Bureaucratic Responsiveness: The Effects of Government, Public and European Attention on the UK Bureaucracy

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Abstract:
What determines the bureaucratic agenda? This paper combines insights from models of bureaucratic behavior with agenda-setting models of government attention to test the effects of elected government, public and EU agendas on the bureaucratic agenda. Using time series cross-sectional analyses of subject and ministry coded data on UK statutory instruments from 1987 to 2008 I find strong effects for both the elected government and EU legislative agendas on UK statutory instruments. Furthermore, by breaking the data into different sets based on its relationship with the EU several logical differences in these effects are found. These results include the EU agenda having exclusive influence on instruments implementing EU directives and the UK agenda being the sole driver of bureaucratic attention on those instruments that mention the EU but do not implement EU legislation. This paper opens a new avenue for research on bureaucracy by approaching it as a unique policy-making institution.

Keywords: bureaucracy, agenda-setting, public policy, responsiveness, Britain, EU

Acknowledgements: I would like to thank Christoffer Green-Pedersen, the three anonymous reviewers and the editor, Martin Lodge, for their comments on this paper. I also thank Marc Debus, Will Jennings and Stefaan Walgrave for their comments on the project design.
Introduction

A functional bureaucracy, despite all the jokes to the contrary, is what makes a democracy work. Without the effective administration of government none of the activities of government would mean anything with policies going both unimplemented and unenforced. However, we generally understand very little about how government bureaucracies allocate their attention. Even within governments bureaucratic agents face many competing concerns from a purely institutional perspective. In many systems the choice of which issues the bureaucracy attends to is largely autonomous with limited direct signals from elected government highlighting the need for more robust investigations of bureaucratic attention (e.g. Neustadt 1969; Hood and Lodge 2006).

The functioning of the bureaucracy has of course been written about before from investigations into the behavior of bureaucrats (e.g. Wilson 1989) to the multiple discussions concerning principal-agent theory (e.g. Strøm 2000). Further, in depth studies of bureaucratic activities such as the in the United Kingdom (UK) oftentimes show the generally professional nature of the fourth branch of government (e.g. Page 2001; 2003). While these studies have done much to push our understanding of government administration, they fall short when it comes to understanding how bureaucratic attention is allocated. To address this shortcoming I propose the combination of theories on bureaucratic behavior with the growing literature and increased data efforts focused on government agendas and agenda implementation. By combining knowledge about the bureaucratic process with a research tradition based on determining policy attention I am able to look beyond the bureaucracy as a tool for policy-making and to it as a separate actor with its own unique agenda.

This paper represents a significant step forward in quantitative research of the bureaucracy through a model of bureaucratic responsiveness using a new dataset of UK statutory instruments, the main form of secondary legislation in the UK, from 1987 to 2008. The bureaucracy, defined as the bureaucrats, ministers and ministries writing and signing
secondary legislation, is central to the Westminster style of government due to UK’s low levels of primary legislation. The results presented here indicate that the UK bureaucracy follows its principal, the UK’s elected government, well beyond what is necessary for the implementation of primary legislation as demonstrated by the exclusion of statutory instruments used to mark-up recent Acts of Parliament from the analyses. While the effects of European Union (EU) attention are weaker, the EU also clearly affects bureaucratic attention. Furthermore, by breaking the data into different sets based on its relationship with the EU several logical differences in these effects are found. These results include the UK centric finding that elected government attention has the lone effect on those instruments that only mention the EU, but that EU attention has the lone effect on those instruments that directly implement EU directives.

The rest of this paper takes the following form. It first discusses existing research on the bureaucracy as an institution and various lessons from agenda-setting research focused on government responsiveness and agenda implementation leading to a set of hypotheses concerning the content of the bureaucracy’s agenda. The data and methods are discussed next including an in depth discussion of the various versions of the dependent variable based on different coding rules and subsamples within statutory instruments. The analyses using time series cross-sectional models are then presented. Finally, the paper concludes by summarizing the results and through a discussion of the broader implications of the findings presented here.

The Bureaucracy as an Institution and an Agenda

Most studies of the bureaucracy tend to focus on its functioning and effectiveness as an institution rather than on how its agenda is formulated. This focus is in many ways due to the focus on agency, namely principal-agent theories that discuss how the bureaucracy can be molded and sanctioned in order for it to perform its duties of implementation, enforcement and beyond (see Strøm 2000). While all bureaucracies are a political agent designed to serve
elected government, the possibility of shirking responsibilities and power grabs focused on other parts of the bureaucracy keep the process anything but clean (see Wilson 1989). Having more than one principal in systems with a strong separation of powers between the various branches of government is another clear complicating factor (Strøm 2000). The delegation of responsibilities can be another important complication as the responsibilities of the bureaucracy grows with their principal(s) telling them to react to and serve other actors directly. The process of delegation has become increasingly common over time for various reasons such as blame shifting or less dire goals such as the effective administration of government (see Fiorina 1982; Kiewiet and McCubbins 1991). In this way, bureaucrats are often told to serve the public and act as the contact point for communication between the government and the public (see Vigoda 2002). This relationship can have significant results on bureaucratic activities and the resulting policies based on responsiveness to the general public will (see Stewart and Ranson 1994) with some of the most successful examples of effective lobbying occurring between the bureaucracy and the actors it was told to serve (e.g. Yackee and Yackee 2006). Delegation in the UK has also taken another turn with the responsibility for implementing EU legislation, namely EU directives falling at the feet of the bureaucracy with the European Communities Acts 1972 (see OPSI 2006, pp 72-73; House of Commons 2008). This Act of Parliament gave the bureaucracy the authority and the obligation to implement EU policy without the need to confer with elected officials. The relationship between elected government and the bureaucracy as well the delegated responsibilities given to the bureaucracy implies that the make-up of the bureaucratic agenda, even if it is only controlled by other actors, is far more complex than many principal-agent models would suggest (e.g. Strøm 2000) given the long term trend of single party government in the UK (Woldendorp et al 1998). After all, while the interests of elected government, the public and the EU can and often do align a degree of disagreement always exists and how the
bureaucracy makes use of the information provided by these three actors goes a long way towards explaining its policy attention.

What then explains the content of the bureaucratic agenda? The bureaucracy is primarily interested in its own survival and the sustainability of its decisions doing its best to maximize both goals (see Wilson 1989; Tsebelis 1995). Yet, the bureaucratic agenda, like any other government agendas, is faced with many responsibilities, pressures and problems. Decision-making in such an environment with all of the competing concerns and various bits of information must be prioritized in order for the bureaucracy to maximize its goals (see Kingdon 1984; Baumgartner and Jones 1993; Jones and Baumgartner 2005). Like executives and legislatures then, the bureaucracy has to process various sources of information based on the quality and importance of the signal as well as problem status. However, unlike many other government agendas the bureaucratic agenda generally has a clearer understanding of problem status based on its own agency status. In a country like the UK with a single principal (Strøm 2000) and in general a single party in control of government (Woldendorp et al 1998) a clear weighting of the information from the principal exists. Nevertheless, information from other actors and from the world in which the bureaucracy functions also informs the bureaucratic agenda due to delegation (Fiorina 1982; Kiewiet and McCubbins 1991) and the general level of freedom the UK bureaucracy is given for creating policy due to the abundance of delegated powers it receives from parent Acts of Parliament (e.g. Hill and Hupe 2002). In other words the principal-agent relationship between the UK’s elected government and the UK bureaucracy should be quite pronounced in any agenda-setting model, but cannot explain the entirely of the bureaucratic agenda as the number of direct orders from elected government are limited making serving elected government an informational problem. Information processing clearly functions in the bureaucracy (see Workman et al 2009), but the process of decision-making is in many ways less complex than for elected officials due to the stricter requirements on the bureaucratic agenda discussed here.
While elected government makes decisions and prioritizes its agenda in anticipation of electoral consequences (see Bevan and Jennings 2014), the bureaucracy faces the possibility of much more immediate sanctions and a clearer chain of responsibility and therefore attempts to match the priorities of elected government as best as it can with the information it receives.

The need to prioritize the bureaucratic agenda is likely further complicated by the technical nature of much of what the bureaucracy does (Fischer 1990) and what it must pay attention to such as EU legislation that generally requires highly trained technocrats in order to be understood and properly implemented (see Haas 1998). Admittedly and unlike many government agendas, the capacity of the bureaucracy is much freer to grow potentially limiting the need for prioritization and allowing bureaucrats to focus on their jobs without needing to pick and choose which issues to attend to (see Page 2001; 2003). While it is certainly true that bureaucratic agendas tend to be much larger than other government agendas and that the bureaucracy makes up the largest part of most governments, resource and time constraints are still quite real with the number and workload of bureaucrats clearly limited creating a need to prioritize some policy areas over others (see Workman et al 2009). The choice of what to prioritize depends on what issues or pattern of attention maximizes the bureaucracy’s goals of survival and sustainable decisions.

This focus on attention rather than the more common focus on the implementation of policy is required as implementation is in reality only part of UK secondary legislation. In the British system the bureaucracy does not just mark-up passed legislation, but creates its own legislation through delegated powers in the parent act, the needs of the ministries and due to the obligations of the European Communities Act 1972 that gave requires the bureaucracy implement EEC/EU based legislation directly through statutory instruments (see OPSI 2006, pp 72-73). Instruments independent of the need for new primary legislation can drastically alter policy (Page 2001) and face limited oversight (see Bennett 1990) with the majority of instruments facing no parliamentary scrutiny (see House of Commons 2008 for a detailed
introduction to statutory instruments).\textsuperscript{1} The relative autonomy of the UK bureaucracy means that while recent reforms in the bargaining between the bureaucracy and elected government have strengthened their relationship (see Hood 2002) there remains a high level of independence in the production of statutory instruments. Furthermore, the limited number of Acts of Parliament (Bevan et al 2011) reducing the time spent on implementation of primary legislation and the limited guidance provided in acts for the production of delegated legislation (Hill and Hupe 2002) further the bureaucracy’s dependence on information beyond their principal in order to be effective. As previous work has shown, public attention and events can drive many bureaucratic reforms independent of primary legislation (Page 2001). The bureaucracy may only have one master capable of directly sanctioning it, but its extended powers and the need for information and activity beyond the scope of Acts of Parliament encourages it to respond to several actors when creating its agenda. While the place of statutory instruments in policy networks is not entirely clear as the transaction costs other actors must endure to participate in their writing may be too high to justify the effort (Hindmoor 1998), the bureaucracy clearly cares about the information it gains from multiple sources. In other words, while the bureaucratic agenda is formed and created largely independently, it uses information from its principal and the actors the principal has chosen as delegated actors in anticipation of the priorities of elected government (see Miller 2005). By forming an agenda based on all of the information that elected government values it avoids scrutiny and sanctions thereby maximizing its goals of survival and sustainable policy.

\textsuperscript{1} Scrutiny can be determined by the lack of a laid before parliament date for the instrument. In this case the instrument was made without either a 40 day negative resolution procedure or a positive vote on the instrument. Oversight of these instruments is still possible and is generally addressed by parliamentary select committees.
The UK bureaucracies delegated responsibilities, limited signals from elected government, autonomy in decision-making and its limited agenda space combine to form an agenda that is in fact quite similar to other governing agendas in that it attempts to respond to its environment and other political actors. In total then, it is safe to say that the bureaucracy responds to elected government and due to delegation, as well as the need for information, to the public and the EU as well. However, due to the scope of the UK’s bureaucratic agenda these effects go well beyond the mark-up of Acts of Parliament and the implementation of EU directives which are only one small part of bureaucratic activity in the UK. Therefore, to more closely tap these relationships I remove statutory instruments marking up recent Acts of Parliament from the analyses. I further investigate several subsamples of the data to consider the effect of the EU in implementation and independent from it. The details of how this was accomplished are presented in the data and methods section.

Hypotheses

The UK bureaucracy plays a predominate role in interacting with the public, the implementation of EU policy and most of all running the UK government. When determining which statutory instruments to write and how to structure their overall attention bureaucrats are faced with a potentially difficult decision, how best to serve their masters? Like other government agendas bureaucratic attention is a finite resource (see Workman et al 2009). There are only so many hours in the day, only so many civil servants, only so much that bureaucrats can do regardless of the legal needs to implement national and European legislation. However, unlike many government agendas the capacity of the bureaucracy is much freer to grow (see Page 2001; 2003) as evidenced by a sizable agenda beyond what is directly required for implementation and mark-up. This growth has clearly not followed from the direct needs of primary legislation with the average number of Acts of Parliament on the decline (see Bevan et al 2011). It seems that a difficult task exists then, how best to form a
bureaucratic agenda that maximizes its goals of survival and sustainable policies by avoiding
depend upon parliamentary scrutiny or worse direct sanctions against the bureaucracy?

Following from the insights of principal-agent models, the bureaucracy is most likely
to follow the interests of its principal who has sanctioning power over it through the ability to
make them redundant, by limiting budgets and through other such means (Strøm 2000). For
UK ministries these direct sanctions are the purview of the UKs elected government most
notably the prime minister and the cabinet (ibid). First and foremost then UK statutory
instruments should reflect the priorities of elected government laid out by primary legislation
that it must implement. However, with only an average of 47 Acts of Parliament a year from
1987 to 2008 opposed to an average of 1765 instruments for the same period direct
implementation of primary legislation alone does not drive the majority of bureaucratic
activity. However, recent work has shown that a required element in an agenda can have clear
carry-on effects on the rest of the agenda. Working on the content of the US congressional
agenda Adler and Wilkerson (2012) theorized and found that the necessary attention caused
by the increased usage of sunset legislation, which must be reauthorized every few years,
creates an institutional capacity to focus on related issues. Put in the context of the UK
bureaucracy this finding suggests that by requiring a certain level of attention to mark-up a
new Act of Parliament the UK legislature opens up the capacity for greater bureaucratic
activity on related matters. For example, work on marking up a healthcare act highlights many
other healthcare regulations that should be updated or added. Coupled with the legal need to
respond to elected government the carry-on agenda-setting effects from marking up Acts of
Parliament create a pattern of responsiveness that goes well beyond simple mark-up. Primary
legislation also plays another important role in that it provides a clear signal of elected
government priorities that are also useful in forming the bureaucratic agenda. Overall, the
distribution of attention by elected government presented in acts, rather than just the acts
themselves, is the strongest public signal from the legislature to the bureaucracy on what to focus on.

H1: Bureaucratic attention increases as UK legislative attention increases.

Beyond this direct signal, the UK’s elected government has laid out further priorities for the bureaucracy through delegation. In particular the UK bureaucracy is responsible for responding to both public needs and to EU legislation. The elected government’s choice to create these delegated actors places clear value on the information they provide for the bureaucracy as responding to them is in the express interest of elected government. Bureaucracy responds to this information to form its agenda in an effort to match elected government priorities and avoid parliamentary scrutiny (e.g. Miller 2005) allowing it to maximize its goals of survival and sustainable of decisions (see Wilson 1989; Tsebelis 1995).

Work on the involvement of the public in the bureaucratic process primarily focuses on its responsiveness to the public (e.g. Vigoda 2000; 2002) either through direct means (e.g. Yackee and Yackee 2006) or indirect means by responding to the general public will (Stewart and Ranson 1994). This work clearly suggests that the bureaucracy is both aware of and responses to the public with varying degrees of success. While previous work on the subject of bureaucratic responsiveness tends to focus on specific arrangements (e.g. Yackee and Yackee 2006) or the sentiment of the public on responsiveness (e.g. Vigoda 2000) a new approach, borrowed from opinion responsiveness literature, is required when considered the bureaucratic agenda in total. When government institutions look for information on the public to help build their agenda they look towards public priorities as priorities indicate the level of attention the public desires (see Bevan and Jennings 2014). Public priorities generally measured by “most important issue” type questions offer an aggregated look at the issues citizens consider the most urgent for government to address. As previous work on various
countries and institutions has shown attention based government agendas are broadly responsive to public priorities (e.g. Bevan and Jennings 2014; Hobolt and Klemmensen 2008). Based on this previous research on other government institutions, evidence of bureaucratic responsiveness to the public in other forms and the express ties between the public and the bureaucracy created through delegation, increased public prioritization should lead to increased bureaucratic attention.

H2: Bureaucratic attention increases as public priorities increase.

The EU and formally the EEC has become a greater part of UK policy over time as the power and the competencies of the EU have continued to grow from 1987 to 2008 with the formation of the EU in its current form, increasing power and greater economic interdependencies (Franchino 2007). At the same time the role of the UK bureaucracy in the administration of government has also grown in part due to the increasingly technical nature of policy (Fischer 1990; Powell 2000). Generally EU policies are also highly technical, regulatory policy which is why the European Communities Act 1972 put the responsibility of EU policy implementation at the feet of the bureaucracy. A great deal of work has shown the importance on the bureaucracy in the mark-up of EU legislation (e.g. Brouard et al 2012) and the UK bureaucracy is no exception given its legal need to implement EU legislation (see OPSI 2006, pp 72-73; House of Commons 2008). This legal need to address the EU has two important effects. First, the delegation of responsibility itself puts the blame at the feet of the UK bureaucracy if a directive fails to be implemented causing reputational and economic (through the EU’s moderate ability to fine governments) harm to the UK (Huber and Shipan 2002). While the decision to ignore EU policy is sometimes made, this decision is generally viewed as a decision that should be made by elected government and not the bureaucracy. Second, information from the EU provides an important signal to the bureaucracy as the
delegation to respond to the EU indicates a continued priority from elected government to follow EU attention. The importance of this signal, like the signals from the public, is due to the limited signals the bureaucracy receives from elected government making any information concerning the elected government’s issue priorities valuable for forming the bureaucratic agenda. A failure of the bureaucracy to respond to the EU can therefore be both a legal failure and an informational failure in representing the elected government’s priorities that can cause increased scrutiny and sanctions against the bureaucracy harming its goals of survival and sustainable policy. The importance of information from the EU and the legal need to implement EU directives in order to create an agenda representative of elected government priorities means that increased EU attention should lead to increased bureaucratic attention.

H3: Bureaucratic attention increases as EU legislative attention increases.

Combined these three hypotheses suggest the UK bureaucracy serves elected government by responding to the information it receives from elected government, the public and the EU. While the bureaucracy’s loyalty to public and EU concerns is based on the process of delegation, both the public and the EU agenda should have an effect on the functioning of the bureaucracy if for no other reason than elected government has put them in charge of responding to attention from both. Failure to respond to these actors opens the bureaucracy up to increased scrutiny and the possibility of sanctions, both of which undermine the bureaucracy’s primary goals of survival and sustainable policy. Admittedly this dependency on multiple sources of information can lead to conflict and competition between these different agendas when information is unclear or contradictory. However, this makes understanding how the bureaucratic agenda is formed all the more important.

Data and Methods
Coding Statutory Instruments

This paper makes use of a new dataset of UK statutory instruments\textsuperscript{2} from 1987 to 2008 gathered from the public record.\textsuperscript{3} In particular it focuses on statutory instruments which do not specifically mark-up recent primary legislation. Separating instruments directly implementing Acts of Parliament from other instruments was challenging with no common method for citing the initial mark-up of a parent act. In reality, all statutory instruments mention at least one Act of Parliament which conveys the authority to create the instrument, but this authority can last for many years or even decades delegating future legislation on the issue to the bureaucracy. In order to separate the mark-up of recent Acts of Parliament from instruments that use their delegated authority to continue to legislate on an issue area long after initial mark-up the dataset drops all instruments that cite any Act of Parliament passed in the current or previous period. This rather conservative technique for removing mark-up from the dataset produced the same inferences as analyses (not presented here) on data without this level of filtering.\textsuperscript{4}

\textsuperscript{2} The resulting dataset excludes, Welsh and Scottish statutory instruments and Northern Ireland statutory rules which became more common following increased devolution of national powers to the subnational level beginning in 1999. This exclusion prevents the duplication of repeated measures and allows for a direct comparison between the pre and post devolution periods of the dataset.

\textsuperscript{3} See The National Archives http://www.legislation.gov.uk/ website.

\textsuperscript{4} The key difference between the models reported here and these other models is moderately lower coefficients for the Acts of Parliament variable in each model, but the same significance level. This difference in part confirms the filtering with the average number of statutory instruments necessary for initial mark-up making up the difference between these two sets of estimates.
To conduct this paper’s analyses each individual statutory instrument has been coded to capture its issue content using the UK Policy Agendas Project (www.policyagendas.org.uk) major topic coding system. However, unlike most other government agendas the organization of the bureaucracy through its various ministries allows for an investigation of how the government and how the Policy Agendas Project classifies policy. To address this difference two separate codes, one based on the topic highlighted in the instrument (subject coding) and the other based on the administrative structure of the UK (ministry coding) were created. Specifically, the subject coding focuses on the content of each instrument as discussed in the subject and explanatory note of each instrument. The ministry coding is based on the main policy area of the first ministry to sign each statutory instrument. Both codes make use of the UK Policy Agendas Project major topic coding system, but code different parts of each instrument for the subject (subject and explanatory note) and ministry (first ministry to sign the instrument) codes. In practice these two versions of the coding capture the by topic and by institution or ministry approaches to addressing policy.

Figure 1 presents the count of instruments by year\(^5\) for each major topic for both versions of the coding. In Figure 1 the solid line indicates the subject coding and the dashed line indicates the ministry coding.

[insert Figure 1 about here]

\(^5\) Year is used in this paper as a shorthand reference point. In reality, the data has been broken up into parliamentary sessions which open each year with the Speech from the Throne (see Jennings et al 2011) in order for the Acts of Parliament and statutory instruments data to be correctly matched.
As Figure 1 demonstrates these two measures produce many differences and similarities in attention. In general the similarities between these two methods for coding the data outweigh the differences with only slight differences in many topics including the economy, health, education and others. The focus and responsibilities of the ministries in these closely matched areas are clearly defined with most if not all statutory instruments focusing on a topic like healthcare signed by ministries focused on health issues. Other topics are only occasionally disjointed when comparing these two measures such as labour, transport and social welfare. In most of these topic areas the number of statutory instruments based on the subject coding is higher indicating attention on the subject that goes beyond the activities of the associated ministries. The opposite relationship for labour late in the period indicates an increased focus of labour ministries on issues other than labour and employment. Finally three large differences between these two methods of coding also occur; these are in the environment, government operations and lands. The large disconnect between these measures in government operations indicates that a large portion of statutory instruments focus on the general running and administration of government despite being signed by other specific ministries. What is perhaps most interesting though are the cases of the environment and lands. In both of these cases the ministries pay far more attention to these topics than in the subject coding. For the environment this indicates that much of what environmental ministries do is in fact not focused on the environment fitting with the general skepticism of the environment being more of a buzzword than an actual policy area. For lands the difference between the ministries and subject coding is much more straightforward representing the shift in responsibility for many government functions to Scotland, Northern Ireland and Wales through the process of devolution (see John et al 2011). Prior to devolution many signers purely acted as a representative of one or more of those territories hence the finding. These two measures offer very similar looks at UK statutory instruments then. While often alike, differences in the clarity and purpose of ministries at different time points or overall produce
separate patterns of attention based on the topic at hand or the institution(s) involved in the process when writing the instrument. However, differences between these two methods of coding may also occur when a ministry actively seeks out additional activities beyond their mission statement in an attempt to increase their power, a common activity in other systems (e.g. Carpenter 2005).

In addition to these two different means of coding the content of statutory instruments the measures were also broken into several subsamples based on their relation to the EU. One of these subsamples that was relatively straightforward to separate were those instruments that implement EU legislation. To identify instruments implementing EU legislation each individual instrument was classified using an automated search procedure for EEC / EU directive numbers and the European Communities Act 1972 that allows for the implementation of EU based legislation directly through statutory instruments. The European Communities Act 1972 is mentioned in a statutory instrument in order to legally implement an EU directive. Cases that mention of EEC/EU directives, but not the European Communities Act 1972 indicate continued compliance with existing EU legislation, but not the implementation of a new directive. Whether or not an instrument cites the European Communities Acts 1972 and/or EEC/EU directives allows for a clear separation of instruments into three separate categories: instruments implementing EU directives, instruments that mention the EU yet do not implement directives and instruments that do not mention the EU at all. This distinction is possible as UK statutory instruments are highly detailed technical documents that cite every act, statutory instrument and directive they relate to regardless of whether or not their purpose is bureaucratic mark-up, the amendment of past legislation or the implementation of EU policy. For example, an instrument may mention EU directives simply to note compliance with an existing or continuing law rather than indicating that new piece of EU legislation needs to be implemented.
Dependent Variables

With each instrument coded according to its topic (by subject and by ministry), totals by year for each major topic were calculated. In addition totals for each subsample also by subject and by ministry were calculated for the subsample of instruments that implement EU directives, for the subsample that do not implement EU directives yet mention the EU and for the non-implementing instruments that make no mention of EU policy. This leads to the creation of eight different versions of the dependent variable and each of these versions is presented in the analyses section in order to highlight the by type differences in responsiveness.

Independent Variables

In order to test this paper’s hypotheses I use data from the UK Policy Agendas Project. This data, which covers various public and government agendas for the entire time period of my analyses, uses the same uniform coding system in each of its datasets and matches the coding of statutory instruments discussed above. As such, what is energy policy in an Act of Parliament is energy policy in a statutory instrument is energy policy in public opinion.

Specifically I include a contemporaneous version of Acts of Parliament in the model in order to measure the legislative attention of the UK’s elected government over time. The choice to use a contemporaneous version of the measure was made to match the quick speed with which the bureaucracy responds to the focus of elected government such as the quick refocusing on priorities with the transition to New Labour Government in 1997 (see Bevan and Greene 2014).6

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6 A lagged version of this variable was also tested in place and alongside the contemporaneous measure. In all cases this did not lead to any significant findings for the lagged variable. While normally the use of contemporaneous independent variables is a cause
In order to measure public priorities I use the UK Policy Agendas project “most important issue” (MII) dataset which captures public responses to the question “What would you say is the most important issue facing Britain today?” The variable is coded as the percent of responses in each issue area. As previous work has shown this measure provides an accurate assessment of issue priorities of the public (see Bevan and Jennings 2014).

In addition to the UK Policy Agendas project data I further make use of data on EU directives coded using the same topic coding system. This dataset was coded based on the subject and title of each EU directive by the Dutch Policy Agendas Project (see Szajkowska, and Breeman 2012). This measure is also included contemporaneously due to the general efficiency with which the UK bureaucracy operates.

for concern in time series models due to the increased risk of endogeneity the nature of the principal–agent relationship between the parliament and the bureaucracy as well as the process of governing (see Bevan et al 2011) makes it unlikely that there are any strong effects for current bureaucratic behavior on current Acts of Parliament.

This measure is functionally equivalent to the more common “most important problem” (MIP) measure used in many countries (see Jennings and Wlezien 2011)

Throughout this time period no respondents to the MII question offered either commerce or science as the “most important issue”. As this data represents a true 0 due to the survey’s usage of open-ended questions these issue areas have been kept in the final model. Robustness checks excluding both of these issues did not change any inferences.

As with the contemporaneous Acts of Parliament measure, a lagged version of the directives measure was also tested in place and alongside the contemporaneous version. While the lagged version of this variable also led to the same inferences the models were generally poorer fitting. Furthermore, the inclusion of both the lagged and contemporaneous variable
**Control Variable**

Events, be they political or otherwise, mark one of the most important exogenous shocks to the functioning of the bureaucracy, but are by their very nature notoriously hard to measure due to the difficulty of identifying important events independent of their effects on policy-making. Therefore, in order to broadly control for events I include a measure of media salience in the model from the UK Policy Agendas project. This data was gathered every Wednesday’s from the front page of the *Times (London)*. As a prioritized media agenda, national front page news from a respected paper of record captures the general pattern of events important both in national news and likely to the national government as well (see John et al 2013, chapter 8).

Each of the independent and control variables are presented in a similar format to Figure 1 in Appendix A.

**Model and Method**

In order to test my hypotheses I make use of an auto-distributed lag (ADL) model in a time series cross-sectional set-up. An ADL was chosen to account for the autoregressive

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10 Media salience as a measure of what the public sees could theoretically be very closely linked to public priorities. As a robustness check models not presented here that excluded one or the other measure were ran and produced the same inferences for these and the other variables in each model. Additionally an overall correlation of 0.209 between the two measures suggests that what the public prioritizes and what is salient to the public are generally quite different.
nature of the individual panels in the model through the inclusion of a lagged dependent variable capturing the persistence of issues on the UK bureaucracy’s agenda.\textsuperscript{11} The use of this model in a time series cross-sectional set-up allows me to test the effects of each of the independent variables generally across all issues and therefore to consider the entire bureaucratic agenda matching the theory and hypotheses as presented.

Before moving to the analyses it is important to further highlight that the analyses tests an attention based model of agenda implementation rather than the direct matching between Acts of Parliament and the statutory instruments which implement them. While the statutory instruments data certainly allows for a direct connection between acts and statutory instruments in the future it does in fact only tell part of the story of the bureaucratic agenda as discussed in the hypotheses section. Due to the autonomous nature of the UK bureaucracy and the small number of acts compared to instruments the largest portion of the bureaucratic agenda is not directly tied to newly minted Acts of Parliament at any point in time. Instead statutory instruments serve both the current institutional demands for legislative mark-up as well as the signals for attention from elected government and other actors more broadly. Specifically information from the public and the EU is valuable to the bureaucracy as it allows for the formation of a more informed agenda that better matches the priorities of elected government. This helps the bureaucracy avoid scrutiny and sanctions that would

\textsuperscript{11} The Breitung test for panel unit roots demonstrated no evidence of a unit root for each of the panels in all eight versions of the dependent variable with lamda values ranging from -5.64 to -9.77 all rejecting the null of a unit root process in at least one panel at the 0.001 confidence level. Through the use of Breusch-Godfrey statistics on the individual panels international affairs for the subject coding and agriculture for the ministry coding demonstrated remaining serial autocorrelation in the models presented here. Excluding these panels from the analyses did not however alter any inferences.
undermine its goals of survival and sustainable policy decisions. This paper, as it is based on agenda-setting models, focuses on the second part of the relationship between the bureaucracy and elected government looking at the effect of attention from different actors on bureaucratic attention excluding those statutory instruments focused on initial mark-up.

**Analyses**

Table 1 presents the results of time series cross-sectional analyses of attention in statutory instruments using the subject coding for all four versions of the dependent variable based on the various subdivisions of the data.

In Table 1 there are several interesting results both in and across each of the models. Model 1 presents the results for the analysis containing all statutory instruments using the subject coding and therefore includes each of the three separate types of statutory instruments discussed in the data section and presented in separate analyses for Models 2-4. In Model 1 there is a strong positive and significant effect for the contemporaneous acts measure on all statutory instruments with a coefficient size of 5.588 indicating that every Act of Parliament on a topic leads to a little over 5 and 1/2 statutory instruments. This number clearly indicates that the UK bureaucracy responds to the pattern of attention put forth by elected government in line with H1. Model 1 also shows positive and significant effects for EU directives on all statutory instruments. The coefficient in this case is 1.326 also indicating that UK statutory instruments are responding to EU legislative attention rather than simply implementing the directives it is required to address with 1 and 1/3 instruments for each directive consistent with H3. In this model there is no significant effect for MII offering no support for H2 which states that bureaucratic attention increases as public priorities increase. This same finding
holds for both versions of the dependent variable across all eight models. While there is no evidence of a direct effect for aggregate public priorities on bureaucratic attention in the UK, there likely is an indirect effect. As previous work has shown, Acts of Parliament in the UK clearly respond to public priorities, but that the direct effects of priorities weaken latter in the policy-making process providing one possible explanation for this result (see Bevan and Jennings 2013) despite the strong ties between the public and the bureaucracy.

Model 2 considers only those statutory instruments implementing EU directives. In this model only the EU directives variable is positive and significant supporting H3 for this sample of data. However, the coefficient of 0.345 indicates that the implementation of EU directives is in fact less than 1 to 1 in each year indicating more of a continual process of implementation. Interestingly, the coefficient for a lagged EU directive measure in an alternative version of the model was also very similar (0.340) further suggesting that implementation is a long term process in UK statutory instruments.

The results for Models 3 and 4 are perhaps the most interesting. Model 3 contains the sample of instruments that do not implement EU directives and do not directly mention the EU. In the model there are positive and significant effects for both acts and directives with a slightly greater effect for directives supporting both H1 and H3. This part of the bureaucratic agenda is not tied to the implementation of EU directives or the mark-up of recent Acts of Parliament based on the filtering of instruments mentioning an act in the current or previous year from the dataset. In other words, these results demonstrate that the most independent part of the bureaucratic agenda still responds to the legislative agendas of the UK and EU demonstrating a clear agenda-setting effect not based on an institutional necessity to respond. Even when acting independently from mark-up and implementation the UK bureaucracy uses the signals provided by UK and EU legislation to form its agenda. Model 4 considers the sample of instruments that do not implement EU legislation, but that do mention the EU. Contrary to the other 3 models there are no effects for EU directives, but similarly sized
positive and significant effects for Acts of Parliament on this set of statutory instruments compared to Model 1 supporting H1. These findings likely demonstrate a more functional side to the UK bureaucracy where EU directives are cited in the majority of statutory instruments motivated by elected government attention independent of what the EU is currently focused on.

Table 2 mirrors Table 1, but uses the version of the data coded according to ministry.

[insert Table 2 about here]

The findings in Table 2 are weaker, but generally consistent with those in Table 1. For example Models 5 and 8 both show significant positive results for Acts of Parliament, while Models 6 and 7 show positive and significant results for EU legislation. Marginally significant and positive results also exist for EU legislation in Model 5 and for Acts of Parliament in Model 7. In total these findings offer somewhat weaker support for H1 and H3 in slightly less well fitting models. Despite a rather weak correlation between the ministry and subject coded versions of the dependent variable (0.556 for the total sample) the effects of elected government and EU attention on statutory instruments still shine through. This second set of analyses demonstrates the robust importance of elected government and EU attention on statutory instrument production. However, as the discussion of Figure 1 indicates accounting for the institutional structure of UK ministries alone cannot account for the content of the bureaucratic agenda.

All models for both dependent variables demonstrate two consistent results for the lagged dependent variable and for the media. In all eight cases the lagged dependent variable is positive and highly significant. The effects are generally stronger for Models 5-8 indicating that the ministries tend to protect their levels of policy production, but not necessarily by attending to issues which perfectly match their intended purpose as demonstrated by Figure 1.
In contrast the results for lagged media attention are insignificant in each of the eight models. While it is likely that some events do affect statutory instrument production, the general pattern of media attention appears to be too blunt of a measure to capture the real effect of events on bureaucratic attention.

One important result in each of the eight models is the R-squared. With values ranging between 0.43 and 0.68 each of these models do a good job of explaining a sizable amount of the variance in the bureaucratic agenda across the two types of coding and subsamples. However, it is clear that the UK, public, EU and media agendas along with the lagged dependent variable do not fully explain the content of the bureaucratic agenda. This means two things. First more research with improved models and methods is required to fully understand the content of the bureaucratic agenda. Second, and more importantly for the central argument of this paper, at least part of the bureaucratic agenda is independent from its principal and delegated actors given the measures used in this paper. While the bureaucracy clearly responds to elected government and the EU maximizing its goals of survival and sustainable policy by helping avoid scrutiny and sanctions if it failed to do so, much of the content of the bureaucratic agenda is formed based on other information and decisions.

Conclusion

The UK bureaucracy does indeed form its agenda based on information from elected government and, in the least, the EU to maximize its goals of survival and sustainable policy by forming an agenda that represents elected government priorities. As this paper shows there is a consistent pattern of responsiveness in statutory instruments to the UK and EU legislative agendas. The results further demonstrate the differing effects of these two agendas on several subdivisions of statutory instruments based on their relationship to the EU and the implementation of EU directives. Namely, there is a clear effect of the EU on statutory instruments implementing EU directives independent from the UK elected government’s
agenda. The results for other sets of instruments are perhaps the most interesting with both elected government and EU agendas affecting those instruments which do not mention the EU indicating that the bureaucracy’s most independent instruments still depend on information from these two important actors. On the other hand, instruments that only mention, but do not implement EU policy appear to only respond to elected government’s agenda following the needs of elected government attention independent from the EU’s current activities. The stronger effect for the elected government’s agenda on statutory instruments match expectations from principal-agent theory, but the independent effects of the EU agenda demonstrate that the UK bureaucracy uses information beyond the signals from elected government in order to create a prioritized agenda.

The robust, but weaker results in this paper for the ministerial versus subject coding of instruments indicate an apparent breakdown in administrative focus. While findings using the data coded by ministry are consistent with the subject coded data, these findings clearly demonstrate that the activities of several ministries often go far beyond their intended purpose either due to unclear competencies and/or attempts to increase ministerial power through bureaucratic activity like has been suggested in other contexts (e.g. Carpenter 2005). However, the exact mechanism behind this general difference should be researched more in the future.

Public priorities (measured through the “most important issue” question) and events (measured through the front page media agenda) appear to have no direct effects on statutory instrument production despite a great deal of evidence to the contrary (e.g. Page 2001). Indirect effects through the elected government agenda likely do exist given other work on opinion responsiveness (e.g. Bevan and Jennings 2013; Hobolt and Klemmensen 2008) and many events inclusive of public uproar and concern no doubt affect statutory instruments on a case by case basis. However, the results of this paper clearly indicate that in the aggregate these things do not in fact matter for bureaucratic attention in a broad sense.
The story of what actors the UK bureaucracy attends to is a consistent and logical story where the key actors involved in each grouping of statutory instruments plays their relevant part independent of the needs of mark-up. Clearly and as so many principal-agent models demonstrate the relationship between the UK bureaucracy and other actors is more complex than what is tested here based on the current state of agenda-setting research and more work should and must be done. Nevertheless, by investigating statutory instruments as a separate bureaucratic agenda this paper has provided valuable insights into the distribution of bureaucratic activity. The UK bureaucracy takes its information from multiple sources to inform its work and so should we.
References


Figure 1: Comparison of Subject and Ministry Coded Statutory Instruments by Topic
<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
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<tr>
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<td>All</td>
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<td>Non-EU</td>
<td>Non-EU</td>
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<td>No Mention</td>
<td>Mentioned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DVt-1</td>
<td>0.603 (0.105)***</td>
<td>0.652 (0.097)***</td>
<td>0.529 (0.124)***</td>
<td>0.625 (0.103)***</td>
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<tr>
<td>Acts_t</td>
<td>5.588 (1.308)***</td>
<td>0.033 (0.069)</td>
<td>0.230 (0.103)*</td>
<td>5.195 (1.212)***</td>
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<tr>
<td>Opinion_t-1</td>
<td>-0.258 (0.230)</td>
<td>-0.004 (0.016)</td>
<td>-0.004 (0.028)</td>
<td>-0.246 (0.214)</td>
</tr>
<tr>
<td>Directives_t</td>
<td>1.326 (0.432)**</td>
<td>0.345 (0.098)***</td>
<td>0.353 (0.122)**</td>
<td>0.594 (0.315)</td>
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<tr>
<td>Media_t-1</td>
<td>0.107 (0.139)</td>
<td>-0.001 (0.006)</td>
<td>0.008 (0.012)</td>
<td>0.098 (0.134)</td>
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<tr>
<td>Constant</td>
<td>9.757 (4.078)*</td>
<td>0.237 (0.374)</td>
<td>0.660 (0.437)</td>
<td>8.156 (3.563)*</td>
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<tr>
<td>R^2</td>
<td>0.52</td>
<td>0.68</td>
<td>0.48</td>
<td>0.52</td>
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<td>399</td>
<td>399</td>
<td>399</td>
</tr>
</tbody>
</table>

Note: * p ≤ .05, ** p ≤ .01, *** p ≤ .001, † p ≤ .10
Table 2: Time Series Cross-Sectional Models of Ministry Coded Statutory Instruments

<table>
<thead>
<tr>
<th></th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
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<td>Non-EU</td>
<td>Non-EU</td>
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<tr>
<td></td>
<td></td>
<td>No Mention</td>
<td>Mentioned</td>
<td></td>
</tr>
<tr>
<td>DV_{t-1}</td>
<td>0.696</td>
<td>0.614</td>
<td>0.567</td>
<td>0.697</td>
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<tr>
<td></td>
<td>(0.091)***</td>
<td>(0.078)***</td>
<td>(0.086)***</td>
<td>(0.093)***</td>
</tr>
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<td>Acts_t</td>
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<td>0.184</td>
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<td></td>
<td>(1.053)*</td>
<td>(0.077)</td>
<td>(0.110)†</td>
<td>(0.948)*</td>
</tr>
<tr>
<td>Opinion_{t-1}</td>
<td>0.130</td>
<td>-0.006</td>
<td>0.020</td>
<td>0.130</td>
</tr>
<tr>
<td></td>
<td>(0.201)</td>
<td>(0.016)</td>
<td>(0.033)</td>
<td>(0.180)</td>
</tr>
<tr>
<td>Directives_t</td>
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<td>0.255</td>
<td>0.219</td>
<td>0.509</td>
</tr>
<tr>
<td></td>
<td>(0.445)†</td>
<td>(0.073)***</td>
<td>(0.092)*</td>
<td>(0.357)</td>
</tr>
<tr>
<td>Media_{t-1}</td>
<td>0.132</td>
<td>0.003</td>
<td>0.009</td>
<td>0.118</td>
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<td></td>
<td>(0.117)</td>
<td>(0.007)</td>
<td>(0.011)</td>
<td>(0.109)</td>
</tr>
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<td>Constant</td>
<td>6.808</td>
<td>0.263</td>
<td>0.409</td>
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<td>(3.478)†</td>
<td>(0.321)</td>
<td>(0.437)</td>
<td>(3.133)*</td>
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<tr>
<td>$R^2$</td>
<td>0.53</td>
<td>0.57</td>
<td>0.43</td>
<td>0.52</td>
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<tr>
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</tbody>
</table>

Note: * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$, † $p \leq .10$