
- As the financial authorities in the country in which a company's goods are produced or the parent company has its headquarters are usually regarded as having jurisdiction over corporation tax, multinational

> corporations are often able to shift their turnover and profit between their subsidiaries in individual countries as it suits them in order to avoid taxation. There are indications that this phenomenon still persists despite the introduction of the tax on diverted profits. This problem is exacerbated in regard to Internet corporations as the Internet is global and no base in another country is needed for online trading. Accordingly, any online advertising tax introduced will be affected by this fact. In these cases, the specific nature of online advertising needs to be taken into account, namely that it involves not only a supplier and a client, but a) the Internet platform, b) users who generate content and data and c) advertisers in various countries. Due to the important role played by the users of online platforms based upon personalised advertising, it seems appropriate to tax online advertising in the location where the platform users are at the point of time they click or view an advertisement. This requires an overview of the volume of the respective platform's online advertising broken down by country.

6.3. The Digital Permanent Establishment

In July 2017, a court in France ruled that Google/Alphabet did not have to pay back taxes of over 1 billion euros because it did not have a permanent corporate establishment in France. The EU looked into developing a legal basis that is based on the concept of a digital permanent establishment. In 2015, the European Parliament passed a resolution that called on the European Commission to 'adjust the definition of "permanent establishment" so that companies cannot artificially avoid having a taxable presence in Member States in which they have economic activity', which should include a definition of

a 'significant digital presence' (European Parliament 2015). In September 2017, the European Commission (2017) published a communication on fair taxation of digital corporations:

> The current tax rules no longer fit the modern context where businesses rely heavily on hard-to-value intangible assets, data and automation, which facilitate online trading across borders with no physical presence. […] As a result, some businesses are present in some countries where they offer services to consumers and conclude contracts with them, taking full advantage of the infrastructure and rule of law institutions available while they are not considered present for tax purposes (European Commission 2017, 2).
>
> Digitalisation has acted as a facilitator and accelerator of cross-border trade (3) […] The underlying principle for corporation tax is that profits should be taxed where the value is created. However, in a digitalised world, it is not always very clear what that value is, how to measure it, or where it is created (7) businesses are now able to have a significant economic presence in a market jurisdiction without necessarily having a substantial physical presence. […] Arriving at a meaningful solution to capture and allocate the value created in the digital economy across countries can take time (9).

The European Commission certainly correctly recognises the problem that value-production on the Internet has a transnational character and that therefore policy rules are needed that define how to determine *what* share of value needs to be taxed *where*. But it does not provide a concrete definition of a digital permanent establishment based on insights into where the value of digital corporations is created and by whom it is created.

The European Commission favours the Common Consolidated Corporate Tax Base (CCCTB) proposal that wants to determine that a digital permanent establishment is based on assets, labour and sales. In a draft-*Directive on a Common Consolidated Corporate Tax Base* from 2016, the following formula is suggested for calculating the tax base of a corporation in a specific EU country (European Commission 2016a, article 28[1]):

Tax based on establishment A of a corporation =

$$\left(\frac{1}{3}\frac{Sales(A)}{Total\ Sales}+\frac{1}{3}\left(\frac{1}{2}\frac{Payroll\,(A)}{Total\ Payroll}+\frac{1}{2}\frac{No\ Employees(A)}{Total\ Employees}\right)+\frac{1}{3}\frac{Assets(A)}{Total\ Assets}\right)\times Consolidated\ Tax\ Base$$

So, this proposal suggests to assume that the tax base of a corporation's specific national establishment shall be determined by the sum of one-third of that national establishment's share of total sales, one-sixth of its share of salaries, one-sixth of its share of the total number of employees, and one third of its share of total fixed capital.

In the case of online corporations, the question that arises is how to determine where commodity sales take place and where the capital assets and workers are located. When software engineers, marketers, warehouse workers and drivers are employed, then there is a clear national presence of people and physical assets. There are, however, also cases, where the value is not just created by paid employees, but also by unpaid users (as in the case of Google and Facebook, the two largest online advertising corporations). If applied to a digital establishment, then

the suggested formula does not take this circumstance into account.

If we think of an online platform, then it is also difficult to determine where fixed assets are located. Of course, there will in most cases be physical assets such as server farms and offices, but online businesses' key assets are made up of intangible resources such as algorithms, web platforms, and software code. In the case of stock-market listed digital corporations, there is both a monetary price of operational capital that is objectified in fixed capital assets, including intangibles and digital resources, as well as a fluctuating stock market value. This means that in such cases there are two monetary expressions of constant capital. In addition, there is an annual amount of labour-hours of the paid and unpaid workers involved in this digital business. Labour-time, salaries, the price of tangible and intangible assets, profits, and stock market values are five different economic aspects of a digital corporation.

Another problem of the suggested formula is that one of its elements, the annual sales, are themselves made up of salaries, annual constant capital investments, and profits. This means that the three factors (sales, labour, assets) are overlapping and that the formula therefore double-counts certain aspects. The formula furthermore implies that economic values are not just generated by humans, but also by non-human assets (including machines, algorithms, and code). There are three options for a labour-theory of value: (1) machines create economic value, (2) humans create economic value, (3) humans and machines create economic value. A humanist theory assumes that only humans can create economic value and that they make use of machines and resources as a means

of production and a means for the creation of value. In a humanist approach, machines do not create value, but rather humans transfer part of the value of machines to the product via their labour. In determining the corporate tax base of digital businesses, it is important to not just think about *where* and *how much value* is created, but also *who creates values*, which determines the factors that should be incorporated into a formula for apportionment. In the next section, a model will be introduced that is based on the question *who* creates the value of online corporations.

In late February 2018, the political news organisation Politico obtained and leaked a European Commission draft report on the 'Taxation of Digital Activities in the Single Market' (Smith-Meyer and Plucinska 2018). The draft report and subsequent draft directive[14] consider the possibility of introducing an EU Directive on Digital Permanent Establishments that also defines rules for how to allocate the profits of such establishments.

The draft report argues that such a Directive could define that a digital permanent establishment exists in a member state if an annual revenue of more than 7 million Euro is achieved or there are more than 100,000 annual users of the establishment's platform in that country. It argues for introducing a digital services tax of 3 percent on the gross revenue of digital permanent establishments. The document speaks of 'user value creation' and argues that 'user participation plays a central role in the creation of value for the company'. Furthermore, it says that in allocating such businesses' profits one must consider that 'in the digital economy, a significant part of the value of a business is created where the users are based and data is

collected and processed' and that therefore users' engagements with a platform, user data, the number of users of a platform and user-generated content should be taken into account for allocating profits to countries. The tax would be limited to large digital corporations with a worldwide annual revenue of more than 750 million Euro and an annual European revenue of at least 50 million Euro.

One has to wait and see if the EU will indeed introduce a Directive that taxes online revenues of large digital corporations. If this will be the case, then the question arises how exactly the value added by users can be defined, what different types of online business model and therefore of digital value generation must be discerned, and how such value generation can precisely be measured. The next section provides ideas on methods for taxing online advertising and digital value.

Sections 5 and 6 have given an insight into some aspects of the public debate on online corporations' tax avoidance strategies and into the question of what can be done against it. Voluntary measures, the 'Google tax' and the concept of the digital permanent establishment have limits. The next section introduces a new method for taxing online corporations. A key insight that has been advanced thus far in this report is that online clicks and online activities take place in specific countries, from which users access the Internet and the platforms they use, and that the use of corporate social media is a form of value-generation and economic production of data that is sold to advertising clients. The next section builds on this argument in order to introduce a method for taxing online advertising and digital value.

7. A Method for Taxing Online Advertising and Digital Value

7.1. Media Reforms: Towards an Online Advertising Tax

There is no advertising tax in the United Kingdom and the United States today. However, media reform movements have repeatedly attempted to introduce an advertising levy. The American media economist Robert McChesney believes that the monopolistic power of the large media corporations poses a threat to democracy, the freedom of opinion and the freedom of the media. He suggests a system in which every citizen is given an annual voucher of 200 US dollars that can be donated to a non-profit news or media organisation (McChesney & Nichols 2010, 201; McChesney 2012, 212–214). McChesney anticipates an increase in the plurality of the media system if this citizens' news voucher is put into practice. McChesney and Nichols (2010, 209–211) suggest a 2% advertising tax as one of the measures for financing this citizens' voucher.

Due to the strong commercialism of the media system in the USA, public service media have traditionally been weak. The path towards the establishment of public service media was a tough one, full of obstacles, and it took until 1967 until the passing of the Public Broadcasting Act that led to the creation of the Public Broadcasting Service (PBS) and National Public Radio (NPR). PBS has existed since 1970. Local stations that are more or less public in nature also play an important role. PBS is structured as a network of local, non-commercial, educational broadcasting stations. In 2013 41% of public television's budget came from taxes, 25% from individuals

(donations, membership fees), 17% from businesses, 4% from universities and 17% from other sources.[15]

The US media reform group Free Press (2010) proposed the introduction of an advertising tax in the USA to provide better funding for public service media, which would strengthen these media and enhance media diversity. It envisages two possibilities: a direct advertising tax would tax the media's advertising income at a certain rate (Free Press suggests a 2% rate). The second kind of advertising tax is an advertising sales tax to be borne by those buying advertising time or advertising space that is added to the price of the advertisement. The third kind is an indirect advertising tax. In the USA, companies are able to deduct 100% of their advertising costs from tax. Free Press suggested that the deductible percentage be reduced and certain industries (e.g. alcohol, tobacco) excluded from this deductibility, which would lead to increased tax revenue. In Free Press's proposal, the revenue generated through the advertising tax should be used to strengthen public media in the USA.

In the United Kingdom, the Media Reform Coalition advocates a similar concept (Co-ordinating Committee for Media Reform 2011). It suggests introducing a tax on the turnover or profit of certain media industry sectors, such as Internet advertising, Internet service providers, mobile phone providers and hardware producers. The income generated through this measure should be used to finance public journalism and local media cooperatives.

Concerning concepts for media reform such as these, which aim among other things to tax the online advertising revenue of corporations such as Google and Facebook,

it is important to note that tax law is organised nationally while the Internet, Internet economy and online advertising operate on a global level.

legislative change is needed before Google and Facebook's online advertising can be taxed

Google and Facebook's tax avoidance is possible precisely because these global companies operate in the global Internet and their tax avoidance is supported by the tax legislation of rival nation states that compete against one another through tax dumping and liberal business regulations. It is important to recognise that while many people certainly regard Google and Facebook's tax avoidance strategies as immoral, these strategies are not in fact illegal in many countries. For this reason, legislative change is needed before Google and Facebook's online advertising can be taxed.

7.2. A Model For Taxing Online Advertising

Existing conditions, which fail to prevent tax avoidance effectively, make it possible for profits to be moved to low-tax countries, so that advertising-based online companies pay hardly any taxes.

Trade is the exchange of two commodities in a certain quantitative proportion. In monetary economies, money takes on the role of a universal means of exchange, and thus commodities are exchanged for money. Neither Google's search engine service nor its advertising auction algorithm is sold. Accordingly, they are not commodities, but investment capital, which serves as a tool

to create value but does not create value in itself – it is dead. Neither software nor algorithms are alive in the way that the Internet's human users are. Technology constitutes only the context and infrastructure of human online communication.

If I look at a personalised online advert and click on it, I am redirected to a certain webpage belonging to the advertising client. The advertising client hopes that I will purchase a certain product on his or her website or carry out a certain action. And he or she will pay a certain amount to the online advertising company (e.g. Google, Facebook, etc.) as the advertisement was seen or clicked upon. Accordingly, the sale of the advertisement as a commodity takes place when it is viewed or clicked upon. The advertising client pays for users' personalised attention, which is only possible thanks to the collection and analysis of personal data. What is sold is thus users' attention to advertising. The user's online behaviour generates the data and metadata needed to enable and personalise online advertising. The activity of giving attention to an online ad or clicking on it finally leads to the monetary transaction between the advertising supplier and the advertising client. If the suppliers of online advertising had only their software and algorithms but no content, data and metadata generated by the users, they would not be able to sell online advertising. Accordingly, the users' online activity creates the value of online advertising.

> ***users' online activity creates the value of online advertising***

Any levy on online advertising introduced in law will be difficult to collect if the law's wording states that the tax

must be paid in the country of the advertising company's main office. The examples of Google and Facebook show that transnational companies operate in many countries at the same time, which means tax jurisdiction is not clearly defined. By contrast, if we argue that the users to whom personalised advertisements are presented (cost-per-view) or who click on such an ad (cost-per-click) create the value of the online advertisement and that online advertising should be taxed in the country where the users at whom it is targeted are, the territorial allocation becomes much easier: in this model, the assumption is that specific national tax legislation applies if I, as a user, am in this country and click on an online advertisement. If I happen for example to be in Germany, then German tax law applies. In order to make online advertising feasible in terms of taxation, we can thus choose to view the location not of the online corporation, but of the users as being most significant, then it is the location where the service is performed and where it should be taxed.

> ***we can thus choose to view the location not of the online corporation, but of the users as … most significant***

Maarten de Wilde (2015) argues that profit is usually taxed in the location where a commodity's value is produced, while value-added tax regulations usually focus on the target country where the commodity is sold. The Internet's global nature renders the application of traditional tax legislation difficult, as an Internet company is able to sell digital commodities in countries where it has no physical or legal presence. According to de Wilde, the view that online profits should be taxed where the clients

are, is becoming increasingly prevalent. Moreover, it has the advantage that the location can be determined via IP addresses and credit card addresses. However, de Wilde fails to consider that various Internet services involve more than only a supplier and a buyer; in the case of Facebook and Google, we have three actors: the Internet platform, the users and the advertisers. These three actors may be in three different countries.

De Wilde also argues that production and consumption should be taken into account. In the case of online advertising, the consumers of the platform services are also the producers of content, data, metadata and the attention that make online advertising possible in the first place. Accordingly, they are prosumers – producing consumers. Where prosumption platforms (including Google and Facebook) are concerned, the users' important role in profit generation and value creation could be taken into account by taxing online profits and online advertising in the country where the user clicking upon or looking at an advertisement is located.

The IP address identifies the computer network from which the user is connecting to the Internet. IP addresses are allocated to the country of the Internet service provider. When visiting an Internet platform, it is standard procedure for the IP address to be retrieved and usually stored for each access. This enables advertising to be personalised according to countries and places. Accordingly, the IP addresses from which platforms are accessed are standard data retrieved and stored by the platforms. If an online advertising tax based on the model described above were to be introduced, the Internet platforms using online advertising technically would be able to identify

and store information on the country in which the user is at the time of the advertising interaction for each individual online advertisement sold.

Even though the Internet is a global medium and the Internet economy is transnational in nature, it is clear that each user will be in a certain country at each point in time that he or she accesses the Internet. In order to solve the complicated issues related to the clash between the global Internet and national legislation, using the user's location as the decisive variable in certain cases thus seems logical.

There are concrete ways of how to calculate the amount of online advertising tax payable by a specific digital corporation. The suggested model could be implemented in such a way that in the UK (or in other countries), companies such as Google or Facebook would be required to statistically analyse what proportion of payment-generating advertising clicks or impressions were executed in Britain (or in whichever country is charging the online advertising tax). The corresponding national share of the global profit, global value creation and global turnover per year could then be used as the financial basis for calculating the payable annual online advertising tax. Another option would be to calculate profit, value creation and turnover according to the country's share of global active users as the financial basis for taxation; however, this would produce only a rough estimate.

The comparatively simple alternative when taxing online advertising through a traffic tax would be to use the sum of the advertising fees charged via British IP addresses, whereby this amount could be the result of fixed transactions or of advertising clicks and impressions.

The majority of Internet access takes place from computers, laptops, mobile phones and tablets, whose users are located in a given country and using a specific national Internet or mobile network provider. Travellers who normally use a provider in their home country but are connecting with the Internet via a mobile network provider based in the country they are travelling in constitute an exception. In cases such as these, agreements between the providers regulate how the connection charge is divided up. For a long time, comparatively high roaming fees were charged. In the European Union, these roaming fees have now been abolished. If a traveller with a German mobile network contract connects to the Internet in the UK using a British mobile network provider, then her/his device was in British territory. Accordingly, it would make sense for each of the advertising clicks carried out by this user while in the British communication network to be counted as advertising clicks carried out in the UK. The reason for this would be that the device in question (mobile phone, tablet, laptop, etc.) was in British territory at the time of the connection. If a traveller joins a local Wi-Fi network, he or she will be given an IP address registered to this network. Accordingly, advertising clicks should be attributed to the country in which the Wi-Fi network is located. Travellers' IP addresses constitute a special case, the technicalities of which need to be considered when introducing an online advertising tax. Mobile phone networks need to use dynamic rather than static IP addresses to connect with the Internet. However, the majority of Internet traffic in any given state comes from the users based in said state using the networks operating in that state.

7.3. Models of Digital Value Generation and the Humanist Labour Theory of Value

If we assume that it is human labour that creates value, then this assumption has specific implications for different international digital business models. The author recommends that legislating taxation of the digital economy is based on specific models of digital value-creation such as the following ones. Here are some of them (see Fuchs 2017a, chapters 5–10; 2008, chapter 7):

- **The digital content as commodity model**: In cases where digital content (such as software) is sold as a commodity, it is decisive how many employees are located in which country and what share of the international corporation's labour-time and salaries they account for. Microsoft is an example of a business that fits this model.
- **The online advertising model:** In such models, targeted advertising is sold as a commodity. Digital platforms act as constant capital. Users produce data that is valorised in the form of personalised ads. For each ad that is shown on a profile and then gets clicked upon, one can determine in which country the value-generating view or click took place. Examples of this model include Google and Facebook.
- **The online retail model**: Online retailers such as Amazon buy commodities that they sell online. They are first buying goods that they then sell to others. These commodities are fixed capital, to which the retail workers engaged in the sales, packaging and transport process add value that constitutes the total commodity value. The service of retailing is the real commodity in this case. For determining value shares it is therefore decisive where the sales, packaging and transport process takes place.

- **The sharing economy-pay per service model**: In this digital economy model, a platform mediates a service between a producer and a buyer and charges a rent on the service. The producer of the service generates its value, on which the platform owner charges a service fee/rent. The service creator (e.g. the Uber driver, the freelancer creating a digital product mediated via a platform such as Upwork, the babysitter advertising his or her services via an online platform) is located in a particular country so that this service's value can be nationally allocated.
- **The sharing economy-rent on rent model**: In such models, no new good is produced, but an already existing good is rented out via a platform that charges a rent on the transaction. A rent on rent is created. The most well-known example is Airbnb. If this rent shall be taxed, then the decisive aspect is where the renting process takes place. Each flat or house rented out is located in a particular country.
- **The digital subscription model**: In the case of digital subscription services such as Netflix, Spotify, Amazon Prime, or online newspapers it is not a physical asset which is rented out, but access to a collection of digital resources. Other than in the case of real estate, where a rent is paid for the use of a property over a specific time period, in the case of reproducible cultural products, royalties are paid that depend on the number of uses (e.g. number of plays or downloads of a song or film) or the size of the good (e.g. number of pages of articles or books). In both cases, it is decisive, in which countries the cultural producers (musicians, actors, writers, performers, etc.) are located. Take as an example the online music companies Bandcamp or Spotify: on Bandcamp, artists and fans sign up. Artists offer their music for sale that is bought by fans. Each artist offering music for sale is tax-resident in a specific country, which means that for each transaction the location of value-generation can be determined. On Spotify, users pay a specific monthly

subscription fee for access to a vast collection of music albums that can be streamed. Spotify pays royalties to rights-holders who are located in specific countries. In order to determine the tax base in one country, for each subscription fee paid by a user, it must be determined how many songs that user has listened to over a year and what share of rights-holders/producers is located in which country. Doing so allows the generation of a tax base for each country.

- **Mixed models**: There are also mixed models that require taxation based on a combination of models (so, for example, Spotify combines an advertising model and a subscription model).

The discussion shows that defining a digital permanent establishment needs not just to take into account *where* value is produced and *how much* value is produced, but also *who produces that value*. It requires a differentiation between different digital business models that involve different forms of value creation.

> ***defining a digital permanent establishment needs not just to take into account* where *value is produced and* how much *value is produced, but also* who produces that value**

In respect to the digital advertising model, Austria is an interesting case because it collects a 5% advertising levy on advertisements in printed works, on radio and television and in the public space. The applicable law is the Advertising Tax Act. The price of one advertisement forms the basis of assessment. At present, online advertising is exempt from the advertising tax. But recently, discussions have emerged that suggest extending this law to also cover online advertising. As this report has shown,

Internet advertising is becoming increasingly economically dominant. Therefore, it seems pertinent to consider extending the advertising tax to online advertising or introduce a special online advertising tax act. According to WARC data, Internet advertising turnover in Austria was 549.2 million US dollars (around 523 million euros) in 2015. A hypothetical 20% online advertising tax would thus produce an income of around 105 million euros, which shows that an online advertising tax would have significant economic potential in Austria. A 10% online advertising tax would currently produce income of around 52 million euros. It should be noted that all trends suggest that online advertising will continue to rise markedly. Were an online advertising tax to be implemented, of course it need not automatically be fixed at 5%, as in the case of other advertisements – it could be higher. The fact that global Internet companies often elude corporation tax through their complex business and financial architecture should be taken into account.

According to media reports, Google Austria GmbH had an estimated turnover of 140 million euros in 2015 but paid only 126,785 euros in taxes (Delcheva 2016). Thus, it seems reasonable to apply a tax rate to online advertising that is significantly higher than 5% of advertising turnover. This discussion has shown that there is a need for alternative Internet platforms, and that an online advertising tax has the potential to create them.

Section 7 has introduced a method for taxing online advertising. An online advertising tax could be used for funding an alternative Internet. The next section points out some foundations of public service alternatives.

8. Towards A Public Service Internet: Funding, Infrastructure and Formats

One of the reasons why no alternatives to Californian Internet companies' dominance have been able to establish themselves in Europe is that public service media's Internet potential is underdeveloped and subject to legal restrictions. The reason for this is that in Europe just like in the USA, Internet regulation has been based on the neoliberal governance model that gives preference to for-profit corporations in the digital economy. Were an online advertising tax to be introduced, there would be the option of using the income thus generated to create public service Internet platforms and launch a public service Internet offensive (Fuchs 2017b; Fuchs 2018, chapter 7). The corporate Internet has in the last instance resulted in problems such as tax avoidance, fake news, fake attention, a flourishing of hate speech and discrimination online, algorithms that replace human online activities, etc. Taken together, the corporate dominance of the Internet has thereby posed a threat to democracy. In contrast to this, a public service Internet is an attempt to strengthen the digital public sphere and digital democracy.

There is a range of conceivable public service Internet platforms whose creation could be financed through an online advertising tax. In the UK, one possibility would be to create a public service emulating YouTube (BBC-Tube), on which all of the BBC's legally available archive of programmes could be made available to users for reuse with creative commons licences. Users could also upload

their own videos to this platform and would have the additional option of remixing and reusing BBC-archive material. Public service broadcasting's educational mandate could thus be realised in the Internet in the form of 'digital creativity'. This concept could conceivably apply not just to video, but also to audio and radio archive material. There are dozens of public service media institutions in Europe. If all or some of them were to pursue similar projects (ARDTube, ZDFTube, ORFTube, ERTTube etc.), then there would be the option of creating a network of these platforms or setting them up as a joint platform, which could establish a popular European public service online media platform able to compete with YouTube, Google and Facebook in terms of popularity and reach. The users would be given ample space to develop their own digital creativity. A pan-European digitisation project would be needed to digitalise the television and radio archives. Projects such as these could be started on a national level, if they do not exist already. Income from an online advertising tax could be used to strengthen the public service Internet, i.e. Internet platforms run by public service media (Fuchs 2014). The key aspect of such platforms is that they are not privately owned, but operate as public services without advertising and as non-profit ventures.

This strengthening of the public service Internet would require changes to current legislative conditions, which make it difficult for public service media to offer Internet services (see Fuchs 2014 for a more detailed discussion). Legal restrictions preventing the establishment of public service Internet platforms (based on the view that public service-based online platforms would distort the market) have now led to a situation where American for-profit

platforms such as Facebook and Google are dominating the markets. At the same time, today we have no European Internet platforms of transnational significance. Therefore, a change in thinking is surely appropriate. Public service Internet platforms would be a counterforce to the monopolies of Facebook, Google & co. and could open up new spaces and possibilities for content creation, creativity, political online debate, and content distribution beyond the logic of capital accumulation.

If a public service Internet strategy were to be launched (with projects such as BBCTube, ORFTube, Club 2.0,[16] etc.) the legislative framework would certainly need to be revised. Alternatives to Google and Facebook's dominance in Europe are possible and feasible.

8.1 Applying the Online Advertising Tax Model to the UK

Figure 9 shows an example how this presented online advertising tax model could work in practice in the UK. The model visually represented in Figure 9 presents an online advertising tax with a hypothetical 20% tax rate on advertising turnover. The fictitious company Cheesebeer is using Facebook and Google to display personalised advertisements on the profiles of beer drinkers in the UK and Germany. The image shows four concrete personalisations, which respectively address users in Germany and the UK. The British finance authority (HMRC) only taxes the advertisements targeting users in Britain and leaves all other online advertisements aside. For both advertisements, an online advertising tax of 90 cents in total is payable, corresponding to 20% of the cost of the advertisements: A total ad value of €4.50 (€2 & €2.50) results

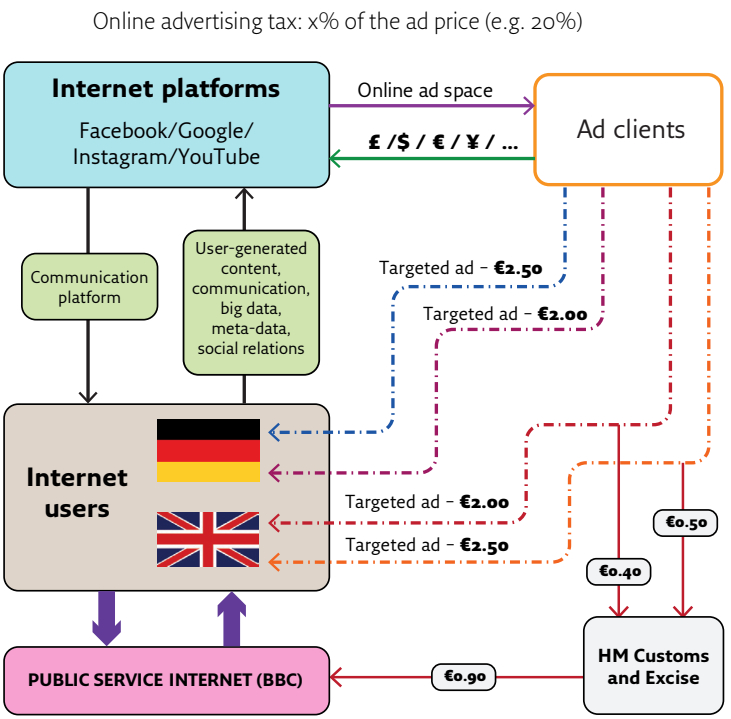


Figure 9: Model of online advertising tax coupled with funding for public service Internet platforms.

in a tax of 90 cents (=20%). This sum would be used to finance public service Internet platforms operated by a department of the BBC.

8.2 Alternative Approaches to Media Content in the Public Service Internet

When the institutional basis for a public service Internet platform is built through a sound funding model with the

help of the digital advertising tax, the platform provides the space for innovative and alternative approaches to different kinds of media content. One idea for this is the format 'Club 2.0'. Club 2.0 is an example idea of a public service Internet platform. Club 2 was an actual programme broadcast by from 1976 until 1995 by the Austrian Broadcasting Corporation (ORF). In the UK, the format had the name 'After Dark' and was first broadcast on Channel 4.

Club 2 was an open-ended, uncensored live debate programme that often featured controversial topics and guests. It provided a space and unlimited time for exploring the complexity of specific topics and problems. Space and time are important features of the public sphere. In addition, a moderator is needed who invites the right kind of people, makes sure that all guests speak to a significant degree and listen to each other, that the right kind of questions are asked, that the debate is not interrupted, etc.

Is a version of Club 2 in the age of the Internet and social media platforms possible? Club 2.0 is an updated version of Club 2. Figure 10 visualises Club 2.0's concept.

There are some core features of Club 2.0:

- Ground rules: Club 2.0 uses Club 2's principles. Club 2.0's broadcasts are open-ended, live, and uncensored.
- Cross-medium: Club 2.0 is a medium that combines the Internet and live television.
- Online video: Club 2.0 is live broadcasts on television and on an online video platform (C2Tube).
- No traditional social media: Existing commercial social media platforms, such as YouTube, Twitter, Facebook, Snapchat, etc., should not be integrated into Club 2.0 because they are based on a culture of speed, commerce and advertising that destroys true

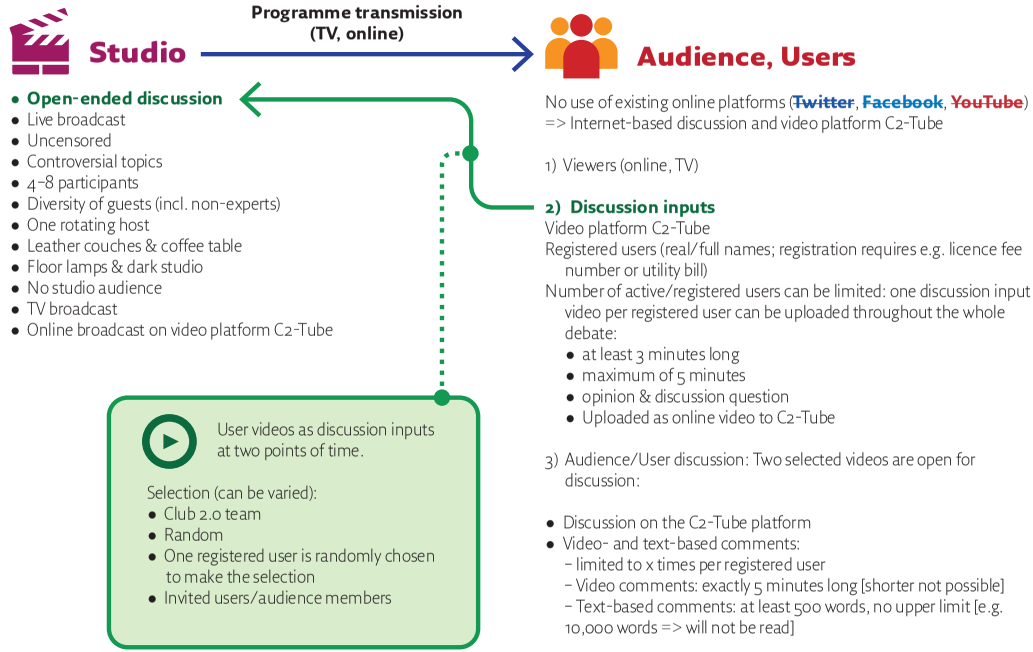


Figure 10: Concept of Club 2.0.

debate. For example, broadcasting Club 2.0 on YouTube could result in disruptive advertising breaks.

- Autonomous video platform C2Tube: Club 2.0 requires its own autonomous video platform – C2Tube. C2Tube broadcasts Club 2.0 and enables user participation.
- User-generated discussion inputs: Users can generate discussion inputs. Registration should require that users are non-anonymous because anonymity can encourage the violation of communicative norms and validity claims. The number of users allowed to post during a debate may be limited in order to avoid high speed. Such a selection of active users could for example be set randomly. An alternative is that all registered users can participate. Video is a good input format for avoiding anonymity and creating social cohesion. It is best to limit the number of videos each user can post (e.g. to one per live debate). User-generated discussion inputs are uploaded to C2Tube.
- Interface of the studio debate and user-generated videos: At specific occasions and points of time, user-generated videos are presented in the live broadcast as discussion inputs. In a three-hour long debate, there could be two to three video inputs. How would the videos be selected? Possibilities include random choice, selection by the Club 2.0 team, selection by a randomly chosen user, or guest selections.
- User discussions: Club 2.0 supports and encourages discussion between users during and after the live broadcast. Video- and text-based comments can be posted to each user-generated video that is shown in the live broadcast. Text-based comments could have a minimum length, videos a maximum length. In order to avoid high-speed debate and enable a slow medium, the number of comments (in video- and text-format) that can be made per user can be limited.
- Privacy-friendliness: Club 2.0 should avoid advertising and not collect, store and process user data and meta-data that are not needed for the pure operation

of the platform. Club 2.0 is a privacy-by-design platform that designs privacy into its platform but avoids anonymity. Privacy in the context of Club 2.0 relates to the way user data is stored and handled. It does not mean anonymity.

- Social production: The production of user-generated Club 2.0-input videos should transcend individualism by encouraging the production of video inputs in social contexts. Club 2.0 is ideally integrated into educational environments, such as schools, universities, community centres, youth clubs, adult education centres, trade unions, civil society associations, NGOs etc. Groups of individuals should be encouraged in such institutions to get together and co-produce content that contributes to the discussion. Even if only a small number of the videos resulting from such social settings are broadcast, there is still a positive educational effect: the production process will foster political debate and engagement among those who are involved in it.

There are also civil society alternatives to the corporate Internet. These have in recent times been discussed under the term platform co-operatives[17]. Platform co-ops are web platforms that are collectively owned by workers and users. One does not have to make a choice between advancing either public service Internet platforms or platform co-ops. Both constitute viable and important alternatives to the corporate Internet.

8.3 The Participatory Media Fee and the Commons-Based Internet

Parts of an advertising tax or of a general corporation tax could be turned into a participatory media fee: as people themselves are part of the value creation because they

create data and their data are being sold, letting them engage directly with the outcomes of those revenues might be good to close that circle and give them back some agency in the process. Each household or individual receives a particular sum of money per year (a public sphere cheque) that must be donated to non-profit civil society online platforms or other non-profit media and cultural organisations that advance the common good, do not use advertising, are non-commercial and non-profit, are not associated with powerful organisations, and do not have a discriminatory purpose. Participatory budgeting and state power are combined in the model of the participatory media fee: the state taxes corporations and then passes on the achieved income via participatory budgeting to citizens, who donate their public sphere cheque to civil society platforms. As a result, non-profit civil society models of investigative and quality journalism and an alternative, non-profit Internet could be advanced. The participatory media fee can be understood as part of a basic income, a citizen income specifically dedicated to advancing the public sphere. It is important to stress that the participatory media fee should not be an alternative to the licence fee that in many countries funds public service media's basic activities. Instead, the participatory media fee is an additional fee beyond and independent from the licence fee. Competition between public service media's funding and the participatory media fee should be avoided because both public service media and civil society media play an important role in the public sphere. Figure 11 summarises some of the key aspects of the participatory media fee.

Participatory Media Fee

From licence fee to the media fee = licence fee + Δx

Media fee + participatory budgeting (Δx) =
Participatory media fee

"Public sphere cheque" for all citizens

Media fee as progressive fee based on the level of company revenues/profits, part of **citizens' basic income**

Figure 11: The participatory media fee.

The model of the commons-based Internet is based on advancing the common good through civil society. The public service Internet model in contrast is organised by public service media organisations. However, the state has to play a different role in each: in the case of commons-based Internet platforms, the state organises funding through taxation and participatory budgeting. In the case of public service Internet platforms, through legislation the state directly creates public service media organisations and specific funding mechanisms such as the licence fee and/or an online advertising tax. In the first case, the state is a facilitator of media organisations, in the second one it is much more directly involved in the organisation through legislation, although public service media does not imply state media and means journalistic autonomy from the government.

9. Conclusions and Discussion

The key conclusions can be summarised as follows:

The economic significance of online advertising:
Online advertising's global revenue is increasing rapidly. If these trends continue, online advertising will soon take TV advertising's place as the economically dominant form of advertising.

Google and Facebook are advertising companies:
Google and Facebook are not just communication and Internet companies; they are the world's largest transnational advertising corporations.

Google and Facebook's duopoly in the field of online advertising:
Google dominates the search engine market, Facebook the social network market. Both markets display a strong tendency towards monopolisation. Facebook and Google both use personalised online advertising as an economic model. They process, store and market massive amounts of data and are thus typical of Big Data capitalism. Facebook and Google dominate the field of online advertising, and this duopoly seems to be expanding.

Negative effects for public service media and the digital economy:
The trend towards a monopoly or duopoly in the increasingly important online advertising sector may have negative consequences for the public service media sector and results in problematic levels of concentration in the digital economy.

Tax avoidance & value-creating users:
Google and Facebook have used complex global corporation and financial architectures to avoid paying taxes. In a parliamentary inquiry into the tax avoidance of transnational corporations, Google repeatedly argued that value is created by software development in California and algorithms in the placeless Internet, and that therefore no value – and no tax liability – is created in the individual countries in which Google searches are carried out. However, the Internet and social media are only communicative thanks to their users. A purely technological infrastructure would be pointless without users' activity. The activities of the Google and Facebook users create content, communication, data, metadata and attention, which form the basis on which both companies sell personalised advertisements. The users create an important part of Google and Facebook's economic value. For this reason, the taxation of Internet companies and especially of online advertising can take place in the country where a user (in the cost-per-view model) views or (in the cost-per-click model) clicks upon online advertisements.

Levying online advertising tax on the basis of all advertising interactions on a country-level:
Online advertising is already personalised according to countries and places. The Internet is not placeless: every online action takes place from a specific physical location within a specific country. It is technologically possible to ascertain which percentage of an online platform's viewed and clicked-upon ads occurred in which country

in a given tax year. For an online advertising tax to work, there would need to be an obligation for the online corporations affected to cooperate, capture the necessary data and report it. The data gathered could be used for the purposes of taxation and the taxation of online advertising. The taxation of Google's online advertising in a particular country could use the sums charged for transactions operating via this country's IP addresses as the basis of its calculations.

Online advertising tax to prevent tax avoidance:
Google has repeatedly argued that tax avoidance is not illegal. However, as many people see tax avoidance as immoral, ways should be found to force Internet companies to pay corporation tax and other taxes and thus contribute to the common good. Introducing a tax on online advertising is one way to do so.

An online advertising tax is possible on the national level:
The introduction of a diverted profits tax in the United Kingdom shows that online advertising tax need not necessarily be organised on a global level, but initially can be implemented nationally.

Sanctions, independence and resource issues:
Financial authorities with limited resources and lobbying by accounting firms can impact negatively upon the effective taxation of corporations. Introducing an online advertising tax should thus go hand in hand with strengthening the resources of the financial authorities so that these are able to effectively deal with the increase in

monitoring and administration required. Furthermore, it should be ensured that financial authorities work independently of lobbying organisations and that legal sanctions become applicable and are indeed applied when a corporation refuses to pay taxes or cooperate with the gathering of the tax data required.

Innovative approaches are required to tax Internet companies:

The G20 and OECD states argue 'that profits [should be] taxed where economic activities generating the profits are performed and where value is created' (OECD 2014, 4). Sales tax is usually charged where a commodity is sold. Some economists have suggested a destination-based corporate tax: profits are taxed in the country where goods are sold, and not where they originate (Avi-Yonah 2016, 72). Both models (taxation in the location of the profit source, taxation in the location of the sales destination) assume that there are two relevant economic actors: the producing corporation and the consumer. In the case of online advertising, however, we have three economic actors: the Internet platform, the platform users, and the advertisers. The users are simultaneously producers (of information, data, metadata, communication, social relations, and attention) and consumers (of web services and online advertising). Thus, the classic distinction between producers and consumers becomes irrelevant. In the case of Google and Facebook, we are actually dealing with prosumers (producing consumers). Because of users' special significance, it seems appropriate to organise online advertising tax on the basis of the total advertising interactions of users in a given country during

the period of calculation. According to this model, Google would in a specific country thus pay tax on all the advertisements that users in that country's network interacted with. The EU in 2016 proposed developing a directive on the country-by-country reporting of corporation tax.[18] This directive would oblige all multinational companies operating in the EU to annually publish their turnover, pre-tax profit, taxes paid, number of staff and kinds of activities for each EU country. If this directive is implemented, the activities of multinational corporations will certainly become more transparent to the public. However, it will not make tax avoidance illegal, which means that turnover and profits could be shifted around between countries. Accordingly, there is certainly a need for national regulations on taxing multinational companies – and there is certainly the possibility of doing so in the field of online advertising.

For a proper legal definition of digital permanent establishments, one needs to identify different models of digital value creation based on the assumption that only human labour creates value:

If we assume that it is human labour that creates value, then this assumption has specific implications for different international digital business models. Legislating taxation of the digital economy should be based on specific models of digital value-creation, such as the digital content as commodity-model, the online advertising model, the online retail model, the sharing economy-pay per service model, the sharing economy-rent on rent model, the digital subscription model, and mixed models (for more details see section 7.3).

Opportunities for public service alternatives to Google and Facebook:
There is a vast and hitherto almost completely untapped potential to create public service Internet platforms (Fuchs 2017b; 2018, chapter 7). Realising this potential could reduce Google and Facebook's predominance in Europe.

Introducing a tax on online advertising is one way to weaken Facebook and Google's monopolistic power. If the income thus generated were to be used to strengthen public service Internet platforms, the foundations of an alternative model could be laid. For decades, unsuccessful attempts have been made to imitate the Californian Internet platform model in the European Union. At the same time, the European public service media's Internet potential has not only been inadequately supported and promoted – it has been legally restricted. As a result, there is no serious European Internet platform comparable to Google or Facebook. A change of thinking and the creation of social, technological, organisational, economic and legal innovations in the field of Internet platforms that would act as an alternative to Google and Facebook could offer a solution.

An alternative Internet is possible:
Introducing measures such as an online advertising tax and a participatory media fee allows the fostering of an alternative, non-profit Internet. An alternative Internet can be advanced both by public service media (PSM) organisations and civil society. Public service Internet platforms operated by PSM can be funded out of an online advertising tax. Example ideas for such platforms include

the open debate format Club 2.0 and the public service YouTube. A participatory media fee is a kind of citizen income that is funded through taxing corporations (and/or advertising). The state taxes corporations and then distributes the resulting income through participatory budgeting to all citizens, who are enabled to donate and support civil society media and cultural organisations through this public sphere cheque. As a result, civil society media and civil society Internet platforms (also called platform co-operatives) are formed. The public service Internet and the civil society Internet are complementary and should not be seen as an either/or option and as competing with each other. Both constitute important alternatives to the corporate Internet.

Several objections could be made to the online advertising tax concept presented here; they will be addressed in the following section:

The *first counterargument* claims that location-based online advertising is technically complicated or impossible. This is hardly a powerful argument, however, given that nowadays nearly all online advertising is personalised according to country and location. In technological terms, the IP address from which an advertising interaction takes place has to be stored for every online advertisement displayed. Via the IP address, the country in which the Internet service provider establishes the connection can be identified. Online advertisers would have to be legally obliged to collect and analyse these data.

The *second counterargument* states that Internet users can use proxy servers and anonymisation techniques to hide their real IP address. Accordingly, online

advertisements' country attributions can be falsified. However, the number of users who hide their IP address or surf anonymously is comparatively low. Most users see no point to this and furthermore lack the technological knowledge to do so. Online platforms such as Google and Facebook themselves have an interest in users using their real IP addresses, as this enables the correct locational personalisation of advertising. In this regard, there is no fundamental clash between the interests of the financial authorities and those of online advertising platforms. One possibility would be for online advertising to be turned off if an online advertiser recognises an anonymisation or IP address diversion, so that locations are not distorted. There are a certain number of users who oppose Internet advertising on principle and would welcome such an option.

The *third counterargument* claims that the model presented would encourage the state monitoring of Internet users. In the model under discussion, financial authorities would need to be given the legal right to monitor the allocation of advertisements to countries to prevent falsification and thus online advertising tax fraud – that is, there would need to be a legal basis granting tax officers the ability to monitor the data through random sampling so as to prevent and uncover fraud. As tax avoidance by Internet companies is a widespread phenomenon, it would be important to have such possibilities for legal monitoring. If financial authorities are given access to IP data and advertising interaction data, it would be possible to use and run comparisons with other databases to create financial profiles of users and combine financial data with online usage data. If this counterargument is

fetishised, however, it plays into the hands of the global Internet giants and their tax avoidance, as the interest in privacy is placed above enhancing the common good through corporate taxation. The key thing would be for this monitoring to comply with data protection standards. This would include sharing only the minimum of necessary data with the tax authorities, namely information about the advertising interaction, the advertisement price charged and a technical confirmation that the user was in the country in question. The complete IP address does not need to be shared for this.

An independent data provider could develop a technology with which the location of all advertisements could be automatically verified. The task of this provider would be to store a distinct identification number and the verification result for each advertisement offered within the country in question. The online advertising platform would also store this identification number and provide it, along with information on the advertisement price and the advertising interaction, to the tax office in case of an inspection. Personal data would never be shared. When the tax office carries out its sampling, it would contact the independent location data verification service and ask for certain identification numbers to be verified.

Another objection related to the third counterargument is that public service Internet platforms would likewise encourage the monitoring of users by the state. However, firstly public service media are not the police but independent institutions. The aim is thus also to increase their independence. Secondly, the extent to which public service Internet platforms would collect and store personal data is not set in stone. They would not necessarily have

to store and process a host of private content and personal data, as Facebook does. A public service YouTube, for instance, would only require relatively little personal data. Thirdly, public media usually have far less interest in storing personal data than commercial providers such as Facebook and Google, as the latter are profit-oriented businesses for which personal data are worth their weight in gold. A public service media company would not follow a private economic logic of profit and could much more easily restrict itself to storing only the necessary data and not collecting excessive data.

A *fourth counterargument* states that it is impossible to take legal action against Google, Facebook and similar companies if they refuse to cooperate. The British example shows that the problem of lacking or inefficient tax control is first and foremost a problem of lacking staff. If an online advertising tax is introduced, then financial authorities should be given the funds to recruit large numbers of online experts and online tax officers. The advantage of the model under discussion is that it could be implemented on a national level, which renders controls easier.

Sanctions to be applied if online advertising platforms refuse to cooperate, falsify data, avoid taxation or commit tax fraud would also be important. The EU General Data Protection Regulation already contains a model for this: Article 83(4) and (5) offers the option of applying administrative fines of 2% or 4% of the company in question's 'total worldwide annual turnover of the preceding financial year', depending on the kind of infringement. This or a similar model could also be used in an online advertising tax law.

None of these points of criticism speaks against the introduction of an online advertising tax. The online advertising tax constitutes a media-political innovation that, in combination with a new public service media strategy, could create real alternatives to Google, Facebook and co. and form the basis for public service Internet platforms.

Putting an end to the power of transnational corporations is possible. An online advertising tax is possible. Another Internet is possible.

Notes

[1] See for example: https://platform.coop
[2] http://www.forbes.com/global2000, last accessed 9 February 2018.
[3] http://www.forbes.com/global2000, last accessed 9 February 2018.
[4] https://www.emarketer.com/Article/Google-Still-Dominates-World-Search-Ad-Market/1014258
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[6] Data source: http://www.forbes.com/global2000/list/#industry: Advertising, last accessed 8 January 2016.
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[15] http://actioninc.apts.org/legislative/resources/ptv-revenue-breakdown (accessed on Jan 31, 2017).
[16] Cf. https://www.westminster.ac.uk/events/the-unreality-of-reality-tv-from-after-dark-towards-twitter-big-data-and-big-brother
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[18] http://ec.europa.eu/finance/company-reporting/country-by-country-reporting/index_en.htm#cbcr-tax

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Online advertising will soon form the largest share of global advertisement revenues. Google and Facebook netted profits of US $29 billion in 2016. While these two giants control more than 66% of all online advertising revenues complex legal company structures have minimised their tax liabilities. This extended policy report considers where they should be taxed and where the value of their activities is actually created. It argues that tax paid by those platforms should be levied in the country where platform users are located when they click on or view an advertisement. Furthermore, the report examines the practical steps needed to ensure transparent accounting of taxed transactions in order to avoid long term negative effects for media and democracy.

Considering counter-arguments the author makes the case for an online advertising tax alongside a public service Internet strategy that could support other viable platforms and counter the dangers of duopoly or oligopoly and the high risks of financial bubbles in a world where advertising is the Internet's dominant business model.

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