The media coverage of the UK Budget: explaining the variation in the attention given to different type of policy decisions

Ana Ines Langer, University of Glasgow (Ana.Langer@glasgow.ac.uk)
Iñaki Sagarzazu, University of Glasgow (Inaki.Sagarzazu@glasgow.ac.uk)

Submitted to the ECPR Conference, Glasgow, September 2014.

Comments are very welcomed. Please do not quote without permission.

Abstract
This paper explores the ‘selection bias’ of the media reporting of the policy decisions presented in the Annual Budget in the UK. Using automated content analysis, this study analyses over 4,000 articles of press coverage of six ‘crisis’ Budgets, from 2008 to 2012 (with two in 2010). It identifies which factors explain the difference in prominence given by the media coverage to a wide range of policy decisions: from an increase in VAT to the reduction of corporation tax to changes in several benefit indexation mechanisms. The analysis shows that the salience of policy decisions in the coverage is determined by its cost, whether is negative (i.e. tax hikes and spending cuts) or positive, the income group that is most affected by it, and the degree of attention given to it by the government. Moreover, although there are some differences, by and large the same factors apply regardless of which party/ies is in government and for both broadsheets and tabloids.
Introduction

The budget presentation and approval process is one of those governing tasks that have a highly political content. Budgets serve governments to establish and publicise their key priorities (Walgrave, et al., 2006), even if they only have the ability to make marginal changes (Wildavsky, 1964). Similarly, they can help the opposition in scoring political points, especially if the opposition is on the side of public opinion (Burstein, 2003, Stimsom, 2004). Furthermore, it cannot be denied the public policy impact of the Budget as well as its direct, and indirect, influence on voters (Whitten and Williams, 2011). In the end, these political and policy dynamics make the act of presenting the budget a highly mediatized event.

Given the relevance of the budget in the political, policy and media realms it is imperative to understand what makes different aspects of the budget more newsworthy than others. This is particularly important given that: 1) the media is the main source of political knowledge and information and can have an important effect on voters perceptions of the economy (Duch, et al., 2011, Goidel and Langley, 1995, Hetherington, 1996, Holbrook and Garand, 1996); 2) it is a long held view that the status of the economy is an important driver of vote choice (e.g. Lewis-Beck, et al., 2013, Tilley, et al., 2008) and the Budget is one the main instruments of economic policy; 3) it is generally recognised that media coverage can influence the actions of both government and opposition, including shaping their communication and policy agendas (Green-Pedersen and Stubager, 2010, Van Aelst, et al., 2014, Vliegenthart and Walgrave, 2010, Walgrave, et al., 2008).

In light of these realities it is important to understand how the media covers the budget and what makes it more likely to cover some areas over others. As such, this paper explores the ‘selection bias’ of the media reporting of the Budget in the UK. In so doing, the objective is twofold. Firstly, to start to develop an understanding of how fiscal and economic policy is covered by the media and secondly to contribute to theorisation of the factors that shape news selection in the coverage of domestic policy. Specifically, the paper will identify the key determinants that explain the difference in the amount of coverage allocated to different types of policy decisions presented in the Budget: from increases in direct taxes such as VAT to the reduction of corporation tax to changes in benefit indexation mechanisms. Using automated content analysis, this study analyses over 4,000 articles of press coverage of six Budgets, from 2008 to 2012 (with two in 2010); three during a Labour government and three during the Conservative-Lib-Dem coalition government. The six Budgets under study were all after the global economic crisis of 2008, which makes them particularly interesting as this was a period of strong fiscal austerity. We then use media, policy and government communication variables in a multiple regression model to explain the variation in the coverage of the different components of the budget.
This paper will be organized as follows: the first section will briefly discuss the role of the media in the policy process and the factors that shape news coverage. This will be followed by the presentation of our hypotheses. The third section explains the data collected, the process of automated text coding, and our dependent and independent variables. This will be followed by sections four, in which we present our results, and section five which summarises our conclusions and suggests several avenues for further research.

**The Media and Public Policy**

What the media does (not) cover can matter a great deal in politics. The media has been found to influence public opinion, including on perceptions of the economy (Duch, et al., 2011, Goidel and Langley, 1995, Harrington, 1989, Holbrook and Garand, 1996). Moreover, agenda setting and priming indicate not only that media’s priorities affect those of the public, but also that parties and political representatives are more likely to be assessed on issues that are highlighted in the media (McCombs and Shaw, 1972, Price and Tewksbury, 1997, Weaver, 1996, Weaver, et al., 2004). Furthermore, changes in salience, tone and framing in coverage has been associated with policy change (Baumgartner and Jones, 2005, John, et al., 2013, Soroka, 2002, Walgrave, et al., 2008). In addition, research has shown not only that government and opposition often respond to the news agenda (Green-Pedersen and Stubager, 2010, Vliegenthart and Walgrave, 2010, Walgrave, et al., 2008) but also that news attention structure issue competition, influencing which issues are subject of dialogue between opposition and government (Thesen, 2011, 27). This is not just about symbolic reactions, however. Issues that the media pick up are more likely to create positive feedback into the policy cycle and hence be subject to more policy attention (Wolfe, et al., 2013).

From a more public policy perspective, many studies have shown how hard politicians work at trying to manipulate the allocation of political costs and benefits for economic and fiscal reforms recurring to both credit-claiming and especially blame avoidance strategies (Green-Pedersen, 2002, Hood, 2010, Pierson, 1994, Vis and van Kersbergen, 2007, Weaver, 1986) and, crucially, have found that these strategies have ‘an impact on the policy outcome’ (Wenzelburger, 2011, 1157). For the government, stealth, which has been highlighted as one of the key blame avoidance strategies (Pierson, 1994), is more likely to work if the media fail to inform citizens of the policy changes, leaving them in a weaker position to pressure or punish the government. Equally, media publicity can also be crucial for credit-claiming, as direct experience of the impact of the policy change might take months or even years to materialise. Media attention to issues can help actors to politicise issues and, crucially, so does lack of it in trying to de-politicise them (Baumgartner and Jones, 2005, Boydstun, 2013).
Despite the accumulated evidence of the media’s relevance, the determinants that explain the coverage of domestic policy—let alone fiscal policy and more specifically the budget—have been remarkably understudied. In public policy, there have been several studies that demonstrate the significance of ideas and discourse on the success or failure of policy measures (Cox, 2001, Green-Pedersen, 2002, Schmidt, 2002), and even some that specifically emphasise the importance of political communication strategies (Hood, 2010, Wenzelburger, 2011). But these are mostly carried out through qualitative analysis of government strategy and discourse, and in some cases public opinion data; surprisingly, though, the media hardly figures. In studies of policy agendas and communication agenda setting (i.e. influence from the media’s to the public’s priorities), the media’s agenda is treated as independent variable, and hence generally left unexplored. On the other hand, studies of media and political agenda setting interactions explore whether media coverage is influenced by the political agenda (and vice versa), but generally do not try to explain the influence of other factors in the media coverage (for overviews see Boydstun, 2013, Van Aelst, et al., 2014, Walgrave and Van Aelst, 2006).

In the media and sociological literatures, the study of the factors that affect the construction of the news agenda is a much more strongly developed field. This literature can be broadly divided into two types. On the one hand, there are a number of studies, often based on highly revealing ethnographies of news production (e.g. Gandy, 1982, Gans, 2004, Golding and Elliott, 1979, Schlesinger, 1978, Tuchman, 1978), which have provided in-depth understanding of the different actors and dynamics that influence what appears in the news and how it is presented. On the other hand, there have been quantitative studies of determinants of media salience —of the kind pursued here—that have put some of these theories to test. However, the latter kind of studies have very predominantly focused on international event news, from elections to terrorism to national disasters to human right violations (e.g. Adams, 1986, Ahern, 1984, Caliendo, et al., 1999, Chang, et al., 1987, Golan and Wanta, 2003, Jones, et al., 2011, Koopmans and Vliegenthart, 2011, Ramos, et al., 2007, Shoemaker, et al., 1986, Weber, 2010, Wu, 2007), rather than on domestic issues. Moreover, the studies on domestic news have tended to heavily concentrate in protest (Oliver and Maney, 2000, Oliver and Myers, 1999) and crime (Buckler and Travis, 2005, Pritchard and Hughes, 1997) or on the relative visibility of specific political actors (e.g. Schoenbach, et al., 2001, Squire, 1988, Tresch, 2009). The dearth of studies focusing on domestic policy is crucial because previous studies have established that the coverage of, and the factors that influence its agenda, are often significantly different from those of foreign policy and event-driven news such as natural disasters (e.g. Boydstun, 2013). This is also consistent with studies of political agenda setting, which highlight the importance of type of issue on understanding the contingency of the effects of media on the political agenda (Walgrave and Van Aelst, 2006).
There have been, however, some exceptions. This includes several studies comparing news about the economy vis-à-vis objective economic indicators in the US (Fogarty, 2005, Harrington, 1989, Soroka, 2002), another one explaining aggregate patterns of attention across major policy issues in the NYT between 1996-2006 (Boydstun, 2013), and closer in focus although methodologically further, one analysing the degree of media attention to policy decisions about welfare cuts (specifically cutbacks to two housing programmes) in Sweden (Lindbom, 2010) depending on size and transparency, and another about the evolution over time of the coverage of the UK Community Charge, known as the ‘poll tax’ (Deacon and Golding, 1994). These studies have identified a range of key determinants, including the importance of sources and their communication strategies (most importantly the government), prior media attention, and news values, most especially negativity, simplicity, conflict and immediacy.

But not only are these studies few and far between but, to the best of our knowledge, the Budget has not been specifically studied, which is surprising as it is undoubtedly of key importance for being the main instrument for setting—as well as giving publicity to—the country’s fiscal, and to an extent economic, policy for the next three to five years. In the next section, drawing on these studies as well as the broader literature on sociology of news, we discuss the determinants of media coverage as applied to the UK Budget and present our hypotheses.

**Determinants of media coverage and hypotheses**

The question of what shapes media coverage, and specifically why certain events and issues receive more news attention than others, has been a key preoccupation of media and political communications scholars for decades, starting in the 1950s (e.g. Gans, 2004, Shoemaker and Reese, 1996, Tuchman, 1978, White, 1950). Initially, a lot of emphasis was placed on the influence of the individual preferences of journalists and especially editors on deciding what news was. Over time, it became clear that there are a range of factors that shape what becomes news, most of which are structural rather than individual. Among them, one of the key considerations is shared professional understandings of newsworthiness, and the news values that underpin them. This is anything but straight forward, however. In fact, news values have been referred to as ‘one the most opaque structures of meaning in modern societies’ (Hall, 1973, 181) and rightly criticised for been naive and too narrow, downplaying or even missing out altogether key organisational, political and economic factors (e.g. Golding and Elliott, 1979, Harcup and O’Neill, 2001, Schlesinger, 1978, Strömbäck, et al., 2012). The key point is that although newsworthiness is indeed associated with the characteristics of the issue or event, and these might make them more likely to be considered worthy of being reported by journalists, whether a ‘happening’ makes it into the news also depends on how these event properties interact with
other factors, including: the influence of individual journalists and editors; organisational factors (including commercial imperatives) and professional routines and values; ideology; and institutional set up (e.g. regulation) (Shoemaker and Reese, 2013). Thus, criteria of newsworthiness are useful for understanding news selection but only as long as they are unpacked (as opposed to be assumed as transparent) and, where possible, combined with other factors that are not confined to the inherent characteristics of the event.

Many studies have tried to operationalise and test the concept of newsworthiness (e.g. Adams, 1986, Chang, et al., 1987, Weber, 2010), often drawing on the seminal paper by Galtung and Ruge (1965). This has led to varied interpretations of what are the key factors, depending among other variables on the approach, the location, medium and focus of the study (e.g. international news vs. earthquakes) and the methodology. As a result, there are several lists and many are rather extensive, which can be problematic, especially for empirical testing (Harcup and O’Neill, 2001, O’Neill and Harcup, 2009). Here we focus on news values that have been repeatedly identified across key studies (Golding and Elliott, 1979, Harcup and O’Neill, 2001, O’Neill and Harcup, 2009, Shoemaker and Reese, 2013) and that are most relevant to this paper, given its focus on fiscal policy coverage. These are: size/importance/magnitude; negativity; timeliness; unexpectedness/surprise; conflict/drama; human interest; and involvement of elite persons (defined as important and/or famous) and institutions.

For both theoretical relevance and matters of operationalization, however, only some of these factors were incorporated in the analysis. Firstly, elites are automatically involved in the Budget as it is the government—led by the Chancellor—that puts forward every policy item of the Budget, so this was excluded. However, there are tools that the government can employ to make more of their role as key sources, which will be incorporated (see below). Secondly, this is a routinized event that newspapers will have prepared well in advance to cover, in fact affecting several ‘beats’. Moreover, many PDs are nowadays pre-announced or at least trailed in advance. So unexpectedness was not incorporated either1. Nor were simplicity, conflict or human interest; firstly, because we did not find a way of reliably coding all policy decisions for any of these criteria, and secondly because previous research has found that these features often have more to do with how the story is covered than with characteristics of events (in our case policy decisions) themselves (Harcup and O’Neill, 2001).

These exclusions mean that, drawing on theories of newsworthiness, we formulated the following three hypotheses, which are directly related to the characteristics of each policy

---

1 It could have perhaps been interesting to include surprise in the model (PDs that had not been expected), but this would have needed to rely on media data and hence have problems of endogeneity
decision (PD). The first of these news criteria is *magnitude or size*. The idea is that the greater the magnitude of a ‘happening’ (however measured, e.g. cost, severity of an earthquake, number of protesters), the more the media is likely to cover it. As applied to our study, then we hypothesize that:

**H1 Magnitude**: the larger the cost of the policy decision, the more the media will cover it

The second value is *timeliness*, which is considered to increase newsworthiness because news should be about ‘new events that are close to us in time’ (Shoemaker and Reese, 2013, 171). So:

**H2 Timeliness**: the more immediate the impact of the policy decision, the more the media will cover it

Finally, but crucially, there is negativity. Negativity has long been considered a key news value (Shoemaker and Reese, 2013, 53-4) based on the idea that ‘bad news sell’ (Golding and Elliott, 1979). It has also been particularly associated with economic news (Fogarty, 2005, Harrington, 1989, Soroka, 2002). In relation to the Budget, negative news can be defined as policy decisions that reduce people’s disposable income and the benefits and services they receive from the state. So we hypothesise that:

**H3 Negativity**: policy decisions that announce cuts on spending and tax increases will be covered more than increases on spending and tax cuts

However, whether this is negative or positive is a judgment that is imbued with ideology and thus, as Harcup and O’Neill suggest (2001, 272), it requires us to ask: negative for whom? ‘A story may be presented as bad news simply because this angle reflects that paper’s political stance or the perceived views of its readers’ (Harcup and O’Neill, 2001, 273). In this sense, policy decisions that cut state spending and help reduce the fiscal deficit might be considered as positive news by some, especially in the context of the economic crisis. This might be most especially the case in relation to cuts on welfare provision, which as has been demonstrated in previous studies (e.g. Lens, 2002, Mooney, 2009) is not only welcomed but also often openly advocated by right leaning newspapers, at least as long as it concentrates in ‘welfare cheats’ and those ‘trapped’ in the vicious cycle of ‘dependency’. To allow for this, we will also test whether the attention to one or the other definition of ‘negative’ news is influenced by the type of the newspaper.

As suggested already by negativity, it would be naïve to claim that news selection simply reflects the intrinsic newsworthiness (however defined) of events. Research by Strömbäck et al (2012) has shown that even journalists recognise that there are important differences
between what they normatively think should be the most important event properties on deciding what’s news and what they are in practice; in fact “event properties related to how important events or information is, are perceived to be less important for the actual news selection than they should be” (Strömbäck, et al., 2012, 722). The literature above pinpoints to other important factors that contribute to determine what eventually becomes news. Firstly, there are commercial imperatives that shape journalists’ work, especially (assumed) audience interests and competences (Deacon and Golding, 1994). In terms of news values, the assumption is that journalists will be more likely to publish about ‘happenings’ that are of interest to the largest number of people. The implication thus is that the greater the number of people affected by it (a policy decision in this case), the more coverage it should receive. But this becomes more complex when we incorporate commercial imperatives. As newspapers are profit-seeking organisations, every potential reader might not have the same ‘value’, depending on the paper’s target readership as well as their marketability for advertisers (Hamilton, 2003). Furthermore, as suggested by Gans (2004, 151) this judgement might also be affected by journalists’ background: more coverage might be given to decisions that affect the middle class, to which most journalists belong. Given these potentially contradictory expectations, in this case we did not state hypotheses. Instead, we are guided by an open question: which income groups matter most for each type of newspaper in their coverage of policy decisions?

Following on this, we also tested a second variable related to commercial imperatives: the impact on the degree of coverage of whether the policy decision affected mostly businesses (as opposed to individuals). Given that readership of all the papers bar the FT is non-specialised, the hypothesis states that:

**H4 readership**: policy decisions affecting primarily **businesses** will receive less coverage than those primarily affecting individuals

The involvement of elites is a crucial criterion of newsworthiness, which in the case of the Budget can be considered a constant. But that is not their only impact. Due to organizational factors and professional norms, source considerations are crucial (Gans, 2004) and, in this regard, the literature has consistently pointed at the influence of official sources, most especially government officials (for an overview see Bennett and Livingston, 2003). This is a result of both the fact that patterns of media attention are shaped by government attention (Boydston, 2013) and the more direct influence of information subsidies from a source that has both high media capital and media-source affinity (Davis, 2000). Thus, we hypothesise that:

**H5 official sources**: if the policy decision is emphasised in government’s communication (Budget executive report and press notices), the media will give it more coverage
Identifying Newspaper Coverage of the Budget

In the previous sections we presented our expectations regarding the visibility of the different policy decisions in media coverage of the Budget. In this section we describe the data collected to test our theoretical claims. First, we proceed to explain the newspaper data. Secondly, we describe how we used the policy decisions to generate a coding dictionary. Third, we explain how we coded the articles and performed reliability tests. Finally, we discuss our dependent and independent variables.

Budget articles
In order to identify how much each of the Budget measures was covered by the press, we downloaded articles from six British newspapers. We chose the print media not only due to ease of access but also because, given impartiality rules in broadcasting, the press is a more varied forum of national debate. Moreover, the press have been found to have intra-media agenda setting influence, including on that of TV news shows (Vliegenthart and Walgrave, 2008, 862).

All but one major daily national newspapers were included, hence covering both tabloids and broadsheets and different partisan and ideological positions. It thus enabled us to compare newspaper types, which are assumed, and indeed have been found by some studies, to differ in their criteria of newsworthiness (Deacon and Golding, 1994, Harcup and O’Neill, 2001). Specifically we included the broadsheets: The Guardian, The Daily Telegraph, The Times, and the Financial Times; and the tabloids: The Daily Mirror and The Sun. Because of access limitations, we were not able to obtain data from The Daily Mail.

The articles were identified using Newsbank with the key word ‘budget’. The samples covered one full working week (Sundays excluded) starting the day after the Budget was announced. The short timeframe allows us to focus on Budget specific stories. We focused on the London Editions because it is the only one that all newspapers have. After manually cleaning for duplicates, we identified a total of 4,861 unique newspaper articles for the six years. As shown in table 1, there are—on average—about 800 articles per budget; tabloids have a significantly lower number of articles than broadsheets, which is expected due to their much weaker focus on public affairs and smaller pagination.
Table 1. Number of articles by newspaper and budget

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>March 2010</th>
<th>June 2010</th>
<th>2011</th>
<th>2012</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily Mirror</td>
<td>35</td>
<td>30</td>
<td>16</td>
<td>38</td>
<td>30</td>
<td>48</td>
<td>197</td>
</tr>
<tr>
<td>The Sun</td>
<td>59</td>
<td>50</td>
<td>42</td>
<td>43</td>
<td>44</td>
<td>43</td>
<td>281</td>
</tr>
<tr>
<td>Telegraph</td>
<td>141</td>
<td>128</td>
<td>181</td>
<td>227</td>
<td>218</td>
<td>198</td>
<td>1,093</td>
</tr>
<tr>
<td>Financial Times</td>
<td>151</td>
<td>201</td>
<td>158</td>
<td>183</td>
<td>174</td>
<td>155</td>
<td>1,022</td>
</tr>
<tr>
<td>Guardian</td>
<td>174</td>
<td>265</td>
<td>225</td>
<td>196</td>
<td>262</td>
<td>244</td>
<td>1,366</td>
</tr>
<tr>
<td>The Times</td>
<td>129</td>
<td>160</td>
<td>160</td>
<td>175</td>
<td>123</td>
<td>155</td>
<td>902</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>689</td>
<td>834</td>
<td>782</td>
<td>862</td>
<td>851</td>
<td>843</td>
<td>4,861</td>
</tr>
</tbody>
</table>

**Coding policy decisions**

The UK Budget is generally structured around two reports: (1) an economic and fiscal strategy report and (2) a financial statement and Budget report. While the former focuses on how the measures and decisions announced in the Budget help advance the Government’s long-term goals, the latter ‘brings together in summary form all the measures and decisions that affect the Budget arithmetic’ either in the form of revenues or spending (Budget 2008, p. 109). These ‘policy decisions’ are then the main feature of the UK Budget and the focus of our paper.

For the purpose of this analysis, we used the policy decisions listed as such in the Budget’s official documents. However, we only included decisions: i) made in the Budget under study and ii) with costed budgetary impact; hence we excluded policy plans without monetary quantification and decisions carried on from a previous Budget. Following these criteria, we identified 299 policy decisions over the six Budgets under study.

In order to code how many of the 4000+ articles in our sample covered the policy decisions of the respective Budgets, we took advantage of dictionary coding. Dictionary coding is a particular variety of quantitative text analysis. It links specific words to predetermined categories, be it policy positions (Laver and Garry, 2000), issue areas (Pardos-Prado and Sagarzazu, forthcoming), or more complex measures such as assuredness and tentativeness (Hart and Childers, 2005). The main advantages of this tool is that it enables researchers to code a larger number of documents and do so with a stronger degree of reliability than hand-coding provides (Mikhaylov, et al., 2012). However, these computerised methods, in

---

2 These include tax measures, national insurance contributions (NICS) measures, measures that affect Annually Managed Expenditure (AME), and additions to Departmental Expenditure Limits (DEL)’ (Budget 2008, 109).
3 Policy decision #23 of the 2008 budget was removed due to its high overlap with a policy decision emanating from 2007. Similarly, policy decision #19 of the 2008 budget was removed due to the limited information for it provided on the budget together with the fact that, on the abstract, it duplicated other PD’s from the same budget (#17, 18 and 20).
this case in particular a dictionary, can suffer of lack of validity, especially if the dictionary was originally drawn for other purposes (Grimmer and Stewart, 2013). Although our dictionary was tailored-made, its validity will nonetheless be tested by comparing the results with a hand-coded random sample of articles.

Our dictionary was created by first taking the words from the tables listing the policy decisions as well as the text describing each of these in more detail. Second, following standard quantitative text analysis practices (e.g. Klüver, 2009, Proksch and Slapin, 2010) we excluded stop-words\(^4\) and stemmed all terms (Porter, 1980) to make sure we covered a wide range of uses of the words.\(^5\) Because of the importance of numbers to the policy decisions, we made sure to include them in our dictionary. Numbers, however, posed a challenge as they do not have a stem. Nonetheless, upon inspection of the texts we noticed different representations for the same concept; for instance two percent was found as 0.02, 2pct, and 2%. So, for each numerical term we used all these variations to increase the accuracy of our dictionary.

Once this initial list of terms for each policy decision was made, we extended each to include synonyms of some of the key words. In order to avoid biasing our dictionary in favour of those PD’s with a longer description, we limited the number of terms associated with each policy decision in the dictionary to 14 (plus or minus 2). We believe that 14 allowed us to be inclusive enough so as to have the most important terms of each policy decisions, while at the same time it was small enough to allow variation in relatively similar policy decisions. In total our dictionary contained 1,279 unique terms of which 1,146 where word stems and 133 where numbers. It is important to point out that our dictionary does not place exclusivity between a term and a policy decision, and as such one term can be included in several policy decisions.

**Coding the articles**

Once our dictionary was defined, we proceeded to code each newspaper article based on the number of terms associated with each policy decision that were present. This coding resulted in three specific measures for each article: 1) the simple count of unique terms in the article that were in the dictionary for each policy decision (repeated terms where counted as one); 2) the percentage of total words in the article that represented the terms from the policy decision; and 3) the average of the uniqueness of the terms from the policy decision present in the article. This later measure is created from a uniqueness index of each term \(t\) which indicates the extent \(t\) is specific to a single policy decision \(p\) compared to

\(^5\) For instance, the stem ‘reassess’ groups the words ‘reassess’, ‘reassessed’, ‘reassessing’, reassessment’, ‘reassessments’.
the other policy decisions in the same budget (i.e. if a term is unique to one PD in a given year uniqueness=1 if it belongs to all PD’s of the same year uniqueness=0).

After coding the articles using the dictionary, we established a threshold for our three indicators. As such, for a policy decision to be coded present in the article it needed to include: 1) at least 6 unique words from the dictionary category; this means that almost 50% of the unique dictionary words for a policy decision need to be present; 2) the total count of words of a policy decision present in the article needs to represent at least 2 per cent of the valid words of the article; 3) the average uniqueness score has to be higher than .2. Figure 1 shows the distribution of articles x policy decisions for the three variables and the cut-off points. As can be seen, these threshold allowed us to be highly inclusive while at the same time controlling the presence of false positives and false negatives.6

Figure 1. Distribution of articles based on coding scores

![Figure 1](image)

a) Count  
b) Percentage  
c) Uniqueness

In order to validate our dictionary, we proceeded to do a manual coding of a random sample of at least 5% of the articles for each newspaper-Budget combination. However, given the small number of articles for the two tabloids, we oversampled these sources. This resulted in a sample of 385 articles. These articles were manually coded for the presence/absence of references to each policy decision, and then we compared our two measures to check their validity. Out of a total of 20,378 observations, we correctly coded 20,037, i.e. 98.3% of our sample.7 Despite the high number of correctly predicted observations, we also estimated the correlation of our dictionary compared to the hand coded measure. The estimates correlate highly (r = .61, p < .001) and therefore largely cross validate each other. As such, we are confident that our dictionary is properly identifying the presence and absence of policy decisions.

Figure 2 shows the total number of articles reporting on at least one policy decision as a percentage over all the articles in the dataset. As it can be seen, on average 20% of tabloid

---

6 We tested alternative thresholds; however, we found this one was more accurate and we corroborated this against our hand-coded sample.

7 We correctly coded the absence of a PD in 19,760 observations and the presence in 277. Our dictionary identified 172 observations which our manual coding didn’t and missed 169 observations.
articles and about 40% of broadsheet articles in our sample (returned with the search string 'Budget') referred to specific policy decisions.

Figure 2.- Percentage of articles coded with at least one policy decision, by budget and output type

Variables

The dependent variable was the number of articles that mentioned each of the policy decisions. Data was then aggregated simultaneously by policy decision and newspaper, resulting in a pooled data set of 1,794 observations of the dependent variable. While we considered the possibility of also trying to establish prominence within the article, based on number and location of references, given the characteristics of our methodology, this would have been very difficult to achieve. However, other studies have found that the results using both types of measures were very similar (Boomgaarden, et al., 2010, Sulitzeanu-Kenan, 2007).

Each policy decision was coded for several independent variables, following our hypotheses. It is a strength of this study that the data for most of the independent variables, as well as the list of Budget policy decisions (and hence the baseline for media inclusion/exclusion), are exogenous to our dependent variable and its data generating process. This data is available in public documents, hence avoiding a common problem of this kind of studies, i.e. what is ‘reality’ to compare it against the media coverage (Rosengren, 1974).

Firstly, we used estimated policy costings based on the governments' figures. Whilst both Labour and the coalition government used the National Accounts basis, consistency across all six Budgets required us to make two choices. First, static costings were chosen, rather than post-behavioural ones. Static costings do not generally take into account projected changes in the behaviour of taxpayers or social security claimants, in response to the policy decisions in question (e.g. changes in how much such individuals work, how much they consume, etc.). Although limited in some regards, it is more reliable than trying to predict behavioural changes. Second, indexed costings were used, rather than non-indexed
ones. This means that, in calculating a policy decision’s net Exchequer impact, it was assumed that the relevant *pre-policy decision* fixed-amount tax or benefit regime (e.g. the personal allowance, benefit amounts, etc.) would have kept pace with inflation, even without the policy decision in question.⁸

These policy costings were used for three variables. For the variable *magnitude*, we added all years and transformed it into absolute numbers. Following standard practices, as these figures were highly skewed, they were log-transformed so that they had a normal distribution in the regression analysis. For *immediacy*, we coded for whether the financial impact started in the fiscal year of the Budget (1), in year two (2), or beyond (3). Finally, we used the sign of the costing (i.e. whether it entailed savings or spending for the Exchequer) combined with type (described below) to code for *negative* or positive news.

In order to identify which income groups were most affected by each policy decision (i.e. according to income groups, and businesses vs. individuals), we employed a research assistant who specialises on tax law. We coded policy decisions based on whether they affected the *poor* (specifically the two lower income deciles as defined by the Office of National Statistics)⁹, the *middle* class (median-income households), the *rich* (the highest income decile), or none of the three (for instance, administrative policy decisions). The variable was coded according to the actual, rather than formal, economic incidence of each policy decision; in the case of taxes, for instance, this is to say, anyone who is out of pocket as a result of the imposition of the tax, rather than only those who have the actual legal liability for paying the tax (Kay and King, 1990, 6). Thus, in coding policy decisions we have assumed that the effective incidence of indirect taxes (e.g. VAT, various duties, etc.) is shared between businesses and consumers; whereas the effective incidence of direct taxes (e.g. income tax, corporation tax, council tax, etc.) is the same as their formal incidence.¹⁰ With respect to welfare benefits, their effective incidence was assumed to coincide with their formal incidence, in line with the above assumption about direct taxes.

For *government attention*, we coded, using the same dictionary and criteria for inclusion, the presence/absence of each policy decision in the Treasury’s press notices and in the Chancellor’s speech in the House of Commons. If present in one of them, we coded as 1, if

---


¹⁰ For example, where the standard rate of VAT went up, this was taken to impact business and consumers alike; whereas changes to the main rate of corporation tax were taken to affect only business (even though, any business tax savings could arguably also be passed on to consumers).
in both as 2, and 0 if not present. Given the different strategies for specific years, we proceed to normalize this variable for the year by estimating how differently policy decisions were mentioned versus the mean mention for the year.

In addition, we created a set of control variables. First, we differentiated policy decisions as to whether they announced *taxes, transfers, or other* measures (essentially administrative and miscellaneous); we set *taxes* as our control category. Second, we generated a dummy variable to identify a *Labour government* (1) versus a Conservative government (0) and another one to identify ideology, i.e. whether the source was *left leaning* (1) for the Daily Mirror and The Guardian or not (0) for the other four titles. Finally, in the full model we controlled for differences on newspaper types with a dichotomous variable identifying whether a source was a *tabloid* (1) or a broadsheet (0). Table 3 shows the summary statistics for all variables.

### Table 3.- Summary statistics of dependent and independent variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Articles coded</td>
<td>1794</td>
<td>3.626</td>
<td>6.516</td>
<td>0</td>
<td>66</td>
</tr>
<tr>
<td>Cost (log)</td>
<td>1794</td>
<td>4.685</td>
<td>2.815</td>
<td>-4.6</td>
<td>10.9</td>
</tr>
<tr>
<td>Timeliness</td>
<td>1794</td>
<td>0.652</td>
<td>0.763</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Negativity</td>
<td>1794</td>
<td>-0.013</td>
<td>0.975</td>
<td>-1</td>
<td>1</td>
</tr>
<tr>
<td>Social class affected</td>
<td>1794</td>
<td>1.100</td>
<td>1.059</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Business affected</td>
<td>1794</td>
<td>0.612</td>
<td>0.487</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Government attention</td>
<td>1794</td>
<td>0.000</td>
<td>0.514</td>
<td>-1.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Type</td>
<td>1794</td>
<td>1.364</td>
<td>0.616</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Left leaning</td>
<td>1794</td>
<td>0.333</td>
<td>0.472</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Labour government</td>
<td>1794</td>
<td>0.515</td>
<td>0.5</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Tabloid</td>
<td>1794</td>
<td>0.333</td>
<td>0.472</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Budget</td>
<td>1794</td>
<td>3.411</td>
<td>1.681</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

### Data analysis

Having defined all variables, we can proceed to our analysis. As we discussed earlier, the dependent variable is a count of the number of articles in a newspaper which mention a policy decision. As such, given the non-negative integer nature of our variable, a count model needs to be used (Cameron and Trivedi, 2013). Within this family of models, we specifically chose to use a Negative Binomial regression given that it is considered to be a more general model than the Poisson regression (Cameron and Trivedi, 1986). However, as suggested by Cameron and Trivedi (1986) we also ran the Poisson models and found the negative binomial regression model is a significant improvement over the Poisson results based on the comparison of the log likelihoods of the models.
For the multiple regressions we run three separate models: one for the whole sample and two models for the sample split by type of newspaper. As it can be seen in Table 4, the full model shows—as expected—that tabloids have given the Budget less coverage overall than broadsheets. Regardless of this disparity, the main point to note is that, although there are some differences between the models that will be discussed below, the coverage in both types of newspapers is largely driven by the same explanatory variables. In other words, both types of newspapers appear to be affected by the same factors in their news selection. Reinforcing this indication of commonality across newspaper types, neither the party in government nor ideological leaning were statistically significant. Given our methodology, we obviously cannot speak to the tone of the coverage; but in terms of salience this result indicates that, despite the marked partisanship of British newspapers, they all focus their attention on the same policy decisions, regardless of editorial ideological leaning and which government is in charge (ceteris paribus).

In regard to our hypotheses, most of them have been confirmed, although there are also some interesting exceptions. The first three hypotheses refer to characteristics of the policy decisions, specifically in relation to cost. Regarding hypothesis 1, which refers to magnitude, it is clear that the monetary value of the policy greatly matters. The relationship is significant and in the expected direction: the greater the cost (whether saving or spending for the Exchequer), the greater the number of articles that discussed it. For example, an additional £3,792.95 in the cost of a policy decision (one standard deviation) increases its coverage by 5 articles. In this sense, perhaps surprisingly given previous findings in other areas, the salience in the coverage can be defined as broadly mirroring the size of the policy decision.

The second hypothesis referred to timeliness, the assumption being that policy decisions that have more immediate effect would receive more coverage than those with deferred implementation. Interestingly, this variable is significant for all three models but in the opposite direction to what we expected: the later a policy decision comes into effect (i.e. starting in year 2 or 3), the more coverage it receives.

The third hypothesis referred to negativity, which has long been considered a key news value. However, as discussed above, what negativity means in practice is less straightforward than it might appear. On the one hand, negative news can be defined as policy decisions that increase taxes or cut spending. Nevertheless, depending on ideological positions, negativity can also be interpreted in a different way: for the right, reduction in transfers could potentially be regarded as positive news, either because of the interpreted target of the cuts (e.g. welfare ‘cheats’) and/or its impact on the fiscal balance. Conversely, for newspapers with a more left wing orientation not only cuts on spending but also tax cuts (especially for the wealthy) might be considered negative news.
Table 4.- Results from Negative Binomial Regression on Number of Articles Coded

<table>
<thead>
<tr>
<th></th>
<th>ALL</th>
<th>Tabloid</th>
<th>Broadsheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost (log)</td>
<td>0.122**</td>
<td>0.149**</td>
<td>0.116**</td>
</tr>
<tr>
<td></td>
<td>(0.049)</td>
<td>(0.060)</td>
<td>(0.048)</td>
</tr>
<tr>
<td>Type [base category= Tax]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfer</td>
<td>-0.228*</td>
<td>0.026</td>
<td>-0.327**</td>
</tr>
<tr>
<td></td>
<td>(0.124)</td>
<td>(0.160)</td>
<td>(0.137)</td>
</tr>
<tr>
<td>Other</td>
<td>-1.012***</td>
<td>-2.217***</td>
<td>-0.913***</td>
</tr>
<tr>
<td></td>
<td>(0.220)</td>
<td>(0.350)</td>
<td>(0.252)</td>
</tr>
<tr>
<td>Negativity</td>
<td>0.125**</td>
<td>0.076**</td>
<td>0.137**</td>
</tr>
<tr>
<td></td>
<td>(0.050)</td>
<td>(0.034)</td>
<td>(0.056)</td>
</tr>
<tr>
<td>Left leaning</td>
<td>0.006</td>
<td>-0.335</td>
<td>0.131</td>
</tr>
<tr>
<td></td>
<td>(0.166)</td>
<td>(0.260)</td>
<td>(0.173)</td>
</tr>
<tr>
<td>Social class affected [base = all]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>0.483*</td>
<td>0.936***</td>
<td>0.385</td>
</tr>
<tr>
<td></td>
<td>(0.257)</td>
<td>(0.331)</td>
<td>(0.276)</td>
</tr>
<tr>
<td>Middle</td>
<td>0.752***</td>
<td>1.207***</td>
<td>0.645**</td>
</tr>
<tr>
<td></td>
<td>(0.288)</td>
<td>(0.305)</td>
<td>(0.291)</td>
</tr>
<tr>
<td>Rich</td>
<td>0.429</td>
<td>0.513</td>
<td>0.443</td>
</tr>
<tr>
<td></td>
<td>(0.332)</td>
<td>(0.332)</td>
<td>(0.360)</td>
</tr>
<tr>
<td>Timeliness</td>
<td>0.237***</td>
<td>0.169**</td>
<td>0.249***</td>
</tr>
<tr>
<td></td>
<td>(0.071)</td>
<td>(0.067)</td>
<td>(0.070)</td>
</tr>
<tr>
<td>Government attention</td>
<td>1.289***</td>
<td>1.001***</td>
<td>1.357***</td>
</tr>
<tr>
<td></td>
<td>(0.189)</td>
<td>(0.254)</td>
<td>(0.187)</td>
</tr>
<tr>
<td>Business affected</td>
<td>-0.251***</td>
<td>-0.210*</td>
<td>-0.267**</td>
</tr>
<tr>
<td></td>
<td>(0.096)</td>
<td>(0.116)</td>
<td>(0.129)</td>
</tr>
<tr>
<td>Labour government</td>
<td>0.022</td>
<td>0.166</td>
<td>-0.026</td>
</tr>
<tr>
<td></td>
<td>(0.201)</td>
<td>(0.235)</td>
<td>(0.197)</td>
</tr>
<tr>
<td>Tabloid</td>
<td>-1.832***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.083)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.393</td>
<td>-1.768***</td>
<td>0.479</td>
</tr>
<tr>
<td></td>
<td>(0.296)</td>
<td>(0.355)</td>
<td>(0.311)</td>
</tr>
<tr>
<td>Parameter α</td>
<td>0.093</td>
<td>-0.640</td>
<td>0.135</td>
</tr>
<tr>
<td></td>
<td>(0.187)</td>
<td>(0.501)</td>
<td>(0.173)</td>
</tr>
<tr>
<td>N</td>
<td>1794.000</td>
<td>598.000</td>
<td>1196.000</td>
</tr>
<tr>
<td>Log Likelihood</td>
<td>-3533.808</td>
<td>-627.031</td>
<td>-2877.812</td>
</tr>
<tr>
<td>AIC</td>
<td>7079.616</td>
<td>1266.063</td>
<td>5767.624</td>
</tr>
</tbody>
</table>

The data provides empirical support to the first definition of negativity and hence for hypothesis 3. This variable, coded to include tax increases and spending cuts, was significant for all three models. This is to say that, even when controlling for other variables including economic costing, negative news defined as above received more coverage than positive news (i.e. tax cuts and spending increases) in both tabloids and broadsheets. We also tested for the other definition of negativity (i.e. tax rises and spending increases) in
interaction with ideological leaning of the newspaper; this was found not to be statistically significant.\textsuperscript{11}

The fact that whether a policy decision is negative or positive is ultimately based on ideological judgements highlights the fact that, as discussed above, many of the factors affecting news selection are neither objective nor intrinsic qualities of the issues or events. They are matters for interpretation and negotiation, which depend not only on the characteristic of the event but also other factors. The next hypotheses focused specifically on the influence of commercial imperatives. As it was the case for hypothesis 1, which referred to magnitude in terms of cost, the assumption in terms of newsworthiness is that the greater the number of people affected by an event, the more coverage it is likely to receive. However, unlike costing, this is not so straightforward to judge. Moreover, not every potential reader might have the same ‘value’. So we asked, which income groups matter most for each type of newspaper?

As explained above, each policy decision was coded according to the income group most affected by it. There were four categories: no particular group, poor (the two lowest income deciles), middle-class (median-income households), and rich (the highest income decile). The data shows that there is a strong focus on what matters for the middle classes, especially by broadsheets. On average, policy decisions affecting them received more coverage. However, interestingly, in tabloids the policy decisions affecting mostly the poor received almost as much attention as those for the middle classes. This is significant while controlling by type of policy decision, so it is not a result of tabloids’ ‘obsession’ with welfare ‘hand-outs’, but an indication of their target readership, and what is assumed to be their (self)interest, and hence of the importance of market considerations in shaping the coverage.

We also tested for commercial imperatives. We hypothesized that policy decisions focusing on\textit{ businesses} would receive less coverage; this was confirmed by the data. This emphasis on general, rather than corporate, policy decisions makes sense from a commercial point of view. From a normative point of view, however, it raises some questions about how well the general public is being informed about what are in many cases highly significant decisions in terms of redistribution of wealth (or rather lack thereof). A similar point can be made about the findings regarding target group. Focusing on measures that affect the middle class is a sound commercial strategy, given the size of the group and their disposable income vis-à-vis—and hence marketability for advertisers—the poor. However, ‘quality’ newspapers overlooking the impact of the Budget on the poor raises normative questions about how well

\textsuperscript{11} Results available upon request.
they serve the public interest. It also provides an interesting angle of support to arguments about the importance of universality in sustaining support for welfare provision.

The final hypothesis about the role of official sources and information subsidies was also confirmed: policy decisions highlighted in *government’s communications* via the Chancellor’s speech and press notices received greater coverage in the media. This is of course while controlling for all other relevant factors, so it is not simply that these policy decisions are ‘objectively’ (e.g. cost) more important; instead, it suggests that because of the public interest value allocated to what the government says, as well as organizational and routine factors that encourage reliance on government’s sources and their information subsidies, the government influences which policy decisions the media give more salience to.

An interesting point to make regarding the attention the government gives to the different policy decisions is that while it matters, it is also conditional to government’s selectiveness of which PD’s to highlight. When we model government attention simply as the number of places where a policy decision is mentioned: none (0), both speech and press release (2), or in one of the two (1), we find not only a similar significance for the attention variable but a corrective negative impact on coverage during the Labour years. This is because Labour’s press notices were substantially longer and touched on a much larger number of policy decisions, suggesting that while government's information subsidies work on shaping coverage, they do so only as long as they are focused.12

**Discussion and conclusions**

This paper analysed the amount of press coverage for each of the policy decisions in six UK Budgets (2008-1012), providing not only data but also an original and useful framework for further research on a subject that has been clearly understudied. The analysis offers interesting results. Firstly, the limited differences between the models and the lack of significance of two of the control variables shows that there is a remarkable commonality about the factors that explain the attention given by the press to the Budget’s policy decisions, regardless of type of newspaper, ideological orientation and party/ies in power. Secondly, the analysis confirmed most of our hypotheses about the factors that shape the salience given to each of the policy measures. In terms of criteria of newsworthiness associated with the policy decisions themselves, both magnitude (based on economic costing) and negativity (defined as tax hikes and spending cuts) were statistically significant and in the expected direction (i.e. more coverage). The fact that cost matters is perhaps not very surprising: the more money at stake, the more press interest is likely to get. However, we know from Lindbom (2010), as well as from studies in other subjects such as the

---

12 Results available upon request.
influence of number of deaths on amount of coverage (e.g. Adams, 1986), that this is not always the case; and there are indeed other factors at play for our data as well. Findings on negativity are consistent with previous literature, which have found negative developments to be more newsworthy (e.g. Golan and Wanta, 2003), especially in economic news (Fogarty, 2005, Soroka, 2012). Immediacy, on the other hand, challenged our expectations: PDs with delayed implementation received more coverage. We do not yet have a sound explanation for this but the fact that policy decisions are nowadays very often pre-announced and heavily trailed is—we suspect—at least part of the answer.

The relative salience of different measures in the coverage, however, was not explained just by properties of the policy decisions and their ‘inherent’ newsworthiness. In line with the literature, government influence proved to be an important factor on explaining the attention to different measures. And so were commercial imperatives, and it is here that we see differences across newspaper types, because of differences in commercial incentives due to their readerships. Moreover, it is these findings that raise normative issues about what the press covers and what it omits, most especially in relation to the role of the government, the low attention to what affects the rich and businesses, as well the poor, and the potential impact of these ‘selection biases’ on both the public and the policy process. Altogether, this highlights the importance of going beyond events newsworthiness, and complementing these explanations with other factors.

The results also suggest several fruitful avenues for further research. The government is clearly a key actor but it would be interesting to explore the role of interest groups, opposition parties and think tanks, such as the IFS, on shaping media attention, especially if the timeframe was extended beyond the period immediately after the Budget announcements. It would also be interesting to include different type of media, especially television, to uncover similarities and differences on the main determinants of attention to different policy decisions. Moreover, the study could be replicated in a comparative setting hence enabling us to test the validity of the conclusions in different media and political systems.
References


