

Road Pricing Policy Process

The interplay between policy actors, the media and public

Özgül ARDIÇ
Delft University of Technology

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Road Pricing Policy Process

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Preface

I am pleased to present this Ph.D. thesis which is the result of almost 5 years of hard work. Below I would like to mention names of people which supported me during these years and express my thanks to them.

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Özgül Ardıç

Ankara, August 2015

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1 Introduction

1.1 Research background¹

In academic literature the idea of charging for the use of road infrastructure was first put forward by Pigou (1920) and Knight (1924) who argued that “road users should be charged their marginal external costs” to deal with transport related problems (e.g. congestion) (Verhoef, 2000, p. 308). However, in the real world, implemented road pricing schemes significantly deviate from this ideal (called as the first-best option) because of both the technological and practical constraints and the problems related to social and political acceptability. The real world examples (often considered second-best options) take on many different forms (e.g. toll cordons, kilometer charging).

Although road pricing policies are generally seen by economists and transport planners as an effective measure to deal with transport related problems (e.g. congestion) and are frequently recommended in transport policy documents (e.g. the EU white paper) (Verhoef, 2008), the number of implemented road pricing schemes is relatively limited. This has stimulated research to investigate what complicates or facilitates the road pricing policy process (e.g. Albalade and Bel, 2009; Banister, 2004; Langmyhr and Sager, 1997). This literature has identified a wide range of factors which contribute to the success or failure of the introduction of road pricing policies. The most frequently mentioned factors in the literature are societal issues such as political and public support (and linked to them, communication of road pricing policies) rather than technical ones (Vonk Noordegraaf et al., 2014).

1.2 Problem statement

Of all the factors affecting road pricing policy processes, the level of political support is regarded as the main determinant of how policy processes progress in general and whether or not a road pricing policy is introduced (Vonk Noordegraaf et al. 2014). It is argued that a lack of political support leads to the abolition of the policy, as in Hong Kong (see Ison and Rye,

¹ This research was one of the sub-projects of the Innovative Pricing for Sustainable Mobility (i-Prism) project. The project included three other sub-projects, which looked into road pricing policies from economical, technical and public acceptability perspectives. The i-Prism project, one of sub-projects of the Sustainable Accessibility of the Randstad programme (SAR), was funded by the Netherlands Organization for Scientific Research (NWO).

2005), or at least delays or complicates the process as in Stockholm (see Isaksson and Richardson, 2009). A high level of political support, on the other hand, acts as a facilitator in the policy process as in Norway (see Larsen, 1995) resulting in the introduction of a road pricing policy. Ardiç et al. (2015, p. 117) state that “this argument is generally justified by illustrating, in a narrative manner, the opposition or support of one (or a few) actors (e.g. political parties, heads of governmental institutions or interest groups) or by highlighting (dis)agreements between a few actors on a specific occasion during the policy process. However, policy outcomes are the consequences of a series of events that occur over a long period of time (Sabatier and Weible, 2007; True et al., 2007) and involve interactions between a diverse set of policy actors (Adam and Kriesi, 2007; Sabatier and Weible, 2007; Zahariadis, 2007). There has as yet been no empirical exploration of all the major actors in a road pricing policy process and the role played by their conflicts and consensus over time”. This is the first knowledge gap this thesis aims to fill. In line with Sabatier and Weible (2007), I define actors as individuals who are specialized in road pricing policies and actively involved in the policy process, such as representatives of a wide range of organizations (e.g. political parties, interest groups). From now on I refer to actors who are involved in road pricing policy processes as “policy actors”. Besides policy actors, under certain circumstances policy outcomes and the course of policy processes can be influenced by the media. The other knowledge gaps concern the role of the media in the road pricing policy process. Before identifying the four knowledge gaps this thesis aims to fill related to the role of the media in road pricing policy processes I first give a brief overview of the relationship between the media and policy processes in general.

The relationship between the media and policy processes is “exasperatingly complex, [...] dynamic and interactive” (Koch-Baumgarten and Voltmer, 2010, p. 80), involving interactions between the media, policy actors and the public. The media is considered as a kind of communication channel between different policy actors and between policy actors and public. More precisely, all policy actors use the media space to communicate with each other. All policy actors keep an eye on the media to monitor the actions of other policy actors and the policy environment, and accordingly adjust their positions and actions during policy processes (Koch-Baumgarten and Voltmer, 2010). Indeed, their messages in the media are often intended as a response to or communication with other policy actors, rather than the public (Heffernan, 2006). Furthermore, the level of public support, which is closely linked to political support (Isaksson and Richardson, 2009; Jones, 2003; Oberholzer-Gee and Weck-Hannemann, 2002), partly depends on the media coverage of policies because the public acquires most information about policy proposals and policy processes (events and the opinions of various actors about policy proposals) from the media (Koch-Baumgarten and Voltmer, 2010; Tresch, 2009). However, “the power of the mass media lies not in the direct influence of the mass media on the general public but in the perception of policy actors that the general public is influenced by the mass media” (Walgrave and Van Aelst, 2006, p. 100). Political actors monitor the media coverage of their policies as a proxy of public opinion and assume that the public is highly influenced by the media coverage. According to the (anticipated) media coverage of their proposals, they might change the content of policy proposals or postpone (or even abolish) the implementation of policy proposals (Koch-Baumgarten and Voltmer, 2010). This results in all policy actors trying to have a voice in the media to communicate with both the public and other policy actors (Tresch, 2009). The role of the media is further complicated by the discussion as to whether or to what extent the media is objective in reporting policy debates, which is “all (more or less) public, planned and organized processes of discussion in which various actors compete for binding interpretations

of social and political events” (Koch-Baumgarten and Voltmer, 2010, p. 216)². Some studies state that the media “does not comply (intentionally or not) with the norms of objectivity and favors particular policy perspectives in its reporting (see Louw, 2010; Semetko, 2003)” (Ardıç et al., 2013, p. 47). The media intervenes with policy processes as a “quasi” policy actor by distorting policy debates and the communication between policy actors and public.

To the best of my knowledge, only a few empirical studies have looked into the media and the media’s role in road pricing policy processes, even though the importance of the media is widely acknowledged (e.g. Hamilton, 2011; Hensher and Li, 2013; Schade and Schlag, 2000). This thesis aims to fill this gap by investigating four aspects of the role of the media in road pricing policy processes.

The first knowledge gap relates to the objectivity of the media in reporting road pricing policies. Ryley and Gjersoe (2006) and Vigar et al. (2011) assessed the extent to which the media was objective in reporting the Edinburgh and Manchester road pricing proposals respectively. “In these studies, it seems that a failure in balanced reporting was regarded as the main indication of media bias (equal space allocation to all sides, e.g. the different elements of the proposal, positive and negative viewpoints in the debate)” (Ardıç et al., 2013, p. 48). However, “objectivity” (and its antonym bias) is a multifaceted term. “The media objectivity has various dimensions (e.g. neutrality, balance) which are all closely related, the balance aspect being only one of them” (Ardıç et al., 2013, p. 48). Therefore, more comprehensive analysis is required to assess the media’s objectivity in reporting road pricing policies.

The second knowledge gap relates to the characteristics (e.g. tone, issues and actors covered) of media coverage of road pricing policies. Ryley and Gjersoe (2006), Vigar et al. (2011) and Gaber (2004) investigated how the media presented Edinburgh, Manchester and London road pricing proposals respectively. All three draw a similar conclusion, that the media coverage of the road pricing policy had a generally negative tone and some policy issues were neglected in the coverage. Each study examines the media coverage of only one road pricing scheme during a 1-2 year long policy process. However, the media’s involvement in policy processes and the media coverage of public policies are contingent on several factors such as policy content (e.g. design features of pricing proposals) or the type of policy event (e.g. political crisis) in the policy fields (Koch-Baumgarten and Voltmer, 2010). Therefore, a more comprehensive approach, which considers changes in these factors, is needed to elicit the characteristics of media coverage of road pricing policies. Furthermore, all the studies to date have analyzed the British media. Their findings do not necessarily explain the characteristics of media coverage of road pricing policies in other countries. The media coverage of the same issue can vary between countries because of differences in media systems and political cultures/systems (De Vreese et al., 2001; Oates, 2008). For instance, Brants and van Praag (2006) and Vliegenthart et al. (2011) state that differences between the Netherlands and the UK in terms of political system/culture (more consensual in the Netherlands vs. more adversary in the UK) and media systems (more neutral in the Netherlands vs. more negative and cynical in the UK) lead to more negative media coverage of political issues in the UK than the Netherlands.

The third knowledge gap concerns the relationship between policy debate and media coverage of the policy. Studies in the communication field indicate that the relationship between media coverage and the policy debate is dynamic, reciprocal and conditional. While the content of a

² This definition is translated from Keller (2004, p. 7, 22) by Koch-Baumgarten and Voltmer (2010).

policy debate shapes media coverage to some extent as the policy debate is input for the media, media coverage sometimes influences the policy debate and (to lesser extent) the course of the policy processes (see Koch-Baumgarten and Voltmer, 2010; Van Aelst and Vliegthart, 2013). To the best of my knowledge, no study has examined the nature of the reciprocity and questioned whether or to what extent two variables (policy debate and media coverage) influence each other in road pricing policy processes.

The fourth knowledge gap relates to the influence of media coverage on the public attitude towards road pricing policies. Winslott-Hiselius et al. (2009) investigated the influence of the media on public attitudes concerning a road pricing policy by comparing the tone of newspaper articles and the outcome of a public attitude survey about the Stockholm congestion charging scheme. However, there is no link between the attitude survey and content analysis of the media coverage in this study, thus whether and to what extent the people surveyed were actually exposed to the media reporting about the Stockholm congestion charging scheme is unknown. Therefore, there is a knowledge gap related to whether or to what extent exposure to a particular tone of media coverage affects individuals' attitudes and beliefs. In addition to that, the effect of the news content is contingent on the characteristics of individuals and issues featured in the news (Perse, 2001). The contingency of the media's effect needs to be further scrutinized.

To sum up, this thesis aims to fill the knowledge gaps identified above by examining road pricing policy processes in the Netherlands. The Dutch road pricing policy processes provides the potential to address all these knowledge gaps regarding the role of policy actors and the media in road pricing policy processes for the following reasons. Politically, road pricing policies were very controversial in the Netherlands for decades. From the late 1980s until 2010 different road pricing proposals were discussed, although none was implemented. All attempts failed to be implemented because of a lack of political and public support (Raad voor Verkeer en Waterstaat, 2005). The long policy process was not only marked by conflicts, sometimes intense, but also by moments of consensus between major policy actors. There are also claims that the Dutch media was biased in its reporting of road pricing proposals and negatively influenced public support (e.g. Hendriks and Tops, 2001; Seidel et al., 2004). In fact, one of the Dutch newspapers, "de Telegraaf, was accused of being biased in articles published in other newspapers (e.g. van Houten, 2009)" (Ardıç et al., 2013, p. 58).

The failed attempts to implement road pricing policy in the Netherlands

The idea of road pricing started to appear on the political agenda in 1977 when it was mentioned in a national policy document (van der Sar and Baggen, 2005). However, the intense debate arose much later. The first proposal to introduce a road pricing policy in the Netherlands was launched in 1988 as part of a policy document (Tweede Structuurschema Verkeer en Vervoer SVV II). The proposal, known as "Rekeningrijden", was an electronic toll system to charge car users during peak hours on ring roads in the Randstad (the most densely populated and commercial region in the Netherlands including the four biggest Dutch cities, Amsterdam, Rotterdam, Utrecht and The Hague). This electronic system was later replaced by the idea of conventional "toll plazas" and "a seasonal license to pass the cordons" due to concerns about its technical feasibility and privacy problems (Rietveld, 2001). But, all these pricing options were removed from the political agenda in 1992 (Raad voor Verkeer en Waterstaat, 2005).

In 1994 a truck accident which caused congestion for a whole day in the Randstad (western part of the Netherlands containing the four largest Dutch cities) drew attention to road pricing policies again. Shortly after this accident, the decision to introduce Rekeningrijden after the year 2000 was taken in parliament. In 1996, Rekeningrijden was included in the national mobility plan (Nota Samen Werken aan Bereikbaarheid) as an instrument to mitigate congestion. The policy started to attract more attention in the public sphere. In January 1999, the ANWB (a national interest group representing car users and, with 4 million members, the largest membership organization in the Netherlands) started a public campaign against Rekeningrijden. Due to the fierce opposition from the ANWB and some other policy actors, the implementation of a pilot project in restricted form was chosen (Raad voor Verkeer en Waterstaat, 2005).

In the early 2000s, Rekeningrijden was replaced on the political agenda by a new form of road pricing policy, “Kilometerheffing”, which would charge road users per kilometer driven on the country’s entire road network - with possible price variations according to vehicle type, time and place. The Mobimiles report, commissioned by the transport ministry in April 2001 and prepared by Roel Pieper, suggested that the implementation of Kilometerheffing was technically possible. In November 2004, the transport ministry established a platform, called the “Nouwen committee” which involved the participation of major policy actors to discuss the possibility of implementing a form of pricing to deal with mobility problems. The platform agreed on the implementation of Kilometerheffing including price variation by time, place and vehicle type in April 2005. Finally, in November 2009, the Kilometerheffing act was sent to parliament. In March 2010, however, following the fall of the government, the proposal was removed from the political agenda.

1.3 Research objectives and questions

This thesis has two main objectives. The first objective relates to the policy actors while the second one relates to the media. Two research objectives and research questions which address each objective are listed below and are further elaborated in chapters 2–5.

Objective 1 is to gain insight into the role of policy actors in the (non-)implementation of road pricing policies. Two research questions below address this objective. Considering that the (road pricing) policy process is “dynamic, nonlinear and complex” (Albright, 2009, p.19), involving interactions among various policy actors, events and contextual variables over time, the analysis needs to be informed by a theoretical framework. The research questions need to be formulated accordingly in order to achieve the research objectives. The research questions stated below led to more elaborate research questions in chapter 2 based on the selected theoretical framework, the Advocacy Coalition Framework (see section 1.4).

RQ1: What factors affect the policy actors’ policy positions, their consensus and conflicts? (addressed in chapter 2)

RQ2: How and to what extent do conflict and consensus among policy actors result in (non-) implementation of road pricing? (addressed in chapter 2)

Objective 2 is to gain insight into the role of the media in road pricing policy processes. This thesis focuses on four issues related to the role of the media: objectivity of the media, characteristics of media coverage (e.g. issues or actors covered), the link between policy

debate and media coverage and finally, the influence of media on individuals' attitudes to provide some insight into the "complex circuit" between the media, policy actors and the public in the road pricing policy process. The following research questions address these issues:

RQ3: Did the Dutch news media present the road pricing policy debate objectively? (discussed in chapter 3)

RQ4: How did the individual newspapers position themselves in the policy debate? (discussed in chapter 3)

RQ5: To what extent did the characteristics of the media coverage of two Dutch pricing proposals (Rekeningrijden and Kilometerheffing) differ from each other and change over time? (addressed in chapter 4)

RQ6: To what extent did the content of the policy debate influence media coverage? (addressed in chapter 4)

RQ7: To what extent and how did the media coverage influence the policy debate and the course of the policy process of the Dutch road pricing policies? (addressed in chapter 4)

RQ8: To what extent does exposure to news about the Kilometerheffing proposal affect people's attitudes and beliefs about Kilometerheffing? (addressed in chapter 5)

The long policy process of road pricing policies, in which a few different policy proposals were discussed and various policy events (e.g. coalition agreement) and varying degrees of consensus and conflict among policy actors were observed, makes the Netherlands a very interesting case to achieve both research objectives. The thesis focuses on this long policy process, in particular the period between 1994 and 2010.

1.4 Theories and frameworks

This thesis uses insights from theories and frameworks from policy science, political communication and media studies. Each chapter is founded upon a different theoretical framework. The theories and frameworks used are discussed in detail in the relevant chapter, but below is a brief overview.

Chapter 2 draws on policy science research and uses the Advocacy Coalition Framework (ACF), developed by Sabatier and Jenkins-Smith, as a theoretical lens. Ardiç et al. (2015, p. 117) explain that:

The ACF aims to understand policy stability (e.g. non-implementation of road pricing policy) and change (e.g. implementation of road pricing policy) by analyzing conflicts and consensuses among multiple policy actors in the policy process over a decade or longer (Sabatier and Weible, 2007). The ACF is not the only theory or framework which aims to understand policy processes. The field of policy research embodies several alternative theories (e.g. the institutional analysis and development framework (IAD) or punctuated equilibrium theory). This thesis does not aim to systematically compare all these alternative theories. The overview of studies in policy research shows that all these theories or frameworks share similarities in scope, concepts and mechanisms with the ACF although the ACF incorporates the most components of the policy processes explained by the other theories (Schlager, 2007). Comparing all these theories, Schlager (2007, p.317) concluded that "the family resemblance among the

policy process theories and comparative policy models has become more pronounced, to the point where they probably belong under a single roof, and that roof is the currently entitled advocacy coalition framework.” Furthermore, several scholars suggest that the ACF (besides IAD) is the most elaborate and/or useful theoretical lens to understand policy processes (e.g. Burton, 2006; Schlager, 2007; Sobeck, 2003). Finally, the ACF is considered particularly suitable for understanding policy processes in policy areas which are “characterized by substantial political conflict and high technological complexity” (Nohrstedt 2005, p.2). This makes the ACF particularly attractive (compared with other theories) for this thesis since the Dutch road pricing policy process has been marked by “political conflicts” and road pricing policies involve “complex technological issues”.

Chapter 3 uses media studies literature and employs the objectivity framework proposed by McQuail (1999) based on Westerstahl (1983). The objectivity norm guides “journalists when they select, collect, and present the news” and is “employed by journalists to convince receivers that they produce reliable and valid descriptions of reality” (Skovsgaard et al., 2013, p. 23, 24). It is an important journalistic value in news reporting in western countries in general (see Cohen-Almagor, 2008; Donsbach, 2003; McQuail, 1999), but at the same time its usage for assessment of news is very controversial (see Donsbach, 2003; Maras, 2013; McQuail, 1999; Skovsgaard et al., 2013; Ward, 2006). It is argued that it is not possible to assess the objectivity in the news because “there is no objective reality out there to report on: the best we can expect is no more than different versions of a multifarious set of impressions” (McQuail, 1999, p. 188). Objectivity is also considered by some as undesirable since “any purportedly objective view of events is likely to privilege one account among several”, which “will be a version of events which serves the interests of established power” (McQuail 1999, p. 188). On the other hand, as quoted by McQuail (1999, p. 195) from Lichtenberg (1990, p. 230), “insofar as we aim to understand the world we cannot get along without assuming both the possibility and value of objectivity”.

Assuming that objective news is possible and desirable, how objectivity should be defined and implemented in news reporting is extensively discussed and “there is neither a common definition nor approach for its use in practice for the assessment of the media’s news reporting” (Ardıç et al., 2013, p. 48) (see Donsbach, 2003; Maras, 2013; McQuail, 1999; Tuchman, 1972; Ward, 2006; Westerstahl, 1983). Westerstahl’s objectivity framework, which is used in this thesis, “is seen as the most comprehensive and robust framework incorporating various aspects of objectivity to assess the objectivity of the media in reporting any issue or policy (e.g. Carpentier, 2005; McGrail, 2008; McQuail, 1999)” (Ardıç et al., 2013, p. 48). Westerstahl (1983) proposes a framework consisting of 6 criteria (e.g. neutrality, balance) for the assessment of objectivity in the news (see chapter 3 for detailed information about the framework). The framework is applied “based on the assumption that objectivity in the news is possible as well as desirable” and could be assessed by comparing the news coverage of different news organizations (McQuail, 1999, p. 196). However, no scale is provided for grading the objectivity of news content and no indication is given of which criteria (e.g. neutrality, balance) should be more or less important under which circumstances (McGrail, 2008). Researchers are therefore given a great deal of freedom in the application of the framework and the interpretation of the results. I explain how the framework is adopted and applied in this thesis to assess the objectivity of news coverage of road pricing policies and present the objectivity performance of the Dutch media according to this framework in chapter 3. In chapter 6, I extend the discussion of these findings in the light of two criticisms: the impossibility and undesirability of objectivity in news reporting on road pricing policies.

Chapter 4 is informed by two complementary theoretical frameworks from media studies and political communication. The first one is the literature on news production process (see McQuail, 2010; Mencher, 2006; Schnell and Frauke, 2001). I particularly focus on the news production process of public policies as documented by Koch-Baumgarten and Voltmer (2010). The literature explains key factors which influence the selection and presentation of news and how the policy debate (media input) – messages from policy actors and policy events about two pricing proposals (Rekeningrijden and Kilometerheffing – is processed by the newspapers and eventually turned into media coverage (media output). This literature indicates that both the policy position of newspapers and the content of the policy debate play a role in the media coverage. Therefore, the analysis in chapter 4 is also informed by insights from chapter 2 regarding the policy positions of newspapers. The second theoretical reference is the literature on the media–politics relations and the reciprocal relationship between media coverage and policy debate (and policy process) (see Koch-Baumgarten and Voltmer, 2010; Van Aelst and Vliegthart, 2013; Walgrave and Van Aelst, 2006; Wolfsfeld, 2014). This literature discusses whether or to what extent the media coverage influences the policy debate (and policy process) or vice versa. Using insights from these theoretical references, chapter 4 proposes a framework which depicts news production process and the relationship between the media coverage influences the policy debate (and policy process) in road pricing policies in the Netherlands.

Chapter 5 borrows from media effect studies. Studies in these fields acknowledge that the effect of news content on individuals' attitudes and beliefs is conditioned by the characteristics of news content and individuals. Accordingly, chapter 5 focuses on two aspects of the news content. The first aspect is the tone of the news (negative or positive). Studies suggest that the tone of news content determines the direction and magnitude of its effect (e.g. Baumeister et al., 2001; Boomgaarden et al., 2011; Soroka, 2006; Zaller, 1992). The second aspect is the degree of personal experience with the particular news topic in daily life. Zucker (1978) suggests that the less personal experience people have with an issue in their daily lives (e.g. events in other countries), the more they rely on the media for information and the more likely it is that the media will affect their attitudes and beliefs about this issue. With respect to the characteristics of individuals, the role of values on the effect of news is examined. Values are defined as “ideals, guiding principles in one's life, or overarching goals that people strive to obtain” (Perloff, 2003, p. 41). Values determine the degree to which individuals attend to particular news content and their response (Perloff, 2003).

1.5. Data collection and analysis

The thesis makes use of three types of data sources: (1) newspaper articles, (2) parliamentary documents, and (3) a public attitude survey. Newspaper articles provide input for all the chapters. In addition to newspaper articles chapters 2 and 4 use parliamentary documents and chapter 5 uses a public attitude survey. Detailed information is provided below regarding the data collection and analysis of these three data sources.

1.5.1 Newspaper articles

In answering research questions regarding the media (addressing objective 2), the scope is restricted to only newspapers. In other words, newspaper articles on road pricing policies represent the media coverage of road pricing policies in this thesis. The first reason for this is that newspapers present more in depth (longer and more detailed) news than television (Perse, 2001). Given the fact that road pricing policies involve technical and political issues, newspapers are more suitable content-wise to focus on for research purposes. The second

reason is that newspaper articles are easier to access and analyze because of free digital availability in written form via the website Lexisnexis. As a non-Dutch Ph.D. researcher, it was not possible for me to improve my Dutch listening skills enough within the research period (4 years) to analyze TV and radio data.

Newspaper articles were selected from the five most read national newspapers: De Telegraaf, Algemeen Dagblad, de Volkskrant, NRC Handelsblad and Trouw. Their coverage in total is quite representative of the whole newspaper coverage read in the Netherlands. This is because “the total circulation rates of these newspapers covers more than 35% of the total newspaper circulation and more than 45% of the paid newspaper circulation in the Netherlands (according to 2010 data released by HOI, The Institute voor Media Auditing)” (Ardıç et al., 2013, p. 49). In addition, the sample is heterogeneous in terms of type and political leaning of the newspaper, (illustrated in Table 1-1) which might affect coverage of issues. Table 1-1 shows the presence of both popular and quality as well as right and center/left leaning newspapers.

Table 1-1: The list of newspapers

Newspaper	Type	Political leaning
De Telegraaf	popular	right-leaning
Algemeen Dagblad	popular	right-leaning
Trouw	quality	centre/left-leaning
de Volkskrant	quality	centre/left-leaning
NRC Handelsblad	quality	right-leaning

Source: (Vliegthart 2007)

Newspaper articles are not only used in chapters 3, 4 and 5 to analyze media coverage to achieve objective 2, but also to determine the policy positions of actors in chapter 2 to contribute to objective 1. Chapter 2 uses the ACF as theoretical lens (see section 1.4). Studies applying the ACF use a wide range of data sources such as questionnaires, interviews and archive data (e.g. documents, reports or media records) (Weible et al., 2009). All these methods have their own advantages and disadvantages. The data from questionnaires or interviews with retrospective questions about actor opinions regarding events (or issues) several years earlier might suffer from recall errors and hindsight bias (Krouwel and van Elfrinkhof, 2014; Vaart et al., 1995). Furthermore, “many of the older party elites may simply not be around anymore” (Krouwel and van Elfrinkhof, 2014, p.1460). In that respect, the data obtained by the content analysis of archive documents is more viable in measuring actor opinions related to past events. Both parliamentary documents and media records constitute a comprehensive archive to trace actor opinions over time. However, parliamentary documents released by the Dutch parliament only contain the statements of politicians, political parties and ministers. Therefore, newspaper articles which simultaneously report the opinions of all types of policy actors were considered a viable option to choose as a data source for this thesis. Parliamentary documents were used to identify the coordination patterns of political actors and to analyze the relationship between media coverage and policy debate. The use of parliamentary documents for this purpose is explained in section 1.5.2.

Newspaper articles provide an extensive database for determining actor positions, but have, nevertheless, some disadvantages as the findings might be distorted by the bias in newspaper articles. Awareness of the possibility of this bias is of crucial importance. In fact, researchers should know “about the structure and sources of bias” in the newspaper articles under investigation (Earl et al., 2004) to develop strategies (in sampling and developing coding scheme) that minimize its impact on the quality of data. The bias in newspaper articles from

wire services (e.g. ANP in the Netherlands) might be less of an issue (compared to newspaper articles) since wire services provide news to the whole range of newspapers, thereby being more objective (see Bergman (2013) for a discussion of the possibility of bias in ANP news). Given the fact that newspaper articles are already being used for media analysis elsewhere in this research, it is efficient to develop a comprehensive approach for the selection and analysis of newspaper articles and use the same sample of articles for both purposes (the analysis of media and determining the policy positions of actors). Furthermore, this thesis already thoroughly examines the “objectivity” issue and the extent to which the Dutch media objectively report Dutch road pricing policies (see chapter 2). This objectivity analysis (see chapter 2) found that the data quality can be jeopardized by bias in newspaper articles in two ways. Firstly, newspapers might have a “selection bias”, in other words that they give more space to the opinions of like-minded policy actors whilst ignoring other actors (totally or to some extent). The analysis might therefore fail to identify some relevant policy actors and their policy position in the policy debate. Secondly, newspapers might also have a “presentation bias”, presenting actor opinions with (implicit or explicit) media comments. In extreme cases, they might even be inaccurate in their reporting of the policy position of actors. In other words, they might distort actor statements to the extent that the meanings of the actor statements might totally change.

These two issues were taken into account when selecting the newspapers and extracting actor positions from newspaper articles in the following way. Firstly, by selecting newspaper articles from five of the most read national newspapers which are a mixture of both quality-popular and right-left leaning newspapers selection bias could be eliminated (see Table 1-1). The types and political leaning of newspapers are the main factors which influence which policy actors and aspects of an issue a newspaper allocates space to in their coverage. Indeed, the analysis in chapter 3 shows that these five newspapers allocated varying amounts of space to certain aspects of the policy and policy actors. It was assumed that the differences between newspapers would cancel each other out and that policy actors not covered by at least one of the five newspapers were either not relevant actors or did not have a stake in the policy (they did not participate in the policy debate or did not have any policy action in the policy process). Secondly, the coding scheme (see below for a more detailed explanation of the coding) was developed to avoid the distortion of actor statements by (implicit or explicit) media comments. Thirdly, even though it was not possible to detect inaccurate statements in the newspaper articles (if any) during the coding procedure the findings in chapter 3 indicate that “inaccuracy problems were not much of an issue in these newspapers, the reported information was mostly correct” (Ardıç et al., 2013, p. 56).

In addition to the possibility of bias in the newspaper articles, another concern is that the actor statements in the newspaper articles may not necessarily reflect the actual actor positions as “it is likely that politicians claim different things when dealing with journalists than when acting in parliament” (Vliegthart, 2007, p.137). In this thesis, this was not the problem as other sources of data were used (e.g. parliamentary documents, policy documents and other literature) to qualitatively analyze the actions and behaviors of policy actors. The fact that the policy positions retrieved from newspaper articles by content analysis corresponds with policy positions reported in other sources confirms the robustness and effectiveness of the procedure used to acquire policy positions from newspaper articles.

Sampling strategy and content analysis of newspaper articles

Content analysis was conducted on the newspapers articles to acquire the data. Content analysis is defined as “a technique for making inferences by objectively and systematically

identifying specified characteristics of messages” (Holsti, 1969, p.14). The technique involves tagging texts with codes using systematic and well-written rules. Content analysis is widely used in communication science to analyze media content based on communication theories, and also in policy sciences to extract actors’ issue positions and actor conflicts from media content (or other types of archive data) (van Atteveldt, 2008; Howland et al., 2006).

I used a search string comprising all the name variations used for road pricing policies in the Dutch language to select newspaper articles published between 1994 and 2010 from the Lexisnexis digital database³. The search results contained around 8000 newspaper articles. The application of content analysis on such a large amount of data manually was not time or cost efficient and was not possible within the timeframe of this research. With such a large amount of data analysis is possible using quantitative computer-based content analysis programs. However, quantitative computer-based content analysis programs have limited capacity beyond the identification of words, counts or categorizations of some issues. For example, exploring the relation between variables (e.g. which actor speaks about which issue) and latent meanings is not possible. In this thesis, the research questions required the identification of not only media attention to a specific issue or actor, which can be measured by the frequency of certain groups of words, but also of complicated relationships between variables such as which actor speaks about which issue, actor position to an issue as well as explicit or implicit media comments involved with issues or actors. Some very advanced computer-based content analysis programs are capable of such complicated analysis (e.g. Network evaluative text analysis), but their results are difficult to interpret and might lead to misleading conclusions (Van Den Berg and Van Der Veer, 2000). Furthermore, these programs often require a substantial amount of pre-editing the text (e.g. decomposing long sentences into smaller pieces) (Krippendorff, 2004). Not being a native Dutch speaker, such editing in the Dutch language texts was not possible. Manual coding was therefore chosen, necessitating the reduction of the number of newspaper articles to be analyzed using a sampling strategy. The manual coding procedure used to infer manifest and latent meanings within texts and identified the relations between coding variables (e.g. which actor speaks about which issue) and created a quantitative dataset.

I used insights from existing literature to develop my sampling strategy. Policy research shows that the media pays more attention to the policy process when routine politics in the policy field is interrupted by extra-ordinary events, for instance when the established political cartels are challenged by new actors or consensus among some policy actors collapses (Koch-Baumgarten and Voltmer, 2010). Similar patterns were observed in the amount of media attention to the Dutch road pricing policies over time. The increase of media attention (the number of newspaper articles) to road pricing policies coincided with such events. Each of these events was an action by one or more of the policy actors, either for or against road pricing policies, heating up the policy debate among actors and thus attracting media attention. There were almost 20 such instances between 1994 and 2010. Eleven such policy events were identified from which newspaper articles were sampled for content analysis. Table 1-2 lists these policy events in chronological order. In the selection process of these policy events, two factors were taken into account: the type of policy event and the length of time between policy events. The aim in determining the sample was to capture the diverse set of policy events and, as much as possible, the uniform distribution of policy events between

³ The search string used to select articles is “rekeningrijden or (rekening rijden) or kilometerprijs or kilometerheffing or kilometerbeprijzing or tolheffing or tolheffingen or tolplein or tolpleinen or tolpoort or tolpoorten or tolwegen or tolweg or betaalstrook or betaalstroken or spitsheffing or tolsysteem or spitsvignet or tolstroke or tolstroken or tolweg”

1994 and 2010. As an example, the ANWB starting a public opinion survey about Kilometerheffing on their website in January 2010 was not included, even though media attention peaked during this period. This is because there were already two events just before and after January 2010 (in November 2009 and March 2010 see Table 1-2). The former was a positive and the latter was a negative development for the Kilometerheffing proposal. I decided that these two events would be sufficient to picture media coverage of the policy and policy position of actors around this period. This strategy enabled the observation of the characteristics of media coverage and the identification of the policy positions of actors during different events and different stages of the policy process over time.

Table 1-2: The list of major policy events regarding the Dutch road pricing policy

Date	Policy event
08.11.1994	Following the truck accident and the parliamentary debate about Rekeningrijden, the decision was taken to implement Rekeningrijden after 2000
23.08.1996	Rekeningrijden was included in the National transport policy document (Nota Samen Werken aan Bereikbaarheid) as an instrument to mitigate congestion
18.07.1998	Rekeningrijden was included in the coalition government agreement
19.01.1999	Autolobby (ANWB) started a public campaign against Rekeningrijden
19.05.2000	Rekeningrijden was included in National transport policy document (BOR)
10. 04.2001	Following the Mobimiles report on the technological possibilities for Kilometerheffing, Rekeningrijden was removed from the political agenda
30.04.2005	Major Dutch policy actors (Nouwen Committee, established by the transport ministry) agreed on the implementation of Kilometerheffing
08.09.2005	National transport policy document (Nota Mobiliteit) was announced, which delayed implementation of Kilometerheffing
05.02.2007	Kilometerheffing was included in the coalition government agreement
13.11.2009	Kilometerheffing, as a final proposal, was sent to parliament
18.03.2010	Kilometerheffing was removed from the political agenda

Source (Ardıç et al., 2013, p. 49; Ardıç et al., 2015, p. 124)

I selected all newspaper articles published during a two week period around these events (one week before and after the event date). Newspaper articles published on the dates which were not available digitally were selected manually according to the same criteria. Table 1-3 presents the number of newspaper articles across newspapers and policy events. The sample contains 427 newspapers articles in total. Each chapter examines a different part of the policy process depending on the requirements of research questions, theories and frameworks of the particular chapter.

For the application of content analysis on these articles, a comprehensive coding scheme was developed to meet requirements of all the research questions in the thesis. Each chapter uses different coding variables and subsequently constructs various secondary variables. Chapter 5 combines coding variables with variables obtained from the public attitude survey (see section 1.5.3) to construct secondary variables. Besides content analysis, each thesis chapter employs descriptive, exploratory and inferential data analysis techniques. Detailed information about the coding variables (and procedure), constructed variables and data analysis techniques is given in the relevant chapter.

Table 1-3: The number of newspaper articles across newspapers and policy events

Policy event date	De Telegraaf	Algemeen Dagblad	de Volkskrant	NRC Handelsblad	Trouw	Total
08.11.1994	1	2	3	5	2	13
23.08.1996	0	2	1	4	2	9
18.07.1998	2	2	1	1	3	9
19.01.1999	11	12	13	3	6	45
19.05.2000	6	20	10	9	11	56
10.04.2001	2	5	2	4	2	15
30.04.2005	4	3	5	5	5	22
08.09.2005	9	5	6	6	9	35
05.02.2007	7	11	4	5	1	28
13.11.2009	39	57	15	9	17	137
18.03.2010	14	7	13	12	12	58
Total	95	126	73	63	70	427

1.5.2 Parliamentary documents

Parliamentary documents provide input to chapters 2 and 4. All the required documents were collected from the on-line Dutch parliament database, where all parliamentary documents can be found (<http://www.tweedekamer.nl>). This section provides a short explanation of the type of documents and how they are used in chapters 2 and 4. Detailed information is provided in the relevant chapters.

Chapter 2 uses motions initiated in the Dutch parliament and their voting results (political parties voting for or against) to identify coordination patterns amongst political parties. Coordination is the main feature of policy actors and actor constellations as well as belief similarities according to the ACF (see chapter 2). Motions, which requested the government to introduce a road pricing policy (Rekeningrijden or Kilometerheffing) or to stop all ongoing preparations for its introduction, were selected. In the Netherlands, members of parliament may introduce a motion requesting the government to take, or refrain from, certain actions. Motions are voted on in parliament and by a majority vote are adopted (Andeweg and Irwin, 2009; Laver, 1994). Chapter 4 uses statements of politicians about road pricing policies with reference to the media to examine the influence of media coverage on policy debate (and policy process). In addition, chapters 2 and 4 use parliamentary documents (in addition to other policy documents and relevant literature) for an in-depth qualitative examination of the policy process and debate by presenting, in a narrative style, the developments during policy events and the policy activities/behaviors of policy actors throughout the policy process.

1.5.3 Public attitude survey

Chapter 5 employs the data derived from a cross-sectional survey and develops three linear regression models to study the effect of exposure to news about road pricing policies on people's attitudes/beliefs. The survey not only measures individuals' attitudes/beliefs about road pricing policies but also the extent individuals read the five newspapers analyzed in this thesis (see above). The study in chapter 5 combines this data with the data obtained from newspaper articles to construct a news exposure variable, which indicates the extent to which individuals are exposed to news about road pricing policies (and its different aspects). It is important to note that this news exposure measure can produce only "the likelihood" of exposure. In other words, the fact that people read a particular newspaper does not guarantee that they read news articles on road pricing policies. Despite this weakness, this approach helps us to gain new insights into the relationship between news and public attitudes towards

road pricing policies as the literature on this topic (the study of Winslott-Hiselius et al. (2009), see section 1.2) does not measure whether and to what extent the people surveyed read newspapers analyzed in this literature.

The survey used in chapter 5 was designed by the University of Groningen (RUG), responsible for the sub-project within the i-Prism project which studied public acceptability of road pricing policies. I contributed variables related to newspaper readerships to the design process. The survey was conducted by TNS NIPO (The Dutch Institute for Public Opinion Research and Market Research) using computer/assisted self-interviewing in December 2012.

As will be discussed in chapter 5, cross-sectional data lacks adequate evidence of the temporal precedence of the independent variables (news exposure) over the dependent variables (attitude/beliefs) and therefore does not enable researchers to convincingly show a causal link between news exposure and attitudes/beliefs. Longitudinal panel surveys and experimental surveys “both satisfy the necessary condition for demonstrating time order” (Coleman et al., 2009, p. 115). Both methods are frequently used by studies analyzing the effect of communication messages on attitudes/beliefs (Coleman et al., 2009; Kinder, 2007). For rather pragmatic reasons both methods were not employed in this thesis. Below I reflect on the usage of both methods in media effect studies and my preference for cross-sectional survey despite its inherent weakness in demonstrating causality.

Longitudinal panel surveys allow researchers to record attitudes/beliefs and media consumption patterns of an individual at various points in time in order to establish a cause and effect sequence (see for example Azrout et al. (2012), Bos et al. (2011), De Vreese and Semetko (2004) for applications of this method). Such a research design may however still suffer from uncontrollable factors despite addressing the time-order problem (Coleman et al., 2009). These studies organize a two or three wave panel survey before and after a particular event (e.g. an election or referendum) during which the media coverage of an issue under investigation is expected to peak and consequently for there to be an impact on attitudes/beliefs regarding this issue. The survey measures attitudes/beliefs of individuals and their media consumption patterns (e.g. the frequency of reading a particular newspaper). They furthermore (as is also done in this thesis) combine the media consumption variable in the survey with the data obtained by content analysis of the news content during the event (e.g. the content of a newspaper reported by survey respondents). By controlling for the attitudes/beliefs reported in the first wave before exposure to the news it is thus possible to explain attitudes/beliefs resulting from exposure to news relating to the event. This method was not applicable for this thesis because road pricing policies were not on the political agenda in June 2010 when this Ph.D. research started. No major policy event occurred and road pricing policies therefore did not receive much media coverage. Furthermore, even if the policy was on the agenda, organizing such a research design is very difficult as policy processes are usually unpredictable and often encounter unexpected developments (which subsequently attract media attention). Longitudinal panel survey designs are more appropriate for studies which analyze the media effect during referendums and elections, whose dates are known well in advance, facilitating the planning of the research procedure.

Experimental surveys also satisfy the conditions for establishing a cause and effect sequence. Furthermore, they do not suffer from uncontrollable variables, contrary to panel surveys (Coleman et al., 2009). They are therefore widely used to analyze the effect of communication messages on attitudes (see for example Lecheler and de Vreese (2011) and Druckman (2004) for application of this method). But on the other hand they receive some criticism for not being well connected to real world settings. To put it more precisely, in experimental surveys,

in general alternative frames (e.g. one particular aspect of road pricing policies (e.g. effectiveness)) are “represented by a single presentation of a sentence or two” and participants in a survey are assigned to one of alternative frames (Kinder, 2007, p. 156). But in everyday life, individuals are exposed to a particular frame “by repeated exposure through multiple venues (e.g. newspapers) over long periods of time—a whole curriculum of exposure”, as stated by (Kinder 2007, p. 156). An experimental survey was possible within time-frame of this thesis and was already planned in the context of another sub-project of the i-Prism project, studying the public acceptability of road pricing policies (by the University of Groningen). As part of the questionnaire used in chapter 5, respondents are randomly assigned to alternative frames (e.g. effectiveness of road pricing policies) to test the effect of different frames on attitudes. Therefore, having already analyzed media coverage, I decided to adopt an alternative research approach and analyze the effect of exposure to actual news content on road pricing policies on attitudes/beliefs. Despite the inherent weaknesses of a cross-sectional research design, I believe that the findings of this thesis make a valuable contribution to the scientific knowledge about this issue because of the dearth of studies on how the media coverage of road pricing policies affects public attitudes (see section 1.2).

1.6 Outline of the thesis

The core of this thesis contains four studies. Chapters 2, 3, 4 and 5 present these four studies. Chapter 6 presents conclusions, limitations and implications of this thesis.

References

- Adam, S., Kriesi, H. (2007) The network approach. *Theories of the policy process* ed Sabatier, P.A. Westview Press, Boulder, Colo.
- Albalade, D., Bel, G. (2009) What local policy makers should know about urban road charging: Lessons from worldwide experience. *Public Administration Review* 69, 962-974.
- Albright, E.A. (2009) Policy change and policy learning in a new Democracy: Response to extreme floods in Hungary. Ph.D. Thesis, Duke University.
- Andeweg, R.B., Irwin, G.A. (2009) *Governance and politics of the Netherlands*. Palgrave Macmillan, Houndmills, Basingstoke, Hampshire, New York.
- Ardıç, Ö., Annema, J.A., van Wee, B. (2013) Has the Dutch news media acted as a policy actor in the road pricing policy debate? *Transportation Research Part A: Policy and Practice* 57, 47-63.
- Ardıç, Ö., Annema, J.A., van Wee, B. (2015) Non-implementation of road pricing policy in the Netherlands: An application of the 'Advocacy Coalition Framework'. *European Journal of Transport and Infrastructure Research* 15, 116-146.
- Azrout, R., van Spanje, J., de Vreese, C. (2012) When news matters: Media effects on public support for European Union enlargement in 21 countries. *JCMS: Journal of Common Market Studies* 50, 691-708.
- Banister, D. (2004) Implementing the possible? *Planning Theory & Practice* 5, 499-501.
- Baumeister, R.F., Bratslavsky, E., Finkenauer, C., Vohs, K.D. (2001) Bad is stronger than good. *Review of General Psychology* 5, 323-370.
- Baumgartner, F.R., Jones, B.D. (1993) *Agendas and instability in American politics*. University of Chicago Press, Chicago.
- Bergman, T.R. (2013) The Dutch media monopoly: A critical-historical analysis of journalism in the Netherlands. Ph.D. Thesis, University of Illinois.
- Boomgaarden, H.G., van Spanje, J., Vliegthart, R., de Vreese, C.H. (2011) Covering the crisis: Media coverage of the economic crisis and citizens' economic expectations. *Acta Politica* 46, 353-379.
- Bos, L., van der Brug, W., de Vreese, C. (2011) How the media shape perceptions of right-wing populist leaders. *Political Communication* 28, 182-206.
- Brants, K., van Praag, P. (2006) Signs of media logic: Half a century of political communication in the Netherlands. *Javnost-The Public* 13, 25-40
- Burton, P. (2006) Modernising the policy process: Making policy research more significant? *Policy Studies* 27, 173-195.
- Carpentier, N. (2005) Identity, contingency and rigidity: The (counter-)hegemonic constructions of the identity of the media professional. *Journalism* 6, 199-219.
- Cohen-Almagor, R. (2008) The limits of objective reporting. *Journal of Language and Politics* 7, 136-155.
- Coleman, R., McCombs, M., Shaw, D., Weaver, D. (2009) Agenda setting. *The handbook of journalism studies* eds Wahl-Jorgensen, K., Hanitzsch, T. Routledge, New York.

- de Vreese, C.H., Peter, J., Semetko, H.A. (2001) Framing politics at the launch of the Euro: A cross-national comparative study of frames in the news. *Political Communication* 18, 107-122.
- de Vreese, C.H., Semetko, H.A. (2004) News matters: Influences on the vote in the Danish 2000 Euro referendum campaign. *European Journal of Political Research* 43, 699-722.
- Donsbach, W. (2003) Objectivity in reporting. *Encyclopedia of international media and communications* ed Johnston, D.H. Academic, San Diego, Calif., London.
- Druckman, J.N. (2004) Political preference formation: Competition, deliberation, and the (ir)relevance of framing effects. *The American Political Science Review* 98, 671-686.
- Earl, J., Martin, A., McCarthy, J.D., Soule, S.A. (2004) The use of newspaper Data in the study of collective action. *Annual Review of Sociology* 30, 65-80.
- Gaber, I. (2004) *Driven to distraction: an analysis of the media's coverage of the introduction of the London congestion charge*. Goldsmiths College, University of London, London.
- Hamilton, C.J. (2011) Revisiting the cost of the Stockholm congestion charging system. *Transport Policy* 18, 836-847.
- Heffernan, R. (2006) The prime minister and the news media: Political communication as a leadership resource. *Parliamentary Affairs* 59, 582-598.
- Hendriks, F., Tops, P.W. (2001) *Politiek en interactief bestuur: Interacties en interpretaties rond de ontwikkeling van het Nationaal Verkeers- en Vervoersplan*. Elsevier bedrijfsinformatie, 's-Gravenhage.
- Hensher, D.A., Li, Z. (2013) Referendum voting in road pricing reform: A review of the evidence. *Transport Policy* 25, 186-197.
- Holsti, O.R. (1969) *Content analysis for the social sciences and humanities*. Addison-Wesley Pub. Co., Reading, Mass.
- Howland, D., Becker, M., Prelli, L. (2006) Merging content analysis and the policy sciences: A system to discern policy-specific trends from news media reports. *Policy Sci* 39, 205-231.
- Isaksson, K., Richardson, T. (2009) Building legitimacy for risky policies: The cost of avoiding conflict in Stockholm. *Transportation Research Part A: Policy and Practice* 43, 251-257.
- Ison, S., Rye, T. (2005) Implementing road user charging: The lessons learnt from Hong Kong, Cambridge and Central London. *Transport Reviews* 25, 451-465.
- Jones, P. (2003) Acceptability of road user charging: Meeting the challenge. *Acceptability of Transport Pricing Strategies* eds Schade, J., Schlag, B. Oxford: Elsevier, pp. 27-62.
- Keller, R. (2004) *Diskursforschung: eine einföhrung für sozialwissenschaftlerInnen*. Leske und Budrich, Opladen.
- Kinder, D.R. (2007) Curmudgeonly advice. *Journal of Communication* 57, 155-162.
- Kingdon, J.W. (2011) *Agendas, alternatives, and public policies*. Little, Brown and Co., Boston [u.a.].
- Knight, F.H. (1924) Some fallacies in the interpretation of social costs. *The MIT Press* 38, 582-606.
- Koch-Baumgarten, S., Voltmer, K. (2010) *Public policy and the mass media the interplay of mass communication and political decision making*. Taylor & Francis, Hoboken.

- Krippendorff, K. (2004) *Content analysis: An introduction to its methodology*. SAGE Publications, London.
- Krouwel, A., van Elfrinkhof, A. (2014) Combining strengths of methods of party positioning to counter their weaknesses: the development of a new methodology to calibrate parties on issues and ideological dimensions. *Quality & Quantity* 48, 1455-1472.
- Langmyhr, T., Sager, T. (1997) Implementing the improbable urban road pricing scheme. *Journal of Advanced Transportation* 31, 139-158.
- Larsen, O.I. (1995) The toll cordons in Norway: An overview. *Journal of Transport Geography* 3, 187-197.
- Laver, M.S.K.A. (1994) *Cabinet ministers and parliamentary government*. Cambridge University Press, Cambridge [England], New York.
- Lecheler, S., de Vreese, C.H. (2011) Getting real: The duration of framing effects. *Journal of Communication* 61, 959-983.
- Lichtenberg, J. (1990) *Democracy and the mass media: A collection of essays*. Cambridge University Press, Cambridge, New York.
- Louw, P.E. (2010) *The media and political process*. SAGE, Los Angeles, Calif., London.
- Maras, S. (2013) *Objectivity in journalism*. Polity Press, Cambridge, U.K., Malden, MA.
- McGrail, J.P. (2008) Sensationalism, narrativity and objectivity - Modeling ongoing news story practice. Ph.D. Thesis, Syracuse University.
- McQuail, D. (1999) *Media performance: Mass communication and the public interest*. SAGE Publ., London [u.a.].
- McQuail, D. (2010) *McQuail's mass communication theory*. SAGE, Los Angeles.
- Mencher, M. (2006) *Melvin Mencher's news reporting and writing*. McGraw-Hill, Boston.
- Nohrstedt, D. (2005) External shocks and policy change: Three Mile Island and Swedish nuclear energy policy. *Journal of European Public Policy* 12, 1041-1059.
- Oates, S. (2008) *Introduction to media and politics*. SAGE, London; Thousand Oaks, Calif.
- Oberholzer-Gee, F., Weck-Hannemann, H. (2002) Pricing road use: Politico-economic and fairness considerations. *Transportation Research Part D: Transport and Environment* 7, 357-371.
- Perloff, R.M. (2003) *The dynamics of persuasion communication and attitudes in the 21st century*. Lawrence Erlbaum Associates, Mahwah, N.J.
- Perse, E.M. (2001) *Media effects and society*. Erlbaum, Mahwah, NJ [u.a.].
- Pigou, A.C. (1920) *The economics of welfare*. Macmillan co. ltd, London.
- Raad voor Verkeer en Waterstaat (2005) *Innoveren, een kwestie van doen: visie op de verschillende rollen van Verkeer en Waterstaat*, Den Haag: de Raad voor Verkeer en Waterstaat.
- Rietveld, P. (2001) Pricing mobility experiences in the Netherlands. *European Journal of Transport and Infrastructure Research* 1, 45-60.
- Ryley, T., Gjersoe, N. (2006) Newspaper response to the Edinburgh congestion charging proposals. *Transport Policy* 13, 66-73.

- Sabatier, P.A., Weible, C.M. (2007) The advocacy coalition framework, innovations and clarifications. *Theories of the policy process* ed Sabatier, P.A. Westview Press, Boulder, Colo.
- Schade, J., Schlag, B. (2000) *Acceptability of urban transport pricing*. Helsinki: Government Institute for Economic Research.
- Schlager, E. (2007) A comparison of frameworks, theories, and models of policy process. *Theories of the policy process* ed Sabatier, P.A. Westview Press, Boulder, Colo.
- Schnell, K., Frauke, C. (2001) Assessing the democratic debate: How the news media frame elite policy discourse. *Political Communication* 18, 183-213.
- Seidel, T., Matthes, A., Wieland, B., Schlag, B., Schade, J., Verhoef, E., Ubbels, B., Tánczos, K., Kosztyó, Á., Mészáros, F. (2004) *TIPP (Transport Institutions in the Policy Process) - Deliverable 4 political acceptability and perceived legitimacy of transport policy implementation*. European Commission.
- Semetko, H.A. (2003) Political bias in the media. *Encyclopedia of International Media and Communications* 3, 517-525
- Skovsgaard, M., Albæk, E., Bro, P., de Vreese, C. (2013) A reality check: How journalists' role perceptions impact their implementation of the objectivity norm. *Journalism* 14, 22-42.
- Sobeck, J. (2003) Comparing policy process frameworks: What do they tell us about group membership and participation for policy development? *Administration & Society* 35, 350-374.
- Soroka, S.N. (2006) Good news and bad news: Asymmetric responses to economic information. *The Journal of Politics* 68, 372-385.
- Tresch, A. (2009) Politicians in the media: Determinants of legislators' presence and prominence in Swiss newspapers. *The International Journal of Press/Politics* 14, 67-90.
- True, J.L., Jones, B.D., Baumgartner, F.R. (2007) Punctuated- equilibrium theory: Explaining stability and change in public policy making. *Theories of the policy process* ed Sabatier, P.A. Westview Press, Boulder, Colo.
- Tuchman, G. (1972) Objectivity as strategic ritual: An examination of newsmen's notions of objectivity. *American Journal of Sociology* 77, 660-679.
- Vaart, W., Zouwen, J., Dijkstra, W. (1995) Retrospective questions: Data quality, task difficulty, and the use of a checklist. *Qual Quant* 29, 299-315.
- van Aelst, P., Vliegthart, R. (2013) Studying the tango. *Journalism Studies* 15, 392-410.
- van Atteveldt, W. (2008) *Semantic network analysis: Techniques for extracting, representing and querying media content*. BookSurge, Charleston, SC.
- van den Berg, H., van der Veer, K. (2000) Computerized decision support systems and text analysis: Evaluating CETA. *Qual Quant* 34, 65-86.
- van der Sar, J., Baggen, J. (2005) Pijlsbeleid op de weg in nederland: Een historisch overzicht. *Colloquium Vervoersplanologisch Speurwerk*, Antwerpen.
- van Houten, M. (2009) Dit systeem is beter dan we ooit hadden: Kilometerheffing. *Trouw*. 17 November.
- Verhoef, E.T. (2000) The implementation of marginal external cost pricing in road transport. *Papers Reg Sci* 79, 307-332.

- Verhoef, E.T. (2008) *Pricing in road transport: A multi-disciplinary perspective*. Edward Elgar, Cheltenham, UK; Northampton, MA.
- Vigar, G., Shaw, A., Swann, R. (2011) Selling sustainable mobility: The reporting of the Manchester Transport Innovation Fund bid in UK media. *Transport Policy* 18, 468-479.
- Vliegthart, R. (2007) Framing immigration and integration: Facts, parliament, media and anti-immigrant party Support in the Netherlands. Ph.D. Thesis, Free University.
- Vliegthart, R., Boomgaarden, H.G., Boumans, J.W. (2011) Changes in political news coverage: Personalization, conflict and negativity in British and Dutch Newspapers. *Political communication in postmodern democracy: Challenging the primacy of politics* eds Brants, K., Voltmer, K. Palgrave Macmillan, New York.
- Vonk Noordegraaf, D., Annema, J.A., van Wee, B. (2014) Policy implementation lessons from six road pricing cases. *Transportation Research Part A: Policy and Practice* 59, 172-191.
- Walgrave, S., van Aelst, P. (2006) The contingency of the mass media's political agenda setting power: Toward a preliminary theory. *Journal of Communication* 56, 88-109.
- Ward, S.J.A. (2006) *The invention of journalism ethics: The path to objectivity and beyond*. McGill-Queen's University Press, Montreal [Que.].
- Weible, C.M., Sabatier, P.A., McQueen, K. (2009) Themes and variations: Taking stock of the advocacy coalition framework. *Policy Studies Journal* 37, 121-140.
- Westerstahl, J. (1983) Objective news reporting: General premises. *Communication Research* 10, 403-424.
- Winslott-Hiselius, L., Brundell-Freij, K., Vagland, A., Byström, C. (2009) The development of public attitudes towards the Stockholm congestion trial. *Transportation Research Part A: Policy and Practice* 43, 269-282.
- Wolfsfeld, G. (2014) *Making sense of media and politics five principles in political communication*. Taylor and Francis, Hoboken.
- Zahariadis, N. (2007) The multiple streams framework: structure, limitations, prospects. *Theories of the policy process* ed Sabatier, P.A. Westview Press, Boulder, Colo.
- Zaller, J. (1992) *The nature and origins of mass opinion*. Cambridge University Press, Cambridge [England], New York, NY, USA.
- Zucker, H.G. (1978) The variable nature of new media influence. *Communication Yearbook 2* ed Ruben, B.D. Transaction Books, New Brunswick, NJ.

2 Non-implementation of road pricing policy in the Netherlands: An application of the ‘Advocacy Coalition Framework’

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2.1 Introduction

Road pricing policies have been debated in the political agenda in several countries but only a limited number of road pricing proposals have so far been implemented (see Vonk Noordegraaf et al., 2014). Various policy actors, individuals (e.g. experts) or representatives of various organizations (e.g. political parties, interest groups) who have expertise in road pricing policies, seek to influence road pricing policy processes. A review of the literature on road pricing implementation cases shows that the level of political support, determined by the degree of (dis-) approval of the policy by these policy actors, is the main determinant of how the policy process progresses and the eventual policy outcome: implementation or non-implementation (Vank Noordegraaf et al., 2014). This argument is generally justified by illustrating, in a narrative manner, the opposition or support of one (or a few) specific policy actors or by highlighting (dis) agreements between a few actors on a specific occasion during the policy process (e.g. Isaksson and Richardson, 2009; Rye et al., 2008). However, policy outcomes are the consequences of a series of events that occur over a long period of time (Sabatier and Weible, 2007; True et al., 2007) and involve a diverse set of policy actors in interaction (Adam and Kriesi, 2007; Sabatier and Weible, 2007; Zahariadis, 2007). To our knowledge, no study so far has dug into the policy process of road pricing policies by empirically exploring the policy positions of all the major policy actors and their conflicts and consensus over time to understand how they play a role in the policy process and policy outcome: implementation or non-implementation.

This study aims to understand how conflict and consensus among policy actors might result in (non-) implementation of road pricing and to explore the factors which affect conflict and consensus among policy actors and contribute to (non-) implementation. To achieve this aim we analyzed the Dutch road pricing policy process. In the Netherlands, cars are taxed independently of the level of car use, although the levies on fuel are relatively high. The idea of road pricing started to appear on the political agenda in 1977 when it was mentioned in a national policy document (van der Sar and Baggen, 2005). However, the intense debate arose in the early 90's. Since 1994 two main road pricing proposals were discussed, "Rekeningrijden" and "Kilometerheffing", although neither was implemented. Rekeningrijden was a proposal to charge road users during peak hours on ring roads surrounding the four big Dutch cities (Den Haag, Rotterdam, Utrecht, and Amsterdam) and was discussed between 1994 and 2001. Kilometerheffing was proposed to replace both (at least: part of) the fixed taxes on new cars and the annual taxes with a per kilometer charge dependent on vehicle type (based on environmental impacts), time and place. This proposal was discussed between 2001 and 2010 and the charge would have applied to the country's entire road network. This long policy process (1994 – 2010) was not only marked by intense (sometimes moderate) levels of conflict but also with some instances of consensus among major policy actors. Seidel et al. (2004) argued that the opposition of some policy actors in this policy process played an important role in the failure of the introduction of road pricing policies in the Netherlands.

To achieve our research aims, this study used the Advocacy Coalition Framework (ACF), developed by Sabatier and Jenkins-Smith, as a theoretical lens. The ACF aims to understand policy stability (e.g. non-implementation of road pricing policy) and change (e.g. implementation of road pricing policy) by analyzing conflicts and consensus among multiple policy actors in the policy process over a period of a decade or longer (Sabatier and Weible, 2007). Within the field of policy research there are a few alternatives to the ACF which aim to understand policy processes (e.g. the institutional analysis and development framework (IAD) or punctuated equilibrium theory) (see Sabatier and Weible, 2014). An overview of studies of policy research shows that all these theories or frameworks share a similar scope, similar concepts and mechanisms as the ACF (Schlager, 2007). This study does not aim to systematically compare all these alternative theories. The ACF was chosen for this study for the following reasons: Firstly, the ACF incorporates the most components of policy processes explained by the other theories (Schlager, 2007). Comparing all these theories, Schlager (2007, p. 317) concluded that "the family resemblance among the policy process theories and comparative policy models has become more pronounced, to the point where they probably belong under a single roof, and that roof is the currently entitled advocacy coalition framework.". Secondly, several scholars suggest that the ACF (as well as IAD) is the most elaborate and/or useful theoretical lens to understand policy processes (e.g. Burton, 2006; Schlager, 2007; Sobeck, 2003). Finally, the ACF is considered particularly suitable for understanding policy processes in policy areas which are "characterized by substantial political conflict and high technological complexity" (Nohrstedt, 2005, p. 2). This makes the ACF particularly attractive (compared with other theories) for this study since Dutch road pricing policy process has been marked by "political conflicts" and road pricing policies involve "complex technological issues".

In section 2.2 we outline the ACF and, based on its structure, pose our research questions. Section 2.3 links the Dutch road pricing policy and its policy process with the main concepts (and mechanisms) suggested by the ACF. Section 2.4 presents the methodological aspects of the study. Section 2.5 presents our results. Finally, section 2.6 finishes with our conclusions.

2.2 The advocacy coalition framework and research questions

We firstly elaborate on how the ACF conceptualizes policy actors, their interactions and the requirements for policy change (and stability), and will then pose our research questions accordingly. The ACF assumes that a policy making process occurs in a “*policy subsystem* which consists of various policy actors who are actively concerned with an issue (e.g. agriculture, road pricing) and regularly seek to influence public policy in that domain” (Sabatier, 1998, p. 99). Policy actors with shared beliefs are grouped into one or more advocacy coalitions. Policy actors within an advocacy coalition coordinate their strategy and policy activity to translate their beliefs into policies in practice (Sabatier, 2014).

The ACF conceptualizes the belief system of policy actors into a three-layer hierarchical structure, classified from broadest to narrowest as: *deep core beliefs*, *policy core beliefs* and *secondary beliefs*. The broader the belief layer, the more resistant it is to change. *Deep core beliefs* are the fundamental values of policy actors such as the traditional left/right cleavage and the relative priority of the welfare of different social groups. This broadest layer shapes the beliefs of policy actors in all policy subsystems. *Policy core beliefs* and *secondary beliefs* involve a specific policy and similarities in these beliefs lead to the formation of advocacy coalitions in a policy subsystem. *Policy core beliefs*, the second layer, are the attitudes of policy actors towards the main policy components in a specific policy subsystem. For instance, the general idea of charging road users for the use of the road network and the seriousness of congestion and the environmental problems arising from road transport can be considered as policy core beliefs in the road pricing policy subsystem. Finally the ACF calls the lowest layer of the belief system *secondary beliefs*. They involve practical matters, rather than beliefs, related to the design and implementation of policy such as budgetary allocations, administrative rules or information about the effectiveness of the policy implementation (Sabatier and Weible, 2007). We therefore refer to this layer as the *secondary aspects* of the policy in our study.

“Within a subsystem, an advocacy coalition is said to be “dominant” when the beliefs it advocates have been translated into real policies” whereas others are considered as “minority” coalitions (Moyson, 2014, p. 58). “Most policy subsystems have one dominant coalition and one or more minority coalitions”⁴ (Sabatier and Weible, 2007, p. 204; Sabatier and Weible, 2014). The distribution of political resources among coalitions in a given subsystem is indicative of the dominance of advocacy coalitions in this subsystem. Political resources are sources of political power (e.g. legal decision making authority, financial resources, public opinion), which can be employed by policy actors to achieve their policy objectives (Sewell, 2005). “The greater a coalition's relative power, the more likely that it will dominate the subsystem and ensure that policy outcomes are consistent with its belief system and policy objectives.” (Sewell, 2005, p. 75). Some political resources are more important to coalitions than others in gaining influence in the policy process (Sabatier and Weible, 2014; Sewell, 2005; Nohrstedt, 2011). So far, no study has hierarchically arranged all political resources, but it is agreed that the legal decision making authority is the most important resource because having a coalition member with this resource provides the coalition with veto power for policy change in the policy process. Thus, an important feature of a dominant coalition is that it has more of its members holding legal decision-making authority than other coalitions (Sabatier and Weible, 2014; Weible, 2007).

⁴ We note that some studies observe the existence of two competing advocacy coalitions for a period of time (Sabatier, 2014). For instance, Leifeld (2013) shows bipolarization of one dominant advocacy coalition in advance of policy change.

The ACF hypothesizes that major policy change, for instance a policy decision to implement a road pricing policy, “is unlikely as long as the same advocacy coalition remains in power.” (Sabatier and Weible, 2014, p. 202). According to the ACF, a major policy change has two precursors: a change in the beliefs of a dominant coalition or changes in the distribution of political resources and the available policy venues⁵. Such changes are brought about by external and internal shocks and policy-oriented learning (Sabatier and Weible, 2014; Weible, 2007)⁶. External shocks are events which originate from outside the policy subsystem such as changes in governing coalitions after elections or policy decisions from other subsystems. Such events induce major policy change in the subsystem in two ways: First, they may redistribute political resources or open (or close) decision-making venues. Second, they may change the policy core beliefs of the dominant advocacy coalition. Internal shocks occur within the subsystem (e.g. disasters) and highlight the failures of policies in practice. These events may change the beliefs by confirming the belief system of minority coalitions and increasing doubt about the effectiveness of the policies of the dominant coalition (Sabatier and Weible, 2014). Another pathway to policy change is policy-oriented learning, which is defined as “relatively enduring alterations of thought or behavioral intentions that result from experience and/or new information and that are concerned with the attainment or revision of policy objectives” (Sabatier and Jenkins-Smith, 1993, p. 123). Belief changes through policy-oriented learning are likely to happen gradually over a long period of time and usually only lead to changes in the beliefs about secondary aspects of the policy. In addition, policy-oriented learning may change policy core beliefs if it is associated with an external or internal shock (Nohrstedt and Weible, 2010; Sabatier and Weible, 2014). The ACF hypothesizes that the existence of a professional discussion forum in which major policy actors participate and the availability of scientific and technical information facilitate belief change through policy-oriented learning (Sabatier and Weible, 2014). However, it is important to note that the ACF hypothesizes that external and internal shocks, and policy-oriented learning, “or some combination thereof are necessary, but not sufficient, sources of major policy change” (Sabatier and Weible, 2014), p. 203). In other words, the ACF admits that such events increase the likelihood of major policy change, but do not always result in major policy change. However, intervening steps between major policy change and such external and internal shocks are not well established in the ACF (Weible et al., 2009). The process of policy change actually remain a “black box” in the ACF, as stated by Leifeld (2013, p. 171). Sabatier and Weible (2014, p. 202) state that some “enabling factors” should emerge after these shocks for major policy change to appear in a subsystem: the heightened political attention (and agenda change), the redistribution of political resources and the exploitation of shocks and political resources by members of pro-road pricing coalition to advance their policy objectives (see also Sotirov and Memmler, 2012; Nohrstedt, 2010; Weible et al., 2009).

In addition to these dynamic factors, major policy change is affected by relatively stable system parameters, which are “the basic social, cultural, economic, physical, and institutional structures that embed a policy subsystem” (Sabatier and Weible, 2014, p. 193). These system parameters are usually stable over decades and rarely trigger major policy change as external shocks do, but they affect how the policy subsystem operates and constrain (or enhance) the resources available to policy actors (Sabatier and Weible, 2007; Nohrstedt, 2011; Nohrstedt, 2010).

⁵ Policy venues are decision settings through which policy actors can influence policy making to advance their policy objectives (Nohrstedt 2011). There might be multiple venues available for policy actors in a subsystem, for instance, opportunity to take the process to the court, to attend parliamentary debates or to hold a referendum.

⁶ Another pathway to major policy change is “negotiated agreement” (See Sabatier, 2014). We do not discuss it here since it is not relevant to our analysis.

Based on the framework explained above, we formulate the following questions to gauge policy stability and the link between conflict and consensus among policy actors and policy stability in the Dutch road pricing policy subsystem:

RQ-1: How, and to what extent, did external and internal shocks change the structure of advocacy coalitions (coalition membership, belief system and resources) without, at the same time, inducing major policy change in the Dutch road pricing subsystem?

RQ-2: To what extent did scientific and technical information facilitate policy oriented learning and affect the policy beliefs of policy actors in the Dutch road pricing policy process?

RQ-3: To what extent did a professional discussion forum facilitate policy oriented learning and affect the policy beliefs of policy actors in the Dutch road pricing policy process?

RQ-4: What was the role of relatively stable system parameters in policy stability in the Dutch road pricing subsystem?

2.3 The ACF and the Dutch road pricing policy process

Before explaining the methodological aspects of our study, we elaborate firstly on the link between the main concepts of the ACF and the Dutch road pricing policy process and how we operationalized these concepts. In section 2.3.1 the stable system parameters are described and how they shaped both the policy actors and the political resources available in the subsystem as well their influence on the functioning of the subsystem. Section 2.3.2 sets out the method used for operationalizing the belief system and coordination patterns of policy actors. Finally, external and internal shocks, the release of scientific/technical information and the establishment of a professional discussion forum were all specific occasions in the Dutch road pricing policy process which also guided us when identifying our research period. These four concepts are therefore discussed concurrently in section 2.3.3 together with other important events during the policy process.

2.3.1 Relatively stable system parameters

The ACF defines three types of stable system parameters: “(I) Basic attributes of the problem area and distribution of natural resources (II) Basic constitutional structure of political system (III) Fundamental sociocultural values and social structure” (Sabatier and Weible, 2014, p.193,194). The first one (I) relates to physical conditions of subsystem. Our analysis excludes this parameter and focuses on the latter two because of the fact that there were no specific physical circumstances in the Netherlands which may affect policy making in road pricing policy subsystem.

System parameter II, the basic constitutional framework and political system/culture of a country, determines the policy actors, political resources, available decision-making venues, the degree of consensus required for major policy change in the policy subsystem and how the policy subsystem operates, thereby being a critical factor in determining dominant advocacy coalition and major policy change (Sabatier and Weible, 2007; Sewell, 2005). The subject of this study, the Netherlands, has a multi-party parliamentary system and the most evident feature of the political system is coalition governments including at least two or three political parties originating from different social and/or religious roots. The foundation of a new government requires many compromises by political parties in different policy areas which, by means of a coalition agreement, become officially binding for the involved political parties and ministers. The Dutch political system is characterized by a high degree of corporatism

and consensus, involving negotiations between government and interest groups for policy decisions (Andeweg and Irwin, 2009). Consensual systems are known for their low capacity for innovation (Fischer, 2014). The Netherlands, where the “policy making process moves slowly”, is not an exception and this feature of the policy making system generally “reduces the space for radical departures from existing policies” in all policy domains (Andeweg and Irwin 2009, p. 223, 224).

The Netherlands has a highly centralized political system and the introduction of road pricing policies requires the approval of related legislation by the national parliament. Local governments have autonomy in only a limited number of issues, depending on the authorization of the central government (Andeweg and Irwin, 2009). In the road pricing policy subsystem local governments have no autonomy and are not authorized to introduce road pricing policy in their area of jurisdiction (Smaal, 2012). Furthermore, the referendum, a critical policy venue in some democracies (e.g. Sweden, the UK), is not common practice in Dutch policy making (Andeweg and Irwin, 2009). A consultative referendum law was only recently adopted, in April 2014 (Zandstra 2014).

Five main groups of policy actors exist in the Dutch policy making system in general: ministers representing the government, political parties in the government, political parties in the opposition, local governments and interest groups. Section 2.4.2 presents the policy actors from these groups which operate in the Dutch road pricing policy subsystem and the selection procedure for these subsystem actors. All political parties, ministers and local government possess a formal decision making authority, but to a varying extent. In this study, we distinguish two levels of decision making authority. The primary level, referred to as “veto power” (VP) from now on, ascribes such power to a policy actor that his/her disagreement or concerns regarding policy content can block or delay the policy process even when all other policy actors support the policy. In this study, ministries and the political parties forming the coalition government are considered to have veto power as road pricing policy proposals must be enacted by central government and the opposition or disagreement of one coalition party or minister regarding the policy content could block or at least delay the policy process. We consider the opposition parties in parliament and local governments to have secondary level power, referred to as “decision making authority” (D) from now on, because of the fact that policy decisions can still be taken despite their disapproval. In addition, financial resources, information, skillful leadership and public opinion are also regarded as resources available to policy actors (Sabatier and Weible, 2007; Sewell, 2005). As these resources, in particular public opinion, are very difficult to operationalize for each policy actor (Sewell, 2005; Sabatier and Weible, 2007), they are only discussed qualitatively (whenever they are used by policy actors in the policy process) by referring to the literature, news articles and policy documents when presenting our results.

System parameter III that affects policy stability or change in the subsystem is a fundamental sociocultural value in Dutch society. The main sociocultural values of the Dutch society relevant for the road pricing policy subsystem are car dependency and the notion that car use is an indispensable part of life and individual freedom, which has gradually developed with increasing car ownership levels since the 1960's and is today deeply rooted in Dutch society (Smaal, 2012). Thus, road pricing policies which aim to intervene in the on-going relationship between people and cars by restricting car use or at least changing car use patterns have a high potential to come under the spotlight in the public sphere. In this study this generates two sources of influence on the road pricing policy subsystem and policy process. Firstly, this makes road pricing policies a very sensitive issue for political actors who have electoral concerns. This is because the cost of pricing implementation (road charge) is much more

visible to car users (voters) than the benefits of the policy (e.g. reduced congestion) (Schneider and Weck-Hannemann, 2005). Political actors might therefore hesitate to promote such policies (with visible costs) which receive so much public attention. In addition, public opinion becomes an important political resource for all policy actors especially when they want to change the course of the policy process because public attention, in other words the voter's attention, is easily attracted to policy process.

2.3.2 Belief system and coordination patterns of policy actors

There are two main features of an advocacy coalition: "shared beliefs" and "coordinated activities" of coalition members (Sabatier and Weible, 2014). How actors' belief systems were operationalized and policy actors' coordination patterns were identified is explained below.

Members of advocacy coalitions are identified based on the similarity of their policy core beliefs. Policy core beliefs consist of 11 components such as "the priority of different policy-related values, whose welfare counts, relative authority of governments and markets, the proper roles of the general public, elected officials, civil servants, experts, and the relative seriousness and causes of policy problems in the subsystem as a whole" and policy core policy preferences (Sabatier and Weible, 2007, p.195). Policy core policy preferences are specific policy instruments or proposals which "are broad in scope (affecting virtually all members of the subsystem), involve very salient beliefs, and have been the source of long-term conflict" (Sabatier, 1998, p. 117) and "the stickiest glue that binds coalitions together" (Sabatier and Weible, 2007, p. 195). Policy core policy preferences were operationalized to identify advocacy coalitions in the Dutch road pricing subsystem, following Leifeld (2013). Two policy proposals, Rekeningrijden and Kilometerheffing, are considered as policy core policy preferences. These proposals became the main source of cleavage among policy actors in the Dutch road pricing policy subsystem throughout the policy process. The policy debate developed mostly around these two proposals such that the other components of policy core beliefs (e.g. charging road users for the use of the road network) occupied a negligible place in the debate⁷. Furthermore, secondary aspects of the policy were used to outline belief compatibility within coalitions. Six *secondary aspects* of the policy were distinguished and are listed below. Around half of the actor statements in our data could be classified under these issues, the other half directly referred to Kilometerheffing or Rekeningrijden with no reference to any *secondary aspects* (see section 2.4 for details of coding procedure).

Effectiveness: The extent to which Rekeningrijden or Kilometerheffing may alleviate congestion and environmental problems such as CO₂ emissions, air quality and noise, and the extent to which road pricing lowers car use and improves accessibility by reducing congestion levels.

Household welfare: The extent to which (some) households (e.g. drivers/auto owners, drivers with a particular type of vehicle, non-drivers) are better or worse off after the introduction of Rekeningrijden or Kilometerheffing.

Price variation by time, place or vehicle type: The idea of price differentiation according to time, place or vehicle type.

Technical adequacy of system: The extent to which the technical system (e.g. toll ports, gps system) can work properly and does not violate the privacy of car users.

⁷ Only less than 0.05% of all arguments used by policy actors were involved with other components of policy core beliefs (see section 2.4 for details of coding procedure).

Revenue use: The extent to which revenue from the system should be allocated to the transport system (e.g. via earmarking budgets to road infrastructure, public transport, or to compensate drivers by reducing existing road taxes).

Cost of the system: The financial cost of the system including operation, installation and maintenance costs.

Besides belief similarity, the second feature of an advocacy coalition is coordination among its members. “The level of coordination within a coalition varies from “strong” (e.g., developing a common plan and implementing that plan) to “weak” (e.g., monitoring ally activities and responding with complementary strategies)” (Schlager, 2007, p. 307). According to these definitions, in this study, the only strong coordination in the Dutch road pricing subsystem is the inclusion of Rekeningrijden or Kilometerheffing in coalition agreements. The contracting political parties involved in the coalition officially agreed to implement road pricing policies within a given government period. “Strong coordination”, as defined by the ACF, was therefore established. Two sources of data were employed to gain insight into weak coordination patterns within coalitions. Firstly, the level of cooperation between the political parties when initiating motions⁸ in the Dutch parliament was examined, which included requesting the government to introduce a road pricing policy (Rekeningrijden or Kilometerheffing), starting the required work (e.g. trial, prepare implementation plan/schedule) for its implementation, or stopping all on-going preparations serving to that end. The voting behavior of political parties (voting for or against) on these motions was also examined. Accordingly, we consider that weak coordination exists among political parties which jointly initiate motions and vote for these motions, and also among political parties which votes against these motions. This method reveals the coordination patterns of the political parties only. For other policy actors, we searched news articles in our sample for joint statements of policy actors or actor statements which explicitly endorsed the actions of other policy actors.⁹

2.3.3 The analysis period, external and internal shocks, scientific/technical information and professional discussion forum

Although road pricing policy first appeared on the political agenda in 1977 when the idea of pricing was mentioned in a national policy document (van der Sar and Baggen, 2005), our analysis covers 16 years of policy process between 1994 and 2010 because of three reasons. Firstly, before 1994 the policy subsystem was not mature according to the ACF¹⁰. As road pricing policy was a new issue in the transport policy debate policy actors did not require specialization in the policy area to manage the debate and formulate policies. The policy debate was chaotic, with a diverse set of pricing forms and policy objectives put on the agenda by ministries and political parties within a short period of time (Smaal, 2012), implying that policy beliefs were in the process of being formed. The spokesman of one political party (D66) for the road pricing policy reflected the ambiguity of the policy for policy actors in this very early stage of policy process: “an instrument which is yet to be

⁸ In the Netherlands, members of parliament may introduce a motion requesting the government to take, or refrain from, certain actions. Motions are voted on in parliament and may be adopted or rejected by a majority vote (Andeweg and Irwin, 2009; Laver 1994).

⁹ One alternative method to identify coordination patterns among policy actors could be to survey policy actors to learn about their coordination activities (see Elgin and Weible (2013) for more information about this method).

¹⁰ “Policy subsystem, as the unit of analysis, must be stable over the prolonged period (10–20 years) over which policy change is to be studied. Denying the stability of a subsystem would undermine the possibility to define, and distinguish between, the three layers of relevant policy belief systems” (Fischer et al., 2007, p. 208).

invented” (Smaal, 2012, p. 402). Secondly, the four ACF concepts related to our research questions (*external and internal shocks, scientific/technical information and professional discussion forum*) are all connected to specific policy events occurring in the policy process. We therefore ensured that at least one policy event related to each concept occurred in the selected research period. Finally, the ACF stipulates that the research period is at least 10 years. Table 2-1 presents the changes in government (elections, the duration of the governments and governing political parties) and major policy events related to road pricing policy during these 16 years. Below we explain the link between these events and four ACF concepts related to our research questions.

The ACF proposes that *external shocks* include changes in governing coalitions, changes in socio economic conditions, public opinion and policy decisions from other subsystems. In the road pricing subsystem in the Netherlands, the only events which can be regarded as external shocks were changes in governing coalitions. Table 2-1 shows that there were 6 different governments in the 16 years. However, as the government periods 3 and 5 were less than 1 year long and no progress was made in road pricing policy in these brief periods we consider only government periods 1, 2, 4 and 6 as external shocks.

Internal shocks are events such as disasters, which “occur in the policy subsystem and highlight failures in current subsystem practices” (Weible et al., 2009, p. 124). There was only one such event in the Dutch road pricing policy process: a truck accident took place in October 1994 in the Randstad (the most densely populated and commercial region in the Netherlands including the four biggest Dutch cities), causing congestion for the whole day (see policy event 1 in Table 2-1) (Raad voor Verkeer en Waterstaat, 2005).

Two important policy events allow us to analyze the effect of *scientific/technical information* and *professional discussion forum* on the policy positions of policy actors. The first one, related to *scientific/technical information*, is the release of the Mobimiles report (see policy event 6 in Table 2-1). The core of the report was that it was organizationally and technically possible to implement a nationwide road charging system (Kilometerheffing). The second one, related to *professional discussion forum*, is the publication of the Nouwen committee’s advice (see policy event 7 in Table 2-1). In this committee major policy actors discussed possibilities for implementing a form of road pricing to deal with mobility problems and came out in support of the implementation of Kilometerheffing (Raad voor Verkeer en Waterstaat, 2005).

Table 2-1: Government periods and major policy events between 1994 and 2010

Government periods	Policy events		
	No	Date	
<i>Period 1</i> <i>Election:</i> 03 May 1994 <i>Duration:</i> Aug 1994 - Aug 1998 (\approx 4 years) <i>Trans. Min:</i> Jorritsma (VVD) <i>Coalition parties:</i> PvdA/VVD/D66	1	08.11.1994	Following the truck accident and the parliamentary debate about Rekeningrijden, the decision was taken to implement Rekeningrijden after 2000.
	2	23.08.1996	Rekeningrijden was included in the National transport policy document (Nota Samen Werken aan Bereikbaarheid) as an instrument to mitigate congestion.
<i>Period 2</i> <i>Election:</i> 06 May 1998 <i>Duration:</i> Aug 1998 - Jul 2002 (\approx 4 years) <i>Trans. Min:</i> Netelenbos (PvdA) <i>Coalition parties:</i> PvdA/VVD/D66	3	18.07.1998	Rekeningrijden was included in the coalition government agreement.
	4	19.01.1999	The car lobby (ANWB) started a public campaign against Rekeningrijden.
	5	19.05.2000	Rekeningrijden was included in National transport policy document (BOR).
	6	10.04.2001	Following the Mobimiles report on technological possibilities for Kilometerheffing, Rekeningrijden was removed from the political agenda.
<i>Period 3</i> <i>Election:</i> 15 May 2002 <i>Duration:</i> Jul 2002 - May 2003 (<1 year) <i>Trans. Min:</i> de Boer (LPF) <i>Coalition parties:</i> CDA/LPF/VVD			No progress
<i>Period 4</i> <i>Election:</i> 22 Jan 2003 <i>Duration:</i> May 2003 - Jul 2006 (\approx 3 years) <i>Trans. Min:</i> Peijs (CDA) <i>Coalition parties:</i> CDA/VVD/D66	7	30.04.2005	Major Dutch policy actors (Nouwen Committee, established by the transport ministry) agreed on the implementation of Kilometerheffing.
	8	08.09.2005	National transport policy document (Nota Mobiliteit) was announced, which delayed implementation of Kilometerheffing.
<i>Period 5</i> <i>Duration:</i> Jul 2006 - Feb 2007 (<1 year) <i>Trans. Min:</i> Peijs (CDA) <i>Coalition parties:</i> CDA/VVD			No progress
<i>Period 6</i> <i>Election:</i> 22 Nov 2006 <i>Duration:</i> Feb 2007 - Oct 2010 (\approx 4 years) <i>Trans. Min:</i> Eurlings (CDA) <i>Coalition parties:</i> CDA/PvdA/CU	9	05.02.2007	Kilometerheffing was included in the coalition government agreement.
	10	13.11.2009	Kilometerheffing, as a final proposal, was sent to parliament.
	11	18.03.2010	Kilometerheffing was removed from the political agenda.

CDA: Christian Democratic Appeal

CU: Christian Union

PvdA: Labor Party

VVD: Liberal Party

LPF: Pim Fortuyn's Party

2.4 Data collection and content analysis

This study uses two sources of data: The first one is parliamentary documents (parliamentary motions and their voting results). They were selected from the free-access digital database on the website of the Dutch parliament (<http://www.tweedekamer.nl/>). The second one is news articles published during our research period in five leading Dutch national newspapers: De Telegraaf, Algemeen Dagblad, de Volkskrant, NRC Handelsblad and Trouw. We considered a full range of national newspapers with different policy position regarding road pricing policies and the inclination to cover some actors more than others (see Ardiç et al., 2013). Our data thus includes all relevant positions and policy actors in the subsystem. We conducted content analysis on news articles to trace four variables: *policy actors*, *policy core policy preferences* (Rekeningrijden and Kilometerheffing), *secondary aspects* and eventually *policy position of policy actors* regarding *policy core policy preferences* and *secondary aspects*. In order to answer our research questions these variables need to be observed at multiple time points during the policy process. We sampled news articles during 11 policy events (see Table 2-1), spanning four government periods. During these major policy events, the policy debate was triggered and in parallel to this, attracted more media attention and statements by policy actors which were reported in newspapers. For each policy event, a period of two weeks, comprising the week prior and following the event, was analyzed. Using a search string comprising all the name variations used for road pricing (Rekeningrijden and Kilometerheffing in the Dutch language) 427 news articles were selected from the digital newspaper archive LexisNexis.

Paragraphs of news articles were taken as the unit of analysis. The names of all the policy actors in a paragraph were assigned to *policy actor*. All *secondary aspects* (e.g. technical adequacy) referred to by each *policy actor* in a paragraph were determined. The *policy core policy preference* indicated which of the two policy proposals (Rekeningrijden or Kilometerheffing) each *secondary aspect* referred to. Each paragraph was evaluated individually, but *policy actor & secondary aspect* pairs present in several paragraphs were recorded only once per news article. *Actor tone* was determined for each *policy actor & secondary aspect pair* in a news article after reading all the paragraphs in the news article which included this *policy actor & secondary aspect pair*. *Actor tone* indicates the position of a *policy actor* on a *secondary aspect* and might be positive, negative, mixed or neutral. In some cases, *policy actors* stated only their general position for a *policy core policy preference* (Rekeningrijden or Kilometerheffing proposals) without any reference to a *secondary aspect*. For instance, one *policy actor* stated only that s/he was (not) in favor of the introduction of Rekeningrijden or Kilometerheffing without any further deliberation. In such cases, *actor tone* was recorded as a position in their *policy core policy preference*. We applied an inter-coder reliability test after completing coding of all the news articles. The results were at a satisfactory level to proceed with data analysis (see Ardiç et al., 2013) for details of reliability tests).

2.4.1 The calculation of policy positions

After the coding process was completed, we calculated three types of policy position for each policy actor per policy event and government period: *policy position* regarding *secondary aspects* (e.g. technical adequacy), *general* and *total policy positions* regarding *policy core policy preferences* (Rekeningrijden or Kilometerheffing). All *policy position* variables range from 1 (very positive) to -1 (very negative) and were calculated by the method used by Leifeld and Haunss (2010) and Koopmans and Statham (1999).

In this method, for all three types of policy position variables, the number of records whose *actor tone* is negative was subtracted from the number of positive ones for each actor. After that, the remainder was divided by the total number of records for this actor. To calculate *policy position* regarding a specific *secondary aspect* (e.g. technical adequacy), we only consider records of this actor related to this specific *secondary aspect*. For instance, if one actor is reported 5 times as being negative (*actor tone*) regarding the technical adequacy of Kilometerheffing, 3 times positive and 2 times mixed, then the *policy position* of this actor regarding the technical adequacy of Kilometerheffing is $-0.2 ((3 - 5) / 10)$.

To calculate the *general policy position* regarding Rekeningrijden or Kilometerheffing, we included records in which the *actor tone* indicated the *policy position* regarding Rekeningrijden or Kilometerheffing without any reference to a specific *secondary aspect* (see section 2.4.2).

Finally, the *total policy position* regarding Rekeningrijden or Kilometerheffing takes into account all the records related to all six *secondary aspects*, and also records the *actor tone* in which the *policy position* regarding Rekeningrijden or Kilometerheffing was made without any reference to a specific *secondary aspect*.

If the value of a *policy position* variable (*policy position* related to *secondary aspects*, *general policy position* or *total policy position*) is equal to 0, this might indicate different positions. Firstly, it is possible that all the statements of an actor had a neutral/mixed tone. The second reason could be that the actor had an equal number of positive and negative statements. Thirdly, it could mean that the actor did not make any statement related to the respective *secondary aspect*, Rekeningrijden or Kilometerheffing.

2.4.2 The identification of policy actors in the road pricing policy subsystem

According to the ACF, policy actors in a subsystem are individuals (e.g. experts) or representatives of various organizations (e.g. political parties, interest groups) who have expertise in a given policy area and “regularly seek to influence policy within a policy subsystem” (Sabatier and Weible, 2007, p. 192; Sabatier and Weible, 2014). We therefore identified policy actors who are frequently mentioned over time in the news articles in our sample. We rather arbitrarily assumed that policy actors who appeared in more than three policy events were frequently mentioned policy actors and thus members of the Dutch road pricing policy subsystem. We determined 21 policy actors who met this criterion. In addition to that, five policy actors which appeared in only two policy events were also included in the subsystem actors: PVV (a political party), the local governments of The Hague and Utrecht, Roel Pieper (an expert preparing the technical report, called “Mobimiles”, for the implementation of Kilometerheffing) and the Nouwen committee (a discussion platform for road pricing policy). The reason is that these five policy actors were quite active considering the fact that they were involved with the policy for only a short period of time. PVV was established in 2005 and so only joined the policy debate at that point. Roel Pieper and the Nouwen committee were temporarily involved with the policy in 2001 and 2005 due to their assignments by the transport ministry. The Hague and Utrecht were involved with the policy particularly until 2001 since the implementation of the policy proposal on the agenda at that time, Rekeningrijden, was going to affect their regions. Table 2-2 presents all the selected policy actors in the Dutch road pricing policy subsystem and the number of statements ascribed to them for each policy event.

Table 2-2: Policy actors in the road pricing subsystem and the number of statements by policy actors

Policy actors	Policy events											Total
	1	2	3	4	5	6	7	8	9	10	11	
<i>Ministries:</i>												
Finance minister				5	8		2			13	2	30
Prime minister				6	3					2	1	12
Transport minister	30	8	2	65	66	38	15	45	8	178	38	493
<i>Local governments:</i>												
Amsterdam					1	5		2	2		2	12
The Hague					1	5		1				7
Rotterdam					4	5						9
Utrecht					2	8						10
<i>Political parties:</i>												
CDA (Christian Democratic Party)	5			4	3	2	5	8	4	12	26	69
CU (Christian Union)	4			1	1	6			4	4	2	22
D66 (Democrats 66)	11	1		1	5	4		7		1	1	31
GL (GreenLeft)	10					3		4		3	4	24
PvdA (Labour Party)	11			3	8	5	2	7	3	5	6	50
PVV (Party for Freedom)										13	3	16
SP (Socialist Party)	2									23	7	32
VVD (Liberal Party)	9			15	17	7	10	10		30	10	108
<i>Interest groups:</i>												
ANWB		1	1	76	7	11	3	8	2	29	11	149
FNV						4			4	2		10
Environmental lobbies				2	6	7	3	2		18		38
MKB-Nederland				7			3	1		2		13
RAI and Bovag								3	6	12		21
VNO-NCW				8	3	3	1	2		7	3	27
<i>Others:</i>												
Nouwen Committee							44	16				60
Roel Pieper (expert)						53	5					58

ANWB: The Royal Dutch Touring Club

FNV: Federation Dutch Labor Movement

MKB-Nederland: Dutch Federation of Small and Medium-sized Enterprises

RAI and Bovag: Manufacturers and Importers of Cars and Trucks, and Employers of Companies related to Mobility

VNO-NCW: The Confederation of Netherlands Industry and Employers

2.5 Results

2.5.1 The advocacy coalitions between 1994 and 2010

The two research questions seek to probe into the extent to which (and how) both external and internal shocks, as well as relatively stable system parameters affect the structure of advocacy coalitions (coalition membership, belief system and resources) and promote policy stability or change in the subsystem. This section therefore firstly depicts the advocacy coalitions after each election (external shock) and the truck accident in 1994 (internal shock, which also

coincides with the elections in 1994). Sections 2.5.2 and 2.5.3 then aim to answer the two research questions by elaborating on the structure of advocacy coalitions and subsystem affairs after such shocks. Below we present the advocacy coalitions identified based on the belief similarities of policy actors and discuss the coordination patterns within (and across, if any) coalition members.

Figures 2-1, 2-2, 2-3, 2-4 and 2-5 visualize pro- and anti- road pricing coalitions in separate government periods based on belief similarities (policy core policy preferences and secondary aspects). In these figures, the x-axes represent policy actors and the y-axes show the policy positions of actors regarding policy core policy preferences and secondary aspects which range from 1 (very positive) to -1 (very negative). The x-axes order policy actors according to the value of their total policy position for Rekeningrijden or Kilometerheffing (black bar on figures). The policy actor with the most positive total policy position is placed on the extreme right of the figures, while the most negative one is on the extreme left. Policy actors whose total policy position for Rekeningrijden or Kilometerheffing are above 0 are members of pro-Rekeningrijden or Kilometerheffing coalitions while those whose total policy position are below 0 are members of anti-Rekeningrijden or Kilometerheffing coalitions. The general policy positions and policy positions regarding six secondary aspects (e.g. effectiveness) are placed alongside the total policy position bars in these figures. Except in government period 2, the advocacy coalitions (pro- and anti-) in each government period involve either only Rekeningrijden (see Figure 2-1) or Kilometerheffing (see Figures 2-4 and 2-5). In government period 2, advocacy coalitions (pro- and anti-) existed for both Rekeningrijden (see Figure 2-2) and Kilometerheffing (see Figure 2-3) since both proposals were discussed together in this government period.

There is plausible evidence that policy actors with shared beliefs, placed in the same advocacy coalition as depicted in Figures 2-1, 2-2, 2-3, 2-4 and 2-5, indeed coordinate their policy activities to a large extent in the course of the policy process. Tables 2-3 and 2-4 present the coordination patterns of policy actors in government periods 1, 2, 4 and 6. Table 2-3 shows that strong coordination, which is an agreement on the implementation of road pricing policies in the coalition agreement, was established mostly among pro- road pricing coalition members. However, one should consider that in the Netherlands a government coalition agreement is the result of compromises in all policy fields. It is possible that a political party strategically agreed on the introduction of road pricing policies in this agreement for the sake of gains in other policy fields despite this position contradicting their policy beliefs about road pricing. The evidence regarding changes in policy positions because of short-term political objectives is discussed in section 2.5.2. Table 2-3 also shows that weak coordination can be observed among fellow (pro- or anti-) coalition members. Or, to put it precisely, fellow (pro- or anti-) coalition members jointly initiated motions to urge the government to introduce road pricing policies (Rekeningrijden or Kilometerheffing), or to refrain from their introduction. In addition, they supported motions initiated by their fellow members and voted against those initiated by members of a competing coalition. However, in Table 2-3 we see that in some instances members of competing coalitions cooperate by initiating joint motions or voting for or against the same motions (e.g. CDA in government period 6 and, both VVD and CDA in government period 2 (see Table 2-3). This does not indicate that policy actors sometimes coordinate¹¹ with members of a competing coalition, but that some political parties shifted

¹¹ Coordination here refers to joint or complementary policy actions of actors to achieve common policy objectives. Members of competing coalitions might interact for some other reasons, for example, functional interdependence or resource interdependence (Weible and Sabatier 2005), but this analysis does not include such interactions.

from one extreme position to another within one government period, thereby joining the opposing advocacy coalition and cooperating with its members. Whether such changes are because of belief change or short-term political objectives are discussed in section 2.5.2. Interest groups who were members of the same advocacy coalition demonstrated weak coordination by issuing joint press releases and writing joint letters to the minister, as illustrated in Table 2-4. Finally, we note that SP (in government periods 1, 2 and 4), CDA (in government period 2), CU (in government period 4), D66 (in government period 6) and FNV (in government period 6) belong to neither pro- nor anti- road pricing coalitions in terms of belief similarities (see Figures 2-1 – 2-5). For these policy actors, represented with a yellow color in Tables 2-3 and 2-4, their coalition membership is identified based on their coordination patterns (e.g., CU is considered a member of pro-Kilometerheffing coalition in government period 4).

2.5.2 External and internal shocks and policy stability/change

Figures 2-1, 2-2, 2-3, 2-4 and 2-5 show that after external and internal shocks, political resources were redistributed and policy positions changed, as suggested by the ACF. In fact, sometimes policy positions changed to such a large degree that shifts in coalition memberships were observed. As a result of these changes, in some government periods, pro-Rekeningrijden and Kilometerheffing coalitions stood alone (see Figures 2-1 and 2-3) or pro-coalitions became relatively more powerful than anti-Rekeningrijden and Kilometerheffing coalitions (at least in terms of having decision making power) (see Figures 2-2 and 2-5). However, pro-coalitions could not transfer their belief system to real policies and, therefore, policy stability was preserved throughout the research period in the subsystem. This section examines the internal subsystem affairs in each government period following external and internal shocks to shed light on how the advocacy coalition restructured after such events and how policy stability reigned in the subsystem even after plausible changes in the power balance among advocacy coalitions. Sub sections *government period 2 (1998 - 2002)* and *government period 4 (2003 - 2006)* discuss, among others, whether or how technical information and professional discussion forum facilitated policy learning respectively.

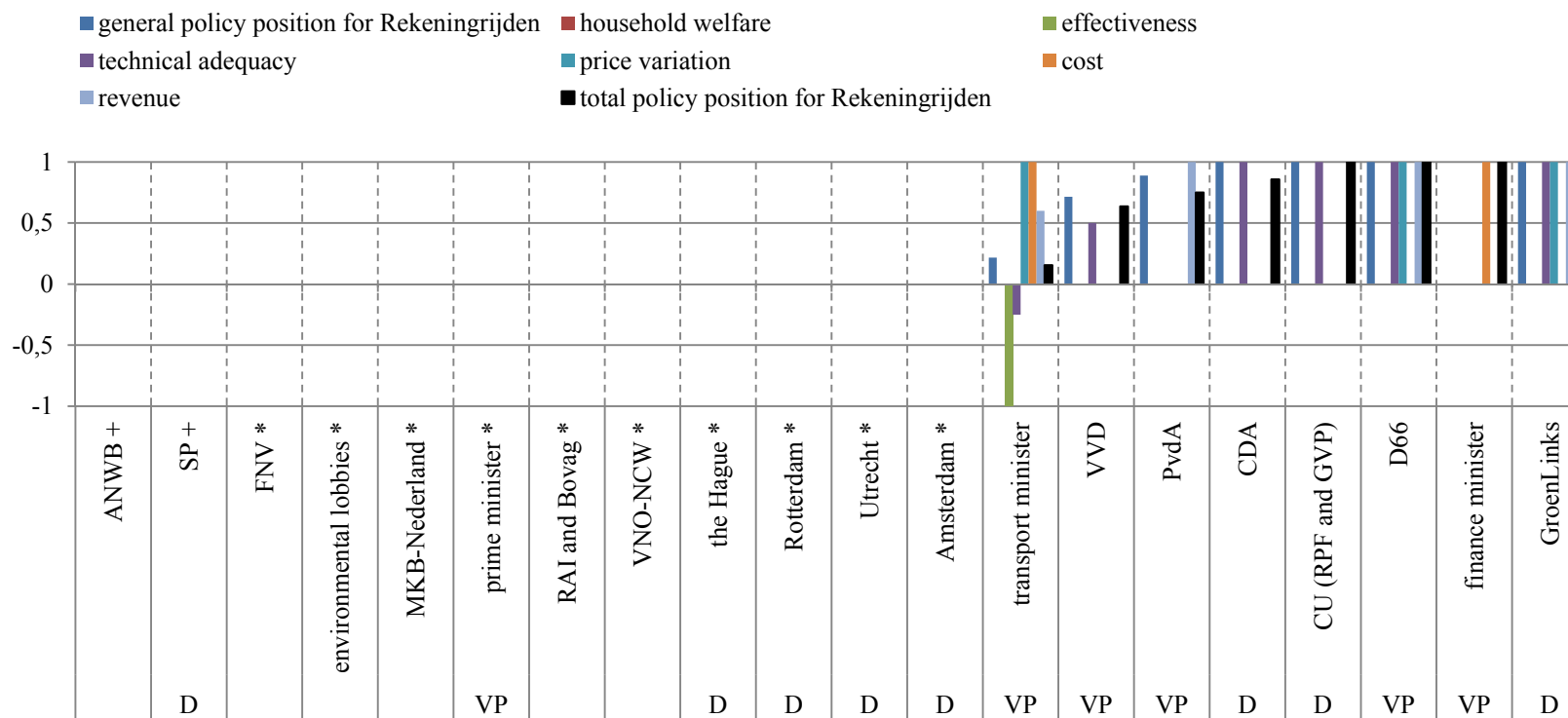


Figure 2-1: Pro- and anti- Rekeningrijden advocacy coalitions in government period 1 (1994 – 1998)

VP: veto power

D: decision making authority

+ Total policy position for Rekeningrijden is 0 since the actor tone of statements are mixed/neutral.

* Total policy position for Rekeningrijden is 0 since the actor has no statement.

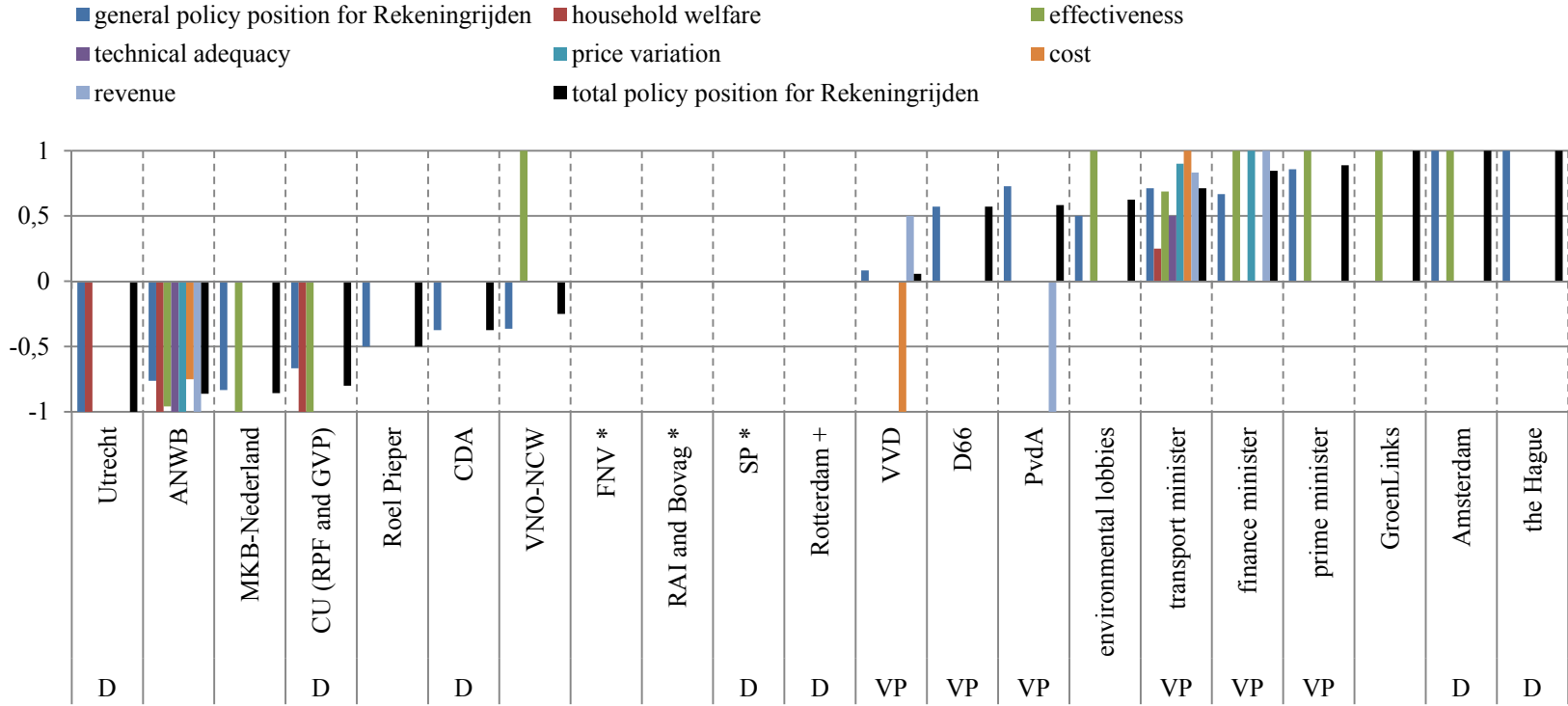


Figure 2-2: Pro- and anti- Rekeningrijden advocacy coalitions in government period 2 – before the Mobimiles report (1998 – 2002)

VP: veto power
 D: decision making authority
 + Total policy position for Rekeningrijden is 0 since the actor tone of statements are mixed/neutral.
 * Total policy position for Rekeningrijden is 0 since the actor has no statement.

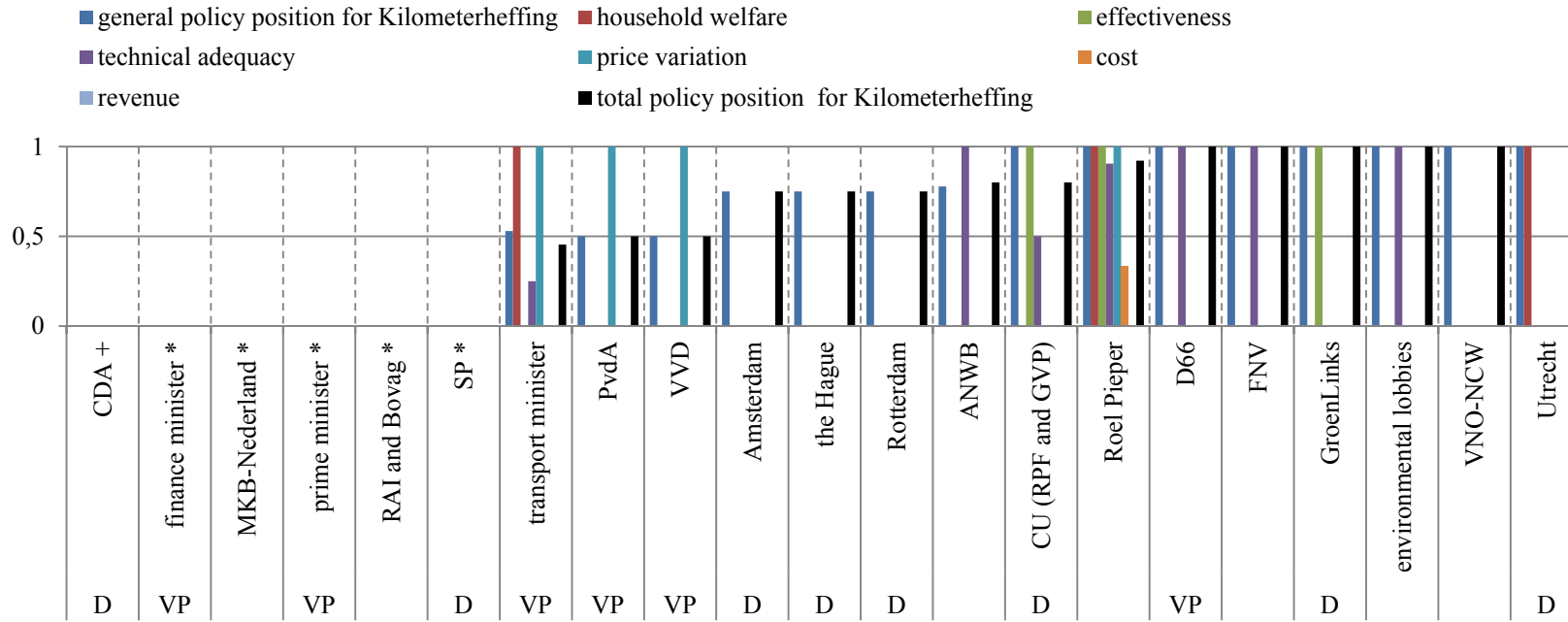


Figure 2-3: Pro- and anti- Kilometerheffing advocacy coalitions in government period 2 –after the Mobimiles report (1998 – 2002)

VP: veto power

D: decision making authority

+ Total policy position for Rekeningrijden is 0 since the actor tone of statements are mixed/neutral.

* Total policy position for Rekeningrijden is 0 since the actor has no statement.

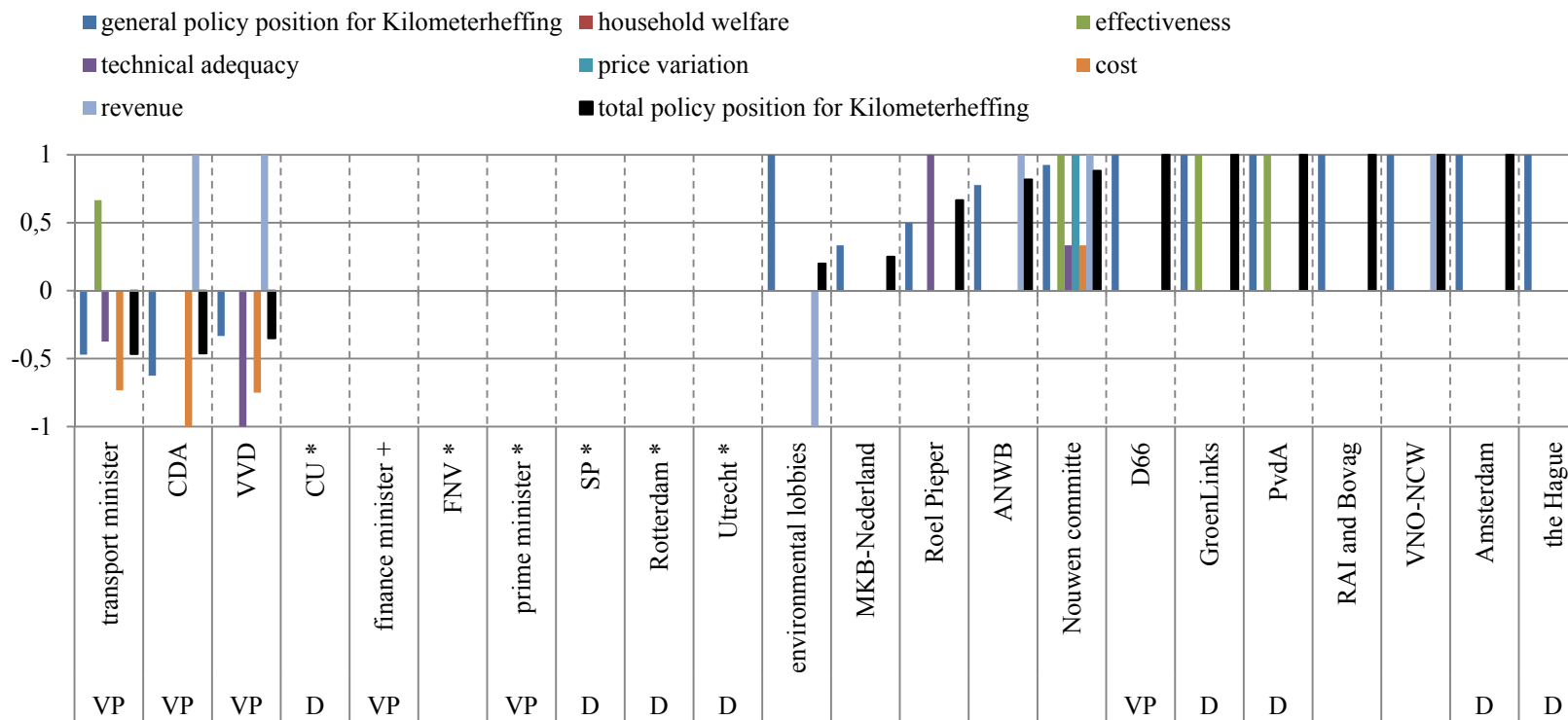


Figure 2-4: Pro- and anti- Kilometerheffing advocacy coalitions in government period 4 (2003 - 2006)

VP: veto power

D: decision making authority

+ Total policy position for Rekeningrijden is 0 since the actor tone of statements are mixed/neutral.

* Total policy position for Rekeningrijden is 0 since the actor has no statement.

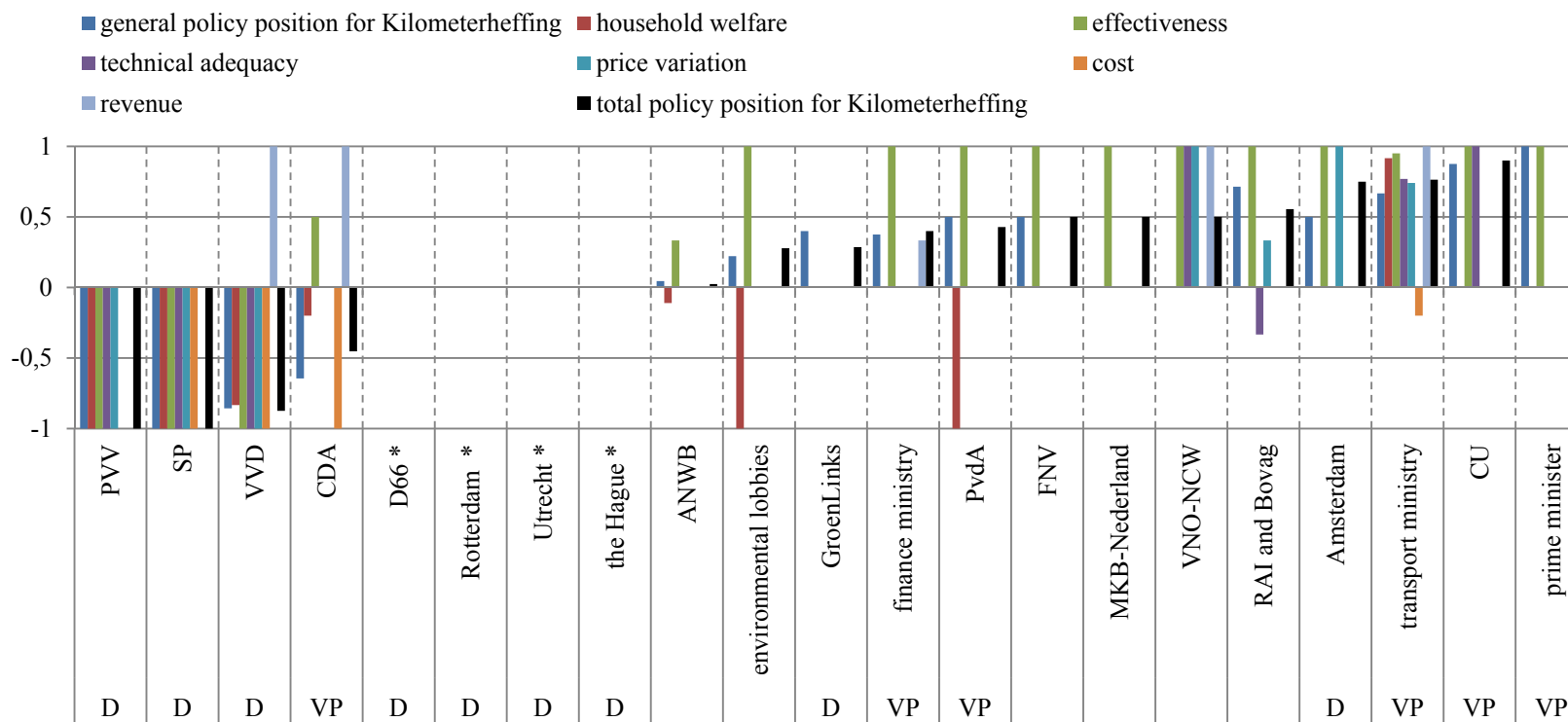


Figure 2-5: Pro- and anti- Kilometerheffing advocacy coalitions in government period 6 (2007 - 2010)

VP: veto power

D: decision making authority

* Total policy position for Rekeningrijden is 0 since the actor has no statement.

Table 2-3: Coalition agreements including Rekeningrijden (RR) / Kilometerheffing (KH) and motions for or against RR / KH

Gov. period	Coalition agree. ^{a b}	Motions		The initiator(s) ^{a b}	Content ^c	Votes for ^{a b}	Votes against ^{a b}
		Date	Number				
1		09.11.1994	23900-XII/10	PvdA/VVD/D66/CDA/CU	for RR	PvdA/GL/D66/CU/VVD/CDA	SP
2	PvdA/VVD/D66 (incl. RR)	04.11.1999	26800-XII/31	CU	for KH	GL/VVD/CU	PvdA/D66/SP/CDA
		14.12.2000	27400-XII/50	CU	for KH	PvdA/GL/CU/D66/SP	VVD/CDA
		06.02.2002	27455/49	CDA	against KH	SP/CDA	PvdA/GL/CU/D66/VVD
3		18.02.2004	29280/6	GL/PvdA	for KH	GL/PvdA/D66/CU/SP	VVD/CDA
		18.02.2004	29280/8	PvdA	for KH	GL/PvdA/D66/CU/SP	VVD/CDA
		24.11.2004	29800-XII/14	PvdA/VVD	for KH	GL/PvdA/D66/CU/SP/VVD	CDA
		15.12.2005	29644 nr.54	VVD/CDA	for KH	PvdA/D66/CU/CDA/VVD	GL/SP
4	PvdA/CU/CDA (incl. KH)	06.12.2007	31200-XII/42	VVD	against KH	PVV/VVD/SP	GL/PvdA/CU/D66/CDA
		06.12.2007	31200-XII/50	PVV	against KH	PVV/VVD/SP	GL/PvdA/CU/D66/CDA
		03.07.2008	31305/64	PVV	against KH	PVV/VVD	GL/PvdA/CU/D66/CDA/SP ^d
		26.11.2008	31305/92	PVV/VVD	against KH	PVV/VVD/SP	GL/PvdA/CU/D66/CDA
		22.04.2009	31305/131	SP/VVD	against KH	PVV/VVD/SP	GL/PvdA/CU/D66/CDA
		12.11.2009	31305/161	PVV	against KH	PVV/VVD/SP	GL/PvdA/CU/D66/CDA
		26.11.2009	32123-XII/24	PVV/VVD	against KH	PVV/VVD/SP	GL/PvdA/CU/D66/CDA
		26.11.2009	32123-XII/30	PVV	against KH	PVV/SP	GL/PvdA/CU/D66/CDA/VVD ^e
		18.03.2010	31305/171	SP	against KH	PVV/VVD/SP	GL/PvdA/CU/D66/CDA
18.03.2010	31305/172	PVV/VVD	against KH	PVV/VVD/SP	GL/PvdA/CU/D66/CDA		

^a Table 2-3 does not include political parties which are not considered policy actors (SGP, AOV and Unie 55+) in the Dutch road pricing subsystem (see section 2.4.2).

^b Green colored political parties are members of pro-.Rekeningrijden or Kilometerheffing coalitions (see Figures 2-1 – 2-5), red colored political parties are members of anti-.Rekeningrijden or Kilometerheffing coalitions (see Figures 2-1 – 2-5) and yellow colored political parties are not a member of either coalition in the relevant government period.

^c Motions which focus on secondary aspects (e.g. revenue use) are not included. Motions in favor of the introduction of Rekeningrijden or Kilometerheffing are presented in green, others in red.

^d SP was a loyal member of the anti-Kilometerheffing coalition during the entire government period 6 (in terms of both policy position and coordination patterns). This motion requests the government not only to abandon Kilometerheffing, but also to use financial resources to reduce fuel tax and expand road infrastructure. It is very likely that SP voted against this motion because it did not agree with the use of financial resources in this way.

^e VVD was a loyal member of the anti-Kilometerheffing coalition during the entire government period 6 (in terms of both policy position and coordination patterns). It is very likely that VVD actually did not vote against this motion, but rather did not bother to vote and its members were absent during the voting session as a similar motion (32123

nr. 30) voted on the same day had already been rejected by a majority vote. Tweede Kamer (2009) reports the voting results for this motion as “present members of SP and PVV voted against this motion and members of others voted for it”.

Table 2-4: Endorsing statement/actions and joint statements

Govern. period	Policy actors ^a	Policy action ^b
Period 2	MKB/ANWB	Endorsing statement against Rekeninrijden ¹
Period 2	CDA/ANWB	Endorsing action against Rekeninrijden ²
Period 2	ANWB/VNO-NCW/Environmental lobby	Joint press release for Kilometerheffing ³
Period 2	ANWB/VNO-NCW/Environmental lobby	Joint letter to minister for Kilometerheffing ⁴
Period 4	ANWB/VNO-NCW/Environmental lobby/ RAI and Bovag/MKB/FNV	Nouwen committee advise for Kilometerheffing ⁵
Period 6	VNO-NCW/MKB Nederland	Joint press release for Kilometerheffing ⁶

^a Green colored policy actors are members of pro-.Rekeningrijden or Kilometerheffing coalitions (see Figures 2-1 – 2-5), red colored policy actors are members of anti-.Rekeningrijden or Kilometerheffing coalitions (see Figures 2-1 – 2-5) and yellow colored policy actors are not a member of either coalition in the relevant government period.

^b Policy actions in favor of Rekeningrijden or Kilometerheffing are presented in green, others in red.

¹ (see De Jong, 1999)

² (see Paradijs, 1999)

³ (see van der Kaaij, 2001)

⁴ (see Raad voor Verkeer en Waterstaat, 2005)

⁵ (see Trouw 2005a)

⁶ (see De Telegraaf, 2009; VNO-NCW and MKB-Nederland, 2009)

Government period 1 (1994 – 1998)

Figure 2-1 shows that the pro-Rekeningrijden coalition stood alone in the subsystem in this government period. The analysis indicates that an internal shock (severe congestion problems following a truck accident in October 1994) highlighted the failure of status-quo policies and skillful exploitation of this event by some policy actors affected the policy beliefs of all subsystem actors, as suggested by the ACF (see Sabatier and Weible, 2014).

When the truck accident occurred in October 1994, road pricing policies were not on the political agenda. The work related to the implementation of road pricing policies was suspended in the previous government period, in May 1992, due to lack of political support (Raad voor Verkeer en Waterstaat, 2005). When the new government took office at the end of August 1994, road pricing policies were not part of the coalition agreement of the new government (see Tweede Kamer, 1994b). In October 1994 the transport minister (Jorritsma, VVD) mentioned that the introduction of road pricing policies would only be possible at the turn of the century because of a lack of public support and the technology required (Tweede Kamer, 1994a). In October 1994 the truck accident caused congestion for the whole day on a main arterial road in a densely commercial region of the Netherlands. This event put the spotlight on road pricing policies as well as other possible remedies to solve congestion problems in the subsystem. One of the interest groups (VNO), representing the business sector, brought this traffic disaster to politicians' attention and called on the government to introduce Rekeningrijden to alleviate congestion (Raad voor Verkeer en Waterstaat, 2005). This event and the subsequent lobbying activities created broad support in parliament for road pricing policies. Indeed, the concerns of the business sector regarding congestion problems became the main issue among the transport experts of political parties in parliament (Het Parool, 1994). Subsequently, five political parties jointly initiated a motion to urge the government to introduce Rekeningrijden before 2000. This motion was almost unanimously adopted (see Table 2-4), reflecting the coalition structure in Figure 2-1. After that, the transport minister started to work on the policy (see Raad voor Verkeer en Waterstaat, 2005).

However, the dominant pro-Rekeningrijden coalition did not bring about major policy change because of disagreements regarding secondary aspects appeared towards the end of the government period and the forthcoming election which interrupted the policy process. The transport minister was concerned from the outset about the adequacy of the available technologies (see Tweede Kamer, 1994a). Local governments raised concerns about the effectiveness of the policy (Raad voor Verkeer en Waterstaat, 2005). Some political parties (CDA and CU) and some interest groups (e.g. VNO-NCW) revealed a preference for applying the charge to only one lane on roads (see Tweede Kamer, 1997a; Tweede Kamer, 1997d). Some political parties (CU and GL) started to consider the possibility of introducing Kilometerheffing (see Tweede Kamer, 1997b). Under such circumstances, a Rekeningrijden act was finally presented to parliament in December 1997 (see Tweede Kamer, 1997c), but was not dealt with by parliament due to the forthcoming election (Raad voor Verkeer en Waterstaat, 2005).

Government period 2 (1998 - 2002)

Government period 2 became a transition period in the subsystem: in 2000 the policy agenda changed from Rekeningrijden to Kilometerheffing. Disputes over Rekeningrijden encouraged policy actors (especially the transport minister (Netelenbos, PvdA)) to search for a policy design which accommodated all the different policy positions. Towards the end of this government period the results of research into Kilometerheffing (and the available

technologies for its implementation) promoted policy-oriented learning and created overall agreement on Kilometerheffing.

The election in 1998 did not change the distribution of the political resources, in other words, the three coalition partners from government period 1 remained in government. As a consequence, the coalition partners agreed to introduce Rekeningrijden and the policy debate resumed almost from the point where it had halted prior to the election. Disagreements which had already started to emerge at the end of government period 1 (see sub section *government period 1 (1994 – 1998)*) deepened and ultimately led to the emergence of an anti-Rekeningrijden coalition and fragmentation within the pro-Rekeningrijden coalition (see Figure 2-2). Members of the anti-Rekeningrijden coalition used their political resources effectively to remove Rekeningrijden from the agenda. ANWB (an interest group of car drivers with 4 million members) mobilized public opinion by organizing a public campaign against Rekeningrijden (Trouw, 1999). This opposition from the ANWB was also supported by other interest groups (see Table 2-4). The ANWB campaign was widely covered by the media and the coverage of the policy in one of newspapers with the highest readership rate in the Netherlands (De Telegraaf) was negative (see Ardiç et al., 2014; Ardiç et al., 2013). Such furious opposition by the anti-Rekeningrijden coalition, coupled with negative coverage of the policy in the media, affected the policy positions of members of pro-Kilometerheffing coalition (e.g., the VVD) (Hendriks and Tops, 2001).

This circumstance forced the minister to constantly update the Rekeningrijden proposal (and implementation plans) and to search for alternative policy designs in order to reconcile the demands of all the policy actors. In this process, Kilometerheffing was under consideration and the support slowly grew as positive research results were published by different policy actors about its effectiveness, efficiency and technical system (e.g. environmental lobbies, de Raad voor Verkeer en Waterstaat) (see Raad voor Verkeer en Waterstaat, 2005). Finally, in April 2001 the Mobimiles research, commissioned by the transport ministry, announced that available technologies were adequate to implement Kilometerheffing (see Pieper, 2001). This report was welcomed by almost all policy actors, reflecting the coalition structure in Figure 2-3. Motions in favor of Kilometerheffing had the support of only some parties in 1999 and 2000 before the release of the Mobimiles report (see Table 2-3), but in 2002 after the release of the report the motion which requested the government not to commit to Kilometerheffing was rejected by the majority (except by SP and CDA). This suggests that new scientific and technical information affected policy positions regarding policy core policy preferences (Kilometerheffing) by facilitating policy oriented learning, which confirms the hypothesis of the ACF. We, however, deduce that the shift in policy position of the VVD was a strategic decision rather than an enduring change in its policy beliefs as the party shifted its policy position several times thereafter (see sub sections *government period 4 (2003 - 2006)* and *government period 6 (2007 - 2010)*).

However, the overall agreement on Kilometerheffing did not lead to a policy decision for its introduction because it was already the end of government period and there were still disagreements regarding secondary aspects which needed to be negotiated among policy actors. In parliament, plenty of motions about secondary aspects (e.g. price variation based on time, and place) were only supported by some political parties (e.g. Tweede Kamer, 2002), which signaled the upcoming conflicts on the concrete policy design.

Government period 4 (2003 - 2006)

The election in January 2003 redistributed political resources: in the new government coalition PvdA, a member of pro-road pricing coalitions before 2003, was replaced by CDA, a member of anti- road pricing coalitions before 2003. This meant that Kilometerheffing was

not included in the coalition agreement. The anti-Kilometerheffing coalition was much stronger than the pro-Kilometerheffing coalition in spite of the fact that the pro-Kilometerheffing coalition had more members (see Figure 2-4). Nevertheless, proponents in parliament constantly pushed the government to put Kilometerheffing on the political agenda again. In the parliamentary debate in November 2003, they (PvdA, D66 and GL in particular) verbally urged the government to put road pricing policies at the center of mobility policy. Reactions of opponents (CDA and VVD) were negative. But the transport minister (Peijs, CDA), on the other hand, had already a rather moderate position and hinted that there might have been a mention of road pricing policies in the transport policy document (Tweede Kamer, 2003b). This was followed by two motions in February 2004 for the introduction of Kilometerheffing, which was supported by all political parties except the CDA and VVD (see Table 2-3).

Meanwhile, in October 2003 the transport minister established a national platform (Nouwen Committee) with the participation of representatives of all major interest groups and local governments¹², referred to by the ACF as a “professional discussion forum”. The platform agreed on the introduction of Kilometerheffing in April 2005 (Platform Anders Betalen voor Mobiliteit, 2005). All members of the platform had already reacted positively to Kilometerheffing following the release of the Mobimiles report (see Figure 2-3), but within the platform policy actors agreed on a detailed policy design (secondary aspects) including revenue use and price variations (see Platform Anders Betalen voor Mobiliteit, 2005). From the ACF perspective, this indicates policy oriented learning facilitated by the professional discussion forum. However, the transport policy document released in September 2005 did not adopt the recommendation of the platform and postponed the introduction of Kilometerheffing to the next government (see Tweede Kamer, 2005a). This postponement was initially supported by VVD and CDA (Oomkes, 2005; NRC Handelsblad, 2005). In fact, it is argued that the minister was pressured by the VVD to postpone the introduction of Kilometerheffing (van der Kaaij, 2005). A short time later (December 2005) the VVD and CDA initiated a motion to adopt the advice of the national platform and they proposed an amendment to the transport policy document to that end (see Table 2-3). This shift in policy position within a couple of weeks is not likely to be the result of policy oriented learning, but rather a strategic decision to achieve political objectives due to conflict within both parties about road pricing policies (see Oomkes (2005) for CDA and Tweede Kamer (2003a) for VVD¹³) and heavy pressure from proponent political parties (see Tweede Kamer, 2005c) and members of the platform (see Trouw, 2005b). In fact, both parties shifted their policy position once again in the next government period (see sub section *government period 6 (2007 - 2010)*). This confirms studies of Nohrstedt (2010) and Nohrstedt (2005) which show that strategic decision rather than policy oriented learning can be a source of position change for political parties. It is also noteworthy that two proponents, GL and SP, unexpectedly voted against the motion to adopt the advice of the platform in December 2005 (see Table 2-3) as they did not agree with the advice of the platform regarding secondary aspects despite supporting Kilometerheffing in general. These parties were against revenue earmarking on road infrastructure and SP was also against price variation according to time and place (see Tweede Kamer, 2005b; Tweede Kamer, 2005c). This confirms the findings of Munro (1993)

¹² Members of this platform included all interest groups and local governments (except Utrecht) considered to be policy actors in this study (see Table 2-2) as well as three scientists, a representative of transport ministry and three other local governments.

¹³ The transport spokesman for the VVD, Hofstra had a rather moderate position regarding Kilometerheffing and initiated the joint motion (submitted in November 2004 with PvdA) in favor of Kilometerheffing (see Table 2-3). However, the party leader, van Aartsen, did not support Kilometerheffing and demanded postponement of the introduction, as proposed in the transport policy document, as mentioned in Tweede kamer (2003a).

that “extreme coalition actors might defect to prevent the adoption of “balanced” policies” (Sabatier and Weible, 2014, p. 195).

This was the first time that such a broad consensus on road pricing policy had emerged, not only in terms of policy core policy preferences (Rekeningrijden or Kilometerheffing) but also in terms of its secondary aspects despite the fact that VVD and CDA were reluctant in their support and GL and SP disagreed on some secondary aspects. However, such a broad consensus was reached in January 2006, almost at the end of a government period. D66 (with veto power) opted out of the government in June 2006 (Smaal, 2012), tipping the power balance in the subsystem in favor of the anti-Kilometerheffing coalition. Under these circumstances, major policy change was not likely.

Government period 6 (2007 - 2010)

The election in November 2006 substantially changed the distribution of political resources. Firstly, a new policy actor was introduced into the subsystem, PVV, which became a member of the anti-Kilometerheffing coalition with the most extreme policy position (see Figure 2-5). Secondly, the new government consisted of two members of the pro-road pricing coalition from the previous government periods: PvdA and CU. Thus, as one would expect, the coalition agreement included the introduction of Kilometerheffing. The pro-Kilometerheffing coalition was much stronger than the anti-Kilometerheffing coalition in terms of political resources (see Figure 2-5). However, opponent political parties actively worked to block the policy process by frequently submitting motions aimed to drop Kilometerheffing from the political agenda (see Table 2-3). In addition, the media attention for the policy peaked towards the end of government periods (the highest level of the whole policy process¹⁴) with overall negative coverage (Ardıç et al., 2014). De Telegraaf, a national newspaper with the greatest readership, was particularly negative. Indeed, De Telegraaf conducted an opinion poll about Kilometerheffing on its website and announced its results in January 2010, demonstrating that the majority of people were against Kilometerheffing (De Telegraaf, 2010). This negative media coverage facilitated the activities of the anti- Kilometerheffing coalition (the results of this survey were used by opponents in the parliamentary meeting (see Tweede Kamer, 2010a) whereas it most probably affected proponents in the parliament negatively considering the fact that politicians usually regard the media coverage of their policies as a proxy for public opinion (Koch-Baumgarten and Voltmer, 2010).

Besides active opposition of opponents, there were disagreements within the pro-Kilometerheffing coalition regarding secondary aspects (see Figure 2-5). In addition the ANWB, which had the power to mobilize public opinion (as it did in government period 2), was the most peripheral member of the pro-Kilometerheffing coalition and did not provide full support. In fact, the ANWB started to conduct a public opinion survey about Kilometerheffing via its website in January 2010 after the Kilometerheffing act was sent to parliament in November 2009. The ANWB’s reluctant support had an adverse effect on other members of the pro-Kilometerheffing coalition in parliament¹⁵. This can be illustrated by the

¹⁴ It is measured by comparing the number of news articles about road pricing policies, which was published monthly in the five biggest national newspapers (De Telegraaf, AD, Trouw, de Volkskrant, NRC Handelsblad and Trouw) between January 1999 and March 2010. The measurement does not include the time period before January 1999 because of the lack of a digital newspaper archive.

¹⁵ The ANWB announced the outcome of their survey on 31 March 2010. The majority of respondents did not support some secondary aspects of Kilometerheffing such as the technical system and price variation according to time and place despite being in general in favour of the idea of charging for kilometres driven. The ANWB stated that there was not enough public support for such a system and more time was needed for the system to be well received by the public (Haighton, 2010).

statement of the transport minister (Eurlings, CDA) when discussing the ANWB survey in parliament: “You need ANWB’s support from the beginning to the end” (Tweede Kamer, 2010a, p. 4362). Meanwhile, the government fell in February 2010 and the CDA, a member of the pro-Kilometerheffing coalition, shifted its policy position and announced in March 2010 that it did not support Kilometerheffing because of the fact that the proposal design was too complex (Tweede Kamer, 2010b) and that public support was lacking (Schonewille and Vermeer, 2010). Smaal (2012) states that the survey of ANWB affected policy positions of some political parties. It seems that CDA was at the top of the list. Kilometerheffing was eventually removed from the political agenda.

2.5.3 The effect of relatively stable system parameters on policy stability

Section 2.5.2 shows that internal and external shocks disturbed the subsystem and triggered a chain of internal subsystem affairs. This resulted in changes in the power balance in the subsystem in each government period, in some instances in favor of pro-road pricing coalitions. In fact, broad agreement was reached for the introduction of Kilometerheffing on some occasions (at the end of government periods 1, 2 and 4) despite some disagreements on secondary aspects. However, policy stability prevailed in the subsystem during the policy process of 16 years. The review of the whole policy process with some deliberation on stable system parameters indicates that political system/culture, sociocultural values and their interplay affected the structure of advocacy coalitions and impeded major policy change in two different ways.

Firstly, in the Dutch political arena, there are several powerful policy actors with different deep core beliefs (e.g. three political parties with various social and/or religious roots form the government). This diversity in deep core beliefs led to disagreements between these powerful actors (e.g. governing coalition partners) in the road pricing policy subsystem regarding policy core beliefs and secondary aspects. The disagreements were deepened by the fact that road pricing schemes can be designed in numerous different forms by differentiating secondary aspects of the policy. This is because design choices differ widely in terms of effectiveness and the financial impact on different social groups in society¹⁶. Policy actors diverged in terms of their preferences for secondary aspects in the design stages of negotiations even if they initially agreed on Rekeningrijden or Kilometerheffing in the early stages of policy discussions (see section 2.5.2). The high level of consensus needed for major policy changes in the Dutch policy making, could therefore not be reached.

Secondly, the high level of consensus requires lengthy negotiations in all policy fields in the Netherlands. Negotiations over an extended period of time are required particularly in the road pricing subsystem because of complex design issues (see above). Elections (at least every 4 years) interrupted the negotiations, altered the policy positions and political resources of policy actors, and ruined agreements made in pre-election periods. The period covered by this study was typified by three-party coalitions in government. Political parties frequently revised their policy positions pre-and post-election according to their position in parliament (in or out of the government) and the compromises made in coalition agreements. Such a system sometimes gave little room for political parties to act based on their policy beliefs in one subsystem, but forced them to determine their policy position in the subsystem based on short-term political objectives. Furthermore, basic values of Dutch society fostered these frequent shifts of policy positions (e.g. CDA in government period 6) even further. Road

¹⁶ The complexities of road pricing design can be illustrated by the fact that in the Dutch road pricing process tens of different design options were scrutinized using cost benefit analyses (see Besseling et al., 2005; Lebouille et al, 2007; Vervoort and Spit, 2005).

pricing policies easily came under the spotlight in the public sphere (especially in government periods 2 and 6) because road pricing policies, which not only affect car users financially, but also aim to change their driving behaviors, threatened these basic values: car dependency and the notion that views car use as an indispensable part of life. More importantly, car users (voters) were well organized via their interest group, ANWB, with 4 million members (a quarter of the population). This made road pricing policies a very sensitive issue for political actors because of their electoral concerns.

2.6. Conclusions

The road pricing policy field is one of the most controversial ones in the Netherlands. A road pricing policy in any form could not be introduced despite being part of the political agenda since 1977. In an attempt to shed light on this long-standing controversy and policy stability, we found that internal and external shocks, and policy-oriented learning affected the subsystem and the power balance (between pro-and anti-road pricing coalitions) in the subsystems, but these changes did not result in major policy change (the introduction of road pricing policies). The analysis indicates that stable system parameters, namely the Dutch political system/culture and complications peculiar to the road pricing subsystem (sociocultural values related to mobility and complex design issues), played a major role in explaining policy stability. The rest of the conclusions below address each factor respectively by elaborating on how they affected the subsystem and promoted policy stability and change in the road pricing subsystem.

Our analysis shows that internal and external shocks disturbed the subsystem and triggered a chain of internal subsystem affairs. Although these shocks did not produce a major policy change (the introduction of road pricing policies), several “enabling factors”, which are required for major policy change, emerged after these shocks in our study (Sabatier and Weible, 2014, p. 202): the heightened political attention (and agenda change), the redistribution of political resources and the exploitation of shocks and political resources by members of pro-road pricing coalition to advance their policy objectives. For instance, the internal shock (congestion problems following a truck accident) highlighted the seriousness of the congestion problems and called into question the effectiveness of policies in practice. This affected the policy beliefs of some policy actors. As a result, road pricing policies rose on the political agenda and policy discussions were heated (in government period 1). External shocks, in our case restricted to elections, redistributed political resources (in terms of decision making power). After elections proponents used their political resources in an attempt to advance their policy objective by using multiple policy venues (e.g. coalition agreements, initiating motions, joint letters and press releases) (see Tables 2-3 and 2-4). On the other hand, opponents responded to these attempts in similar ways. Among them, a public campaign (against Rekeningrijden) organized by the ANWB and supported by other opponents affected the course of policy process in government period 2. The effect of negative media coverage on the policy process was noteworthy in government periods 2 and 6. This suggests that the magnitude of these shocks or “enabling factors” were not sufficient to produce major policy change. For instance, perhaps congestion problems should have been more serious, namely, prevailed over days, or proponents should have possessed more political resources or better exploited their resources to hand for major policy change to happen.

With respect to the effect of policy oriented learning, we found that the accumulation of scientific/technical information over a few years in government period 2 had a major impact by changing policy positions regarding Kilometerheffing through policy oriented learning, as

hypothesized by the ACF. However, this impact cannot be only attributed to scientific/technical information, but also to two other contextual factors. Firstly, disputes over Rekeningrijden urged policy actors to search for alternative policy designs to accommodate the demands of different policy actors. This consensus-seeking behavior encouraged research activities and accelerated learning from new information. Secondly, the transport minister acted as “policy broker” by initiating research activities and negotiating with all sides, thus facilitating the learning process. Furthermore, the existence of a “professional discussion forum” provided overall agreement among policy actors who participated in this forum in government period 4, as hypothesized by the ACF. In addition, our analysis suggests that changes in policy position did not always arise from enduring changes in policy beliefs through policy-oriented learning as suggested by the ACF. The policy position of some political parties frequently shifted (even within one governing period) because of strategic decisions to achieve short-term political objectives (e.g. party cohesion) (see section 2.5.2).

Finally, we found that the Dutch political system/culture and complexities peculiar to the road pricing subsystem (sociocultural values related to mobility and complex design issues) became an impediment for major policy change in the subsystem. Generally “radical departures from existing policies” are not often witnessed in any policy subsystems in the Netherlands (Andeweg and Irwin, 2009, p. 223, 224) because of the requirement for a high level of consensus, fragmentation in Dutch politics (and society), and cumbersome negotiation processes. We are nevertheless convinced that radical changes are probably more difficult in the road pricing subsystem because of two main complications peculiar to the subsystem. The first one is the complex design process, which fostered fragmentation in the subsystem. The second one is the sociocultural values related to mobility (car dependency and the notion that views car use as an indispensable part of life), making road pricing policies a very sensitive issue for political actors because of their electoral concerns and leading to frequent shifts in the policy position of political parties. We mentioned above that the higher magnitude of these shocks or “enabling factors” might have produced major policy change. In addition to that, we can argue here that changes in stable system parameters (although this is rarely observed) might facilitate major policy change in the Dutch road pricing subsystem. For instance, it is possible that, in the future, road pricing policy will become a popular measure across Europe. This may change the notion in the Netherlands that views car use as an indispensable part of life and individual freedom. This, in turn, may affect attitudes towards road pricing policy in Dutch society and eventually affect the road policy subsystem. A similar process has already been experienced in the Dutch coastal flooding policy subsystem. Major policy changes in the Dutch coastal flooding policy were observed primarily as environmental awareness increased in Dutch society (see Meijerink, 2005).

To sum up, by conducting a subsystem-wide empirical analysis (including all major policy actors) over 16 years of road pricing debate, we have shown that the non-implementation of road pricing policy in the Netherlands cannot only be ascribed to the support (or opposition) of one or a few policy actors or to consensus (or conflict) among a few policy actors at a specific point in time. Non-implementation can be well explained by the features of the Dutch political system/culture and the complexities peculiar to the road pricing subsystem (sociocultural values related to mobility, complex design issues). This result implies that future research related to policy actors and their role in the (non-)implementation of road pricing policy should adapt a subsystem-wide approach over time, as in our analysis. An analysis focusing on only a few actors and a specific point in time might reveal fallacious results.

Our research indicates that all the mechanisms and concepts of ACF are applicable to the Dutch road pricing policy processes. We think the ACF has an interesting and rich explanatory power for the non-implementation of Dutch road pricing policy. Our study has two main implications for the ACF. The first one is related to the main criticism to the ACF is that it underestimates the role of strategic action (Fischer et al., 2007; Nohrstedt, 2010). Our study suggests that strategic action sometimes better explains the position shifts of policy actors than enduring changes in policy beliefs. This might be attributable to the political system of the Netherlands, in which three-party coalitions govern the country and political parties sometimes need to compromise their policy beliefs in all policy subsystems for the coalition agreement. Indeed, in coalition agreements political parties sometimes officially (and publicly) agree on policies which contradict their policy beliefs. Under such conditions it becomes very likely to see frequent shifts in their policy positions especially in pre- and post-election periods. This implies that the role of strategic action might be more relevant in countries governed by coalition governments. The second implication is related to the concept of “stable system parameters”. Most of the ACF studies so far have focused on dynamic system events and the role of stable system parameters has mostly been overlooked (Weible et al., 2009), except for a few studies (e.g. Andersson, 1999; Montefrio, 2014). Our study shows that stable system parameters can be a critical variable to explain policy stability or change. This suggests that these parameters must be properly defined and considered when analyzing policy stability and change even if the focus of analysis is dynamic system events. Finally, we recommend that future studies apply the ACF on the policy process of an implemented road pricing case in another country. We believe that an analysis of the policy process of road pricing policies in Sweden with the ACF lens could be interesting since two Swedish road pricing schemes (in Stockholm and Gothenburg) have been implemented so far and Sweden is relatively similar to the Netherlands in terms of stable system parameters (e.g. both consensus democracies). This research might provide additional insights and might be complementary to our findings.

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References

- Adam, S., Kriesi, H. (2007) The network approach. *Theories of the policy process* ed Sabatier, P.A. Westview Press, Boulder, Colo.
- Andersson, M. (1999) *Change and continuity in Poland's environmental policy*. Kluwer Academic Publishers, Dordrecht, Boston.
- Andeweg, R.B., Irwin, G.A. (2009) *Governance and politics of the Netherlands*. Palgrave Macmillan, Houndmills, Basingstoke, Hampshire, New York.
- Ardıç, Ö., Annema, J.A., van Wee, B. (2013) Has the Dutch news media acted as a policy actor in the road pricing policy debate? *Transportation Research Part A: Policy and Practice* 57, 47-63.
- Ardıç, Ö., Annema J.A., van Wee, B. (2014) The reciprocal relationship between policy debate and media coverage: the case of road pricing policy in the Netherlands. *submitted for publication*.
- Besseling P., Groot W. and Lebouille R. (2005) *Economische analyse van verschillende vormen van prijsbeleid voor het wegverkeer*, Den Haag: Centraal Planbureau.
- Burton, P. (2006) Modernising the policy process: Making policy research more significant? *Policy Studies* 27, 173-195.
- De Telegraaf. (2009) Werkgevers: Extra kosten onacceptabel. *De Telegraaf*. 15 November, 4
- De Telegraaf. (2010) Verpletterend NEE; Ruim 89% tegen kilometerheffing Angst voor fraude. *De Telegraaf*. 26 January, 1
- Elgin, D.J., Weible C.M. (2013) A stakeholder analysis of colorado climate and energy issues using policy analytical capacity and the advocacy coalition framework. *Review of Policy Research* 30, 114-133.
- Fischer, F., Gerald, M., Mara, S. (2007) *Handbook of public policy analysis: Theory, politics, and methods*. CRC/Taylor & Francis, Boca Raton.
- Fischer, M. (2014) Coalition structures and policy change in a consensus democracy. *Policy Studies Journal* 42, 344-366.
- Hendriks, F., Tops, P.W. (2001) *Politiek en interactief bestuur: Interacties en interpretaties rond de ontwikkeling van het Nationaal Verkeers- en Vervoersplan*. Elsevier bedrijfsinformatie, 's-Gravenhage.
- Haighton, M. (2010) Heffing per kilometer terug bij af na koerswijziging van ANWB; analyse Geen maatschappelijke steun voor spitstarief. *de Volkskrant*. 1 April
- Het Parool. (1994) Bestrijden van de files doet het opeens goed in Tweede Kamer. *Het Parool*. 8 November, 3
- Isaksson, K., Richardson T. (2009) Building legitimacy for risky policies: The cost of avoiding conflict in Stockholm. *Transportation Research Part A: Policy and Practice* 43, 251-257.
- Koch-Baumgarten, S., Voltmer, K. (2010) *Public policy and the mass media the interplay of mass communication and political decision making*. Taylor & Francis, Hoboken.
- Koopmans, R., Statham P. (1999) Political claims analysis: Integrating protest event and political discourse approaches. *Mobilization: An International Journal* 4, 40-51.

- Lebouille, R., Spit, W., Harmsen J. (2007) *Kosten en baten van varianten Anders Betalen voor Mobiliteit*. Rotterdam: ECORYS Nederland BV.
- Leifeld, P. (2013) Reconceptualizing major policy change in the advocacy coalition framework: A discourse network analysis of German pension politics. *Policy Studies Journal* 41, 169-198.
- Leifeld, P., Haunss S. (2010) *A comparison between political claims analysis and discourse network analysis the case of software patents in the European Union*, Bonn: Max Planck Inst. for Research on Collective Goods.
- Meijerink, S. (2005) Understanding policy stability and change. The interplay of advocacy coalitions and epistemic communities, windows of opportunity, and Dutch coastal flooding policy 1945–2003. *Journal of European Public Policy* 12, 1060-1077.
- Montefrio, M.J.F. (2014) State versus indigenous peoples' rights: Comparative analysis of stable system parameters, policy constraints and the process of delegitimation. *Journal of Comparative Policy Analysis: Research and Practice* 16, 335-355.
- Moyson, S. (2014) The individual in policy change: Policy learning in the liberalization of network industries in Belgium. Ph.D. Thesis, Université catholique de Louvain.
- Munro, J. (1993) California water politics: Explaining policy change in a cognitively polarized subsystem. *Policy change and learning: An advocacy coalition approach* eds Sabatier, P.A., Jenkins-Smith, H.C. Westview Press, Boulder, Colo.
- Nohrstedt, D. (2005) External shocks and policy change: Three Mile Island and Swedish nuclear energy policy. *Journal of European Public Policy* 12, 1041-1059.
- Nohrstedt, D. (2010) Do advocacy coalitions matter? Crisis and change in Swedish nuclear energy policy. *Journal of Public Administration Research and Theory* 20, 309-333.
- Nohrstedt, D. (2011) Shifting resources and venues producing policy change in contested subsystems: A case study of Swedish signals intelligence policy. *Policy Studies Journal* 39, 461-484.
- Nohrstedt, D., Weible C.M. (2010) The logic of policy change after crisis: Proximity and subsystem interaction. *Risk, Hazards & Crisis in Public Policy* 1, 1-32.
- NRC Handelsblad. (2005) Steun voor uitstel kilometerheffing. *NRC Handelsblad*. 9 September, 2
- Oomkes, L. (2005) CDA en VVD zijn gewoon bang voor de kiezer ; kilometerheffing. *Trouw*. 10 September, 7
- Paradijs, S. (1999) Jaap is ook tegen. *De Telegraaf*. 25 January.
- Pieper, R. (2001) *Mobimiles - Bewust op weg*, Bloemendaal.
- Platform Anders Betalen voor Mobiliteit (2005) *Nationaal Platform Anders Betalen voor Mobiliteit*.
- Raad voor Verkeer en Waterstaat (2005) *Innoveren, een kwestie van doen: Visie op de verschillende rollen van Verkeer en Waterstaat*, Den Haag: de Raad voor Verkeer en Waterstaat.
- Rye, T., Gaunt, M., Ison S. (2008) Edinburgh's congestion charging plans: An analysis of reasons for non-implementation. *Transportation Planning and Technology* 31, 641-661.

- Sabatier, P.A. (1998) The advocacy coalition framework: revisions and relevance for Europe. *Journal of European Public Policy* 5, 98-130.
- Sabatier, P.A., Weible, C.M. (2007) The advocacy coalition framework, innovations and clarifications. *Theories of the policy process* ed Sabatier, P.A. Westview Press, Boulder, Colo.
- Sabatier, P.A., Weible, C.M. (2014) *Theories of the policy process*. Westview Press, Boulder, Colo.
- Sabatier, P.A., Jenkins-Smith, H.C. (1993) The advocacy coalition Framework: assessment, revisions, and implication for scholars and practitioners. *Policy change and learning: An advocacy coalition approach* eds Sabatier, P.A., Jenkins-Smith, H.C. Westview Press, Boulder, Colo.
- Schlager, E. (2007) A comparison of frameworks, theories, and models of policy process. *Theories of the policy process* ed Sabatier, P.A. Westview Press, Boulder, Colo.
- Schneider, F., Weck-Hannemann, H. (2005) Why Is Economic Theory Ignored in Environmental Policy Practice? , *Applied Research in Environmental Economics* eds Böhringer, C., Lange, A. Physica-Verlag HD, pp. 257-275.
- Schonewille, M.L., Vermeer O. (2010) De auto is politiek onaantastbaar; Met intrekken steun door CDA komt einde aan plan kilometerheffing. *NRC Handelsblad*. 20 March, 3
- Seidel, T., Matthes, A., Wieland, B., Schlag, B., Schade, J., Verhoef, E., Ubbels, B., Tónczos, K., Kosztyó, A., Mészáros F. (2004) *TIPP (Transport Institutions in the Policy Process) - Deliverable 4 political acceptability and perceived legitimacy of transport policy implementation*. European Commission.
- Sewell, G.C. (2005) Actors, coalitions and the framework convention on climate change. Ph.D. Thesis, Massachusetts institute of technology.
- Smaal, M. (2012) Politieke strijd om de prijs van automobilititeit, De geschiedenis van een langdurend discours: 1895 – 2010. Ph.D. Thesis, Tilburg University.
- Sobeck, J. (2003) Comparing policy process frameworks: What do they tell us about group membership and participation for policy development? *Administration & Society* 35, 350-374.
- Sotirov, M., Memmler M. (2012) The advocacy coalition framework in natural resource policy studies - Recent experiences and further prospects. *Forest Policy and Economics* 16, 51-64.
- Trouw. (1999) ANWB mobiliseert leden tegen rekeningrijden. *Trouw*. 20 January, 9
- Trouw. (2005a) Nouwen wil tol heffen rond dertig verkeersknelpunten; autoverkeer. *Trouw*. 30 April, 3
- Trouw. (2005b) Verkeersplan van Peijs is een gemiste kans. *Trouw*. 9 September, 2
- True, J.L., Jones, B.D., Baumgartner, F.R. (2007) Punctuated- equilibrium theory: Explaining stability and change in public policy making. *Theories of the policy process* ed Sabatier, P.A. Westview Press, Boulder, Colo.
- Tweede Kamer. (1994a) Brief van de minister van verkeer en waterstaat, vergaderjaar 1994-1995, 23958 nr. 1.
- Tweede Kamer. (1994b) Kabinetsformatie 1994, vergaderjaar 1993-1994, 23715 nr. 11.
- Tweede Kamer. (1997a) Motie-Reitsma/van den Berg over betaalstroken, 25 600 XII nr. 6.

- Tweede Kamer. (1997b) Motie-Stellingwerf/van den Berg, 25 600 XII nr. 29.
- Tweede Kamer. (1997c) Regels inzake een regulerende heffing op het gebruik van wegen in de Randstad tijdens spitsuren (Wet op het rekeningrijden), vergaderjaar 1997–1998, 25816 nrs. 1–2.
- Tweede Kamer. (1997d) Vergaderingnummer 18, vergaderjaar 1997–1998, 1287-1318.
- Tweede Kamer. (2002) Motie-van der Steenhoven over directe invoering van een gedifferentieerde heffing, 27455 nr. 54.
- Tweede Kamer. (2003a) Vergaderingnummer 2, vergaderjaar 2005-2006, 32-67.
- Tweede Kamer. (2003b) Vergaderingnummer 19, vergaderjaar 2003-2004, 1191-1226.
- Tweede Kamer. (2005a) Nota Mobiliteit - PKB DEEL III: Kabinetsstandpunt, vergaderjaar 2004–2005, 29 644 nrs. 12–13.
- Tweede Kamer. (2005b) Vergaderingnummer 36, vergaderjaar 2005-2006, 2540-2543.
- Tweede Kamer. (2005c) Verslag van een Noteoverleg, vergaderjaar 2005–2006, 29644 nr. 20.
- Tweede Kamer. (2009) Vergaderingnummer 31, vergaderjaar 2009-2010, 2899.
- Tweede Kamer. (2010a) Vergaderingnummer 46, vergaderjaar 2009-2010, 4362-4367.
- Tweede Kamer. (2010b) Vergaderingnummer 65, vergaderjaar 2009-2010, 5657.
- van der Kaaij M. (2001) De tolpoorten zijn begraven; Kilometerheffing. *Trouw*. 12 April, 15
- van der Kaaij M. (2005) Van Aartsen vetode kilometerheffing. *Trouw*. 20 September, 1
- van der Sar J. and Baggen J. (2005) Prijsbeleid op de weg in Nederland: Een historisch overzicht. *Colloquium Vervoersplanologisch Speurwerk*. Antwerpen.
- VNO-NCW and MKB-Nederland. (2009) VNO-NCW en MKB: Steun kilometerprijs mits aan voorwaarden wordt voldaan. <http://www.vno-ncw.nl/Pers/>.
- Vervoort K. and Spit W. (2005) Economische toets variant 3: Betalen per kilometer vracht. Rotterdam: ECORYS Transport.
- Vonk Noordegraaf, D., Annema, J.A., van Wee B. (2014) Policy implementation lessons from six road pricing cases. *Transportation Research Part A: Policy and Practice* 59, 172-191.
- Weible, C.M. (2007) An advocacy coalition framework approach to stakeholder analysis: Understanding the political context of California marine protected area policy. *Journal of Public Administration Research and Theory* 17, 95-117.
- Weible, C.M., Sabatier, P.A., McQueen K. (2009) Themes and variations: Taking stock of the advocacy coalition framework. *Policy Studies Journal* 37, 121-140.
- Zahariadis, N. (2007) The multiple streams framework: Structure, limitations, prospects. *Theories of the policy process* ed Sabatier, P.A. Westview Press, Boulder, Colo.
- Zandstra, P. (2014) *Vanaf volgend jaar raadgevend referendum in Nederland*. Available at: <http://www.nrc.nl/nieuws/2014/04/15/vanaf-volgend-jaar-raadgevend-referendum-in-nederland/> (accessed on 29 October 2014)

3 Has the Dutch news media acted as a policy actor in the road pricing policy debate?

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3.1 Introduction

There is no doubt that the media influences the policy making process (Birkland, 2001; Islam, 2008) and it is widely accepted that road pricing policy processes are no exception (Schuitema et al., 2010; Winslott-Hiselius et al., 2009; Langmyhr, 1999; Schade and Schlag, 2000). The media is sometimes considered to be a mirror of the policy debate or as a kind of forum where policy actors (e.g. politicians, interest groups, the general public) can learn about policy content and exchange opinions (e.g. Baumgartner and Jones, 1993; Kingdon, 2011). On the other hand, several authors have identified that the media can also act as a policy actor, that it does not comply (intentionally or not) with the norms of objectivity and favors particular policy perspectives in its reporting (e.g. Louw, 2010; Semetko, 2003; Herman and Chomsky, 1988). In this view, the media constructs the coverage in such a way that it satisfies their organizational concerns such as commercial goals, reader profile, political leaning, or reporting tradition.

Studies present empirical evidence for both views: “objective media” as a mirror of policy debate and “biased media” acting as a policy actor. Berkel (2006) analyzed the media coverage of EU integration policy and found strong evidence of media bias. Bosman and d'Haenens (2008) showed the demonization of a right wing politician by some newspapers as evidence of bias. Boykoff and Boykoff (2004, 2007) showed that the media was biased in its reporting of climate change. The findings of Covert and Wasburn (2007), on the other hand, did not reveal any evidence regarding media bias related to issues of crime, environment, gender and poverty. Similarly, D'Alessio and Allen (2000) found no significant media bias in the election campaigns. According to Westerstahl (1983) there was no bias in the reporting of the Vietnam war by the Swedish media.

Only two studies have examined the objectivity of the media in reporting road pricing policy. Ryley and Gjersoe (2006) analyzed how Edinburgh pricing proposal was presented in the media. They explored exhaustively the types of issues and actors that were covered in the media during policy debate and whether the tone of the news was more negative or positive. They concluded that the proposal was presented more negatively than positively, but issues related to the scheme design were balanced. The presentation of Manchester road pricing proposal was analyzed by Vigar et al. (2011). They examined the coverage issues and the extent to which the coverage of newspapers was balanced in terms of presentation tone. Similar to the findings of Ryley and Gjersoe (2006), their study showed that the media presented the scheme more negatively, but the presentation of the proposal varied among newspapers. In these studies, it seems that a failure in balanced reporting (equal space allocation to all sides, e.g. the different elements of the proposal, positive and negative viewpoints in the debate) was regarded as the main indication of media bias. However, we think that media objectivity has various dimensions which are all closely related, the balance aspect being only one of them (see section 3.2). The assessment of media objectivity in our view, therefore, requires a far more comprehensive approach than those used in these studies. In addition to these studies, in the field of transport, Nygrén et al. (2012) analyzed the media presentation of a car tax reform but they also did not consider various dimensions of media objectivity in their study. Moreover, none of these studies on transport and road pricing policy investigated whether or not media bias changes over time.

Our study aims to add to the scientific knowledge base by empirically investigating the objectivity of the news media in reporting the Dutch road pricing policy debate based on a comprehensive objectivity framework. We analyze the media coverage of Dutch road pricing policy in the five leading national newspapers between 1998 and 2010, a period which covers the policy debate of two road pricing proposals. The first one – “Rekeningrijden” – was a cordon charge round 4 big cities (Den Haag, Rotterdam, Utrecht, and Amsterdam) to be implemented during peak hours. The proposal was included in the coalition agreement in 1998, and was abandoned in 2001, after about three years. The second one – “Kilometerheffing” – was a nationwide road pricing scheme including price variation according to vehicle type, time and place which also replaced existing annual road and car purchase taxes with a charge per kilometer driven. It was put on the political agenda in 2005 on the recommendation of a committee composed of main policy actors and was removed in 2010. Both proposals were politically controversial and failed to be introduced after years of discussions by policy actors. Some studies claim, without providing empirical evidence, that the Dutch news media were biased in their reflecting of the policy debate (e.g. Seidel et al., 2004). We have three main research questions. Firstly, did the Dutch news media present the road pricing policy debate objectively, or did the news media act as a policy actor by distorting the reality (policy debate)? How did the individual newspapers position themselves in the policy debate? Finally, did the position of the newspapers change over time?

Objectivity is a multi-faceted term, and the objectivity assessment of news reporting requires a comprehensive approach comprising various components of objectivity. In section 3.2 we, firstly, introduce the objectivity framework (and its components) we adopted. Section 3.3 covers methodological issues such as data collection, variables used in the analysis and operationalization of the objectivity framework. We present our results in section 3.4 and conclusions in section 3.5.

3.2 The Westerstahl's objectivity framework

Objectivity (and its antonym bias) as a term has long been debated and there is neither a common definition nor approach for its use in practice for the assessment of the media's news reporting even though it is widely agreed in western countries that it is an important journalistic value in news reporting (see Donsbach, 2003; Cohen-Almagor, 2008; McQuail 1999). We adopted the objectivity framework proposed by McQuail (1999) based on Westerstahl (1983), which is seen as the most comprehensive and robust framework incorporating various aspects of objectivity to analyze the objectivity of the media in reporting any issue or policy (e.g. Carpentier, 2005; McGrail, 2008). Westerstahl (1983) defines objectivity in news reporting as "adherence to certain norms or standards" and proposes a framework consisting of 6 criteria (see Table 3-1), organized in two dimensions: presentation and selection.

Table 3-1: The objectivity framework

Presentation dimension	
Criteria	Definition of criteria
Factualness	The extent that the information presented in news is checkable and attributed to named (identifiable) actors
Completeness	The extent that the news articles contain full range of aspects of a particular issue so that readers can properly understand the issue
Accuracy	The extent that information in the news articles is correct with respect to places, times, attributions to actors, and so forth.
Neutrality	The extent that evaluative words reflecting (explicitly or implicitly) journalists' points of view are used
Selection dimension	
Criteria	Definition
Relevance	The extent that the media attention on a particular issue corresponds with the relevance of this issue in reality
Balance	The extent that the media attention is equally distributed across all the relevant viewpoints (e.g. two candidates in an election) related to an event.

Source: (McQuail, 1999)

However, though widely acknowledged in the communication field, this objectivity framework is not without limitations. As already pointed out by Westerstahl (1983), "not all criteria apply in all cases, not to equal degree, nor in the same manner". The criteria of relevance and balance, for example, can be contradictory. Some of the major actors may be much more active in the policy debate than others or some particular issues in the policy debate may have an impact on more people than other issues. These actors and issues, therefore, might deserve more media attention than some other actors or issues since they are more relevant. In such cases, unbalanced space allocation in favor of these respective actors or issues in the media coverage might be unavoidable. Relevance and balance criteria therefore might not always be equally important and applicable in the objectivity assessment of media coverage. The Dutch road pricing policy debate, for example, involves many actors, viewpoints and also numerous sub-issues. In these circumstances, it is difficult to determine which sides (e.g. actors) should be balanced against which sides. In our study, therefore, we do not expect the media to fulfill the balance requirement (e.g. if in a particular event four relevant policy actors play a role, they may not each receive 25% of the attention) and in terms of the selection dimension we assess the objectivity of the media only according to the relevance criterion. Furthermore, the framework does not provide any scale so that the

objectivity of certain news content can be graded and hence should be regarded as a guide rather than a rigorous measurement tool of media objectivity (McGrail, 2008).

3.3 Methodology

3.3.1 Data selection

To answer our research questions, we conducted a latent content analysis (see Bernard and Ryan (2010)) on newspaper articles. Newspapers are a popular source of news in the Netherlands (Commissariaat voor de Media, 2011). We selected five Dutch national newspapers with the five highest circulation rates in 2010: De Telegraaf, Algemeen Dagblad, de Volkskrant, NRC Handelsblad and Trouw. The circulation rates of these 5 newspapers in total covers more than 35 percent of total newspaper circulation and more than 45 percent of the paid newspaper circulation in the Netherland according to 2010 data. Table 3-2 lists the newspapers with their type, political leaning and circulation rates.

Table 3-2: The list of newspapers

Newspaper	Type	Political leaning	Circulation rates (2010)^a
De Telegraaf	popular	right-leaning	648958
Algemeen Dagblad	popular	right-leaning	442962
Trouw	quality	centre/left-leaning	262183
de Volkskrant	quality	centre/left-leaning	200723
NRC Handelsblad	quality	right-leaning	106440

Source: (Vliegthart, 2007)

^a Circulation rates were obtained from HOI (Instituut voor Media Auditing)

Our analysis covered a period of almost 12 years, from the agreement on Rekeningrijden in the coalition government negotiations in 1998 to the removal of Kilometerheffing from the political agenda in 2010. However, in this period, the media attention for the policy changed frequently, reflecting changes in the prominence of the policy on the political agenda. We, therefore, confined our analysis to the occasions during which media attention for the policy peaked. We identified 9 such policy events (see Table 3-3), which were major milestones in the policy process. For each event, a period of two weeks, comprising the week prior and following the event, was analyzed. 405 news articles were selected from the digital newspaper archive LexisNexis, using a search string comprising all the name variations used for road pricing, Rekeningrijden and Kilometerheffing in the Dutch language.

Table 3-3: Policy events

Pricing Proposal	Policy Period	Date	Policy event
Rekeningrijden	1	18.07.1998	Rekeningrijden was included in the coalition government agreement
	2	19.01.1999	Autolobby (ANWB) started a campaign against Rekeningrijden
	3	19.05.2000	National Transport Policy document (BOR) was announced, which included Rekeningrijden
	4	10.04.2001	Following the Mobimiles report on technological possibilities for Kilometerheffing, Rekeningrijden was removed from the political agenda
Kilometerheffing	5	30.04.2005	Major Dutch policy actors (Nouwen Committee) agreed on Kilometerheffing
	6	08.09.2005	National transport policy document (Nota Mobiliteit) was announced, which delayed implementation of Kilometerheffing
	7	05.02.2007	Kilometerheffing was included in the coalition government agreement
	8	13.11.2009	Kilometerheffing, as a final proposal, was sent to parliament
	9	18.03.2010	Kilometerheffing was removed from the political agenda

3.3.2 Coding variables

In the coding process, we scrutinized all news articles to trace the variables important for measuring the compliance of media coverage with the criteria of our objectivity framework. We note that pictures and other graphics attached to news articles might affect the interpretation of news but they are not analyzed in our study. In the remainder of the article variables are denoted in italics.

Paragraphs of news articles were taken as the unit of analysis. The name of the newspaper (e.g. De Telegraaf, Trouw) in which a paragraph is issued is assigned to *newspaper*. The names of all the policy actors in a paragraph are assigned to *actor*. All attributions made to each *actor* in a paragraph are also coded. The subject of each attribution, which is a specific aspect of a pricing proposal (e.g. its impact on congestion or privacy problems of the system) is recorded in *sub-issue*. Whether an attribution is about Rekeningrijden or Kilometerheffing is indicated in *pricing proposal*. In cases where no *actor* could be identified, media was assigned to *actor*. We distinguished three types of tone. The first one is *actor tone* which indicates the position of an *actor* in relation to a *sub-issue*. The second one is *media tone* which shows the manner used by the media while communicating the position of an *actor* for a *sub-issue*. Both tone variables have four categories: positive, negative, mixed and neutral. The third tone variable is *overall tone*, which was created by considering both *actor tone* and *media tone* after the coding process was completed. *Overall tone* is the tone presented to readers. For instance, if *actor tone* for a *sub-issue* was negative (for example, an *actor* argues that the technical system of a pricing scheme violates privacy) and the media presented this argument in a negative manner (for example, the media (implicitly or explicitly) indicates that this actor highly exaggerates the privacy issue or that his argument is irrelevant or not well-grounded), then the media actually does not agree with the *actor* and reverses his position. *Overall tone* is then positive (privacy is not a big issue related to road pricing is the message to the reader) even though the *actor tone* for this *sub-issue* was negative.

“Word” was the main unit of *space allocation*, which is an indication of media attention (see McQuail, 1999) for a specific issue or event. We counted the total number of words used in an article for a specific *actor*, *pricing proposal*, *sub-issue* or *tone*. We multiplied the result by page score (“2” the front page news article and “1” for the middle page news articles). Finally, the number of pages published daily varied across *newspapers* and policy periods. We, therefore, weighted the result by the total words published in a *newspaper* on the day a news article was issued to make the unit of *space allocation* (word) equivalent between *newspapers* and across policy periods.

After the coding process was complete, we conducted a reliability test in two phases. ‘Inter-coder reliability is a measure of the extent to which independent judges make the same coding decisions while evaluating the characteristics of messages’ as defined by Lombard et al. (2002, p. 587). The first phase was held for three variables (*actor*, *sub-issue* and *pricing proposal*) and the second phase for the rest (*actor tone*, *media tone* and *overall tone*). In the first phase, we used the “negotiated approach” suggested by Garrison et al. (2006) for a multi-faceted coding scheme like ours, which has plenty of variables with numerous categories (e.g. *sub-issue* has 33 categories) and inter-connected coding decisions. After the principal investigator and another coder had independently coded 40 randomly selected articles (10% of the full sample), percentage agreement scores were 0.81, 0.72 and 0.92 for *actor*, *sub-issue* and *pricing proposal* respectively. Reliability scores increased to 95% for all three variables after discussion between coders regarding the discrepancies. The second phase was performed without negotiations and Kappa agreement was also utilized alongside percentage agreement to eliminate chance agreement, which was likely as the variables in the second phase had four categories. For *actor tone*, *media tone* and *overall tone* the percentage scores were 0.89, 0.81 and 0.78 and the Kappa agreement scores were 0.80, 0.64 and 0.59 respectively. There is no consensus on the acceptable level of reliability scores. It is suggested that researchers must decide on the acceptable reliability scores for their research, considering their research characteristics. Studies offering rich and fruitful results are usually accompanied with complex coding schemes and, subsequently, have relatively low reliability scores. To achieve higher reliability scores can require simplification of the coding scheme which might reduce the value of the results (Rourke et al., 2000; Lombard et al., 2002). Still, for percentage agreement scores, a minimum level of 80% is usually regarded as standard (Rourke et al., 2000). Landis and Koch (1977), admitting the arbitrariness of such a scaling, considered kappa scores between 0.00 and 0.20 to indicate a “slight”, between 0.21 and 0.40 “fair”, between 0.41 and 0.60 “moderate”, between 0.61 and 0.80 “substantial” and between 0.81 and 1.00 an “almost perfect” level of agreement. Banerjee et al. (1999), on the other hand, suggest that Kappa scores below 0.40 can be considered as “poor”, between 0.40 and 0.75 as “fair to good” and greater than 0.75 as “excellent” agreement. Taking this into consideration, the scores in our reliability test are satisfactory, especially for an exploratory research like ours.

3.3.3 Operationalization of objectivity criteria and correspondence analysis

We used different methods, each of which uses one or a few coding variables, for the operationalization of each criterion. We excluded editorials and opinion pieces (n=62) from our analysis in the assessment of all objectivity criteria since it is legitimate for news organizations to express their view points and opinions in these columns.

We measured factualness as a proportion of the *space allocation* for factual information to the total *space allocation* in a *newspaper* for road pricing policy. Factual information was the amount of *space allocation* for *sub-issues* attributed to identifiable *actors*. If *actor* was the name of an individual (e.g. Eurlings, a transport minister between 2007 and 2010) or a

specific institution (e.g. ANWB, the Royal Dutch Touring Club), we considered such *actors* as identifiable *actors* and information presented with reference to these *actors* as factual information. On the other hand, if *actor* was the media or some generalized actor names were used such as business community or local governments, which could actually indicate several different actors, then such *actors* were unidentifiable and information attributed to these *actors* was non-factual information.

We operationalized completeness via two measures. The first one was a proportion of the number of *sub-issues* covered in a *newspaper* in a policy period to the full range of *sub-issues* in this policy period. The second one was a proportion of the number of *actor & sub-issue* pairs, calculated in the same way. Two types of sources are used in the literature to acquire the full range of aspects (*sub-issues*) about an event or issue: some external sources (e.g. official statistics or public documentary records) or news articles from other newspapers (see McQuail (1999) for more information about studies applying these two methods). In our study, the total number of *sub-issues* and *actor & sub-issue* pairs covered by all 5 *newspapers* in a policy period are considered as the full range of *sub-issues* and *actor & sub-issue* pairs in this policy period.

News articles, in our study, reflected the policy debate and, thus, were mostly composed of attributions to *actors* related to various aspects of pricing proposals (*sub-issues*). Therefore, we assessed the accuracy of *newspapers* in terms of attributions to *actors*. To achieve this, attributions to *actors* can be checked against the original records of actor statements or policy actions of actors, but statements and policy actions are not always recorded and available. The other option might be that different newspaper articles of the same event on the same day can be compared in terms of attributions to a specific actor about a specific issue (see McQuail (1977) cited in McQuail (1999) for a similar application). Following this second approach, we compared *actor tone* of the same *actor & sub-issue* pairs among *newspapers* on the same day to measure the accuracy.

Neutral presentation is determined by the amount of *space allocation* for information whose *media tone* is neutral and evaluative presentation by the amount of *space allocation* for information with a positive, negative or mixed *media tone*. The degree of neutrality is presented as a proportion of the *space allocation* for neutrally presented information in a *newspaper* to the total *space allocation* for road pricing policy in this *newspaper*.

The assessment of the relevance criterion requires a comparison between the relevance of an issue for a newspaper and an independent relevance indicator for this issue to detect (non-)correspondence between them. The relevance of an issue (or its sub-issues) for a newspaper can be measured by the space allocated for this issue (or its sub-issues) in this newspaper. However, finding an independent relevance indicator for a specific issue (or its sub-issues) can be problematic and more importantly the results of relevance assessment can change depending on the relevance indicator chosen. Experts can be asked to estimate the relevance of an issue and their estimation can be seen as the independent relevance indicator for this issue, but then this indicator reflects views of certain groups of people. Using official statistics, reports or records of events as a source of the relevance indicator has similar limitations since these documents might reflect the view of a publishing institution. Moreover, such documents are not always available. Alternatively, readers can be surveyed about the relevance of a certain issue, but the research can reveal different results according to the specific research methods used. To sum up, neither of these approaches can produce a totally objective relevance indicator that is superior to others (see McQuail (1999) for an extensive discussion about relevance indicators). In our study, we measured both the relevance of the

road pricing policy for a *newspaper* among other issues covered in a *newspaper* and the relevance of a specific *sub-issue* and *actor* among other *sub-issues* and *actors* in the road pricing policy coverage of a *newspaper* by the amount of *space allocation* for them in this *newspaper*. We did not choose an independent relevance indicator for comparison for either road pricing policy or for a specific *sub-issue* and *actor*. Instead, we compared the five *newspapers* studied in terms of their *space allocation* for road pricing policy and for the categories of *sub-issue* and *actor*. Assuming that there is “one” relevance indicator for road pricing policy indicating its rank among other topics on the public agenda, we expected that the total *space allocation* for road pricing policy was the same in all 5 *newspapers*¹⁷. Similarly, we assumed that there is “one” relevance indicator for each category of *sub-issue* and *actor* in the road pricing policy coverage, and we, thus, expected that the proportion of *space allocation* for each category of *sub-issue* and *actor* to the total amount of *space allocation* for road pricing policy in a *newspaper* was the same in all 5 *newspapers*. We admit that this approach cannot tell us which of the *newspapers* (one, some, or all of them) did (not) satisfy the relevance criterion or to what extent, but the approach can show whether any of them deviates from our assumed relevance indicator.

Finally, to answer our second and third research questions about the positions of newspapers, we used correspondence analysis (CA). CA uses the chi square score as a measure of the association between columns and rows of a cross table and visualizes columns and rows in a two dimensional space according to the strength of associations between these columns and rows. We applied CA on cross tables which give distribution of *space allocation* for *overall tone*, *sub-issue* and *actor* across 5 *newspapers* and explored the direction *newspapers* were slanted among categories of *overall tone*, *sub-issue* and *actor*. In a cross table, the relative contribution of each cell to the total chi-square score implies the strength (and the direction) of the association between the row and the column of this cell. According to this measure, CA calculates the coordinate values of the rows and columns on a two dimensional map in a way that best explains the strength of the associations between all its rows and columns. The stronger the association between a row and a column, the closer this row and column are to each other and the further away from the origin they are placed on the two dimensional map. A row and column with a weaker association are located further away from each other on the map (see Hair (2010) for detailed information about correspondence analysis). In this part of our study we analyzed all news articles including editorial and opinion pieces (n=62) since positions of newspapers can be elicited from both regular news articles (if newspapers are not objective) and editorials and opinion pieces in which newspapers explicitly present their positions.

3.4 Results

3.4.1 Factualness, completeness, accuracy and neutrality

Figure 3-1 shows that all *newspapers*, except Algemeen Dagblad, constructed about 90% of their coverage from factual information. Algemeen Dagblad has the highest amount of non-factual coverage (about 20%). The factualness ratio of Algemeen Dagblad for the coverage of the Kilometerheffing was at the same level as the others (about 90 %), but was much lower for its coverage of Rekeningrijden (about 65%).

¹⁷ In the calculation of the space allocation variable, the number of words used for road pricing policy in a newspaper is weighted by the total number of words published in this newspaper (see section 3.3.2). Therefore, space allocation indicates the relative importance of road pricing policy among other topics in the news coverage of one newspaper.

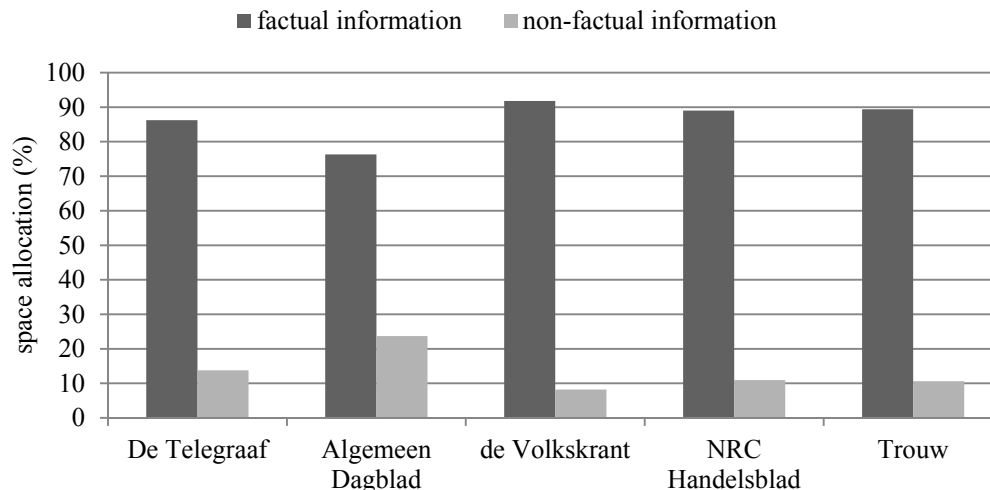


Figure 3-1: The factualness of the media coverage (excluding editorials and opinion columns)

In Figure 3-2 we see that the completeness in terms of *sub-issues* fluctuated around 60% for the five *newspapers* across policy periods. The completeness in terms of *actor & sub-issue* pairs, presented in Figure 3-3, was much lower. This indicates that the five *newspapers* covered most *sub-issues* related to road pricing but they preferred to refer to different sets of *actors* while reporting these *sub-issues*. Figure 3-3 also shows that de Volkskrant, NRC Handelsblad and Trouw display a slightly higher and more consistent level of completeness over time than De Telegraaf and Algemeen Dagblad. Moreover, the completeness of Algemeen Dagblad was slightly higher for Rekeningrijden than Kilometerheffing. For the other *newspapers*, however, it was vice versa.

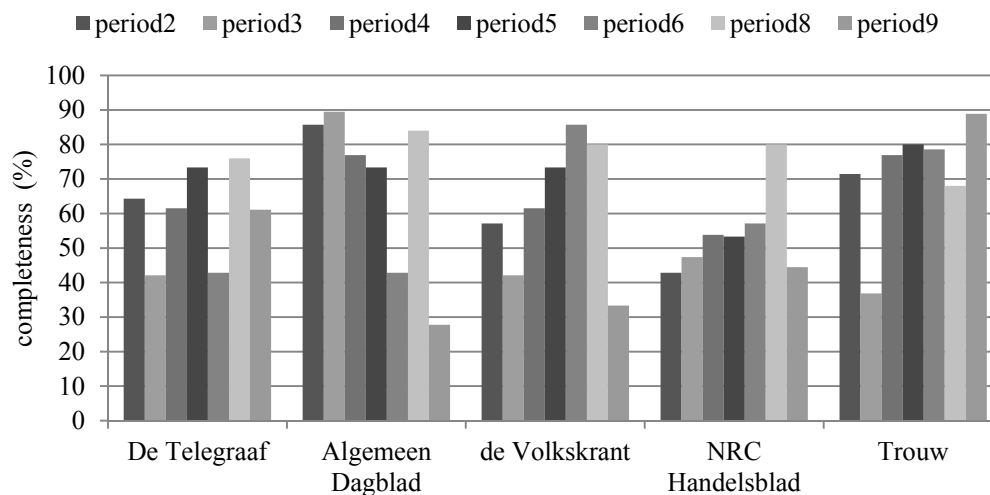


Figure 3-2: The completeness of media coverage in terms of sub-issues (excluding editorials and opinion columns)

^a We exclude period-1 and period-7 from Figure 3-2 since space allocation for road pricing policy was very low in these periods.

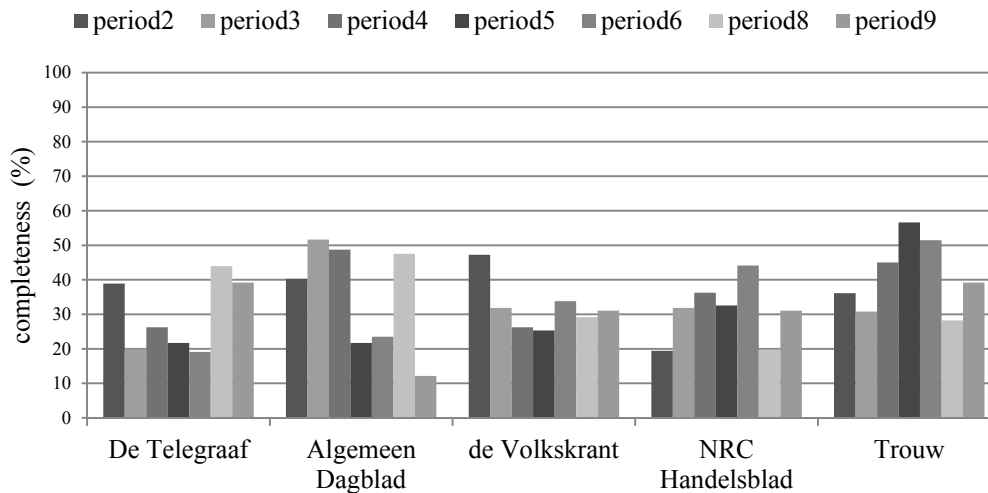


Figure 3-3: The completeness of media Coverage in terms of actor & sub-issues combination (excluding editorials and opinion columns)

^a We exclude period-1 and period-7 from Figure 3-3 since space allocation for road pricing policy was very low in these periods.

In Table 3-4, comparable *actor & sub-issue* pairs indicate the instances in which a particular actor is mentioned in relation to a particular sub-issue in both *newspapers* on the same day. For instance, if the opinion of the transport minister (an *actor*) on the technical system (a *sub-issue*) of Rekeningrijden is featured in Trouw and De Telegraaf on the same day, then it is a comparable *actor & sub-issue* pair for these two *newspapers* (see comparable *actor & sub-issue* pairs in Table 3-4). If the *newspapers* (e.g. Trouw and De Telegraaf) are accurate in their reporting statement of this *actor* about this *sub-issue*, the *actor tone* of this *actor* for this *sub-issue* should be the same in both *newspapers*. In our previous example, if the position (*actor tone*) of the transport minister for the technical system of Rekeningrijden is positive in De Telegraaf, it should also be positive in Trouw. However, *actor tones* of these comparable *actor & sub-issue* pairs were not always the same, indicating inaccuracy in the statement of this *actor* (see inaccurate *actor & sub-issue* pairs in Table 3-4). The inaccuracy scores reflect the share of inaccurate *actor & sub-issue* pairs in the comparable *actor & sub-issue* pairs. The higher the inaccuracy scores of the *newspaper* pairs, the more likely that one (or both) of the *newspapers* reported inaccurate information regarding the positions of these *actors* on these particular *sub-issues*. Inaccuracy scores range between 12% and 22%, with the highest being between Trouw and Algemeen Dagblad and the lowest being between NRC Handelsblad and de Volkskrant.

Table 3-4: The accuracy of media coverage (excluding editorials and opinion columns)

Newspapers compared	Comparable actor & sub-issue pairs	Inaccurate actor & sub-issue pairs	Inaccuracy scores (%) (inaccurate actor & sub-issue pairs / comparable actor & sub-issue pairs *100)
Algemeen Dagblad & Trouw	76	17	22
de Volkskrant & De Telegraaf	74	15	20
NRC Handelsblad & Trouw	66	13	20
Trouw & De Telegraaf	56	11	20
Algemeen Dagblad & de Volkskrant	69	13	19
Algemeen Dagblad & NRC Handelsblad	67	12	18
NRC Handelsblad & De Telegraaf	58	9	16
Trouw & de Volkskrant	84	13	15
Algemeen Dagblad & De Telegraaf	50	7	14
NRC Handelsblad & de Volkskrant	68	8	12

The inaccuracy scores in Table 3-4, however, present the most pessimistic scenario. Examining the inaccurate *actor & sub-issue* pairs more closely we see that the *actor tones* were completely opposite (negative vs. positive, or vice versa) in only 5 % of the inaccurate cases. The rest was only moderately different (mixed vs. positive/negative, or vice versa). In around 10 % of the inaccurate pairs, *newspapers* featured actors' opinions from different time periods. These pairs were actually not exactly comparable since it was possible that actors changed opinions over time and made different statements in the course of the policy process. In around 15 % of the inaccurate pairs, actors' opinions were communicated by other actors so the information was actually distorted by other policy actors. In such cases, the *newspapers* were only indirectly inaccurate. Finally, the largest share of inaccuracy, around 50% of the comparable pairs, arose from the presentation of actors' opinions under different conditions or at a different level of completeness. For instance, one *newspaper* reported only that the minister abandoned the Kilometerheffing proposal. Another *newspaper* reported that the minister abandoned the Kilometerheffing proposal, but also added that the minister announced that the trial of the system (Kilometerheffing) would take place as planned. In other words, *newspapers* in such cases reported various forms or parts of reality. We note that in accurate *actor & sub-issue* pairs, it is possible that both *newspapers* present the *actor tone* of the *actor* for the *sub-issue* wrongly even though the *actor tone* is identical in both *newspapers*.

Figure 3-4 shows that all the *newspapers* presented between 60 and 70 % of their coverage neutrally, de Volkskrant having the most neutral coverage and NRC Handelsblad having the least. The neutrality level of NRC Handelsblad and Trouw was almost the same for Rekeningrijden and Kilometerheffing. De Telegraaf and de Volkskrant provided a more neutral presentation of Rekeningrijden than Kilometerheffing whereas it was vice versa for Algemeen Dagblad.

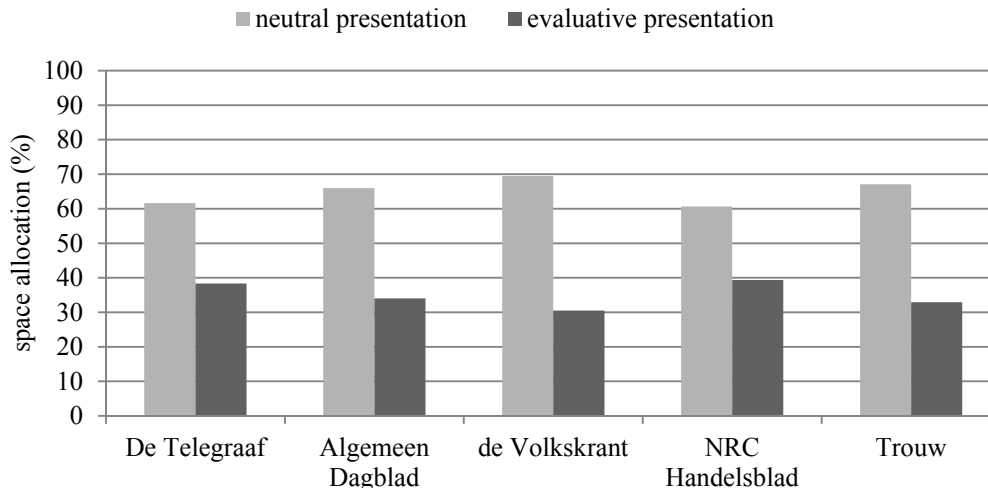


Figure 3-4: The neutrality of media coverage (excluding editorials and opinion columns)

3.4.2 Relevance

Table 3-5 shows that the relevance of road pricing policy among other topics is different for each *newspaper* and the relevance of the policy for popular *newspapers*, De Telegraaf and Algemeen Dagblad, is higher than it is for the three quality *newspapers*.

Table 3-5: The relevance of road pricing policy across newspapers (excluding editorials and opinion columns)

	De Telegraaf	Algemeen Dagblad	de Volkskrant	NRC Handelsblad	Trouw
Space allocation for road pricing policy ^{a b}	161	176	107	100	140

^a In the calculation of the space allocation variable, the number of words used for road pricing policy in a newspaper is weighted by the total number of words published in this newspaper (see section 3.3.2). Therefore, space allocation indicates the relative importance of road pricing policy among other topics in the news coverage of one newspaper in comparison to other newspapers

^b Index NRC Handelsblad (19254) =100

The relevance assessment of *sub-issues* and *actors* in the policy coverage reveals similar results. Appendix A and B indicates that the proportion of *space allocation* to each category of *sub-issue* (e.g. impact on congestion) and *actor* (e.g. transport minister Eurlings) in the total policy coverage of *newspapers* varies across the five *newspapers*. This suggests that the relevance of each *sub-issue* and *actor* was not the same for these five newspapers. For instance, the proportions of sub-issue *technical system* in the policy coverage of popular newspapers, De Telegraaf and Algemeen Dagblad, are 12.3% and 13.7% respectively, whereas for NRC Handelsblad, Trouw, de Volkskrant, the proportion was 6.6%, 6.2% and 5.0% respectively (see Appendix A).

To sum up, one (or some, or all) *newspaper(s)* gave more or less attention to road pricing policy among other topics on the public agenda or some sub-issues or actors in the policy debate compared to their actual level of relevance.

3.4.3 Policy positions of newspapers and changes in time

Figure 3-5 generated by CA depicts associations between *newspapers* and categories of *overall tone* for the road pricing media coverage. On the figure there are clearly three clusters

placed far away from the origin. de Volkskrant and Trouw are strongly associated with a positive *overall tone*, NRC Handelsblad (NRC) and Algemeen Dagblad (AD) with a mixed *overall tone* and, finally, De Telegraaf with a negative *overall tone*. Figures 3-6 and 3-7, which are CA maps generated for Rekeningrijden and Kilometerheffing coverage respectively, roughly mirror the patterns in Figure 3-5. However, in Figure 3-7 we see that the clusters are more evident and placed further from the origin. This apparently indicates that the positions of *newspapers* in the Kilometerheffing policy debate became more distinctive compared to the policy debate of Rekeningrijden even though the directions of their positions remained almost the same. Notable is that the Algemeen Dagblad, which stays almost at the origin in Figure 3-6, had no clear position in the Rekeningrijden policy debate, whereas for Kilometerheffing it had a mixed *overall tone*.

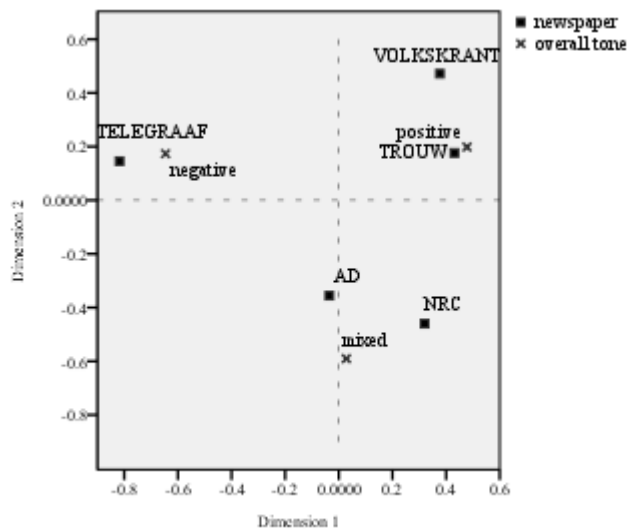


Figure 3-5: Overall tone of media coverage

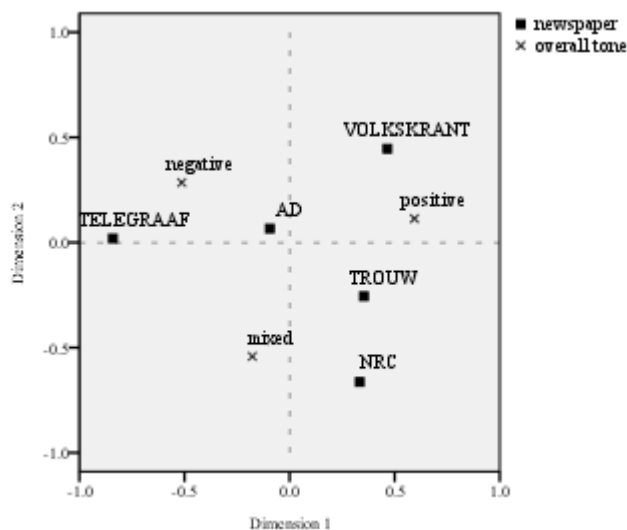


Figure 3-6: Overall tone of media coverage (Rekeningrijden)

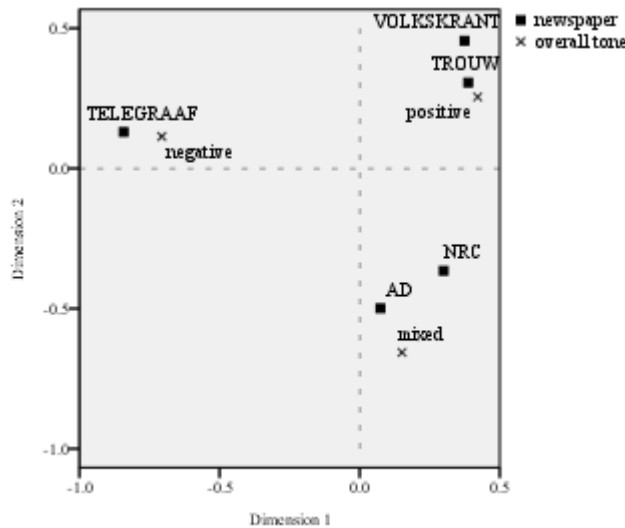


Figure 3-7: Overall tone of media coverage (Kilometerheffing)

Table 3-6 summarizes the results of CA per policy period and shows that each newspaper's *overall tone* did not vary significantly across periods, and in general, the individual periods mirror the overall picture in Figure 3-5. De Telegraaf mostly maintained its negative *overall tone* while de Volkskrant, Trouw were mostly positive. The position of NRC Handelsblad was often positive, although sometimes inclined to be mixed. Algemeen Dagblad usually had a mixed *overall tone*.

Table 3-6: Overall tone of media coverage across policy periods

	Policy Periods							Total
	2	3	4	5	6	8	9	
de Volkskrant	P	PM	N	P	P	P	PN	5P 0.5M 1.5N
Trouw	PM	P	M	P	P	PN	PM	4.5P 2M 0.5N
NRC Handelsblad	P	M	PM	P	N	M	P	3.5P 2.5M 1N
Algemeen Dagblad	NM	PM	PMN	M	M	M	N	1P 4.5M 2N
De Telegraaf	N	N	P	N	M	N	N	1P 1M 5N

^a P: positive, N: negative, M: mixed, PM: between positive and mixed, PN: between positive and negative, NM: between negative and mixed, PMN : no particular position, the same distance to positive, mixed and negative

^b Table 3-6 reflects relative positions of newspapers on the correspondence map of policy periods.

A closer look at period-2, period-4 and period-5 provides further evidence that some *newspapers* inclined to a certain policy position in their news reporting.

In period-2 the ANWB, an auto lobby, started a public campaign against Rekeningrijden, thereby creating lots of negative publicity. Table 3-6 implies that de Volkskrant, Trouw and NRC Handelsblad were indirectly against the ANWB campaign, providing mostly positive coverage of Rekeningrijden during this campaign despite such negative publicity.

In period-4, Kilometerheffing was placed on the political agenda and this led to the removal of Rekeningrijden. Table 3-6 shows that de Volkskrant stood out with its negative *overall tone*, whereas in other periods it was almost always positive. All the other *newspapers* had either a positive or mixed overall tone in this period. De Telegraaf, however, had a positive *overall tone* in period-4 despite being almost always negative in the other periods. Figure 3-8 reveals that the negative *overall tone* of de Volkskrant was mostly for Kilometerheffing (KH). As for De Telegraaf, the positive *overall tone* in this particular period was purely for

Kilometerheffing whereas Rekeningrijden (RR) had almost no *space allocation*. This picture gives an impression that Kilometerheffing was welcomed warmly by De Telegraaf, but not so by de Volkskrant, since its announcement resulted in the removal of Rekeningrijden from the agenda. From this perspective, we can say that de Volkskrant and De Telegraaf were diametrically opposed.

In period-5 there was a common agreement amongst most of the major policy actors on Kilometerheffing, which led to lots of positive publicity. Trouw, de Volkskrant and NRC Handelsblad were associated with a positive *overall tone* in this period. Despite such positive publicity, De Telegraaf and Algemeen Dagblad did not have a positive *overall tone*.

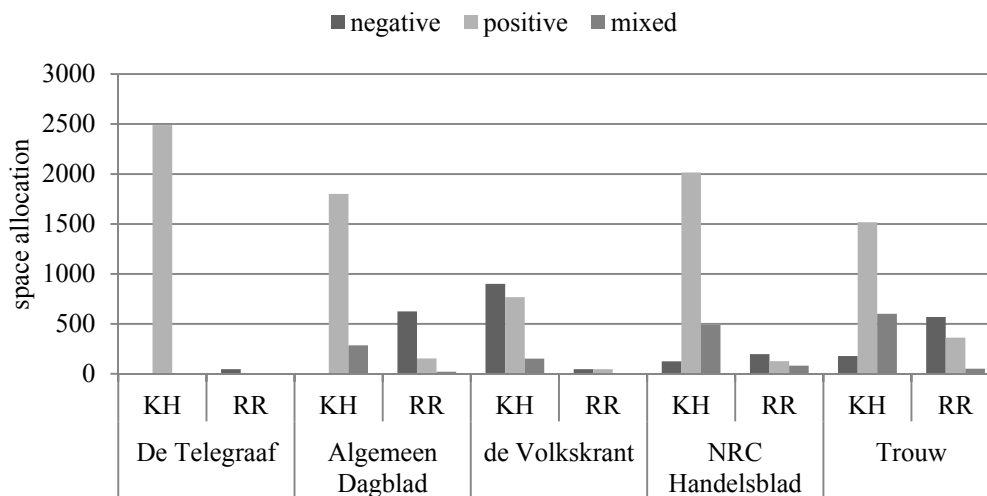


Figure 3-8: Overall tone of media coverage in Period-4

Figures 3-9 and 3-10 show the position of each *newspaper* in terms of *sub-issue* (e.g. impact on congestion) and *actor* (e.g. Eurlings (transport minister)). From these figures, it is clear that de Volkskrant, Trouw and NRC Handelsblad are grouped in the same cluster. De Telegraaf and Algemeen Dagblad, on the other hand, are located away from this cluster and also from each other.

Furthermore, some associations in Figure 3-9 do stand out. The associations between De Telegraaf and *sub-issues* such as privacy and impact on business are rather strong. Algemeen Dagblad is associated more with *sub-issues* like provincial tax, exemptions for public vehicles, impact on rat running, increase in road tax and foreign cars. Also, in Figure 3-10, the *actors* further away from the origin, such as KNMV, lease companies, Chees, real estate, Capgemini, FNV and CBP were closely associated with De Telegraaf. Similarly, *actors* such as Kroes, Weggen, province Drenthe, Rotterdam, Utrecht and SP had a stronger association with Algemeen Dagblad.

Moreover, the reader is closer to both De Telegraaf and Algemeen Dagblad in Figure 3-10 because these *newspapers* published reader letters more often. Interestingly, we see that De Telegraaf exists not only as a *newspaper* but also as an *actor* in Figure 3-10 since it was referred to as an *actor* in some news articles in other *newspapers*.

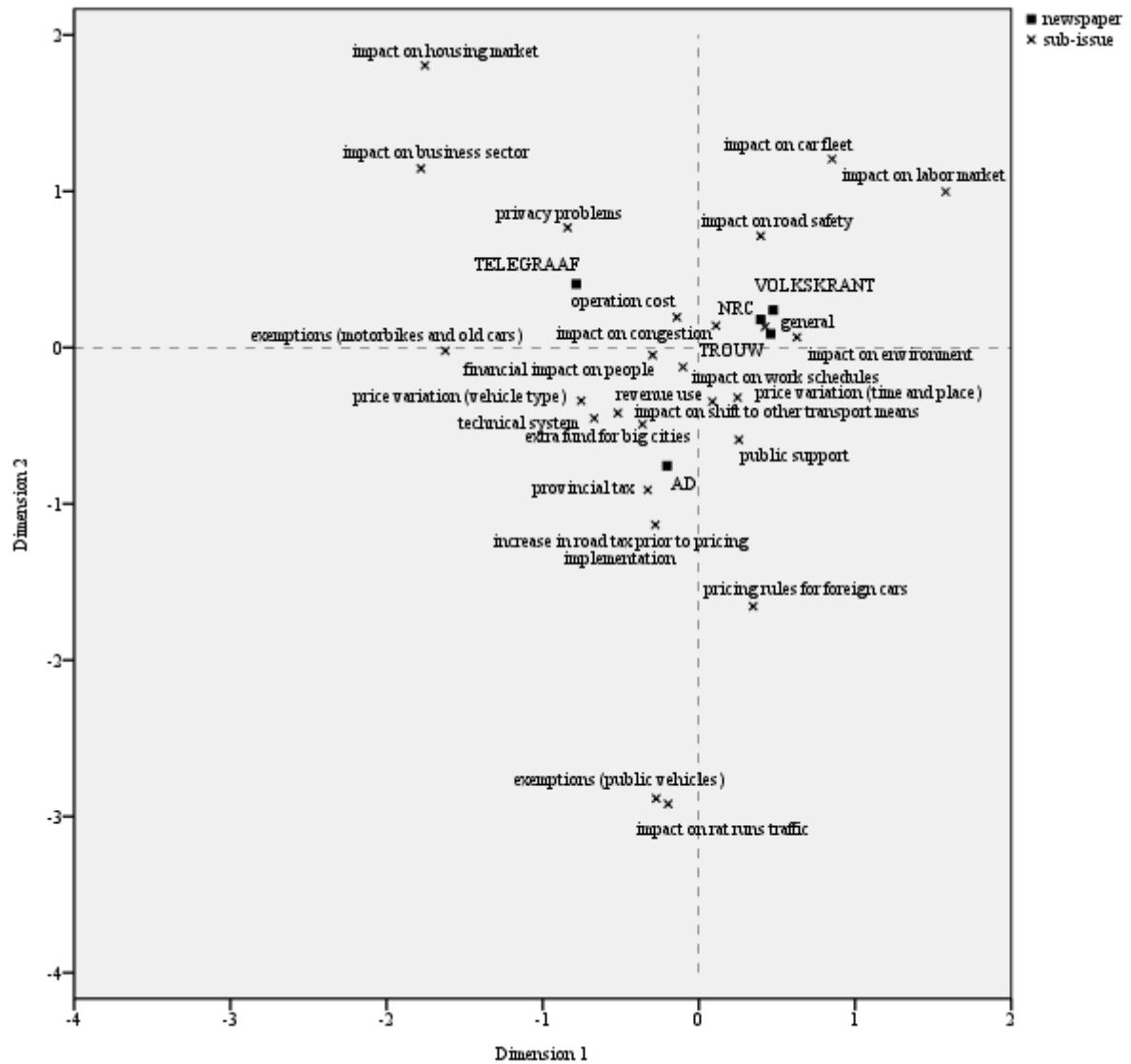


Figure 3-9: Sub-issues in the media coverage

^a Sub-issue is coded as *general* if phrases in a paragraph mention that actors are against (or for) Kilometerheffing or Rekeningrijden, or explain efforts (or intentions) of actors to support or block the introduction of either pricing proposals without giving detailed reasoning for their support or opposition.

^b Sub-issue is coded as *provincial tax* if phrases in a paragraph mention the likelihood of the introduction of a new provincial tax as a source of income for provinces to compensate their missing income resulting from the replacement of existing auto taxes with the kilometer charge after the implementation of Kilometerheffing.

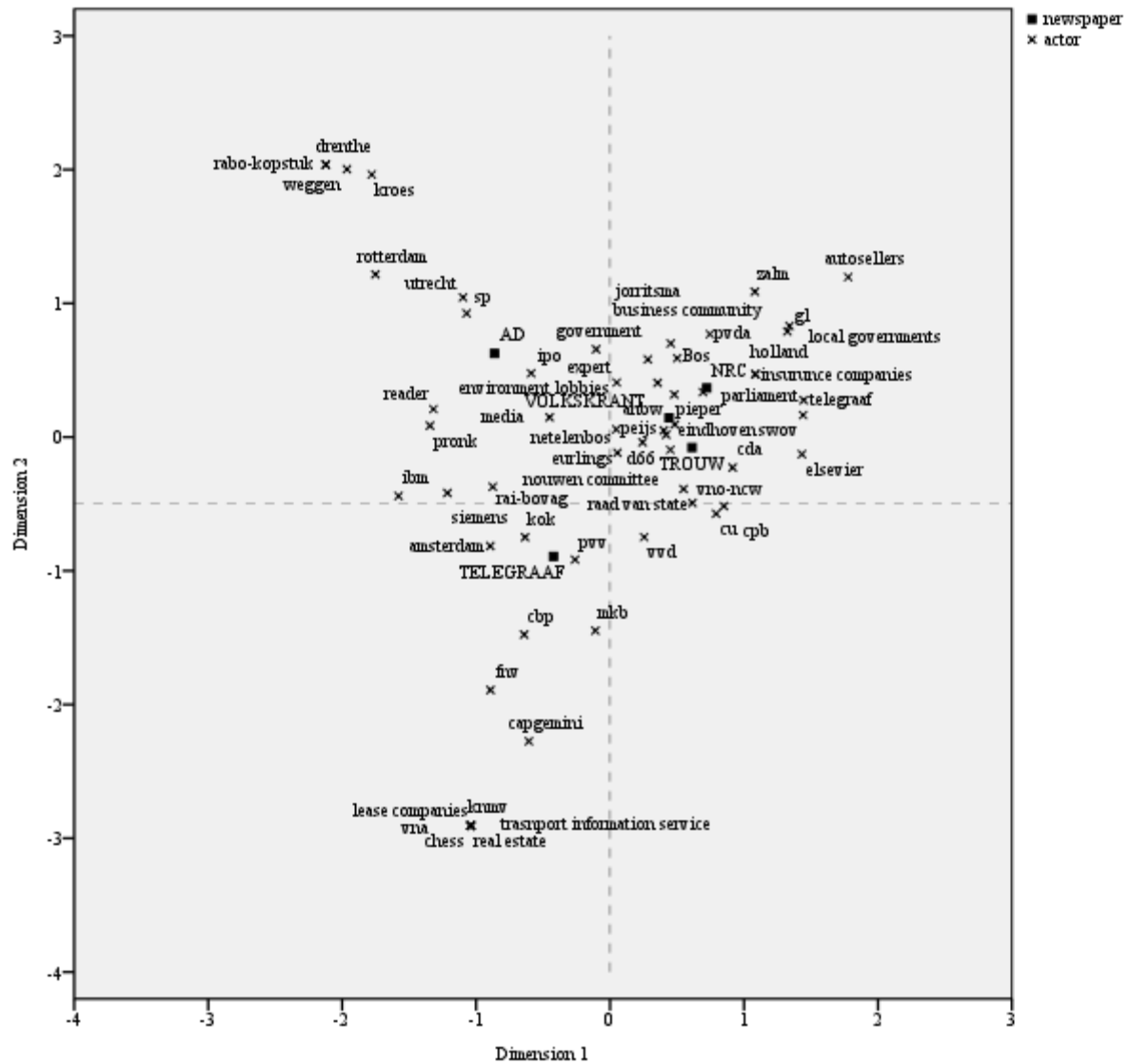


Figure 3-10: Actors in the media coverage

^a Figure 3-10 excludes the actors with a space allocation lower than 0.10 % of the total space allocation.

^c In Figure 3-10, De Telegraaf is seen not only as a newspaper (marked with a cross (x)) but also as an actor (marked with a square (■)).

^d Transport ministry: Eurlings, Weggen, Jorritsma, Kroes, Netelenbos, Peijs

Finance ministry: bos, zalm

Environment ministry: pronk

Prime minister: kok

Local governmental organizations: amsterdam, eindhoven, drenthe, rotterdam, utrecht, Holland, ipo, local governments

Political Parties and other political institutions: cda, cu, d66, gl, pvda, pvv, sp, vvd, government, parlement

Media Organizations: telegraaf, Elsevier, media

Interest groups: anwb, knmv, vna, mkb, rai-bovag, vno-ncw, fnv, business community, environmental lobbies

Advisory bodies and other institutions: cbp, cpb, nouwen committee, raad van state, rapo-kopstuk, swov

Private Companies: capgemini, chess, ibm, lease companies, real estate, siemens, auto sellers, insurance companies

Individuals: expert, reader, pieper, traffic information service

3.5 Conclusions and discussion

In this study, we investigated firstly whether the Dutch news media was objective or acted as a policy actor in the road pricing policy debate. In general, according to our objectivity framework we can conclude that the Dutch news media was not objective, and acted as a policy actor during the policy debate by distorting the reality in its news reporting. We assessed the objectivity of the news media based on presentation and selection dimensions (see Table 3-1). In the presentation dimension, the factualness ratio was quite high for all *newspapers* ranging between 80% and 90%. Inaccuracy problems were not much of an issue, the reported information was mostly correct. Nevertheless, the completeness performance of the media in general was not at a satisfactory level. The completeness scores fluctuated around 60% across the policy periods and between *newspapers* in terms of the range of arguments featured in the media coverage. The scores were even lower for the range of *actor & sub-issue* pairs. These results suggest that the *newspapers* did not present a complete picture of road pricing policy including all the related issues and viewpoints. As to neutrality, we observed that around one third of the media coverage was presented in an evaluative tone reflecting the journalist's point of view. Similar patterns were observed across the *newspapers* for all criteria in the presentation dimension. We can thus conclude that from a presentation perspective, the news media was not objective, but that all five *newspapers* were not objective to almost the same extent. As to the selection dimension, our findings reveal that the news media did not satisfy the relevance criterion, suggesting that neither road pricing policy (among other issues in the public sphere) nor *sub-issues* or *actors* (in the policy debate) received media attention corresponding to their actual relevance. However, our findings do not indicate which of the *newspapers* (one, some, or all of them) did not satisfy the relevance criterion or to what extent.

In the second part of our study, we analyzed how *newspapers* positioned themselves in the policy debate and whether or not there was a change in their positions over time. Interestingly, we found that all five *newspapers* clearly leaned towards different policy options and mostly kept the same position over time even though, as already mentioned, each violated the objectivity norms to about the same extent. We identified four clusters in terms of their *overall tone*: De Telegraaf was almost always negative. Algemeen Dagblad had usually a mixed *overall tone*. de Volkskrant, Trouw were usually positive. The position of NRC Handelsblad was often positive, but sometimes inclined to be mixed. In terms of the coverage of *sub-issues* and *actors*, the quality *newspapers*, de Volkskrant, Trouw and NRC Handelsblad are grouped in the same cluster. De Telegraaf and Algemeen Dagblad, on the other hand, are located away from this cluster and also from each other. From this picture, it seems that the position of the newspapers was mainly determined by the type of newspaper (popular or quality). However, popular *newspapers*, De Telegraaf and Algemeen Dagblad, as well as taking different positions to the quality *newspapers* also differed from each other. Also, the shift in the position of Algemeen Dagblad and its objectivity performance (in the presentation dimension) between Rekeningrijden and Kilometerheffing is notable. This shift could be explained by the editorial restructuring of this *newspaper* in 2005. One of the *newspapers*, De Telegraaf, was accused of being a policy actor, namely being biased, in some of the news articles published in other *newspapers* (see Figure 3-10). Our findings suggest, however, that De Telegraaf was as objective as the others (e.g. de Volkskrant), but clearly had a certain (negative) position to road pricing policy just as de Volkskrant had a certain (positive) position.

Our study is the first empirical analysis which examines the objectivity of the news media in reporting the road pricing policy debate using a comprehensive objectivity framework. With

this study we have empirically shown that the news media acts as a policy actor with its biased reporting and positions of newspapers towards road pricing policy vary to a large extent. However, there is certainly room for future studies. Firstly, our analysis includes only national newspapers. A more comprehensive analysis including local and free newspapers, and other media (radio, TV, internet) could bring new insights to this issue. Secondly, the objectivity of news media in reporting road pricing policy should be further questioned by analyzing the views of journalists, policy makers and media consumers. Interviews with journalists in particular might help to understand what aspects of objectivity they value more and how their perception of objectivity shapes the road pricing coverage. Finally, this study shows that the news media has been a policy actor in the road pricing policy debate through its biased reporting, but the strength of the news media as a policy actor depends on its influence on the public and other policy actors. Therefore, future research should examine to what extent newspapers with different positions have an impact on their readers or other policy actors and lead to changes in opinions and actions in the road pricing policy debate.

Acknowledgements

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Appendix A: Space allocation for sub-issues (%)

	De Telegraaf	Algemeen Dagbald	de Volkskrant	NRC Handelsblad	Trouw
Pricing proposal					
Exemptions (motorbikes and old cars)	1.4	0.8	0.3	0.3	0.0
Exemptions (public vehicles)	0.0	1.1	0.2	0.3	0.0
Extra fund for big cities	0.5	0.7	0.2	0.6	0.4
General ^a	25.4	25.7	43.5	39.6	44.9
Increase in road tax prior to pricing implementation	0.4	0.8	0.0	0.0	0.8
Operation cost	3.2	1.8	1.8	2.4	2.7
Public support	1.3	3.0	2.2	2.9	3.7
Pricing rules for foreign cars	0.0	0.8	0.8	0.3	0.0
Privacy problems	7.7	2.9	4.2	3.1	3.1
Provincial tax ^b	1.2	2.3	0.5	1.4	1.3
Price variation (time and place)	3.1	5.4	3.8	4.7	5.1
Price variation (vehicle type)	4.2	3.9	0.5	3.1	1.8
Revenue use	1.9	2.7	1.2	2.1	2.9
Technical system	12.3	13.7	6.6	6.2	5.0
Total (pricing proposal)	62.8	65.5	65.6	66.7	71.8
Impact of pricing proposal					
Financial impact on people	12.1	10.1	11.9	8.1	5.9
Impact on business sector	2.9	0.4	0.2	0.2	0.7
Impact on car fleet	0.3	0.0	0.9	0.9	0.2
Impact on congestion	10.2	9.8	11.2	11.9	14.2
Impact on environment	0.8	1.1	1.2	2.9	1.4
Impact on housing market	2.2	0.0	0.2	1.1	0.0
Impact on labour markets	0.0	0.0	0.2	1.0	0.0
Impact on rat runs traffic	0.0	0.6	0.0	0.0	0.2
Impact on road safety	0.3	0.1	0.4	0.3	0.2
Impact on shift to other transport means	2.3	2.9	1.6	0.5	1.2
Impact on work schedules	0.4	0.4	0.3	0.0	0.3
Total (impact of pricing proposal)	31.5	25.5	28.2	26.8	24.3
Implementation issues					

Information provision for pricing proposal	0.0	0.0	0.0	0.3	0.0
Institutional settings (e.g. election periods)	0.3	0.5	0.6	2.9	0.8
International road pricing examples	4.2	7.5	2.7	1.1	1.5
Perception of congestion level as a problem	0.0	0.0	0.0	0.5	0.1
Public-private partnership	1.2	1.1	2.9	1.7	1.4
Total (implementation issues)	5.7	9.1	6.2	6.5	3.8
Total (%)	100	100	100	100	100
Total (space allocation)	30943	33816	20564	19254	26974

^a Sub-issue is coded as *general* if phrases in a paragraph mention that actors are against (or for) Kilometerheffing or Rekeningrijden, or explain efforts (or intentions) of actors to support or block the introduction of either pricing proposals without giving detailed reasoning for their support or opposition.

^b Sub-issue is coded as *provincial tax* if phrases in a paragraph mention the likelihood of introducing a new provincial tax as a source of income for provinces to compensate their missing income resulting from the replacement of existing auto taxes with kilometer charge after the implementation of Kilometerheffing.

Appendix B: Space allocation for actors (%)

	De Telegraaf	Algemeen Dagbald	de Volkskrant	NRC Handelsblad	Trouw
Prime ministry					
Balkenende	0	0.2	0	0.2	0.1
Kok	0.7	0.5	0.5	0.3	0.2
Lubbers	0	0	0	0	0.1
Total (Prime ministry)	0.7	0.7	0.5	0.4	0.4
Transport ministry					
Eurlings	11.4	12.7	18.8	13.3	11.4
Jorritsma	0	0.1	0	0	1
Kroes	0	0.2	0	0	0
Netelenbos	11.8	8.2	15	9.8	9.3
Peijs	2.1	1.8	1.1	3.7	3.6
Weggen	0	0.8	0	0	0
Total (Transport ministry)	25.3	23.9	35	26.7	25.4
Environmental ministry					
Pronk	0	0.3	0.2	0	0
Van Geel	0	0	0	0.1	0
Total (Environmental ministry)	0	0.3	0.2	0.1	0
Finance ministry					
Bos	0.2	0.4	0.8	1.5	0.2
Zalm	0	0.3	0	2.6	0.4
Total (Finance ministry)	0.2	0.8	0.8	4.2	0.7
Political parties and other political entities					
CDA	2.5	0.6	2.5	4.8	6.3
CU	0.8	0.1	0.3	0.5	1.9
D66	0.4	0.2	0.4	0.7	0.7
GL	0	0.1	0.3	1.1	0.4
Government	1.2	4.2	2.9	5.4	1.7
GPV	0	0	0	0	0.1
LPF	0	0.1	0.1	0	0.1
Parliament	1.1	1.4	1.9	4.5	2.4
PvdA	0.1	0.7	1.5	2.1	1.3
PVV	1.2	0.3	0.3	0.6	0.3
RPF	0	0	0	0	0.2
SP	0.5	1.9	0.3	0.3	0.4
VVD	6.6	1.5	2.4	3.2	7.7
Total (Political parties and other political entities)	14.5	11	13	23.2	23.6
Local governmental organizations					
Amsterdam	0.6	0.3	0.1	0.2	0

Delft	0	0	0	0	0.2
Den Haag	0.1	0.2	0.1	0.1	0
Drenthe	0	0.5	0	0	0
Eindhoven	0.2	0.1	0.2	0.5	0.1
Haarlem	0.1	0	0	0	0
Local governments	0	0	1	0.7	0.1
IPO	0.1	0.4	0	0	0.4
Noord-Holland	0	0.1	0	0	0
Rotterdam	0.2	0.7	0	0.1	0
Tilburg	0	0.1	0	0	0
Utrecht	0.2	0.7	0	0.2	0.2
VNG	0	0.2	0	0	0.3
Zuid-holland	0	0.1	0	0	0
Total (Local governmental organizations)	1.3	3.6	1.3	1.8	1.3
<hr/>					
Interest groups					
ANWB	7	4.9	11.1	5.7	13.6
Business community	0.1	0.5	0.9	0.7	0.5
Environment lobbies	0.9	1.3	0.9	3.1	1.7
Bicycle association	0	0.1	0.5	0	0
FNV	1	0.2	0	0	0.2
Greenpeace	0	0	1.1	0	0
KNMV	0.6	0	0	0	0
KVK	0	0	0	0	0.2
MKB	1.1	0	1.1	0.2	0
Rai-Bovag	1.8	1.4	1	0.1	0.3
TLN	0	0	0.1	0.1	0.1
VNA	0.7	0	0	0	0
VNF	0.3	0	0	0	0
VNO-NCW	1.1	0.2	3.4	0.3	1.2
VVN	0.3	0	0	0	0
FDN	0	0.2	0	0	0
KNAC	0	0	0.3	0	0
KNV	0	0.1	0	0	0
Total (Interest groups)	15	8.9	20.5	10.1	17.7
<hr/>					
Advisory bodies and other institutions					
CBP	0.5	0.1	0	0.2	0
CPB	2.4	0.2	1.8	2.5	6.3
Government prosecutor	0	0.1	0	0	0
Nouwen committee	2.6	1.9	3.8	3.6	5.2
Privacywaakhond	0	0	0	0	0.5
Raad van state	1	0	0.8	2.7	0.2
Rabo-kopstuk	0	0.5	0	0	0
RIVM	0	0	0	0.1	0
SER	0	0	0	0	0.2
SWOV	0	0	0.2	0.1	0
Free university	0	0.2	0	0	0
Work group mobility management	0.1	0	0	0	0
Total (Advisory bodies and other institutions)	6.6	2.9	6.6	9.2	12.3
<hr/>					
Private companies					
Autosellers	0	0	0	0.9	0
Capgemini	1.2	0	0	0.4	0
Chess	2.1	0	0	0	0
Horvat & partners	0	0	0	0.4	0
IBM	0.5	0.4	0	0	0
Insurance companies	0	0	0.2	0	0
Lease companies	0.5	0	0	0	0
Pon occasion	0	0	0	0.4	0
Port of Rotterdam	0	0	0	0	0.5
Real estate	2.2	0	0	0	0
Siemens	0.5	0.4	0	0	0.1

Total (Private companies)	7	0.9	0.2	2.1	0.6
Media organizations					
Elsevier	0	0	0.3	0	0
Media	13.4	22.7	6.2	8.4	9.2
RTL	0	0	0	0.4	0
Telegraaf ^a	0	0	0.8	0.7	1
Total (Media organizations)	13.4	22.7	7.3	9.4	10.2
Individuals					
Expert	1.3	3.2	8.1	4.5	1.7
Pieper	3.1	2	3.8	8.3	3
Reader	11.1	19.2	2.8	0	3.1
Traffic information service	0.6	0	0	0	0
Total (Individuals)	16	24.3	14.7	12.8	7.8
Total (%)	100	100	100	100	100
Total (space allocation)	30943	33816	20564	19254	26974

^a *De Telegraaf* is mentioned as an actor by other newspapers

References

- Banerjee, M., Capozzoli, M., McSweeney, L., Sinha, D. (1999) Beyond kappa: A review of interrater agreement measures. *Canadian Journal of Statistics* 27, 3-23.
- Baumgartner, F.R., Jones, B.D. (1993) *Agendas and instability in American politics*. University of Chicago Press, Chicago.
- Berkel, B. (2006) Political parallelism in news and commentaries on the Haider conflict. A comparative analysis of Austrian, British, German, and French quality newspapers. *Communications* 31, 85-104.
- Bernard, H.R., Ryan, G.W. (2010) *Analyzing qualitative data: Systematic approaches*. SAGE, Los Angeles [Calif.].
- Birkland, T.A. (2001) *An introduction to the policy process: Theories, concepts, and models of public policy making*. M.E. Sharpe, Armonk, N.Y.
- Bosman, J., d'Haenens, L. (2008) News reporting on Pim Fortuyn: Framing in two Dutch newspapers. *Media, Culture & Society* 30, 735-748.
- Boykoff, M.T., Boykoff, J.M. (2004) Balance as bias: Global warming and the US prestige press. *Global Environmental Change* 14, 125-136.
- Boykoff, M.T., Boykoff, J.M. (2007) Climate change and journalistic norms: A case-study of US mass-media coverage. *Geoforum* 38, 1190-1204.
- Carpentier, N. (2005) Identity, contingency and rigidity: The (counter-)hegemonic constructions of the identity of the media professional. *Journalism* 6, 199-219.
- Cohen-Almagor, R. (2008) The limits of objective reporting. *Journal of Language and Politics* 7, 136-155.
- Commissariaat voor de Media (2011) *Mediamonitor: The Dutch media in 2010*.
- Covert, T.J.A., Wasburn, P.C. (2007) Measuring media bias: A content analysis of time and newsweek coverage of domestic social issues, 1975–2000. *Social Science Quarterly* 88, 690-706.
- D'Alessio, D., Allen, M. (2000) Media bias in presidential elections: a meta-analysis. *Journal of Communication* 50, 133-156.
- Donsbach, W. (2003) Objectivity in reporting. *Encyclopedia of international media and communications* ed Johnston, D.H. Academic, San Diego, Calif., London.
- Garrison, D.R., Cleveland-Innes, M., Koole, M., Kappelman, J. (2006) Revisiting methodological issues in transcript analysis: Negotiated coding and reliability. *The Internet and Higher Education* 9, 1-8.
- Hair, J.F. (2010) *Multivariate data analysis: A global perspective*. Pearson Education, Upper Saddle River, N.J., London.
- Herman, E.S., Chomsky, N. (1988) *Manufacturing consent: The political economy of the mass media*. Pantheon Books, New York.
- Islam, R. (2008) Overview: From Media Markets to Policy. *Information and public choice: From media markets to policy making* ed Islam, R. World Bank, Washington, D.C.
- Kingdon, J.W. (2011) *Agendas, alternatives, and public policies*. Little, Brown and Co., Boston [u.a.].

- Landis, J.R., Koch, G.G. (1977) The measurement of observer agreement for categorical data. *Biometrics* 33, 159-174.
- Langmyhr, T. (1999) Understanding innovation: the case of road pricing. *Transport Reviews* 19, 255-271.
- Lombard, M., Snyder-Duch, J., Bracken, C.C. (2002) Content analysis in mass communication assessment and reporting of intercoder reliability. *Human Communication Research* 28, 587-604.
- Louw, P.E. (2010) *The media and political process*. SAGE, Los Angeles, Calif., London.
- McGrail, J.P. (2008) Sensationalism, narrativity and objectivity - Modeling ongoing news story practice. Ph.D. Thesis, Syracuse University.
- McQuail, D. (1977) *Analysis of newspaper content*. HMSO, London.
- McQuail, D. (1999) *Media performance: Mass communication and the public interest*. SAGE Publ., London [u.a.].
- Nygrén, N.A., Lyytimäki, J., Tapio, P. (2012) A small step toward environmentally sustainable transport? The media debate over the Finnish carbon dioxide-based car tax reform. *Transport Policy* 24, 159-167.
- Rourke, L., Anderson, T., Garrison, D.R., Archer, W. (2000) Methodological issues in the content analysis of computer conference transcripts. *International Journal of Artificial Intelligence in Education* 11.
- Ryley, T., Gjersoe, N. (2006) Newspaper response to the Edinburgh congestion charging proposals. *Transport Policy* 13, 66-73.
- Schade, J., Schlag, B. (2000) *Acceptability of urban transport pricing*. Helsinki: Government Institute for Economic Research.
- Schuitema, G., Steg, L., Forward, S. (2010) Explaining differences in acceptability before and acceptance after the implementation of a congestion charge in Stockholm. *Transportation Research Part A: Policy and Practice* 44, 99-109.
- Seidel, T., Matthes, A., Wieland, B., Schlag, B., Schade, J., Verhoef, E., Ubbels, B., Tánzos, K., Kosztyó, Á., Mészáros, F. (2004) *TIPP (Transport Institutions in the Policy Process) - Deliverable 4 political acceptability and perceived legitimacy of transport policy implementation*. European Commission.
- Semetko, H.A. (2003) Political bias in the media. *Encyclopedia of International Media and Communications* 3, 517-525.
- Vigar, G., Shaw, A., Swann, R. (2011) Selling sustainable mobility: The reporting of the Manchester Transport Innovation Fund bid in UK media. *Transport Policy* 18, 468-479.
- Vliegthart, R. (2007) Framing immigration and integration: Facts, parliament, media and anti-immigrant party support in the Netherlands. Ph.D. Thesis, Free University
- Westerstahl, J. (1983) Objective news reporting: General premises. *Communication Research* 10, 403-424.
- Winslott-Hiselius, L., Brundell-Freij, K., Vagland, A., Byström, C. (2009) The development of public attitudes towards the Stockholm congestion trial. *Transportation Research Part A: Policy and Practice* 43, 269-282.

4 The reciprocal relationship between policy debate and media coverage: the case of road pricing policy in the Netherlands

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4.1 Introduction

Road pricing is generally considered an effective measure to deal with transport problems, for example congestion (Verhoef, 2008). Nevertheless, the policy process does not usually progress smoothly due to low public and political acceptability (Isaksson and Richardson, 2009; Frey, 2003; Jones, 2003; Schade and Schlag, 2003). In the policy process, the media might influence public and political support in various ways. Firstly, all policy actors keep an eye on the media to learn about the opinions and actions of other policy actors. Secondly, politicians monitor the media coverage of their policies as a proxy for public opinion and assume that the public is highly influenced by the media coverage (Heffernan, 2006; Koch-Baumgarten and Voltmer, 2010). Finally, the media might influence public support because the public acquires most of its information about policy proposals from the media (Koch-Baumgarten and Voltmer, 2010; Tresch, 2009).

It is therefore not surprising that the question how the media present policy issues has attracted the attention of researchers. Some studies have examined the media coverage of various policy issues in several policy fields such as the environment, health and monetary policy (e.g. Lyytimäki, 2011; Jönsson, 2011; Collins et al., 2006; Böhm et al., 2012; Hayes et al., 2007). In addition, some studies in the area of transport policy (e.g. Rissel et al., 2010; Nygrén et al., 2012; Judge, 2002) have explored the media coverage of transport policy issues. However, only three of these latter studies focused on road pricing policy. The media coverage of the Edinburgh, Manchester and London road pricing schemes was analysed by Ryley and Gjersoe (2006), Vigar et al. (2011) and Gaber (2004), respectively. All three studies drew a similar conclusion, namely that the media coverage had a generally negative

tone and that some policy issues had been neglected. Each study presented valuable implications for both future research and policymakers. However, each study examined the media coverage of only one road pricing scheme during a policy process that took one or two years. The media's involvement in a policy process and the media coverage of public policies are contingent on several factors, such as policy content or the type of policy events (e.g. political crisis) in the policy fields concerned (Koch-Baumgarten and Voltmer, 2010). Therefore, a more comprehensive approach that considers changes in these factors is needed to elicit the characteristics of the media coverage of road pricing policies. Furthermore, all the studies to date have analyzed the British media. Their findings do not necessarily explain the characteristics of the media coverage of road pricing policies in other countries. The media coverage of the same issue can vary between countries because of differences in media systems (de Vreese et al., 2001; Oates, 2008). More importantly, these studies did not question whether and, if so, to what extent the media coverage of road pricing policies influences the policy debate (and policy processes), or vice versa.

To address these gaps, this study analyzed the media coverage of road pricing policy in a country with a different media system, namely the Netherlands. For example, reporting is more conflict-oriented in the UK compared to the Netherlands (see Vliegenthart et al., 2011). Moreover, the study adopted a more comprehensive approach than previous studies and looked into the media coverage of two road pricing schemes, rather than only one. The analysis covered a policy process that took 12 years (1998–2010) and explored changes in the media coverage of the two schemes at different stages of the policy process, the roles of a varying number and type of policy actors (e.g. politicians and interest groups) and various types of policy events.

Three research questions were formulated. The first – which was intended to identify the characteristics of media coverage (e.g. its tone and space allocation for issues or actors) – was: To what extent did the characteristics of the media coverage of two Dutch pricing proposals differ from each other and change over time? The two other research questions concerned the relationship between media coverage and the content of policy debate. Studies in the communication field indicate that the relationship between media coverage and the policy debate is reciprocal. While the content of the policy debate (and the policy position of newspapers) shapes media coverage, the policy debate and the course of the policy processes can sometimes be influenced by media coverage (this is dealt with in section 4.2). Based on this premise, research questions two and three were: To what extent did the content of the policy debate influence media coverage? And to what extent and how did the media coverage influence the policy debate and the course of the policy process of the Dutch road pricing policies?

Since 1977, there have been several unsuccessful attempts in the Netherlands to introduce a road pricing scheme in one form or another. Two schemes – *Rekeningrijden* and *Kilometerheffing* – were each intensively discussed for several years. *Rekeningrijden* proposed charging road users during peak hours to use the ring roads around the country's largest cities (Den Haag, Rotterdam, Utrecht and Amsterdam) and was high on the political agenda between 1998 and 2001. *Kilometerheffing* was envisaged as a variable kilometer charge according to vehicle type, and time and place on the country's entire road network. The kilometer charge was going to gradually replace the existing annual road tax and car purchase tax. *Kilometerheffing* was on the agenda between 2001 and 2010.

This paper is organized as follows. Section 4.2 introduces the theoretical background to the study and outlines the reciprocal relationship between media coverage and policy debate. Section 4.3 provides the methodological foundation of the study. Section 4.4 presents the

policy positions of Dutch newspapers and explores the degree to which they provide an accurate account of policy debate. Section 4.5 discusses the variation in the characteristics of media coverage and how changes in the content of the policy debate are reflected in the media coverage. Section 4.6 concerns the influence of the media coverage on the policy debate and the policy process. Finally, section 4.7 presents the main conclusions and policy implications.

4.2 The relationship between policy debate and media coverage

The relationship between the media coverage of policies and policy debates is dynamic and reciprocal (Koch-Baumgarten and Voltmer, 2010; Wolfsfeld, 2014). Figure 4-1 depicts a simplified illustration of this relationship. van Aelst and Vliegthart (2014, p. 394) reviewed studies that had analysed this reciprocal relationship, and reported that whereas some studies show the dominance of ‘media-to-politics’ influence, others refer to ‘politics-to-media’ dominance despite a common agreement that ‘the influence works both ways’: policy actors create and promote their messages, and then the media covers some of these messages, which triggers reactions from other actors and influences the policy debate (Sellers, 2010; Wolfsfeld, 2014). It is also argued that the media are an initiator of this influence cycle, since ‘policy actors already in their initial behavior take into account how the media will react’ (van Aelst and Vliegthart, 2014, p. 395). For public policies, Koch-Baumgarten and Voltmer (2010) noted that whether the media coverage triggers changes in the policy debate (and policy process) or vice versa depends on the policy fields in question. The relationship between the media and politics is also conditional: the media coverage does not always influence the policy debate and the behaviors of policy actors, and the policy debate is not always fully reflected in the media coverage.

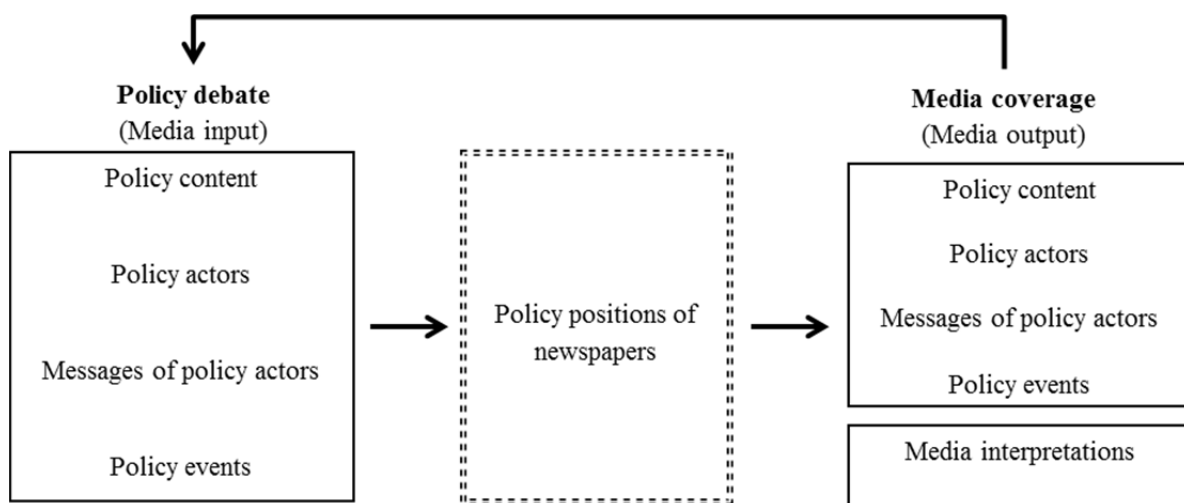


Figure 4-1: The relationship between policy debate and media coverage

It is usually expected that the way a policy is covered by the media influences policymaking because political actors view the media coverage as a proxy for public opinion and assume that the public is highly influenced by the media coverage (Koch-Baumgarten and Voltmer, 2010; Walgrave and van Aelst, 2006). However, media coverage only rarely triggers policy decisions about real policy measures and it affects the policy debate only under certain circumstances, depending on ‘the kind of issues covered, the specific media outlet, and the sort of coverage’ (Walgrave and van Aelst, 2006, p. 88). Koch-Baumgarten and Voltmer (2010) found that policy fields that are closely linked to voters and times of policy uncertainty in the policy process are more prone to the influence of the media. Furthermore, even when

the media coverage has an impact on the policy debate, this influence cannot be solely attributed to the media, because policy actors usually react to statements by other policy actors reported by the media. In such cases, the influence of the media on the policy debate becomes rather indirect through their gatekeeping role, which involves choosing which or whose statements to include in the media coverage from a whole range of statements and viewpoints in a policy debate (van Aelst and Vliegthart, 2014).

Understanding the news reporting process is important for explaining the conditionality of the influence of policy debate on media coverage. In general in the news reporting process, due to the restricted availability of media space, newspapers evaluate all daily events and issues on their newsworthiness using 'news factors', and they include only some events or issues in their coverage and allocate them varying degrees of space (Donsbach, 2003; Mcquail, 2010; Mencher, 2006; Schnell and Frauke, 2001). 'News factors are such basic criteria of news selection on which all journalists tend to agree' (Tresch, 2009, p. 70). News factors include the prominence of actors, the relevance of an issue, the level of conflict related to the issue (or actors) or the unexpectedness of an event (Mencher, 2006; Tresch, 2009; Tuggle et al., 2004). For instance, an issue or event is more likely to become news if the actor involved is prominent (e.g. a government minister or the head of an interest group), the level of conflict is high or the number of people influenced by the issue or event is large. In the reporting process of a policy debate, the same media logic applies. All policy actors try to get their messages inserted into the news (Sellers, 2010; Wolfsfeld, 2014). But the policy debate is covered by the media to the extent that policy content (e.g. the design features of pricing proposals) and the type/ number of actors participating in the policy debate and their messages comply with news factors. Specific policy events might increase the newsworthiness of a policy debate and therefore the media attention. During periods of routine politics, a policy does not attract media attention (Koch-Baumgarten and Voltmer, 2010). Therefore, some similarity might be observed in the content of media coverage across newspapers, as might a correspondence between the content of a policy debate (media input) and its media coverage (media output), because all newspapers use the same media input (policy debate) and rely on common standards (news factors) when selecting events and issues. For instance, speeches by the relevant minister – the most prominent actor in a given policy field – are reported in all newspapers. Indeed, such policy actors can promote their policy positions without much effort. Journalists usually follow and report their messages and activities (Tresch, 2009).

However, studies show that the newsworthiness of a specific issue or actor can vary across newspapers depending on their organizational, commercial and ideological concerns, such as their news tradition, political orientation, reader's affinities, the influence of owners, financial or staff resources, or the socialization of journalists (see e.g. Archetti, 2010; Mencher, 2006; Shoemaker and Mayfield, 1987; Tresch, 2009; Wolfsfeld, 2014). Newspapers thus systematically favor one side of a policy debate or one particular policy position (Mcquail, 1999). For instance, they might all report the activities of prominent actors – a common news factor for journalists – but choose to report messages only from policy actors whose policy position is the closest to theirs. Likewise, their leaning may affect how actors and issues are evaluated and presented (Tresch, 2009). The policy actors' messages which do not correspond with the policy position of a newspaper might be accompanied by implicitly and explicitly negative comments from journalists. As a result, the coverage of the same policy may vary across newspapers. However, we might still expect some level of overlap in the coverage by different newspapers and a correspondence between the content of a policy debate and its media coverage depending on the degree of bias. After all, newspapers are 'expected to disseminate information as neutral chroniclers and impartial observers' and to provide 'an accurate account of important events, actors, and messages' to the public in western

democracies (Hänggli, 2012, p. 303). This implies that a newspaper would not completely ignore the messages or policy activities of a minister (or another prominent actor) who opposes their own policy position, or present all of these messages with negative media comments. If there is such a high degree of bias, the trustworthiness and reliability of newspapers might be degraded in the eyes of the public (Mcquail, 1999).

4.3 Methodology

This study used two data sources, namely news articles published in five leading Dutch national newspapers (De Telegraaf, Algemeen Dagblad, de Volkskrant, NRC Handelsblad, and Trouw) – which were used to determine the characteristics of the media coverage – and parliamentary and policy documents, which were used to determine the content of policy debate. The following is an explanation of how these articles and documents were sampled and analyzed.

4.3.1 Newspaper articles

During periods of routine politics, public policies do not generally attract media attention. Specific policy events disturb routine politics and increase the media attention (Koch-Baumgarten and Voltmer, 2010). In our case, nine such policy events were identified during a policy process lasting 12 years. Each policy event – an action by one or more of the policy actors – triggered discussions amongst policy actors and consequently media attention for the policy peaked. All newspaper articles that appeared during a two-week period around these events (one week before and one week after) were selected. Table 4-1 lists these policy events. Although Rekeningrijden (RR) and Kilometerheffing (KH) were discussed together across all the policy periods, RR was the main focus of four policy events between 1998 and 2001, whereas KH was the focus of six policy events between 2001 and 2010. In policy period 4, both proposals were simultaneously discussed. The LexisNexis database was used as a data source and the search string comprised all the name variations used for road pricing, RR and KH in the Dutch language. The sample includes 405 news articles. A latent content analysis was applied to this sample of news articles as part of a larger piece of research on the role of the media in the Dutch road pricing policy process, and was also partially used in the study by Ardiç et al. (2013).

Table 4-1: Policy events selected for the analysis

Pricing proposal	Policy period	Date	Policy event
RR	1	18.07.1998	RR included in the coalition government agreement
	2	19.01.1999	ANWB (motoring association) started a campaign against RR
	3	19.05.2000	National transport policy document (BOR) announced, which included RR
	4	10.04.2001	Following the 'Mobimiles' report on technological possibilities for KH, RR removed from the political agenda
KH	5	30.04.2005	Major Dutch policy actors (Nouwen Committee) agreed on KH
	6	08.09.2005	National transport policy document (Nota Mobiliteit) announced, delaying KH implementation
	7	05.02.2007	KH included in the coalition government agreement
	8	13.11.2009	KH, as a final proposal, sent to parliament
	9	18.03.2010	KH removed from the political agenda

Source: (Ardiç et al., 2013)

In the coding process of news articles, three elements of the characteristics of media coverage (see Figure 4-1) were traced: the policy content (KH, RR or alternative transport policy measures), the policy actors and the actors' messages related to a particular policy. These variables were also measured in two dimensions: visibility and tone (e.g. negative or positive), which in communication studies are identified as two important dimensions in the evaluation of the media portrayal of a particular person or issue (see Hopmann et al., 2010; Semetko, 2003; Schuck, 2009; van Lunenburg, 2002).

The paragraphs of news articles were taken as the unit of analysis. The names of all the policy actors in a paragraph were assigned to *actor*. The subjects of actors' messages in the paragraph were recorded in two variables: whether their messages are about RR, KH or alternative transport policy measures was assigned to *pricing proposal*; and which aspect of the pricing proposal (e.g. its impact on the environment or privacy problems of the system) or what specific alternative transport policy measures (e.g. investments in roads or interventions in the price of fuel) their messages are about were recorded in *sub-issue*. Furthermore, the position of an actor in relation to a *sub-issue* was coded as *actor tone*. 'The manner used by the media while communicating the position of an *actor* for a *sub-issue* is coded as *media tone*' (Ardıç et al. 2013, p. 50). Both can be positive, negative, mixed or neutral. *Overall tone*, used as a main tone variable in this study, was created by 'considering both *actor tone* and *media tone* after the coding process was completed. It is the tone presented to readers' (Ardıç et al. 2013, p. 50). For instance, as illustrated by Ardıç et al. (2013), if an *actor tone* for a *sub-issue* is negative – for example, an actor thinks that the technical system of the KH proposal has privacy problems, and the media presents this position in a negative manner by implying that this argument is trivial and even wrong – then *overall tone* is positive. In other words, the message to the reader in this paragraph of news is that the KH proposal does not have any privacy problems. On the other hand, if the media present this actor position neutrally, namely without any positive or negative media comments, then *overall tone* is negative because the message to the reader is that the KH proposal has privacy problems (as stated by the *actor*). Thus, the amount of news with a neutral *overall tone* decreases because either the *media tone* or the *actor tone* of the news was negative, positive or mixed. The neutral overall tone is therefore not presented in figures in this study. Finally, the space allocated to each *actor*, *pricing proposal* or *sub-issue*, in other words their visibility, was measured. 'Word' was taken as the unit of *space allocation*. The number of words used for each variable was counted and the results were multiplied by 2 for front-page news articles and by 1 for inside-page news articles (see Adriaansen et al. (2010) and Vliegthart et al. (2008) for similar applications).

To assess the reliability of the coding procedure, 'the principal investigator and another coder independently coded 40 randomly selected articles (10% of the full sample)', as explained by Ardıç et al. (2013, p. 50). The percentage agreement was calculated for three variables: *actor*, *sub-issue* and *pricing proposal*. The scores were 81%, 72% and 92%, respectively. 'Reliability scores increased to 95% for all three variables after discussion between coders regarding the discrepancies' Ardıç et al. (2013, p. 50). Such discussion is recommended by Garrison et al. (2006) for a multifaceted coding scheme like ours (e.g. *sub-issue* has 33 categories). Kappa agreement was used (in addition to percentage agreement) for three other variables – *actor tone*, *media tone* and *overall tone* – to eliminate chance agreement, which was likely as these variables had only four categories. The percentage scores were 89%, 81% and 78%, respectively; the Kappa agreement scores were 0.80, 0.64 and 0.59, respectively. These scores are considered satisfactory for exploratory research using multifaceted coding schemes (like this study) by Ardıç et al. (2013) based on insights from Banerjee et al. (1999), Landis and Koch (1977), Lombard et al. (2002) and Rourke et al. (2000) (see Ardıç et al.

(2013) for justification of the selected reliability procedure and detailed information about its application).

4.3.2 Parliamentary and policy documents

Parliamentary and policy documents were used to determine the content of policy debate. There is no standard way of determining real account of policy debate (McQuail, 1999; Ruigrok, 2008). Two strategies were adopted to study the link between the policy debate and the media coverage. Firstly, when examining the influence of the former on the latter, we qualitatively referred to policy and parliamentary documents. The focus was on certain distinctive features of the policy debate and major changes therein during policy events (e.g. policy positions and some activities/behaviors of policy actors, and policy design features) as recorded by these documents, and the extent to which these changes were reflected in the media coverage over the corresponding period.

Secondly, when examining the influence of media coverage on policy debate, politicians' statements about road pricing policies that referred to the media (and the five newspapers in this study) were selected from the on-line database of the Dutch parliament (<http://www.tweedekamer.nl>), which includes all parliamentary documents. Statements made during a four-month period around these events (two months before and two months after) were considered. Fifty-four statements were found. All statements were grouped into three categories, namely statements referring to (1) the media or media coverage in general, (2) the coverage of a specific newspaper or (3) statements by other policy actors reported in the media or in one of the five newspapers. We realize that politicians' statements in parliament represent only part of the policy debate, since other policy actors (e.g. interest groups) also make speeches and engage in communication activities. We are convinced, however, that the selected statements from parliamentary debates provide sufficient evidence regarding the influence of the media on the policy debate (and policy process), as politicians possess the authority to take policy decisions, which makes them the most prominent and influential actors in the policy process.

4.4 Policy positions of newspapers

As mentioned in section 4.2, newspapers may take a specific standpoint regarding a policy and may thus systematically favor one side of a policy or one particular policy position (Mcquail, 1999; Tresch, 2009). In addition, the extent to which the content of a policy debate (media input) is reflected in the media coverage (media output) depends on the degree of media bias. The study by Ardiç et al. (2013) showed that the five Dutch newspapers under investigation favor specific policy positions (e.g. are negative or positive towards the road pricing policy). The following is a discussion, based on the findings of Ardiç et al. (2013), of the policy positions of the five Dutch newspapers, and an analysis of the extent to which these newspapers provide 'an accurate account of important events, actors, and messages' in the policy debate (Hänggli, 2012, p. 303).

Ardiç et al. (2013, p. 51) employed correspondence analysis (CA) to analyze the policy position of newspapers:

CA uses the chi square score as a measure of the association between the columns and rows of a cross table and visualizes the columns and rows in a two dimensional space according to the strength of the associations between these columns and rows. ... CA is applied on a cross table which give distribution of space allocation for overall tone across five newspapers to explore the direction of newspapers' slant among categories of overall tone (e.g. negative, positive). In this cross table, the relative contribution of

each cell to the total chi-square score indicates the strength (and the direction) of the association between the row (a category of newspaper (e.g. De Telegraaf)) and the column (a category of overall tone (e.g. negative)) of this cell. According to this measure, CA calculates the coordinate values of the rows and columns on a two dimensional map in a way that best explains the strength of the associations between all its rows and columns. The stronger the association between a row and a column, the closer this row and column are to each other and the further away from the origin they are placed on the two dimensional map. A row and column with a weaker association are located further away from each other on the map.

Figure 4-2, generated by CA, depicts the associations between the categories of newspaper and overall tone for the road pricing media coverage. In the figure there are:

... clearly three clusters placed far away from the origin. de Volkskrant and Trouw are strongly associated with a positive overall tone, NRC Handelsblad (NRC) and Algemeen Dagblad (AD) with a mixed overall tone and, finally, De Telegraaf with a negative overall tone (Ardıç et al., 2013, p. 54).

This means, for example, that compared to the other newspapers, De Telegraaf allocated more space to negative statements by policy actors, or more frequently presented positive actor statements with negative comments, or presented its own (negative) point of view without referring to any policy actors.

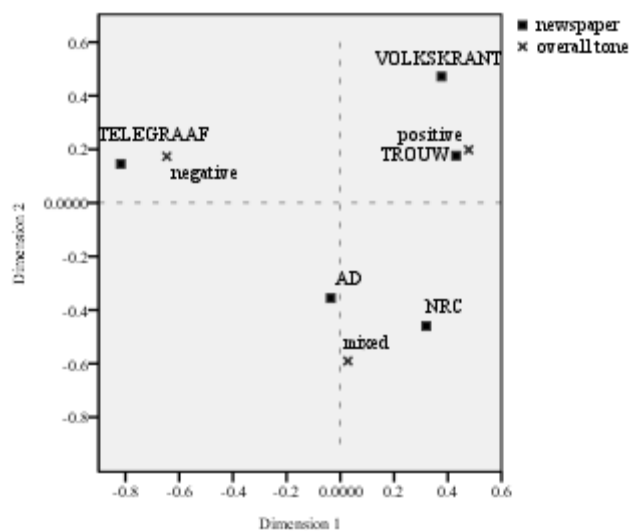


Figure 4-2: Policy positions of newspapers

Source: (Ardıç et al., 2013)

Table 4-2 summarizes the results of CA per policy period and shows that in general, the individual periods mirror the overall picture in Figure 4-2. Each newspaper held almost the same policy position over time and for the two pricing proposals. We note, however, that Figure 4-2 and Table 4-2 present only the leaning of the newspapers towards a particular category of overall tone relative to the others; they do not show the distribution of space allocation among categories of overall tone in each newspaper's coverage and the media coverage (the sum of five newspapers). For instance, Table 4-2 shows that De Telegraaf had a negative policy position in period 5. But De Telegraaf had not only negative coverage, but

also some coverage with positive and mixed overall tone in period 5, and the overall tone of the media coverage in this period was far more positive than negative (see Figure 4-4).

Table 4-2: Policy positions of newspapers across policy periods

	Policy period								
	1	2	3	4 ^a	5	6	7	8	9
de Volkskrant	P	P	PM	N	P	P	P	P	PN
Trouw	M	PM	P	M	P	P	P	PN	PM
NRC Handelsblad	M	P	M	PM	P	N	M	M	P
Algemeen Dagblad	N	NM	PM	PMN	M	M	N	M	N
De Telegraaf	N	N	N	P	N	M	M	N	N

Source: (Ardıç et al., 2013)

Notes: Table 4-2 reflects the relative positions of the newspapers on the correspondence map of policy periods. P: positive, N: negative, M: mixed, PM: between positive and mixed, PN: between positive and negative, NM: between negative and mixed, PMN: no particular position, the same distance to positive, mixed and negative

^a Ardıç et al. (2013, p. 56) stated that:

In period 4, de Volkskrant stood out with its negative overall tone, whereas in other periods it was almost always positive. De Telegraaf, on the other hand, had a positive overall tone in period 4 despite being almost always negative in the other periods. This does not indicate a change in the policy positions of these two newspapers in period 4. In this period, KH was placed on the political agenda and this led to the removal of RR. The negative overall tone of de Volkskrant was mostly for KH whereas the positive overall tone of De Telegraaf in this particular period was purely for KH. This implies that KH was welcomed warmly by De Telegraaf, but not so by de Volkskrant, since its announcement resulted in the removal of RR from the agenda.

Although the five newspapers favored different policy positions, their coverage overlaps to some extent. For instance, each newspaper allocated some space to all three categories of overall tone (positive, negative and mixed). The least favored tone category in each newspaper still comprised at least around 20% of its coverage (e.g. 27% of De Telegraaf's coverage was positive despite the paper's slant towards a negative policy position). The newspapers' coverage overlaps because each paper uses the same media input (policy debate) and partly gives an accurate account of policy debate. This can best be illustrated by a detailed micro-analysis of the coverage of the two most distinctly opposing policy actors – the transport minister (Eurlings) and the VVD (at that time the biggest opposition party) – in the two most distinctly opposing newspapers (De Telegraaf and de Volkskrant) in one policy period.

As transport minister, Eurlings was obviously the most prominent and active proponent of KH in the policy debate in period 8, when he sent the KH act to parliament, whereas the VVD was the most prominent and active opponent (see Ardıç et al. (2015) for an in-depth analysis of the actor positions and behaviors in this policy process). As one would expect, de Volkskrant, which had a positive policy position in period 8 regarding KH (as it did in other periods; see Table 4-2), allocated more space to Eurlings (42% of its road pricing coverage) compared to De Telegraaf (24% of its road pricing coverage), which had a negative policy position. Likewise, De Telegraaf devoted more space to the VVD (4.5% of its road pricing coverage) compared to de Volkskrant (2% of its road pricing coverage). However, neither newspaper fully excluded policy actors whose policy position opposed its position. Furthermore, in both newspapers, the coverage devoted to Eurlings was greater than the coverage devoted to the VVD, in line with the prominence and activity level of these policy actors in the policy debate. This indicates that the leaning of the newspapers did not override the differences in

the relative newsworthiness of two policy actors in the news selection process. However, both newspapers sometimes presented statements by non-likeminded policy actors with negative media comments. Nevertheless, 22% of the coverage devoted to Eurlings in De Telegraaf (this ratio was 75% in de Volkskrant) was positive, reflecting Eurlings's policy positions; 93% of the coverage devoted to the VVD in de Volkskrant (this ratio was 100% in De Telegraaf) was negative, reflecting the policy position of the VVD.

To summarize, given the results of the micro-analysis and the findings of Ardiç et al. (2013) presented above, it is likely that the variation in the characteristics of media coverage over time and between the two policy proposals is a reflection of changes in the content of the policy debate (e.g. the increase in negative media coverage results from the increase in negative messages from policy actors in the policy debate). There are two reasons for this. Firstly, the newspapers neither fully ignored the statements by non-likeminded policy actors nor presented all the statements by these actors with negative comments (see above). Each newspaper partially provided 'an accurate account of important events, actors, and messages' in the policy debate, as would be expected in western democracies despite favoring a particular side (Hänggli, 2012, p. 303). Secondly, their leaning remained almost the same over time. Section 4.5 presents the characteristics of media coverage (e.g. its overall tone, space allocation for issues and actors) and its variation across policy periods and between two policy proposals, and discusses how changes in the content of the policy debate were reflected in the media coverage.

4.5 The variation in media coverage: the reflection of policy debate in media coverage

5.1 The variation in media coverage across policy periods

Figure 4-3 shows that the media coverage was far more positive than negative in periods 4, 5 and 6, and was rather balanced in the other periods. This is because of the large number of positive messages in the policy debate in these policy periods. In period 4, the Mobimiles report announced that the available technologies were adequate to implement KH (see Pieper, 2001). Not only was the content of this report positive for KH, but also the most prominent actors – the minister and the coalition parties – reacted positively to both the findings of this report and KH (Raad voor Verkeer en Waterstaat, 2005). In period 5, the Nouwen committee – which included major policy actors in the road pricing policy debate – reached an agreement on KH. Thus, the major policy actors were positive about KH in this period (see Platform Anders Betalen voor Mobiliteit, 2005). In period 6, the agreement by the Nouwen committee was not adopted in the transport policy document and, with the support of two of the political parties, the introduction of KH was postponed until the next government (see Tweede Kamer, 2005a). However, all the other political parties (see Tweede Kamer, 2005b) and all the members of the Nouwen committee (see Trouw, 2005) were against this postponement and reacted in favor of KH in this period. Indeed, a motion urging the minister to adopt the advice of the Nouwen committee three months after period 6, was accepted by a majority in parliament (see Tweede Kamer, 2005c).

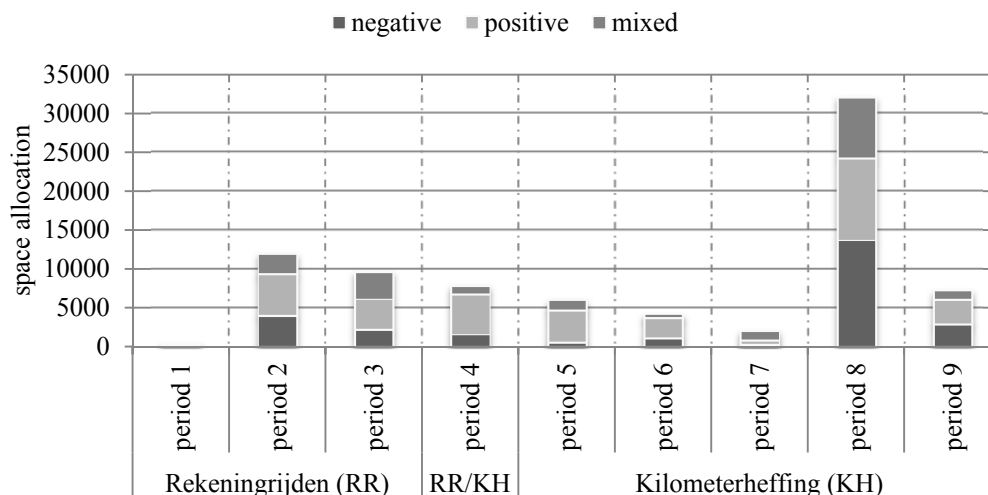


Figure 4-3: Overall tone of news across periods

Notes: Space allocation = number of words * page score. The neutral space allocation is not presented in Figure 4-3 because the amount of space allocation to neutral overall tone was negligible (<1% of total media coverage; see section 4.3). The frequency of news articles day by day in each period is presented in section 4.6.

4.5.2 The variation in the media coverage of two pricing proposals

Figure 4-4 illustrates the space allocated to KH, RR and alternative measures according to their overall tone, showing that the media coverage of the two pricing proposals was different. The overall tone of both pricing proposals was more positive than negative, but KH received much more coverage than RR. The larger amount of space devoted to KH might be due to the fact that in our research period there were more policy events predominantly involving KH (six policy events) than RR (four policy events) (see Table 4-1). However, if two policy events of the same type are compared – for instance periods 1 and 7, in which both proposals were included in the coalition agreement, or periods 3 and 8 in which the transport ministers announced the introduction of both proposals – it is clear that KH received greater space allocation for the same types of policy events than RR (see Figure 4-3). The increased media attention to KH can be explained by its potential impact on almost the entire population of the Netherlands, increasing the newsworthiness of its policy debate for journalists.¹⁸ This was because the KH proposal had a much more comprehensive system design than that of RR,¹⁹ and therefore the implementation of KH was to have consequences for the financial situation and mobility behavior of almost the entire population (car users in particular), while RR would have had a much more limited effect.

¹⁸ The larger the number of people influenced by the issue, the higher the newsworthiness of this issue (see section 4.2)

¹⁹ Firstly, the two proposals differed in terms of spatial coverage. RR was to be implemented only on ring roads around the country's four largest cities (Den Haag, Rotterdam, Utrecht and Amsterdam) while the country's entire road network would be included in KH. Secondly, in the RR proposal the charge was to be differentiated according to time and place, but in the KH proposal, the charge differentiation was based on vehicle type as well as time and place. Thirdly, RR would charge car users only at certain points around the four big cities, whereas KH involved the entire road network with chips placed inside vehicles. This also triggered concerns about privacy protection in the KH proposal. Fourth, the implementation of KH involved an additional complication. The kilometer charge was going to replace existing annual road and car purchase taxes, which required a certain transition period (7-8 years) to replace the existing system (technically and financially) with the KH system.

A deeper analysis of period 4 indicates that the two pricing proposals received diametrically opposed media coverage, even in the same time period. KH was presented in a positive overall tone with high space allocation, while RR was presented in a negative overall tone with low space allocation (see Figure 4-5). Space allocation for KH was greater because it was the focus of the policy debate in period 4, as mentioned above, even though both proposals were being discussed simultaneously. The coverage of RR was more negative than positive because almost all policy actors reacted so positively to the findings of the Mobimiles report on KH, that RR was replaced by KH on the political agenda (Raad voor Verkeer en Waterstaat, 2005).

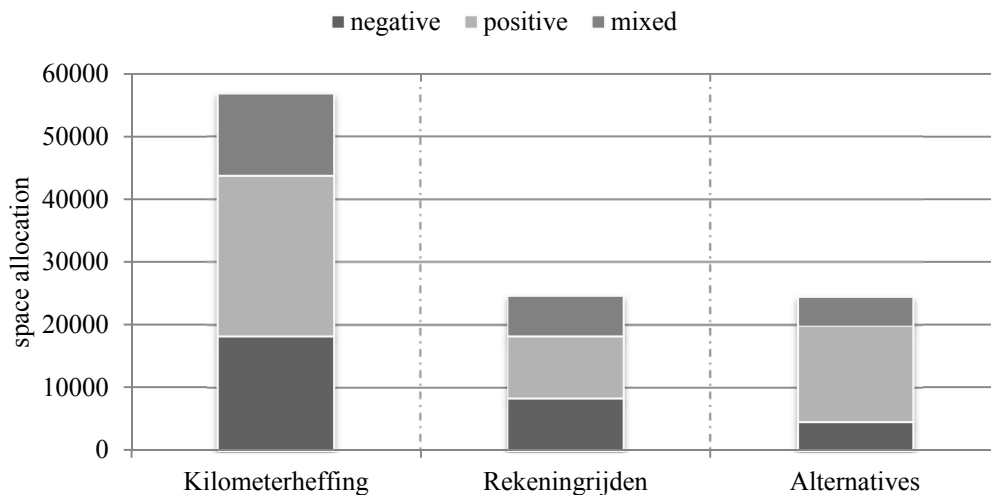


Figure 4-4: Overall tone of news

Notes: Space allocation = number of words * page score. The neutral space allocation is not presented in Figure 4-4 because the amount of space allocated to neutral overall tone was negligible (<1% of total media coverage) (see section 4.3).

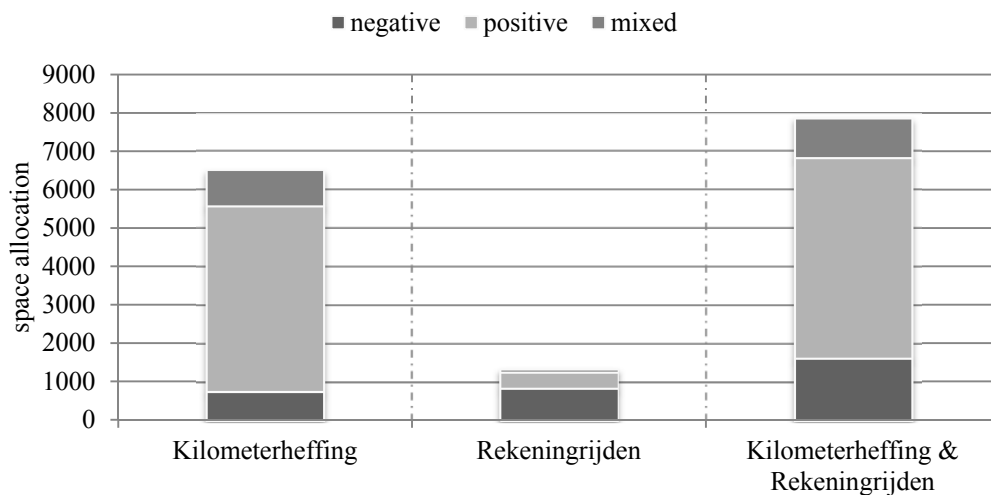


Figure 4-5: Overall tone of news in period 4

Notes: Space allocation = number of words * page score. The neutral space allocation is not presented in Figure 4-5 because the amount of space allocation to neutral overall tone was negligible (<1% of total media coverage) (see section 4.3).

4.5.3 The variation in the media coverage of sub-issues

Figure 4-6 presents the share of space allocation for sub-issues in the coverage of the two proposals. Accordingly, their coverage differs in terms of space allocation and overall tone of sub-issues. In general, KH coverage was richer in terms of the sub-issues mentioned in the coverage. Seven sub-issues not covered in the RR coverage were mentioned in the KH coverage. These seven sub-issues were peculiar to the KH proposal and not included in the design of RR proposal (e.g. provincial tax and price variation according to vehicle type). Apparently, the relatively more complex and comprehensive design of KH was reflected in the policy debate among actors, and subsequently in the media coverage. These design differences between two pricing proposals also explain the different proportion of space allocation for the same sub-issues in the coverage of the two proposals. For instance, 'privacy', 'technical system' and 'financial impact on households' had a higher proportion of the coverage of KH than RR. All three issues mentioned were features of a scheme design peculiar to (or more salient to) the KH proposal (see section 4.5.2). Similarly, 'impact on congestion' and 'general'²⁰ had a greater proportion of the RR coverage than KH. This is because the alleviation of congestion was the only purpose of RR, whereas it was only one aspect of the KH proposal, and the RR design was relatively simpler (not many sub-issues involved) than that of KH, limiting the sub-issue diversity and increasing the amount of reference to 'general' in the policy debate.

Figure 4-7 shows that the sub-issue 'privacy' was much more negative than positive in almost all policy periods. It was covered negatively by using such phrases as 'GPS spying' (De Telegraaf, 2009) and 'Big Brother is watching you' (Douwes and van Keken, 2009). However, it was more positive than negative in period 4 when the Mobimiles report on the technological possibilities for the implementation of KH was released. This is because not only were the findings of the Mobimiles report positive about the privacy aspects of the technical system of KH (see Pieper, 2001), but also most of the prominent actors reacted positively to these findings in this policy period (Raad voor Verkeer en Waterstaat, 2005).

Figure 4-8 shows that alternative transport policy measures and road pricing policies received media coverage concurrently across policy periods but with changing ratios. The amount of space allocated to alternative road transport measures in some periods was relatively the same or more larger than that allocated to road pricing policies, whereas in other periods it was much smaller. These changing ratios correspond with the changing focus of the policy debate across policy periods. Alternative transport measures were allocated an ample amount of space in periods 1, 3, 6 and 7 because these measures, as well as road pricing policies, were high on the political agenda. In periods 1 and 7, the coalition parties negotiated other road transport policy measures as well as road pricing policies (see Tweede Kamer, 1998, 2007). In period 3, RR was proposed as part of a comprehensive transport policy package (see Tweede Kamer, 2000). In period 6, KH and alternative road transport measures were simultaneously discussed (see Tweede Kamer, 2005b). On the other hand, in policy periods 2, 4, 5, 8 and 9, when the share of alternative road transport measures was very low, the focus of the policy debate was on RR or KH.

²⁰ 'General' is chosen as a sub-issue 'if phrases in a paragraph mention that actors are against (or for) KH or RR, or explain efforts (or intentions) of actors to support or block the introduction of the pricing proposal without giving detailed reasoning for their support or opposition' and referring to other sub-issues, as explained by Ardic et al. (2013, p. 57).

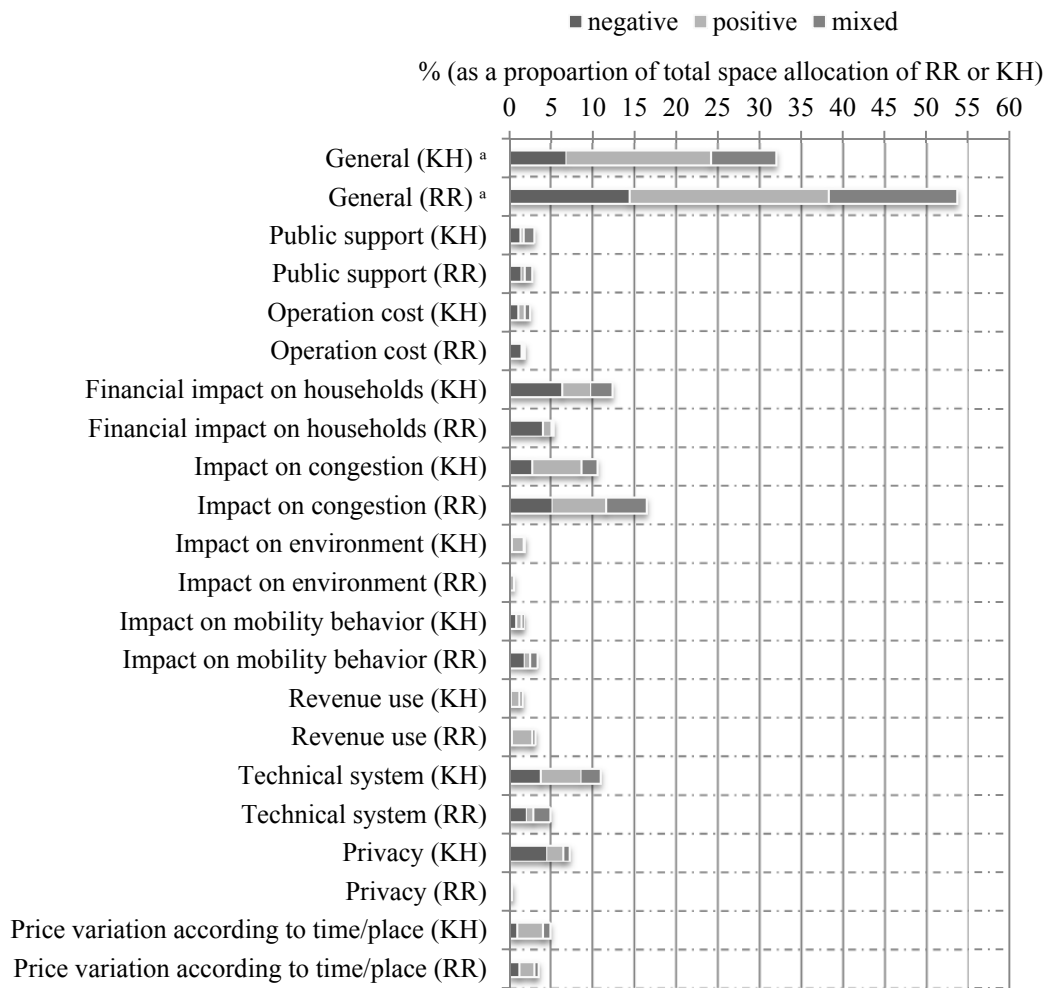


Figure 4-6: Sub-issues in the coverage of KH and RR

Notes: Space allocation = number of words * page score. The neutral space allocation is not presented in Figure 4-6 because the amount of space allocation to neutral overall tone was negligible (<1% of total media coverage) (see section 4.3). The sub-issues with a space allocation of less than 2% of the total space allocation for RR and KH in total (five sub-issues) are excluded from Figure 4-6.

^a ‘General’ is chosen as a sub-issue ‘if phrases in a paragraph mention that actors are against (or for) KH or RR, or explain efforts (or intentions) of actors to support or block the introduction of the pricing proposal without giving detailed reasoning for their support or opposition’ and referring to other sub-issues, as explained by Ardiç et al. (2013, p. 57).

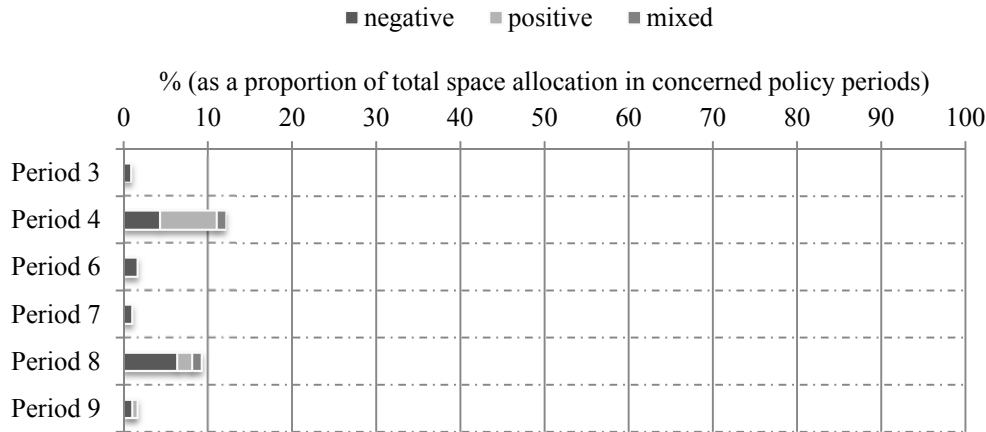


Figure 4-7: The sub-issue 'privacy' across periods

Notes: Space allocation = number of words * page score. The neutral space allocation is not presented in Figure 4-7 because the amount of space allocation to neutral overall tone was negligible (<1% of total media coverage) (see section 4.3).

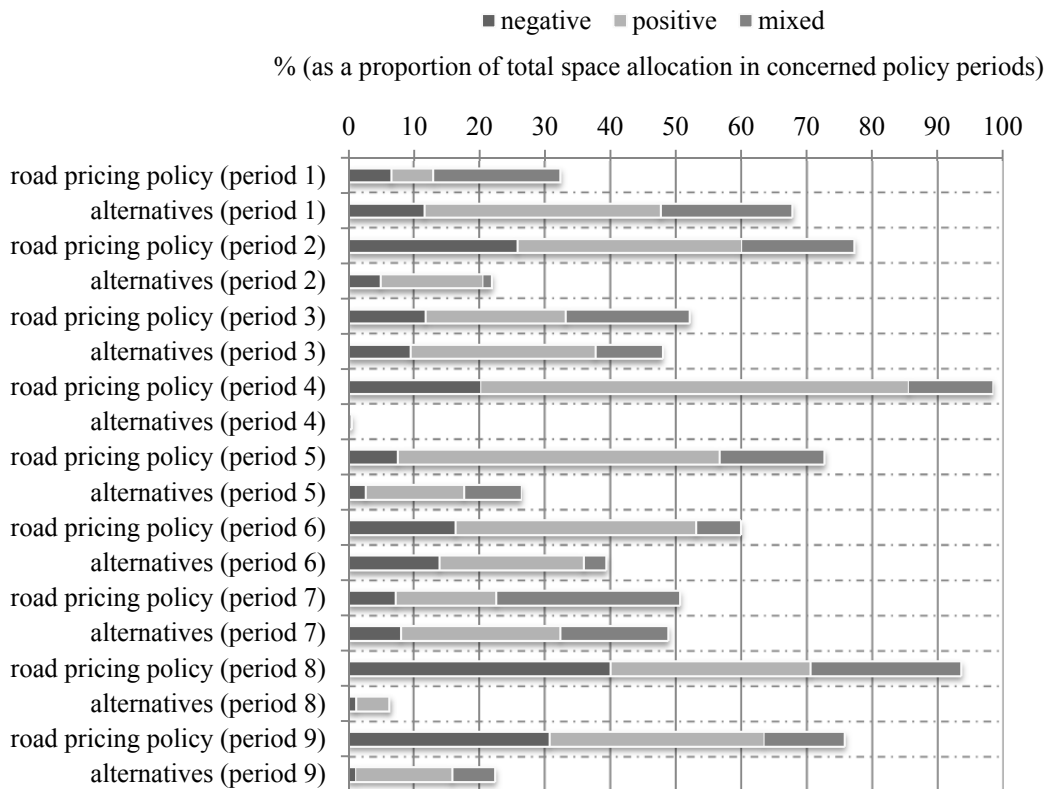


Figure 4-8: Road pricing policies vs. alternative transport policy sub-issues across periods

Notes: Space allocation = number of words * page score. The neutral space allocation is not presented in Figure 4-8 because the amount of space allocation to neutral overall tone was negligible (<1% of total media coverage) (see section 4.3).

4.5.4 The variation in the media coverage of policy actors

Figure 4-9 shows that the share of the total coverage given to policy actors and the overall tone of their coverage varies between two proposals. The variation in the policy actors' coverage between the two proposals reflects the different degree of involvement of these actors in the two proposals and their different roles in the policy processes. A detailed analysis of some individual actors provides evidence regarding the correspondence between the prominence and high activity level of the policy actors in the RR or KH policy debate and the appearance of these policy actors in the media coverage.

For instance, the CDA political party was more prominent and more active in the KH policy process (thus, highly newsworthy) compared with the RR process, which explains its greater prominence in terms of space in the KH coverage than in the RR coverage. The CDA was in opposition when RR was on the political agenda, whereas it was an incumbent party throughout the KH policy process. Moreover, the ministers who managed the KH policy process were from the CDA. Likewise, Roel Pieper, the author of the Mobimiles report, was the most central actor in period 4, whereas he did not take part in the RR policy process (see Ardiç et al., 2015). He received much more KH coverage than RR coverage because of his prominence and his active participation in the KH policy process. The difference between the space allocation proportion of the ANWB (an association with 4 million members, mostly car drivers) in RR and KH coverage is particularly interesting. The ANWB had greater space allocation (almost as much as the transport minister) in the RR coverage than the KH because of its very high level of activity in the RR policy process compared with the KH policy process. It organized a public campaign against RR in 1999, which aimed to attract both media and public attention (Raad voor Verkeer en Waterstaat, 2005). Finally, readers' letters occupy a much greater space in the coverage of KH than RR. This is not surprising, because the KH proposal had a more comprehensive system design than RR, as mentioned in section 4.5.2, and its implementation would affect the financial situation and mobility behavior of the whole population.

4.6 The influence of media coverage on policy debate (and policy process)

We have so far examined only one direction of the reciprocal relationship between media coverage and policy debate, namely how the content of the latter shaped the former. However, as shown in Figure 4-1, the influence also flows from media coverage to policy debate. This section questions the nature of this reciprocity and analyses whether and, if so, how the media coverage influenced the policy debate and the course of the policy process.

Our findings indicate that media coverage did influence the policy debate, but that the policy debate was the initiator of the reciprocal influence between the media coverage and the policy debate. In other words, the statements or actions of policy actors received media coverage, and the media coverage then stimulated the policy debate in each policy event. Tables 4-3 and 4-4 provide evidence of this influence cycle. Table 4-3 presents the number of front-page news articles issued on the days before and after the policy event. It shows that the policy almost always received media coverage in the days following the policy event. Very few news articles issued before event days (see periods 1, 5 and 9 in Table 4-3) did not initiate policy events (and related policy debate), but rather reported preliminary speeches or announcements about forthcoming policy events (e.g. draft coalition agreement). Table 4-4 presents the number of references to the media coverage by political actors in parliament in the days before and after the policy event. It shows that there were many more references to the media coverage in the days after the policy event than in the days before it. Furthermore, Table 4-4 shows that political actors usually reacted to statements by other policy actors

reported in the media rather than reacting directly to the media coverage or the coverage by a newspaper. This suggests that the media mainly had an indirect impact on the policy debate by communicating policy actors' statements to each other.

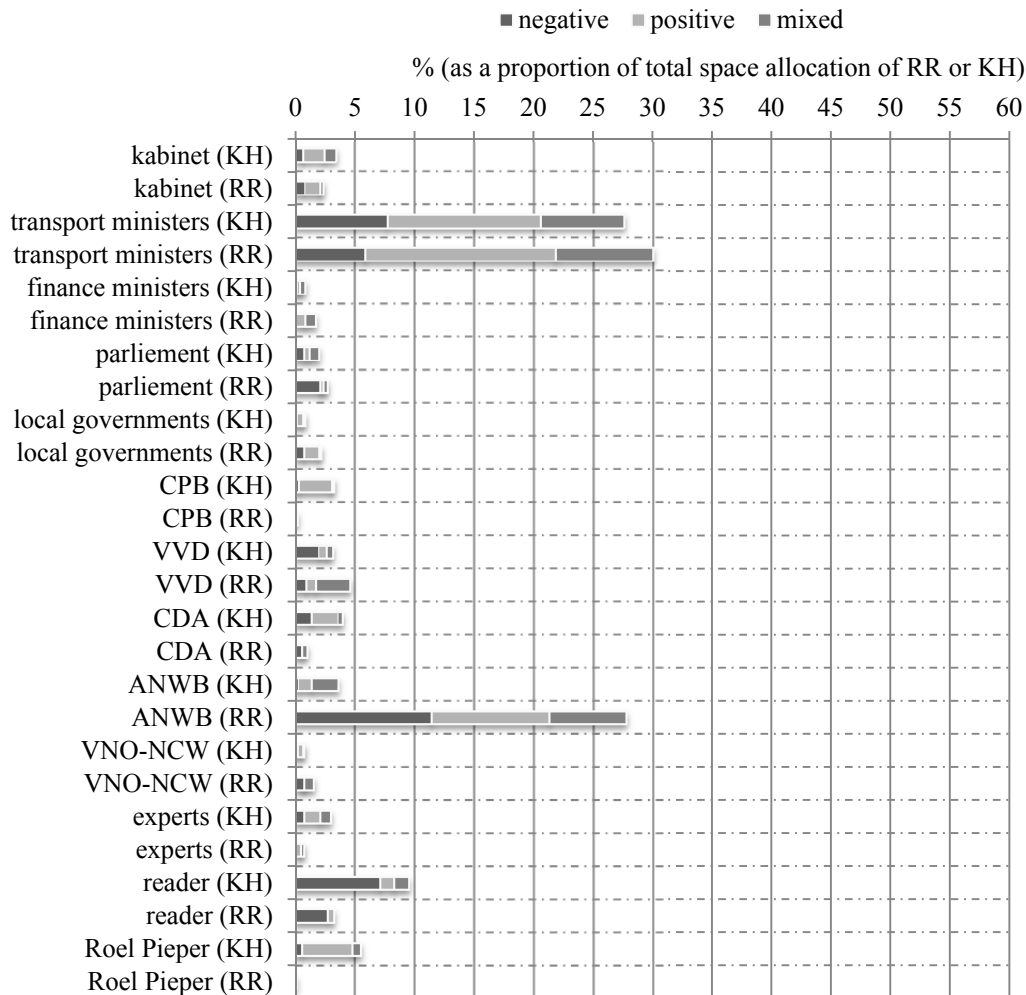


Figure 4-9: Actors in the coverage of KH and RR

Notes: Space allocation = number of words * page score. The neutral space allocation is not presented in Figure 4-9 because the amount of space allocation to neutral overall tone was negligible (<1% of total media coverage) (see section 4.3). The actors with a space allocation of less than 2% of the total space allocation for RR and KH in total (11 actors) are excluded from Figure 4-9. VVD and CDA are political parties. VNO-NCW is an interest group representing the business community. ANWB is an interest group of car drivers. CPB is a research institute and an independent advisory body. Roel Pieper is an expert who conducted Mobimiles research in policy period 4.

The only exception to this influence circle (policy debate → media coverage → policy debate) was possibly observed in period 9 when the KH proposal was removed from the political agenda. Our analysis implies that the negative coverage by De Telegraaf prior to this policy event might have played a role in the removal of the KH proposal from the political agenda. Table 4-4 shows that 14 references were made to De Telegraaf by political actors in parliament during around four months between period 8 and period 9 (seven references after the KH proposal being sent to parliament and seven references before/after the withdrawal of

the KH proposal). The references were about the negative coverage by De Telegraaf and the negative results of a public opinion survey about KH conducted on the newspaper's website. Politicians discussed the extent to which the newspaper's negative coverage and its survey results were indicative of the public opposition to the KH proposal (see e.g. Tweede Kamer, 2009, 2010). However, it is not possible to state conclusively that De Telegraaf contributed to the policy decision to abandon the KH proposal. The role of De Telegraaf seems more peripheral in this policy decision when the presence of all the other unfavorable factors for road pricing in the political environment are taken into consideration, for example the fall of the government in February 2010 (elections were going to be held in June 2010) and the ANWB's reluctant support of KH (the ANWB was an influential policy actor in the policy process) (see Ardiç et al., 2015).

Whether De Telegraaf merely stimulated policy debate or played a role in the withdrawal of the KH proposal, it is striking that its influence on policy debate was greater than that of any other newspaper or the media in general. We think that De Telegraaf had a significantly higher prominence in the policy debate in parliament than other newspapers for three reasons. Firstly, it had higher readership than other newspapers²¹. Political actors should have expected its coverage to influence public opinion because of its large audience. Indeed, De Telegraaf was referred to as an 'opinion leader' by one of politicians (Tweede Kamer, 2009, p. 2815). Secondly, political actors usually pay more attention to negative media coverage (Walgrave and van Aelst, 2006). It is thus possible that the coverage by other newspapers was not debated in parliament due to their relatively more positive coverage compared to De Telegraaf (see section 4.4). Thirdly, it was not only the newspaper's coverage that was negative; so too was the outcome of the opinion survey on KH conducted on its website.

Table 4-3: Front-page news articles issued in the days before and after event date

Days before the event date							Days on / after the event date							
							Event date							
6	5	4	3	2	1	1		2	3	4	5	6	7	
Period 1						1								
Period 2							1		1					
Period 3							1	5	1			1		
Period 4							1	2						
Period 5						1	1	2						
Period 6								1						
Period 7									1	1				
Period 8								5		4	1	3	1	1
Period 9	1					1	2	3			1			

Notes: Table 4-3 presents only the frequency of front-page articles because front-page news articles are a better measure of media attention to an issue than inside-page articles. Furthermore, the frequency table of the inside-page articles demonstrates almost the same pattern as presented in Table 4-3. There was no added value to be gained by presenting this data.

²¹ HOI (Institute for Media Auditing) reports that the circulation rates of De Telegraaf, Algemeen Dagblad, Trouw, de Volkskrant and NRC Handelsblad were 648958, 442962, 262183, 200723 and 106440 respectively in 2010 (Ardiç et al., 2013).

Table 4-4: References to the media by political actors in parliament

	References before the event date				References on / after the event date			
	To the media	To a newspaper ¹	To an actor statement in the media	Total	To the media	To a newspaper ¹	To an actor statement in the media	Total
Period 1								
Period 2		1		1			6	6
Period 3							3	3
Period 4	1		2	3	1		8	9
Period 5								
Period 6							2	2
Period 7								
Period 8	1			1	1	7	9	17
Period 9		5		5		2	5	7
Total	2	6	2	10	2	9	33	44

¹ In period 2, 'newspaper' is AD. In periods 8 and 9, 'newspaper' is De Telegraaf.

4-7 Conclusions and policy implications

In our analysis of the media coverage of road pricing policies, the long history of the road pricing policy process in the Netherlands allowed us to apply a comparative approach both between pricing proposals and across different stages of policy process in time, instead of focusing on one pricing proposal, as was done in the UK studies. As such, we could examine variation in the media coverage of the same newspapers between two pricing proposals and across different stages of the policy process. This comparative approach helped us to examine the role of media input (the content of the policy debate) in the construction of media coverage. The analysis shows that the characteristics of the media coverage varied greatly both across the policy periods and between the two pricing proposals. We found that changes in the content of the policy debate between pricing proposals and across policy periods led to changes in the media coverage.

The comparison between our findings about the characteristics of media coverage and those of the UK studies (Gaber, 2004; Ryley and Gjersoe, 2006; Vigar et al., 2011) is interesting. Our findings contradict those of the UK studies on three points. Firstly, the UK studies all concluded that the media coverage of the road pricing policies was predominantly negative. Ryley and Gjersoe (2006, p. 72) stated that 'overall newspaper coverage was more negative than positive' for the Edinburgh congestion charging proposal; Vigar et al. (2011, p. 478) found that the Manchester road pricing scheme was 'presented in a largely negative light' in the media; and Gaber (2004, p. 3) stated that 'much of the media coverage ... was highly ... negative' for the London congestion charging. Our findings, however, show that the overall tone of the media coverage in the Netherlands was more positive than negative. Secondly, Vigar et al. (2011, p. 478) found that 'many dimensions of the TIF [a transport policy package] bid were under explained. ... the way articles were constructed ... made it look like the TIF bid was a charging scheme'. In contrast, our findings show that alternative transport policy measures received at least as much coverage as road pricing proposals when the pricing proposals were presented as part of larger transport packages. Finally, Ryley and Gjersoe (2006, p. 72) found that 'of the stakeholders ..., politicians had by far the greatest

coverage'. We, however, found that some institutional actors (e.g. the ANWB) or individuals (e.g. Roel Pieper) were just as visible in the media as politicians were.

There is no doubt that this difference between our findings and those of the UK studies might arise from methodological differences (e.g. sampling strategy, coding variables and rules), as all these studies were conducted independently. However, this result is in line with the findings of other studies that compared the political news coverage in the Netherlands and the UK. Vliegthart et al. (2011) found that political news coverage in the British media was more negative than in the Dutch media, and Brants and van Praag (2006) and Vliegthart et al. (2011) concluded that differences between the Netherlands and the UK in terms of political system/culture (more consensual in the Netherlands vs. more adversarial in the UK) and media systems (more neutral in the Netherlands vs. more negative and cynical in the UK) lead to more negative media coverage of political issues in the UK than they do in the Netherlands. This inference offers two explanations for the difference in the media coverage of the Dutch and British road pricing policies. Firstly, it is possible that the more adversarial political system/culture in the UK increased the negativity in the British road pricing policy debate in comparison to the Dutch debate, which in turn created more negative media coverage in the UK than in the Netherlands. For instance, it might be that the British policy debate never experienced a consensual policy environment in which all major policy actors were positive about the policy, such as in the policy periods 4 and 5 in the Netherlands (see section 4.5.1). Secondly, the British newspapers might have presented the policy debate more negatively and cynically than the Dutch papers, even though the content of the policy debates in the UK and the Netherlands was more or less the same. Our findings indicate that the Dutch newspapers partially gave an accurate account of the policy debate. This was perhaps not the case in the UK. In addition, it is of course possible that both explanations hold true to a varying extent. We recommend that future studies should compare the media coverage of road pricing policies in the Dutch and British media within a single study, and investigate the extent to which differences in political system/culture and/or media systems produce two distinct types of media coverage of road pricing policies in the Netherlands and the UK.

These findings have some implications, albeit somewhat tentative ones, for policymakers who are considering implementing a road pricing policy. The implications relate to managing the policy debate. Firstly, they might increase the number of positive messages in the policy debate by giving sufficient information to the media (unofficially or officially). Some studies, however, show that strategic news management activities can lead to unintended news coverage, accompanied by the media's cynical depiction of these activities (de Vreese and Elenbaas, 2011). Secondly, if some prominent policy actors are against the policy in general or against particular design features, it is difficult to avoid negative media coverage. This is because these influential opponents increase the number of negative messages in the policy debate, and these negative messages are very likely to receive media coverage because of the prominence (i.e. high newsworthiness) of the messages' owners. If the transport ministry is able to get most of the prominent policy actors on board (which it did in the KH policy process in period 5), the negative information flow to the media might be restricted and thus less space might be allocated to negative coverage. We agree with Wolfsfeld (2014, p. 34) that 'when leaders are able to maintain control of events and mobilize a high degree elite consensus in support of their policies they have little difficulty' receiving favorable media coverage for their policies. For instance, in our study the total media coverage in periods 4 and 5 was by far more positive than in other periods. The positive atmosphere in the policy debate resulting from a general consensus on a policy proposal among policy actors in these periods was reflected in the media coverage. In fact, if policy actors believe that the implementation of a pricing scheme is advantageous, the number of positive messages in their

communication might increase and thus increase the amount of space allocated to positive coverage. On the other hand, because media attention increases with the level of ‘conflict’ (a news factor), consensus among policy actors might diminish the amount of media coverage. Finally, policymakers should consider that newspapers have specific policy positions (see section 4.4) and that while shaping their coverage they can, to some extent, reverse the direction of information and change the proportion of positive and negative messages in the policy debate.

So far we have discussed the influence of the policy debate (besides the policy position of newspapers) on media coverage. This is only half the picture. Our findings indicate that the media coverage also influenced the policy debate. But our analysis suggests that in each policy event, it was the statements or actions of policy actors that triggered media coverage, followed by the media coverage in turn stimulating the policy debate. An in-depth analysis indicates that the influence of the media on the policy debate was rather indirect, meaning that policy actors mostly reacted to the messages from other policy actors that appeared in the media, rather than to the media coverage itself. Our findings do not provide any evidence regarding the influence of the media on actual policy decisions or the actions of policy actors in the policy process. We think that the proper answer to this question requires consideration of all other factors (e.g. actor constellations in a given policy field) and their complex interaction in the policy process. Finally, Walgrave and van Aelst (2006) argued that the influence of the media on the policy debate is contingent upon the specific media outlet and the sort of coverage. In our study, the influence of one newspaper – De Telegraaf – on the policy debate was stronger than that of other newspapers or the media in general. Possible reasons for this might be the negative outcome of its public opinion survey, its higher readership or its more negative coverage of the policy compared to other newspapers. Future studies should investigate the conditions under which media coverage influences the policy debate of road pricing policies.

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References

- Adriaansen, M.L., van Praag, P., de Vreese, C.H. (2010) Substance matters: How news content can reduce political cynicism. *International Journal of Public Opinion Research* 22, 433-457.
- Archetti, C. (2010) Comparing international coverage of 9/11: Towards an interdisciplinary explanation of the construction of news. *Journalism* 11, 567-588.
- Ardıç, Ö., Annema, J.A., van Wee, B. (2013) Has the Dutch news media acted as a policy actor in the road pricing policy debate? *Transportation Research Part A: Policy and Practice* 57, 47-63.
- Ardıç, Ö., Annema, J.A., van Wee, B. (2015) Non-implementation of road pricing policy in the Netherlands: An application of the 'Advocacy Coalition Framework'. *European Journal of Transport and Infrastructure Research* 15, 116-146.
- Banerjee, M., Capozzoli, M., McSweeney, L., Sinha, D. (1999) Beyond kappa: A review of interrater agreement measures. *Canadian Journal of Statistics* 27, 3-23.
- Brants, K., van Praag, P. (2006) Signs of media logic: Half a century of political communication in the Netherlands. *Javnost-The Public* 13, 25-40.
- Böhm, J., Král, P., Saxa, B. (2012) The Czech National Bank's monetary policy in the media. *European Journal of Political Economy* 28, 341-357.
- Collins, P.A., Abelson, J., Pyman, H., Lavis, J.N. (2006) Are we expecting too much from print media? An analysis of newspaper coverage of the 2002 Canadian healthcare reform debate. *Social Science & Medicine* 63, 89-102.
- De Telegraaf (2009) 'Gps-spionage' deert ANWB niet; SUV-rijder de dupe. *De Telegraaf*. 20 November, 3.
- de Vreese, C.H., Elenbaas, M. (2011) Spin and political publicity: Effects on news coverage and public opinion. *Political Communication in Postmodern Democracy: Challenging the Primacy of Politics* eds Brants, K., Voltmer, K. Palgrave Macmillan, New York.
- de Vreese, C.H., Peter, J., Semetko, H.A. (2001) Framing politics at the launch of the Euro: A cross-national comparative study of frames in the news. *Political Communication* 18, 107-122.
- Donsbach, W. (2003) Objectivity in Reporting. *Encyclopedia of international media and communications* ed Johnston, D.H. Academic, San Diego, Calif., London.
- Douwes, D., van Keken, K. (2009) Kastje registreert niet of u te hard rijdt; Kilometerheffing Om files tegen te gaan zal op termijn de kilometerprijs in de spits worden verhoogd. *de Volkskrant*. 18 November, 8.
- Frey, B.S. (2003) Why are efficient transport policy instruments so seldom used? , *Acceptability of transport pricing strategies*. eds Schade, J., Schlag, B. Elsevier, Oxford, pp. 63-75.
- Gaber, I. (2004) *Driven to distraction: an analysis of the media's coverage of the introduction of the London congestion charge*. Goldsmiths College, University of London, London.
- Garrison, D.R., Cleveland-Innes, M., Koole, M., Kappelman, J. (2006) Revisiting methodological issues in transcript analysis: Negotiated coding and reliability. *The Internet and Higher Education* 9, 1-8.

- Heffernan, R. (2006) The prime minister and the news media: Political communication as a leadership resource. *Parliamentary Affairs* 59, 582-598.
- Hänggli, R. (2012) Key factors in frame building. *American Behavioral Scientist* 56, 300-317.
- Hayes, M., Ross, I.E., Gasher, M., Gutstein, D., Dunn, J.R., Hackett, R.A. (2007) Telling stories: News media, health literacy and public policy in Canada, *Social Science & Medicine* 64, 1842-1852.
- Hopmann, D.N., Vliegenthart, R., de Vreese, C., Albæk, E. (2010) Effects of election news coverage: How visibility and tone influence party choice. *Political Communication* 27, 389-405.
- Isaksson, K., Richardson, T. (2009) Building legitimacy for risky policies: The cost of avoiding conflict in Stockholm, *Transportation Research Part A: Policy and Practice* 43, 251-257
- Jones, P. (2003) Acceptability of Road User Charging: Meeting the Challenge. *Acceptability of Transport Pricing Strategies* eds Schade, J., Schlag, B. Oxford: Elsevier, pp. 27-62.
- Jönsson, A. (2011) Framing environmental risks in the Baltic Sea: A news media analysis, *AMBIO: A Journal of the Human Environment* 40, 121-132.
- Judge, E.J. (2002) Environmental and economic development issues in the Polish motorway programme: a review and an analysis of the public debate, *European Environment* 12, 77-89.
- Koch-Baumgarten, S., Voltmer, K. (2010) *Public policy and the mass media the interplay of mass communication and political decision making*. Taylor & Francis, Hoboken.
- Landis, J.R., Koch, G.G. (1977) The measurement of observer agreement for categorical data. *Biometrics* 33, 159-174.
- Lombard, M., Snyder-Duch, J., Bracken, C.C. (2002) Content analysis in mass communication assessment and reporting of intercoder reliability. *Human Communication Research* 28, 587-604.
- Lyytimäki, J. (2011) Mainstreaming climate policy: The role of media coverage in Finland, *Mitig Adapt Strateg Glob Change* 16, 649-661.
- Mencher, M. (2006) *Melvin Mencher's news reporting and writing*. McGraw-Hill, Boston.
- McQuail, D. (1999) *Media performance: Mass communication and the public interest*. SAGE Publ., London.
- McQuail, D. (2010) *McQuail's mass communication theory*. SAGE, Los Angeles.
- Nygrén, N.A., Lyytimäki, J., Tapio, P. (2012) A small step toward environmentally sustainable transport? The media debate over the Finnish carbon dioxide-based car tax reform, *Transport Policy* 24, 159-167.
- Oates, S. (2008) *Introduction to media and politics*. SAGE, London, Thousand Oaks, Calif.
- Pieper, R. (2001) *Mobimiles - Bewust op weg*, Bloemendaal.
- Platform Anders Betalen voor Mobiliteit (2005) *Nationaal Platform Anders Betalen voor Mobiliteit*.
- Raad voor Verkeer en Waterstaat (2005) *Innoveren, een kwestie van doen : visie op de verschillende rollen van Verkeer en Waterstaat*. Raad voor Verkeer en Waterstaat, Den Haag.

- Rissel, C., Bonfiglioli, C., Emilsen, A., Smith, B. (2010) Representations of cycling in metropolitan newspapers - changes over time and differences between Sydney and Melbourne, Australia, *BMC Public Health* 10, 1-8.
- Rourke, L., Anderson, T., Garrison, D.R., Archer, W. (2000) Methodological issues in the content analysis of computer conference transcripts. *International Journal of Artificial Intelligence in Education* 11.
- Ruigrok, N. (2008) Journalism of attachment and objectivity: Dutch journalists and the Bosnian War. *Media, War & Conflict* 1, 293-313.
- Ryley, T., Gjersoe, N. (2006) Newspaper response to the Edinburgh congestion charging proposals', *Transport Policy* 13, 66-73.
- Sellers, P.J. (2010) *Cycles of spin: Strategic communication in the U.S. Congress*. Cambridge University Press, Cambridge, New York.
- Schade, J., Schlag, B. (2003) Acceptability of urban transport pricing strategies, *Transportation Research Part F: Traffic Psychology and Behaviour* 6, 45-61.
- Schnell, K., Frauke, C. (2001) Assessing the Democratic Debate: How the News Media Frame Elite Policy Discourse. *Political Communication* 18, 183-213.
- Schuck, A. (2009) Referendum campaign dynamics news media, campaign effects and direct democracy. Ph.D. Thesis, Universiteit van Amsterdam.
- Semetko, H.A. (2003) Political Bias in the Media, *Encyclopedia of International Media and Communications* 3, 517-525.
- Shoemaker, P.J., Mayfield, E.K. (1987) *Building a theory of news content: A synthesis of current approaches*. Association for Education in Journalism and Mass Communication, Columbia, S.C.
- Tresch, A. (2009) Politicians in the media: Determinants of legislators' presence and prominence in Swiss newspapers. *The International Journal of Press/Politics* 14, 67-90.
- Trouw (2005) Verkeersplan van Peijs is een gemiste kans. *Trouw*. 9 September, 2.
- Tuggle, C.A., Carr, F., Huffman, S. (2004) *Broadcast news handbook: Writing, reporting, and producing in a converging media world*. McGraw-Hill, Boston.
- Tweede Kamer (1998) Kabinetsformatie 1998, vergaderjaar 1997–1998, 26024 nr. 10.
- Tweede Kamer (2000) Bereikbaarheidsoffensief Randstad, Vergaderjaar 1999–2000, 27165 nr. 2.
- Tweede Kamer (2005a) Nota Mobiliteit - PKB DEEL III: Kabinetsstandpunt, vergaderjaar 2004–2005, 29 644 nrs. 12–13.
- Tweede Kamer (2005b) Verslag van een Noteoverleg, vergaderjaar 2005–2006, 29644 nr. 20.
- Tweede Kamer (2005c) Motie-Hofstra c.s. over het advies van de commissie-Nouwen over Anders betalen voor Mobiliteit , vergaderjaar 2005–2006, 29644 nr. 54
- Tweede Kamer (2007) Kabinetsformatie 2006, vergaderjaar 2006–2007, 30891 nr. 4.
- Tweede Kamer (2009) Vergaderingnummer 30, vergaderjaar 2009-2010, 2798-2856.
- Tweede Kamer (2010) Vergaderingnummer 46, vergaderjaar 2009-2010, 4362-4367.
- Verhoef, E.T. (2008) *Pricing in road transport: A multi-disciplinary perspective*. Edward Elgar, Cheltenham, UK, Northampton, MA.

Vigar, G., Shaw, A., Swann, R. (2011) Selling sustainable mobility: The reporting of the Manchester Transport Innovation Fund bid in UK media, *Transport Policy* 18, 468-479.

Vliegthart, R., Schuck, A.R.T., Boomgaarden, H.G., de Vreese, C.H. (2008) News coverage and support for European integration, 1990–2006. *International Journal of Public Opinion Research* 20, 415-439.

Vliegthart, R., Boomgaarden, H.G., Boumans, J.W. (2011) Changes in political news coverage: Personalization, conflict and negativity in British and Dutch newspapers. *Political Communication in Postmodern Democracy: Challenging the Primacy of Politics* eds Brants, K., Voltmer, K. Palgrave Macmillan, New York.

van Aelst, P., Vliegthart, R. (2013) Studying the tango. *Journalism Studies* 15, 392-410.

van Lunenburg, M. (2002) A content newspaper analysis of Dutch industry. *Corporate Communications: An International Journal* 7, 126-135.

Walgrave, S., van Aelst, P. (2006) The contingency of the mass media's political agenda setting power: Toward a preliminary theory. *Journal of Communication* 56, 88-109.

Wolfsfeld, G. (2014) *Making sense of media and politics five principles in political communication*. Taylor and Francis, Hoboken

5 The effect of news on attitudes towards a Dutch road pricing proposal

This chapter is currently under review as: Ardiç, Ö., Annema, J.A., Molin, E., Bolderdijk, J.W., van Wee, B., The effect of news on attitudes towards a Dutch road pricing proposal

5.1 Introduction

Public support plays a major role in road pricing policy processes. Low public support, which in turn reduces political acceptability, usually leads to failure of the introduction of road pricing policies (Isaksson and Richardson, 2009; Jones, 2003; Oberholzer-Gee and Weck-Hannemann, 2002). Cools et al. (2011) and Ison and Rye (2005) stress that providing information to the public is of vital importance to increase public support for the policy. As the media is an important source of information for the general public, it is widely acknowledged that the media plays a key role in road pricing policy processes (e.g. Ryley and Gjersoe, 2006; Schade and Schlag, 2000; Vigar et al., 2011). Nevertheless, in road pricing policy research, the relationship between the media and public attitude has not been empirically researched. To our knowledge, the study of Winslott-Hiselius et al. (2009) is the only one which investigates the influence of the media on public attitudes towards a road pricing policy. It compares the tone of news articles and the outcome of a public attitude survey about the Stockholm congestion charging scheme. Their results reveal that the change in tone of news articles published during the Stockholm congestion charging trial coincides with the change in public attitudes about the charging scheme. However, there is no link between the attitude survey and media analysis in this study, thus whether and to what extent the people surveyed were actually exposed to the media reporting about the Stockholm congestion charging scheme is unknown.

To address this gap, our study investigates the relationship between news exposure and public attitudes (and beliefs) regarding a road pricing policy by integrating the data from a public attitude survey with a content analysis of news articles. Our analysis is threefold: Firstly, we look into how the effect of news exposure differs for different tones of news content (negative and positive). Secondly, we analyze the extent to which the effect of news varies depending on the degree of direct personal experience with the issues featured in the news. Lastly, the

effect of news changes depending on numerous individual characteristics (e.g. preexisting attitudes, values) (Perse, 2001). Our study particularly focuses on values and tests how values moderate the effect of exposure to news content about a road pricing policy. Values are defined as “ideals, guiding principles in one's life, or overarching goals that people strive to obtain” (Perloff, 2003, p. 41) and are antecedents of various other individual characteristics such as beliefs and attitudes (Ajzen, 2005). “Attitudes are positive or negative evaluations” of objects such as people, entities or policies (e.g. road pricing policy) (Olson and Kendrick, 2012, p. 230). Beliefs are evaluations regarding whether an attitude object (e.g. road pricing policy) has a particular attribute or leads to a particular outcome (e.g. the impact of road pricing on the environment) (Perloff, 2003).

To achieve these aims, we analyzed the effect of news exposure on attitudes and beliefs about a road pricing policy in the Netherlands. Since 1977 several road pricing proposals have been intensively discussed in the public sphere, although all the proposals ultimately failed to be implemented. One particular form of road pricing Kilometerheffing, which is the subject of this study, was very close to implementation. The proposal was to charge car drivers per kilometer driven, and in the meantime abolish fixed taxes (annual road tax and (part of the) car purchase tax). The charge per kilometer was to vary according to vehicle type (based on emissions), time and place. The proposal occupied the Dutch political arena for about 5 years and was abolished in 2010. Politicians ascribed the decision to abolish the policy predominantly to the lack of public support (Schonewille and Vermeer, 2010; van Keken and Witteman, 2010; Weel, 2010). In our study, we conducted a content analysis on news articles about Kilometerheffing, published between 2005 and 2010. In addition, we also conducted a public attitude survey about this proposal which measures not only the attitudes and beliefs about Kilometerheffing but also the extent to which respondents read the five newspapers we analyzed. We then combined the data from these two sources to determine the level of exposure to various types of news content (e.g. positive vs. negative) from different newspapers at the individual respondent level. The survey was undertaken in 2012, two years after Kilometerheffing was removed from the public and media agenda. We assume that the news about Kilometerheffing published between 2005 and 2010 made a long-lasting impact on people's attitudes and beliefs about the policy since people were highly dependent on the media for information about the policy and very likely to find the policy personally relevant and frequently exposed to news about road pricing policies over long period of time (see section 5.2 for detailed information).

The rest of this chapter is structured as follows: section 5.2 explains the role of the news in forming attitudes about the Dutch road pricing policy. Section 5.3 elaborates on our theoretical framework. Section 5.4 presents our research questions and hypotheses. Section 5.5 outlines methodological aspects of our study such as public attitude survey, content analysis of news articles and the link between them. Section 5.6 presents our results. Section 5.7 presents conclusions and discussion. Finally, section 5.8 presents limitations of the study and suggestions for future research.

5.2 The role of the news in attitude and belief formation about the Dutch road pricing policy

In our study, we argue that the media played an important role in the formation of attitudes and beliefs about Kilometerheffing. In general, media information is one of the factors that contributes to the formation of attitudes and beliefs. Attitudes and beliefs are formed (and modified) either by direct experience with attitude objects (e.g. experience of the implementation of a road pricing policy) or indirectly by exposure to information about the

attitude object available in the social environment (e.g. friends, colleagues) and in the media (Chaiken, 2001; Manstead, 2001). In the communication sciences there is no doubt that the media messages affect people's attitudes and beliefs about an issue, but the research in this field suggests that the strength of the effect (compared to other factors) and its duration are dependent on the type of issue, the characteristics of both the news content and the individuals and how individuals process the media messages (see Perse, 2001). Our expectation is that the Dutch media had a long-lasting impact on attitudes and beliefs about the Dutch road pricing policy (Kilometerheffing). In other words, the effect was still observable when our public attitude survey was conducted in 2012 (see section 5.5.1) about two years after the removal of the Kilometerheffing proposal from the political agenda for following three reasons:

Firstly, the media messages were the main sources of attitude and belief formation for Kilometerheffing. People did not personally gain any experience of how the system operates and how it affects their environment, their mobility and financial situation since the proposal was only discussed in the public sphere and never implemented. Studies indicate that "the less direct experience individuals have with an issue, the more they rely on the media for information and interpretation in that area" and thus the stronger the effect the media has on this issue (Soroka, 2002b; Zucker, 1978, p. 227). Secondly, if people consider that an issue is personally relevant for them, they attend the media coverage about the issue, which in turn increase the likelihood of strong media effect (McCombs, 2004; Coleman, et al. 2009). The Kilometerheffing proposal was a personally relevant issue for the majority of Dutch people since the Kilometerheffing proposal was expected not only to influence most people financially but also to have an impact on their mobility habits. Finally, Garz (2013, p.157) states that "repeated news coverage of a certain topic may lead to long-term changes in attitudes due to the accumulation of effects". Such long lasting impact is enabled by repeated activation of the issue in mind through frequent exposure to related news over long period time (Garz, 2013; Lecheler, et al. 2015). Accordingly, in our case, the media was likely to make a long lasting impact on attitudes and beliefs about road pricing policies because people were repeatedly exposed to media coverage during the research period between 2005 and 2010

5.3 The effect of news

This section explains that the effect of news varies depending on the characteristics of both the news content and the individual readers. We focus on two aspects of the news content: the tone of the news (negative or positive) and the degree of personal experience with the issues featured in news. With respect to the characteristics of individuals, we examine the role of values on the effect of news. We present theories and empirical studies related to three issues and discuss what they mean for the relation between the news and attitudes and beliefs about Kilometerheffing in sections 5.3.1, 5.3.2 and 5.3.3 respectively.

5.3.1 The effect of news tone: negative vs. positive news

The research on the effect of news tone demonstrates that exposure to positive news affects attitudes positively while negative news affects attitudes negatively (e.g. Boomgaarden et al., 2011; De Vreese and Boomgaarden, 2006a; De Vreese and Boomgaarden, 2006b; De Vreese and Semetko 2004). These studies draw on two slightly different perspectives: the first line of research follows Zaller (1992), who suggests that positive and negative news affects attitudes in opposite directions and in the same order of magnitudes. The second one is the study of Soroka (2006) which also suggests that positive and negative news affects attitudes in opposite directions, but in contrast to Zaller (1992), argues that negative news has a much

greater and longer-lasting effect on attitudes than positive news. There is also a substantial body of research in the field of psychology which supports this perspective (see Baumeister et al. (2001) for a review of the relevant literature on this issue). The primacy of negative information is explained by the fact that people process negative information more thoroughly as their survival instinct means they are adapted to respond faster to bad events than good ones (Baumeister et al., 2001). As to road pricing policies, it is often argued that news, especially the tone of the news (negative or positive), affects attitudes towards road pricing policies (e.g. Jones, 2003; Rye et al., 2008; Winslott-Hiselius et al., 2009). Based on these studies, we might expect that exposure to negative news would affect attitudes and beliefs about Kilometerheffing negatively while exposure to positive news would affect attitudes and beliefs positively.

5.3.2 The differential effect: the role of direct personal experience with an issue

The effect of news also differs according to the degree of direct personal experience people have with the issue. Zucker (1978) suggests that the less personal experience people have with the issue in their daily lives, in other words the less obtrusive the issue is for people, the more they are dependent on the media for information and the more likely it is that the media will affect their attitudes and beliefs about this issue. In section 5.2 we explained that the Kilometerheffing proposal was not implemented and people have not experienced how the system works and how it affects the environment, congestion and their financial situation. Therefore, we expect that exposure to news about Kilometerheffing affected attitudes towards the proposal. We also argue that the degree of personal experience differs for these two aspects of Kilometerheffing: the impact of Kilometerheffing on an individual's financial situation and the impact of Kilometerheffing on the environment (and congestion). Based on the studies of Boomgaarden et al. (2011), Soroka (2002a) and Zucker (1978), we expect that exposure to news content about the impact of Kilometerheffing on an individual's financial situation does not have any impact on beliefs about this issue. The reason is that road pricing schemes can have different consequences for each individual depending on personal life conditions such as existing transport expenses and mobility patterns (e.g. the number of kilometers individuals drive). As the media can only cover the financial impact of the proposed scheme on certain social groups (e.g. peak hours drivers, environment friendly car owners), individuals would not rely on the media for information about this issue. Instead, they themselves calculate whether they are going to be financially better or worse off by considering personal life conditions and the design of the Kilometerheffing proposal (e.g. flat charge or price variation according to time and place)²². This is also in line with findings of Boomgaarden et al. (2011) which found that exposure to economic news does affect one's assessment of national economic situations, but not one's expectations of personal economic situation. Furthermore, we expect that people's beliefs about the impact of Kilometerheffing on the environment (and congestion) are likely to be affected by exposure to news about this issue. This is because people would rely on the information presented by the media about the impact of Kilometerheffing on the environment (and congestion) as the information regarding the impact of system on congestion (and environment) does not involve one's specific life conditions but an overall nationwide (or regional) evaluation as presented in the media.

²² We note that people may not accurately predict the impact of a road pricing scheme on their personal financial situation before its implementation (Schuitema et al., 2010). We argue here that people do rely on their own predictions to form their beliefs regardless of the accuracy of their predictions.

5.3.3 The differential effect: the role of individual values

Besides the characteristics of the news content (e.g. tone and issue type), the effect of news content is contingent on individual characteristics. People selectively expose themselves to news content, pay attention to the same news content quite selectively and respond to the same news content differently based on various individual characteristics such as preexisting attitudes, beliefs and values (Perse, 2001). In this study, we analyze the interaction between individual values and the relationship between beliefs and news exposure. Individuals become highly involved in processing messages which touch upon one's values. They evaluate these value-relevant messages thoroughly and thus respond to such messages differently (Perloff, 2003). Jakovcevic and Steg (2013) and Steg et al. (2012) found that four types of values are particularly predictive for public acceptability of transport pricing measures: "hedonic value" concerns one's self comfort and pleasure, "egoistic value" concerns the costs and benefits incurred on one's resources, "altruistic value" concerns the welfare of others and "biospheric value" concerns the quality of nature and the environment. Among them, we focus particularly on biospheric and egoistic values. We argue that people with a strong biospheric value may react to news about the impact of Kilometerheffing on the environment (and congestion) differently than those with a weak biospheric value. Likewise, the effect of news about the impact of Kilometerheffing on individuals' financial situations may vary according to the strength of the egoistic value an individual holds. However, we mentioned previously that people do not rely on media information to construct their beliefs about the impact of Kilometerheffing on their financial situation (see section 5.3.2). As such, we can also argue that people may not be affected by news about the financial impact of Kilometerheffing regardless of the strength of their egoistic value.

5.4 Research questions and hypotheses

The first part of our analysis addresses the relation between the characteristics of news content (news tone, issue type) and attitudes (and beliefs) about Kilometerheffing. We formulated the following research questions based on the theoretical and empirical studies presented in sections 5.3.1 and 5.3.2:

RQ1: To what extent does exposure to positive and negative news about the Kilometerheffing proposal affect people's attitudes towards Kilometerheffing?

RQ2: To what extent does exposure to positive and negative news about the impact of Kilometerheffing on the environment (and congestion) affect people's beliefs about the impact of Kilometerheffing on the environment (and congestion)?

RQ3: To what extent does exposure to positive and negative news about the impact of Kilometerheffing on individuals' financial situations affect people's beliefs about the consequences of Kilometerheffing on their financial situation?

The second part of our analysis looks into the moderation effect of biospheric and egoistic values. We posit two hypotheses below based on the theoretical framework presented in section 5.3.3:

H1: The effect of news about the impact of Kilometerheffing on the environment (and congestion) is moderated by the strength of the biospheric value.

H2: The effect of news about the impact of Kilometerheffing on an individual's financial situation is moderated by the strength of the egoistic value.

5.5 Methodology

5.5.1 Data sources

This study combined the data from two different sources: a content analysis of newspaper articles (280 news articles) published during the Kilometerheffing policy process between 2005 and 2010 and a public attitude survey (N=705) conducted in December 2012. Based on this data, our study developed five linear regression models.

5.5.2 Content analysis

A content analysis of news articles about the Dutch road pricing policy was carried out by Ardiç et al. (2013). It was conducted on news articles published in the five national newspapers with the five highest circulation rates in 2010: *De Telegraaf* (type: popular, political leaning: right), *Algemeen Dagblad* (type: popular, political leaning: right), *de Volkskrant* (type: quality, political leaning: centre/left), *NRC Handelsblad* (type: quality, political leaning: right) and *Trouw* (type: quality, political leaning: centre/left). Newspapers are widely used as a source of news by the Dutch public (Commissariaat voor de Media, 2011) and a large number of Dutch newspaper readers (more than 35% and 45% of the total and paid newspaper readers respectively) read one or more of these five newspapers (Ardiç et al., 2013).

Kilometerheffing was discussed in the public sphere between 2005 and 2010. During this period, the policy continuously received media coverage but the media attention for the policy frequently changed, reflecting changes in the prominence of the policy on the political agenda. The sample included news articles published in the two weeks around five major policy events (one week before and one after the event) during which media attention for the policy peaked (see Table 5-1). 280 news articles were selected from the digital newspaper archive LexisNexis, using a search string comprising all the name variations used for Kilometerheffing in the Dutch language.

Table 5-1: Major Policy Events in Kilometerheffing Policy Process (Ardiç et al., 2013)

Date	Policy event
30.04.2005	Major Dutch policy actors (Nouwen Committee) agreed on Kilometerheffing
08.09.2005	National transport policy document (Nota Mobiliteit) was announced, which delayed implementation of Kilometerheffing
05.02.2007	Kilometerheffing was included in the coalition government agreement
13.11.2009	Kilometerheffing, as a final proposal, was sent to parliament
18.03.2010	Kilometerheffing was removed from the political agenda

Source (Ardiç et al., 2013, p. 49)

The coding scheme included 25 issues about Kilometerheffing, each of which indicated a different aspect of the Kilometerheffing proposal such as its *impact on individuals' financial situations, impact on congestion, air quality and noise*. Each issue was given a varying amount of space (number of words) and presented in different tone (positive, negative, mixed or neutral) by the five newspapers. The data provides the total space allocation, measured by the number of words for each issue per type of tone and newspaper. We divided the mixed and neutral space allocation (for each issue and newspaper) equally between the positive and negative space allocation variables. The reliability test of content analysis performed by two coders revealed satisfactory results (see Ardiç et al. (2013) for detailed information about the coding process).

5.5.3 Survey

The survey was conducted by TNS NIPO (The Dutch Institute for Public Opinion Research and Market Research) using computer/assisted self-interviewing. Respondents (N=705) were randomly sampled from their database which is representative of the Dutch population. The ratios of male and female respondents in our sample were 50.1% and 49.9% respectively. The ratio of respondents aged between 18 and 34 was 22.7%, between 35 and 49 was 28.5% and over 50 was 48.6%. The ratios of low, middle and high educated respondents were 27.8%, 41.2%, and 30.8% respectively (see NIPO (2012) for the demographic characteristics of the Dutch population). At the beginning of the survey, respondents were randomly assigned brief descriptions of one of two Kilometerheffing designs: one with price variation according to vehicle type, and the other one without. After reading this information, respondents proceeded to fill out the survey questions about the proposal.

Dependent variables: attitudes and beliefs

In the survey, we used 7 attitude scale items in total to measure three constructs: *Attitude towards Kilometerheffing*, *belief about the financial impact of Kilometerheffing* and *belief about the impact of Kilometerheffing on the environment (and congestion)*. Respondents were asked to indicate the degree to which they agreed with presented items on a 7 points-scale ranging from “totally disagree” (1) to “totally agree” (7). Table 5-2 presents the items used to measure each of these constructs. Since the internal reliability of the items used for each construct, measured by Cronbach’s alpha, was all above 0.73 (see Table 5-2), we summed scales of items to create scale measures.

Table 5-2: Scale measures and their items

Scale measures	Cronbach’s alpha	Scale items
Attitude towards Kilometerheffing	.94	I find the proposed measure is acceptable It is good that this measure is introduced
Belief about the financial impact of Kilometerheffing	.73	I think that the proposed measure will bring financial benefits to me This measure will make me financially worse off
Belief about the impact of Kilometerheffing on the environment (and congestion)	.86	I think that the proposed measure will be effective in decreasing congestion level I think that the proposed measure will improve air quality I expect that the proposed measure will lower noise level.

Independent variables: news exposure

News exposure can be defined as the extent to which readers have encountered specific news content (Slater, 2004). There is no agreed measure in the media effect research. There are a few widely used measures, but no measure is a priori superior. The first one is “self-reports” in which readers report the extent they are exposed to specific news content. This can suffer from recall errors. The second one is “experimental manipulation” in which researchers determine the extent readers are exposed to particular news content. But, the effect of such exposure can be different than exposure experienced in natural settings. The last measure is to estimate exposure from the content analysis of newspapers. This exposure measure can produce only “the likelihood” of exposure and cannot tell the extent to which readers pay attention to this estimated exposure (Yanovitzky and Greene, 2009).

In our study, we created our exposure variables by combining a global self-reported measure, which indicated the extent to which readers read specific newspapers, and the content analysis of newspapers. In the survey we asked respondents how often they read the five newspapers: *De Telegraaf*, *Algemeen Dagblad*, *de Volkskrant*, *Trouw* and *NRC Handelsblad* and they responded with a 5 points-scale ranging from “never” (0) to “daily” (4). Furthermore, we conducted a content analysis of the news articles published in these newspapers (see section 5.5.2) and determined space allocation devoted to specific news content about “Kilometerheffing” in these newspapers. We produced 6 different news exposure variables listed in Table 5-3. “Word” was taken as the unit of space allocation and counted the total number of words used for each variable. The results were multiplied by “2” for the front page news articles and “1” for the middle page news articles (see Adriaansen et al. (2010) and Vliegthart et al. (2008) for similar applications) as front-page news were more likely to attract readers’ attention. We however note that visual cues related to news (e.g. pictures and headlines) and whether people read the printed version or on-line version of newspapers were not considered when constructing our exposure variables. Visual cues may increase readers’ attention whereas on-line news reading may decrease their attention due to higher possibility of distractions (e.g. pop-up ads, visuals distractions).

Table 5-3: News exposure variables

Topic of variables	Name of variables
Kilometerheffing	Exposure to positive Kilometerheffing news content
	Exposure to negative Kilometerheffing news content
The impact of Kilometerheffing on individuals’ financial situations	Exposure to positive news content about the impact of Kilometerheffing on an individual’s financial situation
	Exposure to negative news content about the impact of Kilometerheffing on an individual’s financial situation
The impact of Kilometerheffing on the environment (and congestion)	Exposure to positive news content about the impact of Kilometerheffing on the environment (and congestion)
	Exposure to negative news content about the impact of Kilometerheffing on the environment (and congestion)

Exposure to positive Kilometerheffing news content for each respondent was calculated in two steps. Firstly, the positive space allocation for Kilometerheffing in each newspaper was multiplied by the reading frequency of this newspaper by this respondent to obtain exposure to positive news content of each newspaper. Then, we summed the exposure to positive news content of the five newspapers by this respondent. *Exposure to negative Kilometerheffing news content* was calculated using the same method.

We repeated a similar procedure to calculate the four news exposure variables related to *the impact of Kilometerheffing on an individual’s financial situations* and *the impact of Kilometerheffing on the environment (and congestion)*. Positive and negative space allocation variables used for the calculation of the financial impact variables utilized the amount of space allocation only for the issue *the impact of Kilometerheffing on an individual’s financial situation*. Space allocation variables used for the calculation of *the impact of Kilometerheffing on the environment (and congestion)* variable were the sum of space allocation of three issues: impact on congestion, impact on air quality and impact on noise.

Control variables

When constructing regression models to answer our research questions and test our hypotheses, we controlled for three groups of control variables to avoid their spurious effect on the relationships between our dependent variables (attitudes and beliefs about Kilometerheffing) and independent variables (news exposure): socio-demographic variables, individual values, and variables that explain the mobility patterns of people and scheme characteristics. Firstly, socio demographic variables (age, gender, education and social class) affect attitudes about road pricing (see Gehlert et al. (2011) and Jaensirisak et al. (2005)). Also, selective exposure and attention to news might bear similar characteristics across these groups as these variables represent groups which share roughly similar interests, abilities and experiences (Perse, 2001). Secondly, egoistic, hedonic, altruistic and biospheric values are predictive of attitudes and beliefs about a road pricing policy (Jakovcevic and Steg, 2013; Steg et al., 2012). In addition, people might selectively attend to messages in the news about Kilometerheffing in line with these values (Stern and Dietz, 1994). Thirdly, the mobility patterns of individuals (e.g. car ownership, kilometer driven) and design characteristics of the scheme (e.g. price variation based on vehicle type) are predictive of attitudes and beliefs about a road pricing policy (see Gehlert et al. (2011) and Jaensirisak et al. (2005)). These variables can also affect the extent to which people attend to news about Kilometerheffing (or its particular aspect) since the personal relevance of Kilometerheffing (or its particular aspects) may change according to the mobility patterns of individuals.

Age is measured in years. *Gender (female)* is a dummy variable. *Education* is an ordinal variable with three levels (1 low, 2 middle and 3 high). The *social class* variable, which contains information about both *level of education* and *occupation*, is an ordinal variable with three levels (1 low, 2 middle and 3 high). *Kilometers driven per week* and *number of cars owned* are continuous variables. *Number of cars owned* ranges from “no car” (1) to “6 and more” (6).

Values were measured by the value scale developed by de Groot and Steg (2008) and Steg et al. (2012) based on the value theory developed by Schwartz (1992). The scale has been validated by various studies (e.g. de Groot and Steg, 2008; Jakovcevic and Steg, 2013; Steg et al., 2011; Steg et al., 2012). Table 5-4 presents the items used to measure each value. Following Schwartz (1992) and Steg et al. (2012), respondents indicated the extent to which these values were important “as a guiding principle in their lives” on a 9 point scale ranging from -1 ‘opposed to my values’, 0 ‘not important’ to 7 ‘extremely important’. The reliability of the value scale was satisfactory. The Cronbach’s alpha of value scales ranged from 0.75 to 0.87 (see Table 5-4). We summed the scales of items to create four value scale: *egoistic*, *hedonic*, *biospheric*, *altruistic*.

Table 5-4: Scale measures and their items

Scale measures	Cronbach's alpha	Scale items
egoistic	0.75	social power wealth authority influential ambitious
hedonic	0.84	pleasure enjoying life gratification for oneself
biospheric	0.87	preventing pollution respecting the earth unity with nature protecting the environment
altruistic	0.78	equality a world of peace social justice helpfulness

5.6 Results

Around 64% (n=452) of the respondents in our survey read at least one of the five newspapers analyzed. Among the newspaper readers (N=452), *De Telegraaf* (n=280) had the highest number of readers and *Trouw* (n=70) the lowest. The great majority of the readers of each newspaper also read one of the other newspapers (60% of De Telegraaf readers (n=168), 80% of de Volkskrant readers (n=130), 88% of NRC Handelsblad readers (n=180), 87% of Trouw readers (n=61) and 79% of Algemeen Dagblad readers (n=174)). In total, 53% (N=238) of the newspaper readers read more than one newspaper and 31% (N=139) of them were exposed to both right-leaning (*De Telegraaf*, *Algemeen Dagblad* or *NRC Handelsblad*) and left-leaning (*Trouw* or *de Volkskrant*) newspapers.

Figure 5-1 presents the space allocation of positive and negative news about the Kilometerheffing proposal for the five newspapers. The space allocation for the proposal is highest in *De Telegraaf*, followed by *Algemeen Dagblad* and *Trouw*. *De Telegraaf* has the highest amount of negative space allocation compared to the other newspapers and is also the only newspaper which allocates more space to negative news than positive news. *Trouw* has the highest amount of positive space allocation for the proposal. To sum up, all of the newspapers have both positive and negative space allocation for Kilometerheffing but to a varying extent. The extent that a respondent is exposed to negative or positive Kilometerheffing news content depends on which newspaper(s) (and how often) s/he reads.

We will now consider the effect of exposure to Kilometerheffing news content on people's attitudes and beliefs about Kilometerheffing, based on our research questions and hypotheses. RQ1 addresses the relation between exposure to positive and negative content about Kilometerheffing and attitudes towards Kilometerheffing. Table 5-5 presents the results of a multiple regression model predicting attitudes about Kilometerheffing. The regression model suggests that while exposure to negative news about Kilometerheffing is negatively associated with attitudes towards Kilometerheffing, exposure to positive Kilometerheffing news is positively associated with attitudes. However, exposure to positive news is only statistically significant at the 0.10 level.

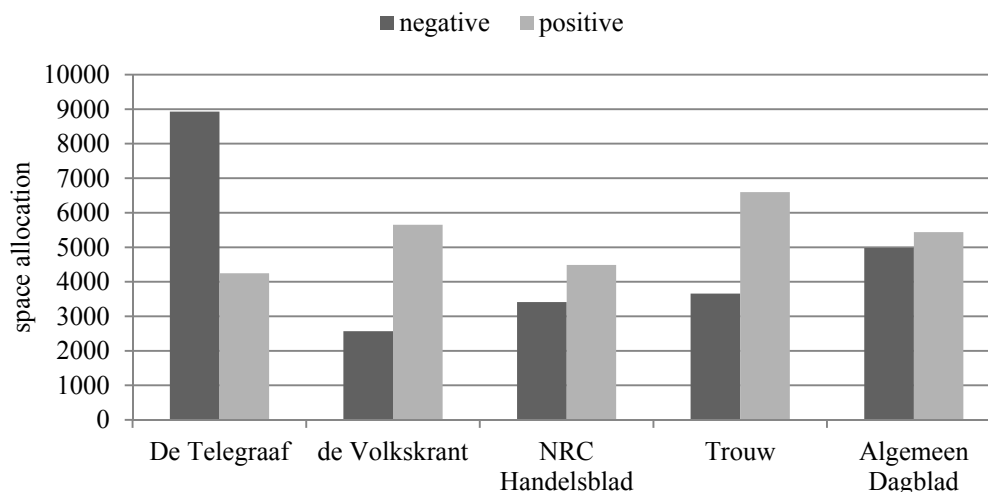


Figure 5-1: The overall tone of Kilometerheffing news content across newspapers

Table 5-5: Regression model explaining the attitudes towards Kilometerheffing

	Model 1		
	Stand. beta coef.	t value	p value
(Constant)		5.075	.000
Control variables (socio-demographic)			
Gender (female)	-.022	-.586	.558
Age	.084	2.038	.042
Social class (high) ¹	.026	.459	.646
Social class (middle) ¹	.029	.570	.569
Education (high) ²	.044	.815	.415
Education (middle) ²	-.012	-.260	.795
Control variables (mobility)			
Number of cars owned	-.082	-2.170	.030
Kilometers driven per week	-.187	-4.824	.000
Kilometerheffing with price variation (vehicle type)	.098	2.782	.006
Control variables (values)			
Egoistic value orientation	-.050	-1.304	.193
Biospheric value orientation	.197	4.054	.000
Altruistic value orientation	.005	.109	.913
Hedonic value orientation	-.053	-1.340	.181
Independent variables (news exposure)			
Exposure to negative Kilometerheffing news content	-.158	-2.109	.035
Exposure to positive Kilometerheffing news content	.139	1.798	.073
Adjusted R2		0.141	0.000
N		705	

¹ Reference group is taken as *social class (low)*

² Reference group is taken as *education (low)*

Table 5-6: Regression model explaining beliefs about the impact of Kilometerheffing on the environment (and congestion)

	Model 2			Model 3		
	Stand. beta coef.	t value	p value	Stand. beta coef.	t value	p value
(Constant)		4.451	.000		6.349	.000
Control variables (socio-demographic)						
Gender (female)	-.011	-.298	.766	-.009	-.243	.808
Age	.084	2.033	.042	.079	1.891	.059
Social class (high) ¹	.007	.118	.906	.000	.002	.998
Social class (middle) ¹	.019	.367	.714	.016	.315	.753
Education (high) ²	.002	.040	.968	.005	.086	.932
Education (middle) ²	-.050	-1.040	.299	-.047	-.981	.327
Control variables (mobility)						
Number of cars owned	-.081	-2.135	.033	-.081	-2.122	.034
Kilometers driven per week	-.145	-3.730	.000	-.141	-3.629	.000
Kilometerheffing with price variation (vehicle type)	.058	1.636	.102	.057	1.613	.107
Control variables (values)						
Egoistic value orientation	-.042	-1.085	.278	-.043	-1.123	.262
Biospheric value orientation	.196	4.027	.000	.194	3.992	.000
Altruistic value orientation	.044	.905	.366	.040	.824	.410
Hedonic value orientation	-.010	-.258	.796	-.012	-.297	.766
Independent variables (news exposure)						
Negative news content about the impact of Kilometerheffing on the environment (and congestion)	-.132	-1.405	.160	-.152	-1.601	.110
Positive news content about the impact of Kilometerheffing on the environment (and congestion)	.193	1.983	.048	.226	2.284	.023
Interactions (news exposure X biospheric value)						
Negative news content about the impact of Kilometerheffing on the environment (and congestion) X biospheric value				.169	1.894	.059
Positive news content about the impact of Kilometerheffing on the environment (and congestion) X biospheric value				-.182	-2.021	.044
Adjusted R2						
		0.133	0.000		0.136	0.000
N						
		705			705	

¹ Reference group is taken as *social class (low)*² Reference group is taken as *education (low)*

RQ2 is related to the relation between exposure to positive and negative news content about the impact of Kilometerheffing on the environment (and congestion) and beliefs about this aspect of Kilometerheffing. Table 5-6 presents two regression models (model 2 and model 3) explaining beliefs about the impact of Kilometerheffing on the environment (and congestion).

Model 2 shows that exposure to positive news about the impact of Kilometerheffing on the environment (and congestion) is significantly positively associated with beliefs about the impact of Kilometerheffing on the environment (and congestion). Exposure to negative news content about this issue does not have a significant impact on beliefs about this issue although the sign of the coefficient is negative, as expected. The result of model 3 confirms our hypothesis (H1) that the effect of news about the impact of Kilometerheffing on the environment (and congestion) is moderated by the strength of biospheric value. Interestingly, exposure to positive news content about the impact of Kilometerheffing on the environment (and congestion) backfires on people with strong biospheric values. Likewise, exposure to negative news content about the impact of Kilometerheffing on the environment (and congestion) backfires on these people although this effect is only statistically significant at the 0.10 level.

RQ3 is related to the relation between exposure to positive and negative content about the impact of Kilometerheffing on individuals' financial situations and beliefs about the financial consequences of kilometerheffing on one's own financial situation. Table 5-7 presents two regression models (model 4 and model 5) explaining beliefs about the consequences of Kilometerheffing on one's own financial situation. Model 4 shows that neither exposure to negative nor positive news content about the impact of Kilometerheffing on individuals' financial situations is significantly related to beliefs about the impact of kilometerheffing on one's own financial situation. Model 5 does not support our hypothesis (H2) that the effect of news about the impact of Kilometerheffing on individuals' financial situations is moderated by the strength of egoistic value.

5.7 Conclusions and discussion

Our results show that exposure to positive and negative news content about Kilometerheffing affects attitudes and beliefs about Kilometerheffing, but the strength (and significance) and the direction of effect (in parallel with or opposite to the tone of news (negative or positive)) vary depending on the type of issue featured in the news and the characteristics of the individuals. Attitudes towards Kilometerheffing are only affected by negative news while beliefs about the impact of Kilometerheffing on the environment (and congestion) are only affected by positive news. Beliefs about the impact of Kilometerheffing on one's financial situation are not affected by exposure to news about this issue. Positive news about the impact on the environment (and congestion) backfires on people with strong biospheric values.

The fact that attitudes towards Kilometerheffing are affected only by negative news is in accordance with the findings of previous studies (e.g. Baumeister et al., 2001; Soroka, 2006) that the effect of negative news is greater than the effect of positive news. On the other hand, this result contradicts the argument of Zaller (1992) that positive and negative news has the same magnitude. However, this result might also be related to preexisting attitudes towards previous road pricing proposals rather than the inherently greater power of negative news. Our models do not include preexisting attitudes and beliefs. But, in general we know that the majority was against road pricing policies before Kilometerheffing was put on the political agenda (Harms and van der Werff, 2008). It is widely acknowledged that people "seek out and pay close attention to information that confirms their existing attitudes and avoid information that might contradict their attitudes" (Bohner and Dickel, 2011, p. 407). Based on this reasoning, in our case the effect of negative news might be stronger than the effect of positive news because people might already have negative attitudes towards previous road pricing proposals and as such negative information is more easily accepted and reinforces preexisting negative attitudes.

Table 5-7: Regression model explaining beliefs about the financial consequences of Kilometerheffing on one's own financial situation

	Model 4			Model 5		
	Stand. beta coef.	t value	p value	Stand. beta coef.	t value	p value
(Constant)		7.458	.000		8.622	.000
Control variables (socio-demographic)						
Gender (female)	-.051	-1.361	.174	-.050	-1.332	.183
Age	-.124	-2.988	.003	-.128	-3.081	.002
Social class (high) ¹	-.002	-.039	.969	.005	.088	.930
Social class (middle) ¹	.046	.891	.373	.055	1.060	.290
Education (high) ²	-.028	-.519	.604	-.034	-.626	.532
Education (middle) ²	-.002	-.034	.973	-.006	-.127	.899
Control variables (mobility)						
Number of cars owned	-.006	-.152	.880	-.002	-.047	.962
Kilometers driven per week	.256	6.571	.000	.259	6.643	.000
Kilometerheffing with price variation (vehicle type)	-.022	-.628	.530	-.021	-.589	.556
Control variables (values)						
Egoistic value orientation	.089	2.316	.021	.089	2.308	.021
Biospheric value orientation	-.115	-2.342	.019	-.111	-2.279	.023
Altruistic value orientation	-.006	-.121	.904	-.007	-.154	.878
Hedonic value orientation	.023	.590	.555	.023	.593	.553
Independent variables (news exposure)						
Negative news content about the impact of Kilometerheffing on individuals' financial situations	.032	.536	.592	.020	.334	.738
Positive news content about the impact of Kilometerheffing on individuals' financial situations	-.004	-.074	.941	.010	.159	.874
Interactions (news exposure X egoistic value)						
Negative news content about the impact of Kilometerheffing on individuals' financial situations X egoistic value				-.025	-.387	.699
Positive news content about the impact of Kilometerheffing on individuals' financial situations X egoistic value				.089	1.369	.171
Adjusted R2						
		0.127	0.000		0.128	0.000
N						
		705			705	

¹ Reference group is taken as *social class (low)*

² Reference group is taken as *education (low)*

As we expected, news exposure affects beliefs about the impact of Kilometerheffing on the environment (and congestion). This indicates that people rely on media information to form their beliefs since they do not have personal experience (they have never experienced environmental impacts due to Kilometerheffing in the real world). Furthermore, while exposure to positive news affects beliefs about the impact of Kilometerheffing on the environment (and congestion), the effect of negative news is insignificant. This finding

contradicts two hypotheses related to the effect of positive and negative news, which posit that the power of negative information is either greater than or equal to the power of positive information. We might explain this result based on preexisting beliefs. Positive news plays a greater role if preexisting beliefs about the impact of previous road pricing policies on the environment (and congestion) are positive. Our models do not include preexisting attitudes and beliefs, but in our view, preexisting beliefs about this aspect of Kilometerheffing were most probably positive because it is highly likely that beliefs about this aspect were constructed on an initial positive inference made by using common rules of logic. Fishbein and Ajzen (1975) argues that people may rely on commonly held assumptions or use the rules of logic (as well as turn to other information sources (e.g. media, friends)) to construct their beliefs when they do not have direct experience with the issue. Such inferential belief formation very likely plays a role at the initial stages of belief formation about the impact of road pricing policy on the environment (and congestion) and affects the perception of information (e.g. from the media) about this issue. The reason is that road pricing policy applies the general rule of the pricing mechanism, with which people are very familiar in daily life. The policy charges road users (customers) for the use of the road network (market product) to reduce the demand for the use of the network, in turn alleviating congestion and improving environmental quality. Therefore, knowing that the demand for a product decreases when its price increases, people may infer that road pricing policies are likely to alleviate congestion and improve environmental quality. Although they cannot know the magnitude of the positive impact on congestion and the environment without experiencing it in daily life, their inference is likely to be in a positive direction. As such, positive information about this issue may be accepted more easily than negative information.

Neither exposure to positive nor negative news about the impact of Kilometerheffing on an individual's financial situation affects beliefs about the impact of Kilometerheffing on one's own financial situation. Furthermore, the effect of news about the impact of Kilometerheffing on an individual's financial situation is not moderated by the strength of the egoistic value. This indicates that people do not rely on media information but on their own experience to form their beliefs, as we expected.

Finally, the strength of the biospheric value moderates the effect of news about the impact of Kilometerheffing on the environment (and congestion) as expected. Interestingly, exposure to positive news about the impact of Kilometerheffing on the environment (and congestion) affects people with a strong biospheric value negatively. It seems that exposure to positive news content about this issue backfires on people with strong biospheric values. This finding contradicts two hypotheses related to the effect of positive and negative news, which posit that the effect of news is in the same direction as the tone of the news. The reverse effect of news might be explained by social judgment theory. This theory states that the more an issue touches people's strong values, the more people elaborate on the information about this issue, the more they are resistant to any information inconsistent with their beliefs. It is even likely that information leads to an effect opposite to that intended if the issue touches one's strong values (Dainton and Zelley, 2005). In our case, Dutch environmental lobbies were moderately positive about the introduction of road pricing policy and Kilometerheffing, but they also believed that road pricing policy cannot deal with solving all environment problems (they saw road pricing policy as a supportive measure). They were in favor of more radical measures (see for example ANP (2009)). We might expect that people with strong biospheric values may have a similar way of thinking as environmental lobbies. As such, exposure to "too" positive news (in their view) about the impact of Kilometerheffing on the environment (and congestion) may backfire on these people and affect them negatively.

5.8 The limitations of study and future research

This study is the first which investigates how news affects attitudes and beliefs about a road pricing policy. We add to the research on public acceptability of road pricing policy by providing evidence for the link between news and attitudes towards road pricing policy. But the study has some limitations. Four issues should be kept in mind when considering our findings and should be further analyzed by future studies. They are discussed in sections 5.8.1, 5.8.2 and 5.8.3.

5.8.1 The possibility of reverse causality

It is important to stress that our analysis lacks adequate evidence of the temporal precedence of our independent variables (news exposure) over our dependent variables (attitudes and beliefs). The results of our analysis demonstrate that exposure to specific news content (e.g. tone, issue) is correlated with the attitudes and beliefs of people who are exposed to this news content, but we cannot conclude with confidence that exposure to news content about a road pricing policy affects (positively or negatively) attitudes and beliefs about this policy as the analysis is drawn on cross sectional data. Yet, we believe that our results plausibly indicate a causal effect between our dependent and independent variables. Firstly, as explained at the outset of this chapter, it seems highly plausible that news about road pricing policy had an enduring impact on attitudes and beliefs about road pricing policy since people were highly dependent on the media for information about the policy and very likely to find the policy personally relevant and frequently exposed to news about road pricing policies over long period of time. Secondly, our assumptions, research questions and hypotheses are grounded on theoretical frameworks and previously conducted empirical studies about these hypotheses. Lastly, our models control for several possible confounding factors which possibly influence the relations between our dependent and independent variables according to the literature in the fields of communication and transport. Nevertheless, there is no doubt that studies using a longitudinal design might draw more precise conclusions about the effect of news on attitudes and beliefs about road pricing policies. A longitudinal design furthermore allows us to gain some additional insights. We illustrated in section 5.7 that the same observed effect (e.g. negative attitudes) may be the outcome of different cognitive processes (e.g. the inherent greater power of negative news or reinforcement of negative preexisting attitudes). A longitudinal design may help us to understand the cognitive processes behind the observed effect. In addition to that, a longitudinal design allows us to measure variation in media effect for different duration. For instance, we present the relation between news content and attitudes (beliefs) two years after exposure to news, but what was the effect one year or a few months after exposure to the news or right after exposure to news content about a specific policy event? Therefore, we suggest that future studies conduct a panel survey before and after policy events related to road pricing policies, and additionally analyze the news content on the policy during these policy events. We should, however, note that it might be difficult to set such research design for issues like road pricing policy since the policy process is usually very difficult to predict and often encounters unexpected developments.

5.8.2 The role of ideology

It is important to realize that we did not measure the political ideology of respondents (left vs. right: position in relation to government interventions in economic and social affairs), whereas the political ideology of an individual may intervene with the impact of news exposure on the attitudes and beliefs about Kilometerheffing. This is because attitudes and beliefs about policies involving changes in levels of welfare and taxes (e.g. road pricing policy) may be related to people's political ideology (Perloff, 2003), whereas newspapers

might have a political ideology which influences their presentation of policy issues (Mencher, 2006). In addition people might be more inclined to read like-minded newspapers, thereby being exposed to news which matches their political ideology (Stroud, 2008).

As a sensitivity analysis we added the voting preferences of respondents in the 2012 elections as a proxy for political ideology. These preferences were available via the NIPO (see section 5.5.3) and had potential as a proxy because of the fact that political ideology is an important factor in voting decisions in the Netherlands even though other factors (e.g. government economic performance, the leadership) may also influence voting preferences (Andeweg and Irwin 2009). Based on the preferences we classified respondents as having an ideology that was either left, right or center. We could then re-estimate our models controlling for political ideology. Most effects were more or less the same, the only exception being that in model 1 (Table 5-5) the association between exposure to negative news content and attitudes towards Kilometerheffing turned out to be insignificant.

We consider these new findings to be not robust for the following reasons. Firstly, electoral choice in one election is not a very adequate or robust proxy for the political ideology of individuals in the Netherlands as in recent years more than one third of Dutch voters have changed their party choice between two elections. Secondly, political ideology is not the only factor which may influence voting preferences as previously mentioned. We do not know which factors (and to what extent) determine voting preferences. Finally, voting preferences were missing for 25% of the cases in our sample, the remaining subsample is not fully representative of the whole population and the models were already less likely to produce statistically significant results due to the smaller sample size. We can therefore only stress the potential importance of political ideology for our analyses, and recommend that future studies further analyze the effect of political ideology. Our models including political ideology are not considered to be acceptable models.

5.8.3 Future research

Our analysis did not include interpersonal communication and exposure to other forms of mass media (e.g. TV programs). These variables might affect the relation between news exposure and attitudes (and beliefs) (Perse, 2001). The inclusion of these variables in models may reveal more conclusive results. Furthermore, our study focuses on the effect of news on attitudes towards Kilometerheffing and beliefs about two aspects of Kilometerheffing: the impact of Kilometerheffing on the environment (and congestion) and on people's financial situation. There are other issues frequently featured in the news, such as the adequacy of technical systems, the possibility of privacy violation, and the installation and operational cost of the system. It is to be expected that exposure to news about these issues would affect beliefs as people have no personal experience with how Kilometerheffing operates. The relation between news exposure and beliefs about these issues is an interesting topic for future studies. Finally, people are highly dependent on the media to form their attitudes and beliefs about Dutch road pricing policy since the policy has not implemented. We recommend that future studies analyze the media effect on an implemented road pricing policy in another country. Findings of these studies may help us to understand the role of media information in attitude and belief formation about road pricing policy when people have direct personal experience with the policy.

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References

- Adriaansen, M.L., van Praag, P., de Vreese, C.H. (2010) Substance matters: How news content can reduce political cynicism. *International Journal of Public Opinion Research* 22, 433-457.
- Andeweg, R.B., Irwin, G.A. (2009) *Governance and politics of the Netherlands*. Palgrave Macmillan, Houndmills, Basingstoke, Hampshire, New York.
- Ajzen, I. (2005) *Attitudes, personality and behaviour*. Open University Press, Maidenhead.
- ANP (2009) 'Zwaar aan de bak' om klimaatdoelen te halen. 9 February.
- Ardıç, Ö., Annema, J.A., van Wee, B. (2013) Has the Dutch news media acted as a policy actor in the road pricing policy debate? *Transportation Research Part A: Policy and Practice* 57, 47-63.
- Baumeister, R.F., Bratslavsky, E., Finkenauer, C., Vohs, K.D. (2001) Bad is stronger than good. *Review of General Psychology* 5, 323-370.
- Bohner, G., Dickel, N. (2011) Attitudes and attitude change. *Annual Review of Psychology* 62, 391-417.
- Boomgaarden, H.G., van Spanje, J., Vliegenthart, R., de Vreese, C.H. (2011) Covering the crisis: Media coverage of the economic crisis and citizens' economic expectations. *Acta Politica* 46, 353-379.
- Chaiken, S. (2001) Attitude Formation: Function and Structure. *International Encyclopedia of the Social & Behavioral Sciences* eds Smelser, N.J., Baltes, P.B. Pergamon, Oxford, pp. 899-905.
- Coleman, R., McCombs, M., Shaw, D., Weaver, D. (2009) Agenda Setting. *The handbook of journalism studies* eds Wahl-Jorgensen, K., Hanitzsch, T. Routledge, New York.
- Cools, M., Brijs, K., Tormans, H., Moons, E., Janssens, D., Wets, G. (2011) The socio-cognitive links between road pricing acceptability and changes in travel-behavior. *Transportation Research Part A: Policy and Practice* 45, 779-788.
- Dainton, M., Z Kelley, E.D. (2005) Explaining theories of persuasion. *Applying communication theory for professional life: A practical introduction* eds Dainton, M., Z Kelley, E.D. SAGE Publications, Thousand Oaks, Calif.
- de Groot, J.I.M., Steg, L. (2008) Value orientations to explain beliefs related to environmental significant behavior: How to measure egoistic, altruistic, and biospheric value orientations. *Environment and Behavior* 40, 330-354.
- de Vreese, C.H., Boomgaarden, H. (2006a) News, political knowledge and participation: The differential effects of news media exposure on political knowledge and participation. *Acta Politica* 41, 317-341.
- de Vreese, C.H., Boomgaarden, H.G. (2006b) Media effects on public opinion about the enlargement of the European Union. *JCMS: Journal of Common Market Studies* 44, 419-436.
- de Vreese, C.H., Semetko, H.A. (2004) News matters: Influences on the vote in the Danish 2000 euro referendum campaign. *European Journal of Political Research* 43, 699-722.
- Fishbein, M., Ajzen, I. (1975) *Belief, attitude, intention, and behavior: An introduction to theory and research*. Addison-Wesley Pub. Co., Reading, Mass.

- Garz, M. (2013) Unemployment expectations, excessive pessimism, and news coverage. *Journal of Economic Psychology* 34, 156-168.
- Gehlert, T., Kramer, C., Nielsen, O.A., Schlag, B. (2011) Socioeconomic differences in public acceptability and car use adaptation towards urban road pricing. *Transport Policy* 18, 685-694.
- Harms, L., van der Werff, E. (2008) *Psychologie en prijsbeleid: Acceptatie en effectiviteit van de kilometerprijs*. Den Haag: Kennisinstituut voor Mobiliteitsbeleid.
- Hårsman, B., Quigley, J.M. (2010) Political and public acceptability of congestion pricing: leaning and self-interest. *Journal of Policy Analysis and Management* 29, 854-874.
- Isaksson, K., Richardson, T. (2009) Building legitimacy for risky policies: The cost of avoiding conflict in Stockholm. *Transportation Research Part A: Policy and Practice* 43, 251-257.
- Ison, S., Rye, T. (2005) Implementing road user charging: The lessons learnt from Hong Kong, Cambridge and central London. *Transport Reviews* 25, 451-465.
- Jakovcevic, A., Steg, L. (2013) Sustainable transportation in Argentina: Values, beliefs, norms and car use reduction. *Transportation Research Part F: Traffic Psychology and Behaviour* 20, 70-79.
- Jaensirisak, S., Wardman, M., May, A.D. (2005) Explaining variations in public acceptability of road pricing schemes. *Journal of Transport Economics and Policy* 39, 127-154.
- Jones, P. (2003) Acceptability of road user charging: Meeting the challenge. *Acceptability of Transport Pricing Strategies* eds Schade, J., Schlag, B. Oxford: Elsevier, pp. 27-62.
- Lecheler, S., Keer, M., Schuck, A.R.T., Hänggli, R. (2015) The effects of repetitive news framing on political opinions over time. *Communication Monographs*, 1-20.
- Manstead, A.S.R. (2001) Attitudes and Behavior. *International Encyclopedia of the Social & Behavioral Sciences* eds Smelser, N.J., Baltes, P.B. Pergamon, Oxford, pp. 909-913.
- McCombs, M.E. (2004) *Setting the agenda : the mass media and public opinion*. Polity; Blackwell Pub., Cambridge, UK, Malden, MA.
- Mencher, M. (2006) *Melvin Mencher's news reporting and writing*. McGraw-Hill, Boston.
- NIPO T (2012) *TNS NIPObase, samenstelling, kwaliteit en kenmerken*.
- Oberholzer-Gee, F., Weck-Hannemann, H. (2002) Pricing road use: Politico-economic and fairness considerations. *Transportation Research Part D: Transport and Environment* 7, 357-371.
- Olson, M.A., Kendrick, R.V. (2012) Attitude Formation. *Encyclopedia of human behavior (second edition)* ed Ramachandran, V.S. Academic Press, San Diego, pp. 230-235.
- Perloff, R.M. (2003) *The dynamics of persuasion communication and attitudes in the 21st century*. Lawrence Erlbaum Associates, Mahwah, N.J..
- Perse, E.M. (2001) *Media effects and society*. Erlbaum, Mahwah, N.J..
- Petty, R.E. (2012) Attitude Change. *Encyclopedia of human behavior (second edition)* ed Ramachandran, V.S. Academic Press, San Diego, pp. 224-229.
- Petty, R.E., Cacioppo, J.T. (1986) *Communication and persuasion: Central and peripheral routes to attitude change*. Springer-Verlag, New York.

- Rye, T., Gaunt, M., Ison, S. (2008) Edinburgh's congestion charging plans: An analysis of reasons for non-implementation. *Transportation Planning and Technology* 31, 641-661.
- Ryley, T., Gjersoe, N. (2006) Newspaper response to the Edinburgh congestion charging proposals. *Transport Policy* 13, 66-73.
- Schade, J., Schlag, B. (2000) *Acceptability of urban transport pricing*. Helsinki: Government Institute for Economic Research.
- Schonewille, M-L., Vermeer, O. (2010) De auto is politiek onaantastbaar; Met intrekken steun door CDA komt einde aan plan kilometerheffing. *NRC Handelsblad*. 20 March, 3
- Schuitema, G., Steg, L., Forward, S. (2010) Explaining differences in acceptability before and acceptance after the implementation of a congestion charge in Stockholm. *Transportation Research Part A: Policy and Practice* 44, 99-109.
- Schwartz, S.H. (1992) *Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries*. Academic Press, San Diego.
- Slater, M.D. (2004) Operationalizing and analyzing exposure: The foundation of media effects. *Research Journalism & Mass Communication Quarterly* 81, 168-183.
- Soroka, S.N. (2002a) *Agenda-setting dynamics in Canada*. UBC Press, Vancouver.
- Soroka, S.N. (2002b) Issue attributes and agenda-setting by media, the public, and policymakers in Canada. *International Journal of Public Opinion Research* 14, 264-285.
- Soroka, S.N. (2006) Good news and bad news: Asymmetric responses to economic information. *The Journal of Politics* 68, 372-385.
- Steg, L., de Groot, J.I.M., Dreijerink, L., Abrahamse, W., Siero, F. (2011) General antecedents of personal norms, policy acceptability, and intentions: The role of values, worldviews, and environmental concern. *Society & Natural Resources* 24, 349-367.
- Steg, L., Perlaviciute, G., van der Werff, E., Lurvink, J. (2012) The Significance of hedonic values for environmentally relevant attitudes, preferences, and actions. *Environment and Behavior*, 1-30
- Stern, P.C., Dietz, T. (1994) The value basis of environmental concern. *Journal of Social Issues* 50, 65-84.
- Stern, P.C., Kalof, L., Dietz, T., Guagnano, G.A. (1995) Values, beliefs, and proenvironmental action: Attitude formation toward emergent attitude objects. *Journal of Applied Social Psychology* 25, 1611-1636.
- Stroud, N. (2008) Media use and political predispositions: Revisiting the concept of selective exposure. *Polit Behav* 30, 341-366.
- van Keken, K., Witteman, L. (2010) Draai van CDA'er Koopmans is einde van de km-heffing. *de Volkskrant*. 19 March, 3
- Vigar, G., Shaw, A., Swann, R. (2011) Selling sustainable mobility: The reporting of the Manchester transport innovation fund bid in UK media. *Transport Policy* 18, 468-479.
- Vliegthart, R., Schuck, A.R.T., Boomgaarden, H.G., de Vreese, C.H. (2008) News coverage and support for European integration, 1990–2006. *International Journal of Public Opinion Research* 20, 415-439.
- Weel, I. (2010) CDA trekt steun km-heffing in; Ook minister Eurlings begrijpt dat het eenvoudiger en goedkoper moet. *Trouw*. 19 March, 1

Winslott-Hiselius, L., Brundell-Freij, K., Vagland, A., Byström, C. (2009) The development of public attitudes towards the Stockholm congestion trial. *Transportation Research Part A: Policy and Practice* 43, 269-282.

Yanovitzky, I., Greene, K. (2009) Quantitative methods and causal inference in media effect research. *The SAGE Handbook of Media Processes and Effects* eds Nabi, R.L., Oliver, M.B. SAGE Publications.

Zaller, J. (1992) *The nature and origins of mass opinion*. Cambridge University Press, Cambridge, England, New York, NY, USA

Zucker, H.G. (1978) The variable nature of new media influence. *Communication Yearbook 2* ed Ruben, B.D. Transaction Books, New Brunswick, NJ.

6 Conclusions, limitations and implications

This chapter presents the conclusions that can be drawn from this research and discusses its limitations and implications. The following sections summarize and reflect on the main conclusions of chapters 2, 3, 4 and 5 respectively. The limitations, policy implications and suggestions for future research already mentioned in the individual chapters are not repeated here (except a few very important issues), but some additional remarks will be made.

6.1 The conclusions of chapter 2

6.1.1 The answer to research questions 1 and 2 on policy actors and the (non-) implementation of road pricing policies

To achieve objective 1 of this thesis, chapter 2 sought to understand the role of policy actors in the (non-) implementation of road pricing policies using ACF as the theoretical lens. The research questions 1 and 2, proposed in chapter 1, were revised in the light of the ACF's mechanisms, concepts and hypotheses in chapter 2. This revision led to the following 4 different research questions:

RQ-a: How, and to what extent, did external and internal shocks change the structure of advocacy coalitions (coalition membership, belief system and resources) without, at the same time, inducing major policy change in the Dutch road pricing subsystem?

RQ-b: To what extent did scientific and technical information facilitate policy-oriented learning and affect the policy beliefs of the policy actors in the Dutch road pricing policy process?

RQ-c: To what extent did a professional discussion forum facilitate policy-oriented learning and affect the policy beliefs of the policy actors in the Dutch road pricing policy process?

RQ-d: What was the role of relatively stable system parameters in the policy stability in the Dutch road pricing subsystem?

Each research question is addressed individually below, although I would like to highlight the main conclusion of chapter 2:

The non-implementation of road pricing policy in the Netherlands cannot only be ascribed to the support (or opposition) of one or a few policy actors or to consensus (or conflict) among a few policy actors at a specific point in time. Non-implementation can be well explained by the features of the Dutch political system/culture and the complexities peculiar to the road pricing subsystem (sociocultural values related to mobility, complex design issues).

Internal and external shocks, and policy-oriented learning changed the power balance between pro-and anti-road pricing coalitions (sometimes in favor of pro-road pricing coalitions), but these changes did not result in major policy change (the introduction of road pricing policies).

The influence of external and internal shocks (RQ-a)

Internal and external shocks disturbed the subsystem and triggered a chain of internal subsystem affairs. Several “enabling factors”, which are required for major policy change to occur, emerged after these shocks (Sabatier and Weible, 2014, p. 202): heightened political attention (and agenda change), the redistribution of political resources and the exploitation of shocks and political resources by members of the pro-road pricing coalition to advance their policy objectives. However, the magnitude of these enabling factors was not sufficient to produce major policy change.

The influence of policy oriented learning (RQ-b and RQ-c)

The accumulation of scientific/technical information and the existence of a “professional discussion forum” changed the policy positions regarding Kilometerheffing through policy-oriented learning. Two other factors facilitated this process: the disputes over policy design and policy brokers. The disputes urged policy actors to search for alternative policy designs to accommodate the demands of different policy actors. This consensus-seeking behavior encouraged research activities and accelerated learning from new information. Policy brokers (transport ministers) initiated research activities and negotiated with all sides, thus facilitated the learning process. However, changes in policy position did not always result from enduring changes in policy beliefs through policy oriented learning as suggested by the ACF. The policy position of some political parties shifted frequently (even within one governing period) as a result of strategic decisions to achieve short-term political objectives (e.g. party cohesion).

The influence of stable system parameters (RQ-d)

Two relatively stable system parameters were identified as an impediment for major policy change in the subsystem: the Dutch political system/culture and complications peculiar to the road pricing subsystem. “Radical departures from existing policies” are not often witnessed in any policy subsystem in the Netherlands (Andeweg and Irwin, 2009, p. 223, 224) because of the requirement for a high level of consensus, the fragmentation of Dutch politics (and society), and the cumbersome negotiation processes. However, two additional complications peculiar to the road pricing policies make radical changes in this subsystem more difficult. The complex design process, which fostered fragmentation in the subsystem and secondly the sociocultural values related to mobility (car dependency and the notion that views car use as an indispensable part of life), which makes road pricing policies a very sensitive issue for political actors because of their electoral concerns, leading to frequent shifts in the policy position of the political parties.

Will it ever be possible to introduce road pricing policies in the Netherlands?

Having read this thesis, it might appear valid to consider the question “*will it ever be possible to introduce road pricing policies in the Netherlands?*” There is no clear cut answer for this question. Policy processes are “dynamic, nonlinear and complex” (Albright, 2009, p.19). However, some scenarios in which the likelihood of the introduction of a road pricing policy in the Netherlands is relatively high can be identified in the light of the ACF and the findings in chapter 2. For instance, a change in the governing coalition (an external shock) may pave the way for the introduction of a policy if, following an election, the members of pro-road pricing coalitions have majority of political resources as a result of elections. One such government formation might be a coalition government composed of the proponents of road pricing policy (e.g. PvdA, CU and D66, according to their policy positions in the past). Under such circumstances, proponents would hold full decision-making authority for the approval of policy legislation. It is then likely that road pricing policy would be part of a coalition agreement and intensively discussed among policy actors during this government period. Also, with a substantial amount of political resources (full decision making authority) proponents would be able to facilitate the policy process. However, negotiations may still not end up with a consensus amongst the policy actors. Sabatier and Weible (2007, p. 206) propose that the basic precondition of reaching consensus during negotiations is “a situation in which all policy actors view a continuation of the status quo as unacceptable”. This situation is called “policy stalemate”. Considering the Dutch road pricing subsystem, it is possible to envisage a number of situations in which the status quo policy (charging car users by fuel tax and other road taxes) is likely to become unacceptable for policy actors: For instance, if congestion levels increase to a level which dramatically hinders accessibility across the Netherlands and/or air quality seriously deteriorates due to road transport. The policy subsystem might then be faced with a policy stalemate. Alternatively, the revenue from fuel tax might decrease due to the widespread use of electric cars or the increase in fuel efficiency. Such revenue losses could also lead to a policy stalemate. Under such circumstances, policy actors might be encouraged to negotiate and agree on a form of road pricing policy. In addition, the existence of a professional dissuasion forum and policy brokers may facilitate the negotiation process and the release of information about new technical/scientific developments regarding road pricing policies may change the policy positions of opponents.

Another scenario may emerge when one of the relatively stable system parameters, for instance socio-cultural environment, changes over time. In the future, it is possible that road pricing policy will become a more popular measure across Europe if the number of pricing proposals implemented in neighboring countries increase. Such developments may change the notion that car use is an indispensable part of life and individual freedom may, in turn, affect attitudes towards road pricing policy in Dutch society. This positive atmosphere may eventually affect the road policy subsystem. A similar scenario has already been seen in the Dutch coastal flooding policy subsystem. Major policy changes in the Dutch coastal flooding policy were observed primarily when there was an increase in environmental awareness in Dutch society (see Meijerink, 2005).

Implications for the implementation of road pricing policies in other countries

The conclusions of chapter 2 might provide some insights into understanding the policy process and (non-)implementation of road pricing policies in countries with a similar political system/culture. In general it can be concluded that the introduction of a road pricing policy is likely to be difficult in a country where several coalition parties coming from various ideological and social roots share the decision-making authority; strong and well-organized

interest groups are involved in the policy process; and a high level of consensus is required to make policy decisions which change the policy status quo. However, for each country an analysis of the subsystem over time is necessary, taking into account all the major policy actors as well as contextual and dynamic factors. This is because policy processes are complex and the features/functioning of road pricing policy subsystems are affected by many other contextual factors which may differ across countries (e.g. relatively stable system parameters (e.g. attributes of problem area) and dynamic factors (e.g. changes governing coalitions)). As already stated in chapter 2, it is recommended that a future study compares the road pricing policy processes in Sweden and the Netherlands using the ACF theoretical lens. This is because two Swedish road pricing schemes (in Stockholm and Gothenburg) have so far been implemented, despite the fact that Sweden is relatively similar to the Netherlands in terms of stable system parameters (e.g. both consensus democracies), identified in this study as impediments to the introduction of road pricing policies in the Netherlands. In the light of the ACF and the findings of chapter 2, I can only argue that in Sweden dynamic factors (e.g. a change in governing coalitions) disturbed the policy subsystem and the subsequent emergence of strong “enabling factors” (e.g. the redistribution of political resources and the exploitation of shocks and political resources by members of pro-road pricing coalition) brought about the introduction of road pricing policies. Comparative research between the Netherlands and Sweden might provide additional insights and might complement the findings of this thesis.

Implications for studies on road pricing policy process

The findings of chapter 2 suggest that an analysis focusing on only a few actors and a specific point in time might reveal fallacious results. The extent to which a policy actor (e.g. one of interest groups or political parties) affects a policy process depends on the policy position and power of other policy actors in the subsystems and dynamic (e.g. elections) and stable (e.g. political system/culture) system factors which affect the operation of policy subsystem as a whole. This implies that research related to policy actors and their role in the (non-) implementation of road pricing policy should adapt a system-wide approach over time.

To achieve this, the ACF might be used for future studies examining road pricing policy processes. The analysis in chapter 2 proves that all the mechanisms and concepts of ACF are applicable to the Dutch road pricing policy processes and the ACF has a rich explanatory power for the non-implementation of Dutch road pricing policy. However, as stated in chapter 1, the ACF is not the only theoretical lens to understand policy change (and stability) and the role of policy actors in policy processes. For example, several scholars consider the IAD (as well as the ACF) to be useful and elaborate. Therefore, the potential of other theories (IAD in particular) is worth testing to understand (Dutch) road pricing policy processes in future studies. In fact, Kay and Baker (2015) and Weible et al. (2008) warn that the use of a single theory may be insufficient to address the inherent complexity of policy processes. This could “mean ignoring alternative and potentially equally valid explanations” (Kay and Baker, 2015, p. 7).

Newspapers as a data source for identifying policy positions of actors

This thesis used newspaper articles to retrospectively determine the policy positions of actors. Chapter 1 discussed the (dis)advantages of using news articles, other archive data and questionnaires (or interviews) with retrospective questions in comparison. The practice with newspaper articles in this thesis proves that newspaper articles are a rich archive which is well suited for determining the policy positions of actors if two potential pitfalls are carefully considered. The first one is the possibility of bias in news articles. The second one is the

likelihood that politicians may “claim different things when dealing with journalists than when acting in parliament” (Vliegthart, 2007, p.137). The former problem can be overcome when sampling and coding the newspaper articles and the extent to which the latter problem distorts the data can be examined by using other sources of data (e.g. parliamentary documents). These two issues were discussed in chapter 1.

Another drawback (or perhaps better “constraint”) of using newspaper articles (as well as other archive data like parliamentary documents) as a data source for identifying actor positions is that the researcher does not have full control over his/her data. To put it more precisely, some research variables may not be available in these archives. For instance, I initially intended to portray advocacy coalitions based on the similarities of policy positions regarding two components of policy core beliefs: policy core policy preferences (policy proposals) and the general idea of charging for the use of road infrastructure. However, only a few policy actors mentioned their opinion on the idea of charging in newspaper articles. Almost all of them stated only their policy positions regarding the policy proposal (Rekeningrijden or Kilometerheffing) on the political agenda because the policy debate was focused on these policy proposals.

6.2 The conclusions of chapter 3

6.2.1 The answer to research question 3 on the media’s objectivity

The Dutch news media was not objective in reporting the Dutch road pricing policies

The main finding of chapter 3 is that the Dutch newspapers were not objective in reporting road pricing policies according to Westerstahl’s framework, which assesses the objectivity in two dimensions: presentation and selection.

From a presentation perspective, all Dutch newspapers

- ✓ covered only some of the issues (50-70%) related to the policy (e.g. impact on environment) and policy debate (*completeness criterion*)
- ✓ did not attribute some of the information (10-20%) to identifiable policy actors (*factualness criterion*)
- ✓ presented part of the information (30-40 %) with implicit or explicit media comments (*neutrality criterion*)
- ✓ were mostly correct with respect to attributions to actors (*accuracy criterion*)

From a selection perspective, the Dutch newspapers did not meet the *relevance criterion*, meaning that neither road pricing policy (among other issues in the public sphere) nor sub-issues or actors (in the policy debate) received media attention corresponding to their actual relevance.²³

²³ No extra relevance indicator is chosen to compare newspapers’ coverage (see chapter 3 for the reasoning behind this decision). The conclusion is drawn under the assumption that there is “one” relevance indicator for road pricing policy indicating its rank among other topics on the public agenda and that there is “one” relevance indicator for each sub-issue and policy actor in the road pricing policy debate. Accordingly, it is expected that the relevance of each sub-issue and policy actor was the same in all 5 newspapers if newspapers meet this “one” relevance indicator. Thus, newspapers are compared with each other in terms of the relevance they attribute to each sub-issue and policy actor.

Ifs, ands, buts: very objective or a bit objective?

Assuming that the requirements for each objectivity criterion should be met fully and that all objectivity criteria (excluding balance criterion, see chapter 3) are equally important, chapter 3 draws the conclusion that five Dutch newspapers were not objective. This was an arbitrary assumption because the Westerstahl's framework utilized in this thesis does not provide any scale to grade the objectivity of certain news content. Also, this framework does not indicate which criteria should be weighed as more or less important under which circumstances (McGrail, 2008). This is not a weakness of the framework, but due to the complexity of the objectivity concept and the difficulties in measuring it. It is generally argued that objectivity assessments can only be made by varying the degrees of approximation and chosen indicators according to a rule of thumb, which can "vary from one society to another and even from one theme or issue to another, depending on the overall balance of view in the society" (McQuail, 1999, p. 202). There is also no conventional grading and scaling system to measure the compliance of the Dutch newspapers to the objectivity criteria in news reporting in general or in reporting road pricing policies. Therefore, I wish to briefly discuss the findings taking assumptions into consideration different to the one made in this thesis. This will also help to elucidate the complexity of the objectivity concept and its measurement. My aim is not to give a comprehensive overview of discussions on the objectivity concept (see Cohen-Almagor (2008), Donsbach (2003), McQuail (1999), Skovsgaard et al. (2013) and Wolfsfeld (2014) for an in-depth discussion of the concept of objectivity), but to draw attention to some points which need to be taken into consideration when interpreting the findings, and to invite readers to be cautious when considering the findings of this thesis.

Let's first consider the neutrality criterion. Under the above-mentioned assumption, each newspaper is expected to have a 100% neutral coverage when assessing the compliance of newspapers to neutrality criterion. Hence, it can be concluded, as in this thesis, that no newspapers were objective in terms of the neutrality criterion as 30-40% of the coverage of each newspaper contained implicit or explicit media comments. However, one can argue that the neutrality performance of Dutch newspapers (60-70% neutral coverage) is sufficient. After all some scientists argue that real neutrality in news is not possible (see McQuail (1999, p. 184) for these studies). Or, if it is laid down that newspapers should present at least 70% of news neutrally, then, we can conclude that of the five newspapers, only de Volkskrant is objective as the neutrality score for the others is lower than 70%. From the selection perspective, similar illustrations can be made. Chapter 3 concludes that the Dutch newspapers did not meet the relevance criterion, meaning that the space allocation ratios of each sub-issue or policy actor in the newspaper's road pricing coverage were different for each newspaper. But, which newspaper is more objective than others in terms of the relevance criterion? Even though no external relevance indicator was chosen in this thesis (see chapter 3) one could argue that scientific research results are relevant because of the complexity of the road pricing policy issue including technical, economic and social aspects and the active engagement of experts in the road pricing policy debate. The expectation would then be that a fair amount of the road pricing coverage in each newspaper would comprise experts' opinions. Then, none of the five newspapers could be considered as objective as the ratios of space allocation for experts were much lower than 10% of the coverage of road pricing. de Volkskrant could possibly be considered as more objective than the others as its space allocation ratio was higher than the other newspapers (8.1%, see Appendix B in chapter 3). However, this decision raises more questions and complicates the decision process further, especially if there are contradictory research findings: which experts? Which research results? Which research tradition or field?.

One last point relates to the equality assumption of different objectivity criteria. Let us focus on a comparison of the neutrality and completeness criteria (e.g. reporting all types of issues or messages in policy debates). On the one hand, chapter 3 shows that de Volkskrant's coverage was more neutral than De Telegraaf's (70% vs. 60%). On the other hand, in terms of completeness De Telegraaf performed better than de Volkskrant during the minister's announcement of the Kilometerheffing proposal in 2009 (60% vs. 30%). Thus, which newspaper is more objective than another? Is De Telegraaf better as its performance superiority on the completeness criterion (30% (60%-30%)) is higher than de Volkskrant's superiority on the neutrality criterion (10% (70%-60%)). Or, is reporting neutrally more desirable than comprehensive news content?

This discussion on the difficulties of grading or scaling the objectivity performance of a newspaper extends to the notion that objective news reporting is impossible and undesirable. This notion is grounded on various arguments. Firstly, it is argued that in a reporting process, newspapers have to process an enormous amount of relevant information which has the potential for becoming news and select only some to place in a limited amount of media space under time pressure. The whole selection process is subject to the subjective judgment of journalists regarding the relevance of events or issues for readers, "of which journalists themselves may be unaware" (McQuail, 1999, p.187). As such, it is almost unavoidable that the selected news is biased. More importantly, it is argued that "there is no objective reality 'out there' to report on: the best we can expect is no more than different versions of a multifarious set of impressions" (McQuail, 1999, p.188). The selected events, messages and issues in the media coverage "reinforce the existing order of society by favoring legitimate institutional sources and excluding outsiders and radical views" (Skovsgaard et al., 2013, p. 24). For instance, chapter 4 shows that the road pricing coverage of five newspapers overlaps to some extent. For instance, the policy position of the transport minister was reflected in all newspapers (despite variation in size). Could we regard this commonality as a reflection of the reality? Perhaps we can, because after all there is a partial agreement on the reality among the five leading national newspapers, each with a different political leaning (left vs. right), different genre (popular vs. quality), and different policy position regarding road pricing policies. Furthermore, this intersection accurately reflects part of the policy debate (e.g. the messages of a minister as reported in parliament). However, from the point of view which defends the absence of reality, we cannot, because this commonality heavily reflects the voices of the existing power structure and legitimate sources (e.g. a minister). As quoted by Wolfsfeld (2014, p.9) from Mark Danner: "the power makes the reality its bitch". Some messages from powerless actors, peripheral issues (e.g. not raised by powerful actors), or opinions which contradict the value system of society are excluded from these newspapers' coverage. Last but not least, from a presentation perspective, the collection of selected issues, events and actors "has to be placed in wider frames of reference which give them evaluative meanings" when writing the news (McQuail, 1999, p.187), which automatically violates the neutrality requirement of objectivity.

The view about the undesirability of objectivity is related to its impossibility, which argues that objectivity in news is not deemed because "there is no objective reality 'out there' to report on" (McQuail, 1999, p.188). The other undesirability argument involves the definition of the role of journalists. The objectivity requirement may lead to "detached journalists who take no moral stand to improve the society they are supposed to serve" (Skovsgaard et al., 2013, p. 25). Mencher (2006) writes about the frustration of journalists when they recognize inconsistencies in the statements and actions of actors: should their role be to allow readers to be exposed to these statements (neutrality) or to call attention to these discrepancies (violation of neutrality)? As to the news reporting of road pricing policies, when reporting the policy

position of a policy actor, should newspapers communicate his/her messages neutrally when they make statements that contradict past statements and assume that readers have enough background to detect this contradiction? Or, should they present his/her messages with some comments regarding these contradictory statements they made in the past in order to point out the possibility of his/her strategic position shift?

6.2.2 The answer to research question 4 on newspapers' policy positions

Each newspaper favored different policy positions and all generally maintained the same position over time.

Wolfsfeld (2014, p. 47) states that “the real question is not, then, whether or not the media are biased (they are), the question is how are they biased.” Research question 4 addressed this issue and attempted to understand the policy position of the newspapers, in other words: their leaning or the direction of their bias.

In the course of road pricing policy process between 1998 and 2010,

- ✓ De Telegraaf was almost always negative.
- ✓ Algemeen Dagblad was usually mixed.
- ✓ de Volkskrant and Trouw were usually positive.
- ✓ NRC Handelsblad was often positive, but sometimes inclined to be mixed.

These results mean that each newspaper allocated more space to a certain tone in their coverage compared with other newspapers: For instance, De Telegraaf, compared with other newspapers, either allocated more space to negative statements by policy actors, or presented positive actor statements with negative comments, or placed more frequently its own point of view (negative) without any reference to any policy actors. However, each of the five newspapers gave a partially accurate account of the policy debate. This means that the newspapers neither fully ignored statements of non-like-minded policy actors nor presented all of the statements by these actors with negative comments despite systematically favoring a particular side.

Sources of bias

The question of “how are newspapers biased” involves an inquiry into not only the direction of the bias, but also the sources of the bias. This thesis did not aim to investigate the sources of bias, but the findings enable us to discuss this question to some extent. Wolfsfeld (2014, p. 47) determines three types of bias: cultural, ideological and commercial. Cultural bias can be detected between news reported at different times and in different places. It is not likely that the different leanings of the newspapers arises from cultural bias as they are all circulated in the Netherlands and their coverage of the same time period was subject to the analysis. Ideological bias refers to the tendency of newspapers to promote and favor certain ideological values (e.g. left vs. right) in their coverage. Commercial bias, on the other hand, is the tendency “to choose, highlight, and create dramatic news stories” (Wolfsfeld, 2014, p.70) and to “emphasize the more sensational and negative aspects of political news” (Norris, 2000, p. 9), characterized in the popular newspaper coverage (Norris, 2000; Vliegthart et al., 2011). It is usually very difficult to identify the sources of bias (commercial vs. ideological) as both, in many cases, affect the coverage in the same direction (Wolfsfeld, 2014). Regarding the five Dutch newspapers in this thesis I can tentatively suggest that the policy position of the

newspapers seems to be more driven by commercial bias than ideological bias when reporting road pricing policies. The reason for this is that the policy position was more similar between newspapers of the same genre (popular vs. quality) than newspapers with the same political leaning (left vs. right). The policy position of the popular newspapers (AD and De Telegraaf and De Telegraaf in particular) was more negative and the three quality newspapers (NRC Handelsblad, de Volkskrant and Trouw) were generally more positive. The proportion of privacy issues, which is prone to be dramatized, is higher in De Telegraaf than in others. Future studies should investigate sources of bias in the new reporting of road pricing policies.

6.3 The conclusions of chapter 4

6.3.1 The answer to research questions 5 on the characteristics of media coverage

The media coverage of two pricing proposals (and their sub-issues and policy actors) varied greatly in terms of visibility (e.g. the number of words) and tone (e.g. negative) in time.

One of chapter 4's findings is that the media coverage of road pricing policies in the Netherlands during 9 major policy events between 1998 and 2010 was more positive than negative and the media coverage of two pricing proposals (sub-issues and the policy actors involved with these two pricing proposals) varied greatly in terms of visibility (e.g. the number of words) and tone (e.g. negative). In fact, the two pricing proposals received different media coverage even within the same time period when both were on the political agenda.

6.3.2 The answer to research questions 6 on the influence of the policy debate on media coverage

The content of the policy debate was partially reflected in media coverage.

The other finding suggests that such variation in media coverage was a reflection of changes in the content of the policy debate. The policy debate was partially reflected in the media coverage of policies. For instance, during two policy events where there was general consensus (when the Mobimiles report was released in 2001 and when the Nouwen committee agreed on the implementation of Kilometerheffing in 2005), the frequency of favorable messages by major policy actors for road pricing policy in the policy debate increased and consequently the ratio of positive news in the media coverage. On the other hand, the campaign organized by the ANWB against Rekeningrijden in 1999 led to a high level of communication activity by prominent opponents which increased the negativity in the media coverage. Another illustration is that the relatively more complex and comprehensive design of Kilometerheffing compared to Rekeningrijden increased the diversity of sub-issues in the Kilometerheffing coverage compared to Rekeningrijden. This does not mean, however, that media coverage was a mirror image of the "actual" policy debate. As concluded in chapter 3, newspapers systematically favored one policy position in their selection and presentation of issues and actor messages in the policy debate. Nevertheless, they also did not fully ignore messages by non-like-minded prominent policy actors and did not present all the messages by these policy actors with negative comments.

6.3.3 The answer to research question 7 on the influence of media coverage on the policy debate

The media coverage influenced the policy debate.

One finding is that not only the policy debate shaped the media coverage of road pricing policies (the answer to research question 6) but also that the media coverage influenced the policy debate in the Netherlands. However, the influence of the media on the policy debate was rather indirect, meaning that politicians mostly reacted to messages by other policy actors which appeared in the media, rather than to the media coverage itself. This cycle of influence between media coverage and the policy debate took place in such a way that in each policy event it was first the statements or actions of policy actors which received media coverage and subsequently the media coverage which in turn stimulated the policy debate. Finally, the influence of one newspaper, De Telegraaf, on the policy debate was stronger than other newspapers, especially between 2009 and 2010 when the proposal for Kilometerheffing was discussed in parliament. However, De Telegraaf's greater degree of influence than other newspapers is not peculiar to road pricing policy debate. Van Aelst and Vliegthart (2013) found that De Telegraaf's dominancy in parliament is observed in other policy fields as well. Three factors might explain the greater influence of this newspaper on road pricing policy debate: (1) the negative outcome of its public opinion survey (2) its higher readership (3) more negative coverage of the policy than other newspapers.

Chapter 4 did not provide any evidence regarding the influence of the media on actual policy decisions or the actions of policy actors in the policy process. The answer to this question requires consideration of all other factors (e.g. actor constellations in a given policy field) and their complex interaction in the policy process. Furthermore, it is very difficult to detect the media's influence on actual policy measures because nowadays the anticipated media coverage "has become part of every decision a politician takes" (Van Aelst and Walgrave, 2011, p. 11). However, based on findings in the literature on the media's influence on politics, I can argue that the likelihood of the media's influence on actual policy decisions or actions of policy actors is rather low. These studies indicate that "substantial policy initiatives are immunized against media impact" and that the media's influence is mainly in the realm of symbolic politics, namely in the policy debate (Walgrave and Van Aelst, 2006, p.104).

Considering cross-country differences

Readers of this thesis should bear in mind that the answers to research questions 5, 6 and 7 may be country-specific. In other words, the media coverage of road pricing policies in countries other than the Netherlands might have different characteristics to those presented in this thesis and the characteristics of media coverage might not be a reflection of the content of the policy debate. Or, the influence of the media on the policy debate (and policy process) might be negligible or even greater. Chapter 4 already listed the differences in characteristics of the media coverage between the British and Dutch road pricing policies and discussed the possible causes of these differences to some extent. In general, it is argued that cross-country differences in terms of political system/culture and media systems affect the relationship between the media and politics and cause variation across countries in the characteristics of the media coverage of the same political issues and the interaction between the media and politics. I advise readers to consult Brants and Voltmer (2011), Gunther and Mughan (2000), Hallin and Mancini (2004) and Vliegthart and Mena Montes (2014) for an in-depth discussion of this issue and to be cautious when using the findings of this thesis to explain characteristics of media coverage and the relationship between the media and road pricing policy debates (and policy processes) in other countries.

Digging deeper into the relationship between media coverage and policy debate (and policy process)

Chapter 4 provides ample evidence for the fact that the relationship between media coverage and policy debate is reciprocal, but nevertheless it has its limitations. Below I discuss these limitations as well as alternative research designs which might enrich the findings of this thesis and provide additional insights.

The study has two types of limitations. The first one is related to the determination of a real account of a policy debate. McQuail (1999) and Ruigrok (2008) already state that there is no standard way of determining a real account of a policy debate. This means that any chosen method involves some limitations. Below I make the limitations of my approach explicit. When examining the influence of a policy debate on media coverage, this study qualitatively used policy and parliamentary documents to determine the content of the policy debate. Therefore, the study focused on certain distinctive features of the policy debate and major changes therein during policy events in the course of the policy process (e.g. some activities/behaviors of policy actors, policy design features), and examined to what extent these changes were reflected in the media coverage over the corresponding time period. The analysis did not trace the correspondence between media coverage and policy debate for all the categories of each variable in the media coverage (e.g. all 24 categories of a sub-issue variable). Furthermore, when examining the influence of media coverage on the policy debate, the study used politicians' statements about road pricing policies which referred to the media in parliament. This approach limited the analysis in two ways. Firstly, politicians' statements in parliament represent only part of the policy debate since it does not include the speeches and communication activities of other policy actors (e.g. interest groups). Secondly, it is possible that politicians took media coverage into account without explicitly referring to it in the policy debate (Van Aelst and Vliegthart, 2013). For instance, the findings in chapter 4 show that there was no attribution to media coverage or coverage of any newspapers in parliament during the two months following the ANWB campaign in 1999. However, Hendriks and Tops (2001) and Seidel et al. (2004) argue that the media, especially the negative coverage by De Telegraaf, negatively influenced the Rekeningrijden policy process and played a role in the unfavorable developments regarding the policy after the ANWB campaign in 1999. Based on the findings of chapter 4, one can argue that these unfavorable developments for Rekeningrijden in this period were wrongly attributed to the media in the aforementioned literature and were rather the consequences of active opposition by the ANWB and other policy actors (see also chapter 2). On the other hand, given the limitations of the analysis, one can also argue that politicians did not explicitly refer to the media during the parliamentary debates but did however take the media coverage into consideration and steered the policy process accordingly. The analysis in chapter 4 was unable to identify this influence.

The other limitation is related to the choice of analysis period and sampling. The study did not cover the whole media coverage and policy debate between 1998 and 2010 uninterrupted but was restricted to only 9 specific policy events. In addition, the analysis was restricted to the media coverage and policy debate for a relatively short period during these events (a two-week period for media coverage, four months for parliamentary debate) (see chapter 1 for detailed information about the selection of policy events and sampling strategy). It examined the relationship between two variables during each policy event separately. Thus, it might not have captured any long term or delayed influences. For instance, politicians might react later to media coverage (e.g. one year later). Walgrave and Van Aelst (2006, p. 102) state that institutional rules and the internal functioning of political actors might delay the reactions of

these actors to media coverage and that “substantial policy reactions are more subject to internal decision-making practices than discursive reactions” in the policy debate. Alternatively, media coverage of an issue at a particular moment might be influenced by earlier media coverage of the same issue (e.g. a few months) (Jones and Wolfe, 2010; Vliegthart and Roggeband, 2007). If we recall the previous example about the influence of media during the ANWB campaign in 1999, given the restrictions on the period used for analysis, one could argue that the analysis did not detect any evidence of media because negative media coverage in this period influenced the policy debate in later stages of policy process.

To tackle these limitations, future research could rely on a time-series design which covers a continuous period of 15-20 years with weekly, monthly or yearly data and involves statistical modeling (e.g. structural equation modeling) to study the extent to which policy debate is preceded in time by media coverage about the same policies or the other way around (e.g. Van Aelst and Vliegthart, 2013; Van noije et al., 2008; Vliegthart and Mena Montes, 2014; Vliegthart and Roggeband, 2007). It should, however, be noted that this research approach has other shortcomings despite dealing with the above mentioned limitations. Firstly, such research requires the analysis of an enormous amount of documents (perhaps thousands of newspaper articles and parliamentary documents), which can be done by help of computer-assisted coding (see chapter 1 for advantages and disadvantages of this method) or with simple coding schemes which reduce the amount of time needed for the coding of each document. This would force researchers to focus only on the salience of the policy issues in both arenas as in the aforementioned studies (except Vliegthart and Roggeband (2007)) but not on how these issues are presented or how policy actors are related to a particular issue that generally requires more complicated coding schemes and human interpretations, and in turn considerable time. Secondly, there might not be an archive available, which systematically records speeches or actions of all policy actors in time, for such large scale of quantitative analysis. Researchers might therefore have to rely only on the speeches or actions of only politicians (rather than all policy actors (e.g. interest groups)). The analysis would therefore be likely to overestimate the influence of the media on the policy debate (and policy process). That is to say, in such a research design, policy activities and the statements of other policy actors in the media coverage would not be seen as a reflection of the policy debate. Instead, this coverage would be considered to be created spontaneously by journalists. Thus, the influence of this media coverage on parliamentary policy debates would be considered as autonomous media power. This is actually not true because these policy actors are also part of the policy debate (and policy process) and therefore the influence of their media coverage on a parliamentary debate is partly the influence of them as well as the media. For instance, chapter 4 shows that politicians mostly reacted to the messages by other policy actors which appeared in the media, rather than to the media coverage itself.

The need to see the wider picture: contextual factors and public opinion

One additional point is the necessity to include all related factors into the time-series analysis of the media - policy debate (and policy process) relationships. It is widely acknowledged that media coverage and policy debate (and policy process) do not interact in isolation. Contextual factors (e.g. the level of congestion and environmental problems) and public opinion, which might have an impact on the influence of the policy debate on media coverage or the other way around (see Kleinnijenhuis and Rietberg (1995), Koch-Baumgarten and Voltmer (2010) and Vliegthart (2007) for detailed information). For instance, in this thesis, the fact that media attention for Kilometerheffing was much higher than for Rekeningrijden during the same type of policy events is attributed to the higher newsworthiness of the Kilometerheffing

debate than Rekeningrijden's because of the comprehensive system design of the Kilometerheffing policy. On the other hand, the level of congestion increased gradually over the research period (1998 - 2010), with a small decrease after 2008 (van der Loop, 2012) which might have increased the newsworthiness of road pricing policies in general and thus the media attention for the Kilometerheffing debate, irrespective of the system design. Furthermore, it is possible that increased transport problems were noticed by the media and policy actors independently, but caused reactions in both arenas. Likewise, both media coverage and the policy debate (and policy process) might be independently influenced by changes in public opinion. Public opinion polls may drive media coverage and the actions/speeches of policy actors in the same direction (Van Aelst and Walgrave, 2011).

Theoretically it is widely acknowledged in the field of political communication and media studies that complex reciprocal and conditional interactions exist between three arenas: public, political and media (policy actors \Leftrightarrow the media, public \Leftrightarrow the media and policy actors \Leftrightarrow public) and all three are influenced by other contextual factors (see Kleinnijenhuis and Rietberg (1995), Koch-Baumgarten and Voltmer (2010) and Vliegthart (2007) for detailed information). However, studies mainly focus on the link between politicians (or a specific policy actor) and the media, or the public and the media. Also, only a few properly include contextual factors in their research. The reason for this seems to be that dominant theoretical approaches in the field of media studies and political communication steer studies in a certain direction (Van Aelst and Vliegthart 2013; Vliegthart and Mena Montes 2014). In addition, it seems difficult to empirically establish sound research to reveal the whole picture (or to control for all other factors when investigating the relationship between two arenas to prevent all spurious effects) because of the complexity and difficulty of collecting longitudinal data involving all these factors. Tan (2008) and Vliegthart (2007) are examples of such comprehensive studies.

What do these conclusions tell policy makers?

The conclusions of chapter 4 naturally lead to one obvious policy recommendation for policy makers: if they achieve consensus among major policy actors, they would not have much difficulties to receive favorable media coverage for road pricing proposals. This issue was already discussed in chapter 4. I would like to make some additional remarks below. However, before proceeding, it is important to note that when considering policy recommendations, policy makers from other countries (other than the Netherlands) should take into account the characteristics of the media in these countries (see above).

The first remark is related to policy ambiguity and its impact on the media coverage of road pricing policies. "Policy ambiguity and uncertainty create potential entry points for media interventions" (Howarth, 2010, p. 147). In the case of ambiguity and uncertainty in policy content, the media may be invited by policy actors (especially policy opponents) to highlight these points. Alternatively, the media may largely cover contradictory speeches by different policy actors (especially by different governmental organizations involved with policy design) about policy content. This would create doubt about the robustness of the policies (Howarth, 2010). Such a situation was experienced in the Kilometerheffing policy process. When the Kilometerheffing proposal was sent to parliament in 2009, there were two issues which were left for a later stage in the policy process or a lower level of government to decide on. The first one was the matter of how local governments would compensate their missing income, currently part of the existing road taxes which would be replaced by a kilometer charge after the introduction of Kilometerheffing. The second one related to how the peak hour charge would be implemented (e.g. on which part of the road network (and how much) drivers would

be charged). These two issues were largely speculated on by policy actors (e.g. local governments) and journalists in the media coverage (see for instance *Algemeen Dagblad*, 2009a; *Algemeen Dagblad*, 2009b; Vermeer and Wester, 2009). Policy actors or journalists raised concerns about the likely negative financial impact (on households) of a future peak hour charge and provincial tax (as compensation for the missing income in the provinces).

I therefore recommend that policy makers pay attention to policy content. Aspects of a pricing proposal which are not properly defined or are planned to be decided on later on in the policy process lend themselves to speculation by other policy actors and journalists, especially in terms of their likely negative impacts on the expected benefits of the system. This, in turn, increases the amount of negative media coverage.

Secondly, I would like to stress that road pricing policies are very liable to high media attention (probably more than most other policies) because road pricing policies inherently possess various news values, which increase their newsworthiness. This fact is probably already very well known by all policy makers who are or have been involved with road pricing policy processes. Nevertheless, I would like to highlight some of the characteristics of road pricing policies and policy debates which make them very prone to media attention for those who will be involved with road pricing policies in future. As explained in chapter 4, “news values are specific issue characteristics, which are supposed to attract public attention” (Waldherr, 2012, p. 87). Events and issues which have such characteristics are very likely to become news (O’Neill and Harcup 2009). Road pricing policies and policy debates satisfy most news values, which are listed by communication scholars (see O’Neill and Harcup, 2009): *containing surprise elements, affecting large number of people, high relevance to daily life, involvement of prominent actors, the high conflict level and opportunity for personalization*. Firstly, road pricing policies are very rich in surprise elements especially in countries like the Netherlands which has not implemented road pricing policies before. This is because road pricing policies propose radical changes in the financing of road transport and mobility management. They challenge car dependency and the notion that views car use as an indispensable part of life and individual freedom, which has become a deeply rooted value especially in western countries over the last decades (Urry, 2004). Furthermore, a large amount of money involving the installation and operation of a system (depending on system design) enhances surprise elements in the road pricing policies. Secondly, road pricing policy can impact a large number of people, almost the whole population of country with a system design such as the Kilometerheffing proposal. Thirdly, they affect not only the financial situation of people but also their mobility behaviors, which increases the relevance of road pricing policies for daily life. Fourthly, road pricing policy debates usually involve a high level of conflict among policy actors representing different groups in society. This is because different road pricing policy designs affect different people in different ways. So, some are better or worse off in terms of financial situation or mobility behavior compared to their situation in the current system. Furthermore, the introduction of road pricing policies almost always requires the adoption of legislation and all policy actors in this part of the policy process are prominent individuals in society, either politicians or representatives of influential interest groups (especially in well-organized societies such as the Netherlands). Finally, “news stories that are personalized attract audience more than the portrayal of generalized concepts or process” (Bednarek and Caple, 2012, p. 44). Therefore, newspapers have a tendency to “reduce complex events and issues to the actions of individuals” (O’Neill and Harcup, 2009, p.166). Road pricing policies lend themselves well to personalized news stories. They affect each individual differently. It is very easy to present policy proposals by illustrating its application to the life-style of specific individuals. Indeed, readers themselves

explain, in their letters to newspapers, how proposed pricing schemes are likely to affect their lives and the extent to which they expect to be better or worse off.

Newspapers as a data source for studying the media: what about TV, radio and social media?

This thesis restricted the scope of the media to only newspapers. Chapter 1 already explained the background of this choice and mentioned that newspapers are more appropriate to consider as representative of the media when studying road pricing policies. However, TV, radio and social media are no doubt other important types of media, which might differ from newspapers in terms of the characteristics of their content. The analysis of TV and radio might provide additional insights. Future research needs to focus on these sorts of media. In addition, Interviews with journalists might help to understand what aspects of objectivity they value more and how their perception of objectivity shapes the road pricing coverage.

6.4 The conclusions of chapter 5

6.4.1 The answer to research question 8 on the effect of news exposure on attitudes/beliefs

Exposure to news about road pricing policies is associated with attitudes and beliefs depending on the characteristics of both individuals and news content.

The findings indicate that exposure to positive and negative news content about Kilometerheffing is associated with the attitudes and beliefs regarding Kilometerheffing, although the strength (and significance) and the direction of the association (in parallel with or opposite to the tone of the news (negative or positive)) vary depending on the type of issue featured in the news and the characteristics of individuals. That is to say, exposure to negative news about Kilometerheffing is negatively associated with the attitudes towards Kilometerheffing while exposure to positive news about the impact of Kilometerheffing on the environment (and congestion) is positively associated with the beliefs about this issue. The strength of biospheric value moderates the relationship between beliefs about the impact on the environment (and congestion) and exposure to positive news about this issue. Neither exposure to negative nor positive news about the impact of Kilometerheffing on individuals' financial situations is related to beliefs about the impact of Kilometerheffing on one's own financial situation.

These conclusions should be regarded as only a first contribution to this challenging endeavor!

The conclusions presented above demonstrate only the associations between dependent (attitudes/beliefs) and independent (news exposure) variables. The study in chapter 5 could not conclude with confidence whether or to what extent exposure to a particular tone of media coverage affects individuals' attitudes and beliefs as the regression analysis lacks adequate evidence of the temporal precedence of independent variables over dependent variables and thus does not allow researchers to draw causal inferences, as was already discussed in chapters 1 and 5. Yet, I think that the results plausibly indicate a causal effect between the dependent and independent variables. Firstly, as explained in chapter 5, it seems highly plausible that news about road pricing policy had an enduring impact on people's attitudes and beliefs regarding road pricing policy as they were highly dependent on the media for information about the policy, they were likely to find the policy personally relevant and they were repeatedly exposed to news about road pricing policies over a long period of time.

Secondly, assumptions of the study, research questions and hypotheses are grounded on theoretical frameworks and previous empirical findings. Lastly, the models control for several possible confounding factors which possibly influence the relations between dependent and independent variables according to the literature in the fields of communication and transport. Nevertheless, the inherent weakness of cross sectional data calls for some caution when interpreting results of the analysis. The reverse causal link from attitudes/beliefs to news exposure is also possible. After all, the data and analysis do not include preexisting attitudes and beliefs. There is quite a lot of evidence that people are prone to search for or pay attention to information or news consistent with attitudes and beliefs they already have (Bohner and Dickel, 2011; Perse, 2001). Therefore, it is possible on the one hand, as concluded in chapter 5, that exposure to negative news affects attitudes while positive news does not. Scientific evidence about the primacy of negative information over positive (see Baumeister et al. (2001)) supports this finding. On the other hand, it is also possible that people already had a negative attitude towards road pricing policies prior to news exposure about Kilometerheffing. Thus, negative news did not have any impact on attitudes such that people with more negative attitudes preferred to read more negative news. Indeed, Harms and van der Werff (2008) state that the majority was against road pricing policies before Kilometerheffing was put on the political agenda.

Stringent research design requirements to convincingly demonstrate the causal link between news exposure and attitudes/beliefs are touched upon in chapter 1. In addition to time order problems between news exposure and attitudes/beliefs in the analysis, various other factors which can intervene in the relationship between these two variables are discussed in chapter 5. Despite the limitations of the study, I think that the findings of this thesis make a valuable contribution to the scientific knowledge about this issue because of the dearth of studies on how the media coverage of road pricing policies affects public attitudes. However, given these limitations and the complexity of the relationship between news exposure and attitudes/beliefs, I would like to stress that the conclusions of chapter 5 should be regarded as only a first contribution to this challenging endeavor!

References

- Albright, E.A. (2009) Policy change and policy learning in a new democracy: Response to extreme floods in Hungary. Ph.D. Thesis, Duke University.
- Algemeen Dagblad (2009a) DRENTHE - Drenthe vreest de kilometerheffing. *Algemeen Dagblad*. 18 November, 19
- Algemeen Dagblad (2009b) Nieuwe heffing treft straks ook mensen zonder auto - Provincies overwegen 'bewoners- belasting'. *Algemeen Dagblad*. 17 November, 1
- Andeweg, R.B., Irwin, G.A. (2009) *Governance and politics of the Netherlands*. Palgrave Macmillan, Houndmills, Basingstoke, Hampshire; New York.
- Baumeister, R.F., Bratslavsky, E., Finkenauer, C., Vohs, K.D. (2001) Bad is stronger than good. *Review of General Psychology* 5, 323-370.
- Bednarek, M., Caple, H. (2012) *News Discourse*. Continuum International Publishing, London.
- Bohner, G., Dickel, N. (2011) Attitudes and attitude change. *Annual Review of Psychology* 62, 391-417.
- Brants, K., Voltmer, K. (2011) *Political Communication in Postmodern Democracy: Challenging the Primacy of Politics*. Palgrave Macmillan, New York.
- Cohen-Almagor, R. (2008) The limits of objective reporting. *Journal of Language and Politics* 7, 136-155.
- Donsbach, W. (2003) Objectivity in reporting. *Encyclopedia of international media and communications* ed Johnston, D.H. Academic, San Diego, Calif., London.
- Gunther, R., Mughan, A. (2000) *Democracy and the media: A comparative perspective*. Cambridge University Press, Cambridge, New York.
- Hallin, D.C., Mancini, P. (2004) *Comparing Media Systems: Three Models of Media and Politics*. Cambridge University Press, West Nyack, NY, USA.
- Harms, L., van der Werff, E. (2008) *Psychologie en prijsbeleid: Acceptatie en effectiviteit van de kilometerprijs*. Den Haag: Kennisinstituut voor Mobiliteitsbeleid.
- Hendriks, F., Tops, P.W. (2001) *Politiek en interactief bestuur: Interacties en interpretaties rond de ontwikkeling van het Nationaal Verkeers- en Vervoersplan*. Elsevier bedrijfsinformatie, 's-Gravenhage.
- Howarth, A. (2010) Contested processes, contested influence: A case study of genetically modified food in Britain. *Public policy and mass media: the interplay of mass communication and political decision making* eds Koch-Baumgarten, S., Voltmer, K. Taylor & Francis, Hoboken.
- Jones, B.D., Wolfe, M. (2010) Public policy and the mass media: An information processing approach. *Public policy and mass media: The interplay of mass communication and political decision making* eds Koch-Baumgarten, S., Voltmer, K. Taylor & Francis, Hoboken.
- Kay, A., Baker, P. (2015) What can causal process tracing offer to policy studies? A review of the literature. *Policy Studies Journal* 43, 1-21.
- Kleinnijenhuis, J., Rietberg, E.M. (1995) Parties, media, the public and the economy: Patterns of societal agenda-setting. *European Journal of Political Research* 28, 95-118.

- Koch-Baumgarten, S., Voltmer, K. (2010) *Public policy and the mass media the interplay of mass communication and political decision making*. Taylor & Francis, Hoboken.
- McGrail, J.P. (2008) Sensationalism, narrativity and objectivity - Modeling ongoing news story practice. Ph.D. Thesis, Syracuse University.
- McQuail, D. (1999) *Media performance: Mass communication and the public interest*. SAGE Publ., London [u.a.].
- Meijerink, S. (2005) Understanding policy stability and change. The interplay of advocacy coalitions and epistemic communities, windows of opportunity, and Dutch coastal flooding policy 1945–20031. *Journal of European Public Policy* 12, 1060-1077.
- Mencher, M. (2006) *Melvin Mencher's news reporting and writing*. McGraw-Hill, Boston.
- Norris, P. (2000) *A virtuous circle: Political communications in postindustrial societies*. Cambridge University Press, Cambridge, UK, New York, NY, USA.
- O'Neill, D., Harcup, T. (2009) News values and selectivity. *The handbook of journalism studies* eds Wahl-Jorgensen, K., Hanitzsch, T. Routledge, New York.
- Perse, E.M. (2001) *Media effects and society*. Erlbaum, Mahwah, NJ [u.a.].
- Ruigrok, N. (2008) Journalism of attachment and objectivity: Dutch journalists and the Bosnian war. *Media, War & Conflict* 1, 293-313.
- Sabatier, P.A., Weible, C.M. (2007) The advocacy coalition framework, innovations and clarifications. *Theories of the policy process* ed Sabatier, P.A. Westview Press, Boulder, Colo.
- Sabatier, P.A., Weible, C.M. (2014) *Theories of the policy process*. Westview Press, Boulder, Colo.
- Seidel, T., Matthes, A., Wieland, B., Schlag, B., Schade, J., Verhoef, E., Ubbels, B., Tánzos, K., Kosztyó, Á., Mészáros, F. (2004) *TIPP (Transport Institutions in the Policy Process) - Deliverable 4 political acceptability and perceived legitimacy of transport policy implementation*. European Commission.
- Skovsgaard, M., Albæk, E., Bro, P., de Vreese, C. (2013) A reality check: How journalists' role perceptions impact their implementation of the objectivity norm. *Journalism* 14, 22-42.
- Tan, Y. (2008) Agenda-setting effects among newspaper coverage, public opinion and legislative policies. Ph.D. Thesis, Indiana University.
- Urry, J. (2004) The 'system' of automobility. *Theory, Culture & Society* 21, 25-39.
- van Aelst, P., Vliegthart, R. (2013) Studying the tango. *Journalism Studies* 15, 392-410.
- van Aelst, P., Walgrave, S. (2011) Minimal or massive? The political agenda-setting power of the mass media according to different methods. *The International Journal of Press/Politics* 16, 295-313.
- van der Loop, H. (2012) Verklaring reistijdverlies en betrouwbaarheid op hoofdwegen 2000-2010. Den Haag: Kennisinstituut voor Mobiliteitsbeleid.
- van Noije, L., Kleinnijenhuis, J., Oegema, D. (2008) Loss of parliamentary control due to mediatization and europeanization: A longitudinal and cross-sectional analysis of agenda building in the United Kingdom and the Netherlands. *British Journal of Political Science* 38, 455-478.

- Vermeer, O., Wester, J. (2009) Rekeningtruc elke auto goedkoper; Eurlings cijfert creatief om steun voor kilometerheffing te behouden. *NRC Handelsblad*. 17 November, 3
- Vliegthart, R. (2007) Framing immigration and integration: Facts, parliament, media and anti-immigrant party support in the Netherlands. Ph.D. Thesis, Free University
- Vliegthart, R., Boomgaarden, H.G., Boumans, J.W. (2011) Changes in political news coverage: personalization, conflict and negativity in British and Dutch Newspapers. *Political Communication in Postmodern Democracy: Challenging the Primacy of Politics* eds Brants, K., Voltmer, K. Palgrave Macmillan, New York.
- Vliegthart, R., Mena Montes, N. (2014) How political and media system characteristics moderate interactions between newspapers and parliaments: Economic crisis attention in Spain and the Netherlands. *The International Journal of Press/Politics* 19, 318-339.
- Vliegthart, R., Roggeband, C. (2007) Framing immigration and integration: Relationships between press and parliament in the Netherlands. *International Communication Gazette* 69, 295-319.
- Waldherr, A. (2012) The mass media as actors in innovation Systems. *Innovation Policy and Governance in High-Tech Industries* eds Bauer, J., Lang, A., Schneider, V. Springer Berlin Heidelberg, pp. 77-100.
- Walgrave, S., Van Aelst, P. (2006) The contingency of the mass media's political agenda setting power: Toward a preliminary theory. *Journal of Communication* 56, 88-109.
- Weible, C.M., Sabatier, P.A., Flowers, J. (2008) Advocacy coalition framework. *Encyclopedia of Public Administration and Public Policy, Second Edition* 1, 1-10.
- Wolfsfeld, G. (2014) *Making sense of media and politics five principles in political communication*. Taylor and Francis, Hoboken.

Summary

Background

Road pricing policies are mainly founded on the idea of charging for the use of road infrastructure. Road pricing schemes can be designed in countless different forms (e.g. toll cordons, kilometer charging). They are generally seen by scientists as an effective transport measure to deal with transport-related problems (e.g. congestion) and are frequently recommended in transport policy documents (e.g. the EU white paper) (Verhoef, 2008). However, the number of implemented road pricing schemes in the real world is relatively limited. Studies list a wide range of factors which complicate or facilitate road pricing policy processes such as the opposition or support of some policy actors (e.g. political parties, heads of governmental institutions or interest groups), the level of public support, characteristics of a transport system or technology (Vonk Noordegraaf et al., 2014).

The aim and scope of the thesis

The aim of this thesis is twofold. The first aim is to gain insight into the role of policy actors in the (non-) implementation of road pricing policies. In the road pricing policy literature it is the level of political support for road pricing policies which is regarded as the main determinant of whether or not a road pricing policy is introduced and how policy processes progress in general (Vonk Noordegraaf et al., 2014). Ardiç et al. (2015, p.117) state that “this argument is generally justified by illustrating, in a narrative manner, the opposition or support of one (or a few) policy actors (e.g. political parties, heads of governmental institutions or interest groups) or by highlighting (dis)agreements between a few policy actors on a specific occasion during the policy process (e.g. Isaksson and Richardson, 2009; Rye et al., 2008). However, policy outcomes are the consequences of a series of events that occur over a long period of time (Sabatier and Weible, 2007; True et al., 2007) and involve a diverse set of policy actors (Adam and Kriesi, 2007; Sabatier and Weible, 2007; Zahariadis, 2007)”. To the best of my knowledge, no study so far has dug into the policy process of road pricing policies by empirically exploring the policy positions of all the major actors and their conflicts and consensus over time to understand how they play a role in the policy process and policy outcome. This thesis aims to fill this gap, in particular chapter 2 focuses on this aspect.

The second aim of this thesis is to gain insight into the role of the media in road pricing policy processes. Besides the policy actors, it appears that under certain circumstances the media influences policy outcomes and the course of policy processes. Although the importance of the media in road pricing policy processes is frequently stressed by several scholars (see Vonk Noordegraaf et al., 2014), the role of the media has barely been empirically investigated. The relationship between the media and policy processes is “exasperatingly complex, [...] dynamic and interactive” (Koch-Baumgarten and Voltmer, 2010, p. 80), involving interactions between the media, policy actors and public. This thesis focuses on four issues related to the role of media. Chapter 3 addresses the objectivity of the media in reporting on road pricing policy debates, chapter 4 examines the characteristics of media coverage (e.g. issues or actors covered) and analyzes the link between policy debate and media coverage, and finally chapter 5 investigates the influence of the media on individuals’ attitudes/beliefs.

This thesis aims to achieve these objectives by examining road pricing policy processes in the Netherlands between 1994 and 2010. Dutch road pricing policy processes provide a suitable vehicle for addressing these knowledge gaps for the following reasons. Firstly, for decades road pricing policies in the Netherlands were politically controversial. All attempts to introduce a road pricing policy failed because of a lack of political and public support (Raad voor Verkeer en Waterstaat, 2005). The long policy process was not only marked by intense levels of conflict but also moments of consensus between major policy actors. Secondly, it is argued that the Dutch media was biased in their reporting of road pricing proposals and negatively affected public support (e.g. Seidel et al., 2004).

Theories and methodology

Table 1 gives an overview of the theories, data sources and analyses used in each thesis chapter. The theoretical framework of each chapter is subsequently presented along with the data sources and analyses. Detailed information can be found in chapters 2-5.

Table 1: Overview of theories, data sources and analyses by thesis chapter

	Theories	Data sources	Data analysis
Chapter 2: Non-implementation of road pricing policy in the Netherlands: An application of the ‘Advocacy Coalition Framework’	The Advocacy Coalition Framework	Newspaper articles * Parliamentary documents	Content analysis Descriptive figures In-depth qualitative analysis
Chapter 3: Has the Dutch news media acted as a policy actor in the road pricing policy debate?	Westerstahl’s objectivity framework	Newspaper articles *	Content analysis Descriptive figures Correspondence analysis
Chapter 4: The reciprocal relationship between policy debate and media coverage: the case of road pricing policy in the Netherlands	The literature about media – politics relationship and news production process	Newspaper articles * Parliamentary documents	Content analysis Descriptive figures In-depth qualitative analysis
Chapter 5: The effect of news on attitudes towards a Dutch road pricing proposal	The literature about media effects	Newspaper articles * public attitude survey	Content analysis Linear regression

* from Trouw, de Volkskrant, NRC Handelsblad, De Telegraaf and AD

Chapter 2 uses the Advocacy Coalition Framework (ACF), developed by Sabatier and Jenkins-Smith, as a theoretical lens. Ardiç et al. (2015, p.117) state that “the ACF aims to understand policy stability (e.g. non-implementation of road pricing policy) and change (e.g.

implementation of road pricing policy) by analyzing conflicts and consensuses amongst multiple policy actors in the policy process over the period of a decade or more (Sabatier and Weible, 2007)". Chapter 3 employs the objectivity framework proposed by McQuail (1999) based on Westerstahl (1983) to assess the objectivity of Dutch newspapers in reporting the road pricing policy debate. Westerstahl (1983) proposes a framework consisting of 6 criteria (e.g. neutrality, balance) for the assessment of objectivity in the news. Chapter 4 builds on two theoretical references. The first one is the literature on news production processes (see Koch-Baumgarten and Voltmer, 2010; McQuail, 2010; Mencher, 2006; Schnell and Frauke, 2001). The literature explains key factors which influence the selection and presentation of news and how the policy debate (media input) is processed by the newspapers and eventually turned into media coverage (media output). The second one is the literature on the relations between the media and politics (see Koch-Baumgarten and Voltmer, 2010; Van Aelst and Vliegthart, 2013; Walgrave and Van Aelst, 2006; Wolfsfeld, 2014). This literature discusses whether or not, and to what extent the media coverage influences the policy debate (and policy process) or the other way around. Chapter 5 borrows from media effect studies. Studies in these fields acknowledge that the effect of news content on individuals' attitudes and beliefs is conditioned by the characteristics of news content and individuals (see for example Baumeister et al., 2001; Boomgaarden et al., 2011; Perloff, 2003; Soroka, 2006; Zaller, 1992; Zucker, 1978). Based on this literature, chapter 5 focuses on two aspects of the news content: the tone (negative or positive) and the degree of personal experience with the news topic in daily life. With respect to the characteristics of individuals, the role of values on the effect of news is examined.

This thesis employs three sources of data: newspaper articles, parliamentary documents and a public attitude survey. Newspaper articles provide input to all the chapters in the thesis. Content analysis was conducted for the analysis of newspaper articles. A comprehensive coding scheme was developed considering the requirements of all the research questions. The coding scheme was manually applied to be able to infer manifest and latent meanings within texts and to identify the relations between coding variables (e.g. which actor speaks about which issue). This procedure created a quantitative dataset. Each chapter uses different coding variables and constructs various secondary variables using these coding variables. Detailed information about the coding scheme, procedure and variables can be found within relevant chapters. In addition to this data, chapters 2 and 4 use parliamentary documents and chapter 5 a public attitude survey.

Besides content analysis, the thesis employs descriptive, exploratory and inferential statistical methods (see Table 1). However, because of the complex nature of policy process, these quantitative data analysis methods may not properly encompass the relationships between the variables under investigation in chapters 2 and 4. Therefore, in chapters 2 and 4 these methods are complimented with an in-depth qualitative examination of the policy processes and policy debates based on parliamentary and policy documents and other relevant literature, to provide a more nuanced understanding of the quantitative findings and the complex phenomena.

Results

This section summaries the results of chapters 2, 3, 4 and 5 respectively.

Chapter 2: Non-implementation of road pricing policy in the Netherlands: An application of the 'Advocacy Coalition Framework'

- ✓ The non-implementation of road pricing policy in the Netherlands cannot only be ascribed to the support (or opposition) of one or a few policy actors or to consensus (or conflict) among a few policy actors at a specific point in time. Non-implementation can be well explained by the features of the Dutch political system/culture and the complexities peculiar to the road pricing subsystem (sociocultural values related to mobility, complex design issues).
- ✓ Internal and external shocks (e.g. elections) changed the power balance between pro- and anti-road pricing coalitions, but did not result in the introduction of road pricing policies.
- ✓ The accumulation of scientific/technical information and the existence of a "professional discussion forum" changed policy positions regarding Kilometerheffing through policy oriented learning. Two other factors facilitated this process: the disputes over policy design and policy brokers.
- ✓ Changes in policy position did not only arise from enduring changes in policy beliefs through policy oriented learning, but also through strategic decisions to achieve short-term political objectives (e.g. political party cohesion).

Chapter 3: Has the Dutch news media acted as a policy actor in the road pricing policy debate?

- ✓ The Dutch newspapers were not objective in reporting road pricing policies.
- ✓ Each newspaper violated the objectivity norms (e.g. neutrality) to about the same extent.
- ✓ Each newspaper had a different position regarding the policy. De Telegraaf was almost always negative; Algemeen Dagblad was usually mixed; De Volkskrant and Trouw were usually positive; NRC Handelsblad was often positive, but sometimes inclined to be mixed.

Chapter 4: The reciprocal relationship between policy debate and media coverage: the case of road pricing policy in the Netherlands

- ✓ The media coverage of two pricing proposals (and their sub-issues and policy actors) varied greatly in terms of visibility (e.g. the number of words) and tone (e.g. negative) in time.
- ✓ Such variation in media coverage was a reflection of changes in the content of policy debate.
- ✓ The media coverage influenced the policy debate. However, the influence of media on the policy debate was rather indirect, meaning that policy actors mostly reacted to the messages by other policy actors which appeared in the media, rather than to the media coverage itself.

- ✓ It was first the statements or actions of policy actors which received media coverage and subsequently the media coverage which in turn stimulated the policy debate in each policy event.
- ✓ The influence of one newspaper, De Telegraaf, on the policy debate was stronger than other newspapers.

Chapter 5: The effect of news on attitudes towards a Dutch road pricing proposal

The findings indicate that exposure to positive and negative news content about Kilometerheffing is associated with attitudes and beliefs about Kilometerheffing, although the strength (and significance) and the direction of the effect (in parallel with or opposite to the tone of news (negative or positive)) varied depending on the type of issue featured in the news and the characteristics of individuals. That is to say that;

- ✓ Exposure to negative news about Kilometerheffing is negatively associated with the attitudes towards Kilometerheffing while exposure to positive news about the impact of Kilometerheffing on the environment (and congestion) is positively associated with the beliefs about this issue.
- ✓ News about the impact of Kilometerheffing on individuals' financial situations is not related to beliefs about the impact of Kilometerheffing on one's own financial situation.
- ✓ The strength of biospheric value moderates the relationship between beliefs about the impact on the environment (and congestion) and exposure to positive news about this issue.

Policy implications

In the light of the ACF and findings in chapter 2 I give an overview below of some scenarios which might support the introduction of road pricing policy in the Netherlands, as well as some factors which may facilitate the policy process. However, it is impossible to tell precisely whether or in which situations road pricing policies will be introduced in the Netherlands in the future because of the complexity of the policy process.

- ✓ The change in the governing coalition (an external shock) may pave the way for the introduction of a policy if proponents hold a majority of political resources (e.g. decision making authority) as a result of elections.
- ✓ The information about new technical/scientific developments about road pricing policies may change the policy positions of opponents.
- ✓ The existence of policy brokers and professional discussion forums may facilitate policy negotiations
- ✓ The magnitude of transport related problems (e.g. significant deterioration of accessibility due to an increase in congestion, or revenue losses from the widespread use of electric cars (or increase in fuel efficiency)) may create a "policy stalemate" in which the status quo policy (charging car users by fuel tax and other road taxes) is

very likely to be unacceptable for all or at least several important policy actors. This situation may encourage policy actors to agree on the introduction of road pricing.

- ✓ Changes in stable system parameters, for instance the socio-cultural environment, may pave the way for the introduction of a road pricing policy in the long term. For instance, if road pricing policies gradually become a popular measure across Europe in the future, such a positive atmosphere in countries around the Netherlands may change the notion that views car use as an indispensable part of life and individual freedom. This, in turn, may affect attitudes towards road pricing policy in Dutch society in general. This positive environment may eventually affect the road policy subsystem.

In the light of the findings in chapters 3 and 4, listed below are policy recommendations which might increase favorable media coverage during the road pricing policy processes.

- ✓ Increasing amounts of positive messages in the policy debate and consensus amongst policy actors about the introduction of road pricing policies increase the amount of positive media coverage. If policy makers are able to get most of the prominent policy actors on board, the negative information flow to the media might be restricted and, thus, the space allocation of negative coverage might be more limited.
- ✓ Newspapers have a specific policy position. Therefore, policy makers should keep in mind that newspapers are able to change the direction of messages by adding media comments or changing the proportion of positive and negative messages in the policy debate when reporting news. Nevertheless, this thesis shows that the content of the policy debate is still partially reflected in the media coverage.
- ✓ Ambiguity and uncertainty in policy content should be avoided as this may increase the amount of negative media coverage.

References

- Ardıç, Ö., Annema, J.A., van Wee, B. (2015) Non-implementation of road pricing policy in the Netherlands: An application of the 'Advocacy Coalition Framework'. *European Journal of Transport and Infrastructure Research* 15, 116-146.
- Baumeister, R.F., Bratslavsky, E., Finkenauer, C., Vohs, K.D. (2001) Bad is stronger than good. *Review of General Psychology* 5, 323-370.
- Boomgaarden, H.G., van Spanje, J., Vliegenthart, R., de Vreese, C.H. (2011) Covering the crisis: Media coverage of the economic crisis and citizens' economic expectations. *Acta Politica* 46, 353-379.
- Isaksson, K., Richardson, T. (2009) Building legitimacy for risky policies: The cost of avoiding conflict in Stockholm. *Transportation Research Part A: Policy and Practice* 43, 251-257.
- Koch-Baumgarten, S., Voltmer, K. (2010) *Public policy and the mass media the interplay of mass communication and political decision making*. Taylor & Francis, Hoboken.
- McQuail, D. (1999) *Media performance: Mass communication and the public interest*. SAGE Publ., London [u.a.].
- McQuail, D. (2010) *McQuail's mass communication theory*. SAGE, Los Angeles.
- Mencher, M. (2006) *Melvin Mencher's news reporting and writing*. McGraw-Hill, Boston.
- Perloff, R.M. (2003) *The dynamics of persuasion communication and attitudes in the 21st century*. Lawrence Erlbaum Associates, Mahwah, N.J.
- Raad voor Verkeer en Waterstaat (2005) *Innoveren, een kwestie van doen: visie op de verschillende rollen van Verkeer en Waterstaat*, Den Haag: de Raad voor Verkeer en Waterstaat.
- Rye, T., Gaunt, M., Ison, S. (2008) Edinburgh's congestion charging plans: An analysis of reasons for non-implementation. *Transportation Planning and Technology* 31, 641-661.
- Sabatier, P.A., Weible, C.M. (2007) The advocacy coalition framework, innovations and clarifications. *Theories of the policy process* ed Sabatier, P.A. Westview Press, Boulder, Colo.
- Schnell, K., Frauke, C. (2001) Assessing the democratic debate: How the news media frame elite policy discourse. *Political Communication* 18, 183-213.
- Soroka, S.N. (2006) Good news and bad news: Asymmetric responses to economic information. *The Journal of Politics* 68, 372-385.
- van Aelst, P., Vliegenthart, R. (2013) Studying the tango. *Journalism Studies* 15, 392-410.
- Verhoef, E.T. (2008) *Pricing in road transport: A multi-disciplinary perspective*. Edward Elgar, Cheltenham, UK; Northampton, MA.
- Vonk Noordegraaf, D., Annema, J.A., van Wee, B. (2014) Policy implementation lessons from six road pricing cases. *Transportation Research Part A: Policy and Practice* 59, 172-191.
- Walgrave, S., van Aelst, P. (2006) The contingency of the mass media's political agenda setting power: Toward a preliminary theory. *Journal of Communication* 56, 88-109.

Westerstahl, J. (1983) Objective news reporting: General premises. *Communication Research* 10, 403-424.

Wolfsfeld, G. (2014) *Making sense of media and politics five principles in political communication*. Taylor and Francis, Hoboken.

Zaller, J. (1992) *The nature and origins of mass opinion*. Cambridge University Press, Cambridge, England, New York, NY, USA.

Zucker, H.G. (1978) The Variable Nature of New Media Influence. *Communication Yearbook* 2 ed Ruben, B.D. Transaction Books, New Brunswick, NJ.

Samenvatting

Achtergrond

Prijsbeleid op de weg is gebaseerd op de gedachte dat weggebruikers direct zouden moeten betalen voor het gebruik ervan. Politici kunnen prijsbeleid op de weg op zeer veel verschillende manieren vormgeven zoals via tolsystemen of via allerlei vormen van kilometerheffingen. Wetenschappers beschouwen prijsbeleid op de weg in het algemeen als een effectief middel om transportproblemen zoals congestie tegen te gaan. Beleidsmakers bevelen het dan ook geregeld aan in beleidsdocumenten (zoals in de EU ‘White Paper’) (Verhoef, 2008). Niettemin is het aantal werkelijk geïmplementeerde vormen van prijsbeleid op de weg wereldwijd beperkt. Studies geven een groot aantal redenen waarom invoering van prijsbeleid soms mogelijk is (en soms ook niet) zoals het aanwezig zijn (of juist ontbreken) van steun van belangrijke actoren (bijvoorbeeld politieke partijen, ministers en belangengroepen), de mate van publieke steun en door karakteristieken van het verkeers- en vervoersysteem en de technologie (Vonk Noordegraaf *et al.*, 2014).

Doel en scope van dit proefschrift

Het doel van dit proefschrift is tweevoudig. Het eerste doel is het verkrijgen van inzicht in de rol van actoren in het (niet) kunnen invoeren van prijsbeleid op de weg. In literatuur over prijsbeleid op de weg beschouwen wetenschappers de mate van politieke steun als de belangrijkste determinant voor wel of niet invoeren en hoe een implementatieproces verloopt (Vonk Noordegraaf *et al.*, 2014). Dit argument wordt in het algemeen verdedigd door op een narratieve manier de steun of oppositie van één actor of een paar actoren te illustreren of door overeenstemming of conflict tussen een paar actoren op een bepaald punt in het beleidsproces te benadrukken (zie bijvoorbeeld Isaksson en Richardson, 2009; Rye *et al.*, 2008). Politieke resultaten zijn echter vaak een gevolg van een aantal gebeurtenissen over een lange periode van tijd (Sabatier en Weible, 2007; *et al.*, 2007) waarin een diverse verzameling van allerlei actoren is betrokken die met elkaar interacteren (Adam en Kreisi, 2007; Sabatier en Weible, 2007; Zaharidas, 2007). Voor zover ik weet heeft tot nu toe geen studie zich verdiept in het beleidsproces van invoering van prijsbeleid op de weg door empirisch na te gaan wat de standpunten van alle belangrijke actoren zijn geweest en wat hun mate van conflict en overeenstemming is geweest gedurende een lange tijd van pogen tot invoering. Met behulp

van een dergelijke analyse zouden we beter kunnen begrijpen welke rol standpunten, conflicten en momenten van overeenstemming hebben gespeeld in het beleidsproces en in de uitkomst daarvan. Dit proefschrift wil dit wetenschappelijke gat dichten (zie hoofdstuk 2).

Het tweede doel van dit proefschrift is het verkrijgen van inzicht in de rol van media in het proces van invoering van prijsbeleid op de weg. In beleidsprocessen kunnen de media onder bepaalde omstandigheden, naast andere actoren, uitkomsten en de processen zelf beïnvloeden. Hoewel verschillende onderzoekers het belang van de media bij implementatie van prijsbeleid op de weg noemen (Vonk Noordegraaf *et al.*, 2014) is de rol van de media nauwelijks empirisch onderzocht. Ook dit wetenschappelijke gat wil ik dichten. De relatie tussen media en beleidsprocessen is ‘*adembenemend ingewikkeld, en de processen dynamisch en interactief*’ (Koch-Baumgarten en Voltmer, 2010, p.80) en heeft betrekking op interacties tussen media, actoren en het publiek. Dit proefschrift concentreert zich bij de rol van de media op vier punten. Hoofdstuk 3 gaat in op de objectiviteit van de media (vijf grote landelijke dagbladen) toen zij rapporteerden over de debatten in het Nederlandse proces van invoering van prijsbeleid op de weg. Hoofdstuk 4 onderzoekt de karakteristieken van de nieuwsweergave (zoals bijvoorbeeld welke issues en actoren komen aan bod) en analyseert de link tussen het inhoudelijke debat en nieuwsweergave. Hoofdstuk 5, tot slot, onderzoekt de invloed van de media op attitudes en overtuigingen van individuen.

Om de twee doelen te bereiken, analyseert dit proefschrift het proces van invoering van prijsbeleid op de weg in Nederland tussen 1994 en 2010. Dit Nederlandse beleidsproces biedt zeer goede mogelijkheden om bij te dragen aan het dichten van de geïdentificeerde wetenschappelijke gaten. Op de eerste plaats omdat prijsbeleid op de weg zeer controversieel was in Nederland gedurende decaden. Alle pogingen om een vorm van prijsbeleid op de weg in te voeren mislukten omdat het ontbrak aan politieke en publieke steun (Raad voor Verkeer en Waterstaat, 2005). Het lange beleidsproces werd niet alleen gekenmerkt door intense (en soms gematigde) momenten van conflict maar er waren ook perioden van consensus tussen alle belangrijke actoren. Ten tweede stellen sommige onderzoekers dat de Nederlandse media bevooroordeeld waren in hun nieuwsweergaven over prijsbeleid op de weg en publieke steun negatief hebben beïnvloed (bijvoorbeeld Seidel *et al.*, 2004).

Theorie, data en analysemethoden

Tabel 1 geeft een overzicht van de gehanteerde theorieën, databronnen en analysemethoden per hoofdstuk. De lezer kan gedetailleerde informatie in de hoofdstukken 2 tot en met 5 vinden.

Tabel 1: Overzicht van theorieën, databronnen en analysemethoden per hoofdstuk

	Theorieën	Databronnen	Dataanalyse
Hoofdstuk 2: Het niet invoeren van prijsbeleid op de weg in Nederland: een toepassing het ‘Advocacy Coalition Framework’	‘Advocacy Coalition Framework’	Krantenartikelen* Parlementaire documenten	Inhoudsanalyse Descriptieve analyse Diepgaande kwalitatieve analyse
Hoofdstuk 3: Heeft de Nederlandse media als een beleidsactor opgetreden in het debat over prijsbeleid op de weg?	Westerstahl’s framework over objectiviteit	Krantenartikelen*	Inhoudsanalyse Descriptieve analyse ‘Correspondence’ analyse
Hoofdstuk 4: De wederkerige relatie tussen beleidsdebat en nieuwswaergeving: de casus prijsbeleid op de weg in Nederland	Literatuur over de relatie media – politiek en over het productieproces van nieuws	Krantenartikelen* Parlementaire documenten	Inhoudsanalyse Descriptieve analyse Diepgaande kwalitatieve analyse
Hoofdstuk 5: Het effect van nieuws op attitudes voor een Nederlands prijsbeleidsvoorstel op de weg	Literatuur over mediaeffecten	Krantenartikelen* Eigen enquête naar attitudes	Inhoudsanalyse Lineaire regressie

* Trouw, de Volkskrant, NRC Handelsblad, De Telegraaf en AD

Hoofdstuk 2 gebruikt het zogenaamde ‘Advocacy Coalition Framework’ (ACF; ‘politieke belangen’ coalitie framework) zoals ontwikkeld door Sabatier en Jenkins-Smith als theoretische lens. Het doel van ACF is het begrijpen van politieke stabiliteit (bijvoorbeeld het niet-invoeren van prijsbeleid op de weg) dan wel van politieke verandering (bijvoorbeeld het juist wel invoeren ervan) door conflicten en perioden van consensus tussen vele actoren te analyseren die zich voordoen in beleidsprocessen die zich kunnen uitstrekken over een decade of langer (Sabatier en Weible, 2007). Hoofdstuk 3 maakt gebruik van het framework voor objectiviteit zoals voorgesteld door McQuail (1999), die zich baseerde op Westerstahl (1983), om de mate van objectiviteit te kunnen inschatten van de vijf landelijke kranten die verslag deden van het Nederlandse prijsbeleidsdebat. Westerstahl (1983) stelde een framework voor dat bestaat uit zes criteria (zoals neutraliteit, evenwichtigheid) om objectiviteit van het nieuws te kunnen inschatten. Hoofdstuk 4 bouwt voort op twee theoretische concepten. De eerste is literatuur over nieuwsproductie (zie Koch-Baumgarten en Voltmer, 2010; McQuail, 2010; Menscher, 2006; Schnell en Frauke, 2001). Deze literatuur identificeert belangrijke factoren die bepalen hoe media nieuws selecteren en hoe media een maatschappelijk debat (media input) bewerken en eventueel weergeven (media output). Het tweede concept gaat in op de relatie tussen media en politiek (zie Koch-Baumgarten en Voltmer, 2010; Van Aelst en Vliegthart, 2013; Walgrave en Van Aelst, 2006; Wolfsfeld, 2014). In deze literatuur discussiëren onderzoekers of en hoeverre media het maatschappelijk debat (en het beleidsproces) beïnvloeden of dat alleen de omgekeerde weg geldt. Hoofdstuk 5 leent ideeën uit de literatuur over effecten van blootstelling aan media. Studies in dit veld onderkennen dat het effect van nieuws op de attitudes van individuen afhankelijk is van karakteristieken van de nieuwshoud en van de individuen (zie bijvoorbeeld Baumeister et al., 2001; Boomgaarden et al., 2011; Peroff, 2003; Soroka, 2003; Zaller, 1992; Zucker, 1992). Gebaseerd op inzichten uit deze literatuur concentreert hoofdstuk 5 zich op twee aspecten van de inhoud van het nieuws: de toon van het nieuws (negatief of positief) en de mate waarin individuen persoonlijk ervaringen kunnen hebben met een bepaald nieuwsonderwerp in hun eigen leven. Met betrekking tot karakteristieken van individuen is de rol van waarden op effecten van nieuws onderzocht.

Dit proefschrift maakt gebruik van drie soorten van databronnen: krantenartikelen, parlementaire documenten en een enquête naar attitudes van individuen. Krantenartikelen hebben data voor alle hoofdstukken geleverd. Ik heb inhoudsanalyse toegepast op de krantenartikelen. Ik heb daartoe een uitgebreid coderingsschema ontwikkeld waarin al mijn behoeften aan variabelen voor alle hoofdstukken tot uiting kwam. Het coderingsschema heb ik handmatig toegepast om zodoende alle duidelijke maar ook verborgen betekenissen in een tekst te kunnen vinden en om relaties te kunnen identificeren tussen coderingsvariabelen (bijvoorbeeld welke actor praat over welk punt). Deze procedure leidde tot een kwantitatieve dataset. Elk hoofdstuk gebruikt andere primaire variabelen en construeert verscheidene secundaire variabelen op basis van de primaire variabelen. De lezer kan gedetailleerde informatie over het coderingsschema, de procedure en de variabelen in de hoofdstukken 2 tot en met 5 vinden. In aanvulling op deze variabelen gebruikt hoofdstuk 2 en 4 informatie uit parlementaire en beleidsdocumenten en aanvullende literatuur. En maakt hoofdstuk 5 tevens gebruik van resultaten uit een enquête naar attitudes van individuen ten aanzien van prijsbeleid op de weg in relatie tot hun 'blootstelling' aan nieuwsweergaven in de vijf kranten. Ook voor deze additionele databronnen verwijst ik naar de genoemde hoofdstukken om er de details over te vinden.

Naast inhoudsanalyse heb ik descriptieve, exploratieve en inferentiële statistiek toegepast (zie tabel 1). Deze kwantitatieve methoden kunnen echter niet alle relaties ondervangen die ik in hoofdstuk 2 en 4 wil onderzoeken. Dit vanwege de aard van beleidsprocessen die ingewikkelde interacties omvat tussen allerlei actoren, waarin vele verschillende beleidsgebeurtenissen plaatsvinden en die omgeven worden door allerlei contextuele variabelen die variëren in de tijd. Daarom heb ik in hoofdstukken 2 en 4 de kwantitatieve methoden aangevuld met diepgaand kwalitatieve analyses van beleidsprocessen en debatten zoals weergegeven in parlementaire en beleidsdocumenten en andere relevante literatuur om daarmee een genuanceerder beeld te verkrijgen van de kwantitatieve bevindingen en de complexe processen zoals die zich in de werkelijkheid hebben afgespeeld.

Resultaten

Ik vat nu de resultaten weer per hoofdstuk.

Hoofdstuk 2: Het niet invoeren van prijsbeleid op de weg in Nederland: een toepassing het 'Advocacy Coalition Framework'

- ✓ Het niet invoeren van prijsbeleid op de weg in Nederland kan niet worden toegeschreven aan tegenstand van één of een paar actoren op een bepaald moment in de tijd. Het niet-invoeren kan beter worden verklaard door kenmerken van het Nederlandse politieke systeem en politieke cultuur en door ingewikkeldheden die specifiek zijn voor prijsbeleid op de weg (zoals de sociaal-culturele waarden van automobilititeit en ingewikkelde ontwerpissues).
- ✓ Schokken (bijvoorbeeld verkiezingen) veranderden het machtsevenwicht tussen pro- en antiprijsbeleidcoalities, maar ze leidden nimmer tot invoering van prijsbeleid.
- ✓ Toenemende wetenschappelijke en technische informatie en het bestaan van een commissie van deskundigen en belangenbehartigers veranderden standpunten over kilometerheffing doordat ze leidden tot 'leren'. Twee andere factoren faciliteerden dit leerproces: de discussies over ontwerpissues en zogenaamde kennismakelaars.

- ✓ Veranderingen in standpunten over prijsbeleid op de weg kwamen niet alleen voort uit duurzame veranderingen van overtuigingen maar ook uit strategische politieke keuzen om kortetermijn politieke doelen te behalen (zoals bijvoorbeeld het belang van eenheid binnen de partij).

Hoofdstuk 3: Heeft de Nederlandse media als een beleidsactor opgetreden in het debat over prijsbeleid op de weg?

- ✓ De Nederlandse kranten hebben niet op objectieve manier gerapporteerd over prijsbeleid op de weg.
- ✓ Elke krant schond objectiviteitsnormen (zoals neutraliteit) in ongeveer gelijke mate.
- ✓ Elke krant had andere voorkeuren. De Telegraaf was nagenoeg altijd negatief over prijsbeleid op de weg; AD was altijd gemengd; De Volkskrant en Trouw waren meestal positief; NRC Handelsblad was vaak positief, maar soms gemengd.

Hoofdstuk 4: De wederkerige relatie tussen beleidsdebat en nieuwsweergave: de casus prijsbeleid op de weg in Nederland

- ✓ De nieuwsweergaven van de twee prijsbeleidsvoorstellen (rekeningrijden en kilometerheffing) verschilden in hoge mate in termen van zichtbaarheid (bijvoorbeeld het aantal bestede woorden) en toon (bijvoorbeeld positief).
- ✓ Zulke verschillen waren een weerspiegeling van veranderingen in de inhoud van het debat.
- ✓ De kranten hebben het beleidsdebat beïnvloed. De invloed van de media was echter nogal indirect omdat actoren meestal reageerden op beweringen van andere actoren die in de media verschenen in plaats van dat ze op een nieuwsbericht zelf reageerden.
- ✓ Eerst haalden beweringen van actoren het nieuws en dan konden die nieuwsweergaven op hun beurt het debat verder doen verhitten.
- ✓ De invloed van één krant, De Telegraaf, op het debat was groter dan die van de andere kranten.

Hoofdstuk 5: Het effect van nieuws op attitudes voor een Nederlands prijsbeleidsvoorstel op de weg

De bevindingen in dit hoofdstuk geven indicaties dat blootstelling aan positief en negatief nieuws geassocieerd is met attitudes en overtuigingen. De mate van associatie (en de significantie) alsmede de richting van de associatie (tegengesteld of gelijk aan de toon van het nieuws) variëren afhankelijk van het soort van issue en van de karakteristieken van individuen. Dat wil zeggen dat:

- ✓ Blootstelling aan negatief nieuws over kilometerheffing is negatief geassocieerd met attitudes voor kilometerheffing. Blootstelling aan positief nieuws over het effect van kilometerheffing op het milieu is positief geassocieerd met overtuigingen over dit issue.

- ✓ Blootstelling aan nieuws over de impact van kilometerheffing op de portemonnee van mensen is niet gerelateerd aan overtuigingen over deze impact van kilometerheffing.
- ✓ De mate waarin mensen waarde hechten aan bio sferische waarden heeft een matigend effect op de relatie tussen overtuigingen over de impact van kilometerheffing op milieu (en files) en blootstelling aan positief nieuws over dit onderwerp.

Beleidsaanbevelingen

Met behulp van het ACF en bevindingen van hoofdstuk 2 geef ik hieronder een aantal scenario's dat invoering van prijsbeleid op de weg zou kunnen ondersteunen in Nederland en ook een aantal factoren dat het beleidsproces zou kunnen faciliteren. Het is vanwege de ingewikkeldheden in het beleidsproces echter onmogelijk om precies te vertellen onder welke omstandigheden prijsbeleid op de weg zou kunnen worden ingevoerd.

- ✓ Als gevolg van een verkiezing zou een verandering in regeringscoalitie de weg kunnen plaveien voor introductie van prijsbeleid op de weg indien voorstanders van dat beleid de belangrijkste politieke middelen in handen krijgen (bijvoorbeeld beslismacht).
- ✓ Informatie over nieuwe technische en wetenschappelijke ontwikkelingen van prijsbeleid op de weg zou de beleidsvoorkeuren van actoren kunnen doen veranderen.
- ✓ Het bestaan van kennismakelaars en commissies (zoals de Commissie Nouwen) zou politieke onderhandelingen mogelijk kunnen maken.
- ✓ De omvang van transportgerelateerde problemen (zoals een verslechtering van de bereikbaarheid door toenemend congestie of accijnsverliezen voor de overheid door grootschalig gebruik van elektrische auto's) zou een patstelling kunnen veroorzaken waarbij de status quo (het belasten van automobilisten via fossiele brandstoffen en vaste belastingen) door belangrijke politieke actoren als onacceptabel wordt gezien. Een dergelijke situatie zou beleidsactoren kunnen aansporen om overeenstemming te verkrijgen over een bepaalde vorm van prijsbeleid op de weg.
- ✓ Langzame en graduele veranderingen in 'stabiele systeemp parameters', bijvoorbeeld in de sociaal-culturele omgeving, zouden de weg kunnen bereiden voor introductie van prijsbeleid op de weg. Het zou bijvoorbeeld kunnen dat prijsbeleid op de weg langzaam een populaire maatregel wordt in Europa in de toekomst waardoor het idee in Nederland aangetast wordt dat auto's een onmisbaar deel van iemand leven en vrijheid zijn. Dit kan op zijn beurt attitudes voor prijsbeleid op de weg in de Nederlandse samenleving doen veranderen.

Met behulp van hoofdstuk 3 en 4 kan ik de volgende aanbevelingen doen die kunnen leiden tot gunstige nieuwsweergaven van prijsbeleid op de weg gedurende een beleidsproces.

- ✓ Het aantal positieve nieuwsweergaven neemt toe als gevolg van toenemende positieve boodschappen in het debat en door overeenstemming tussen belangrijke actoren over introductie van prijsbeleid op de weg. Als beleidsmakers erin slagen de belangrijkste actoren aan hun kant te krijgen kunnen ze de negatieve berichtgeving beperken.
- ✓ Kranten hebben specifieke voorkeuren. Beleidsmakers kunnen voor ogen houden dat kranten, tot op zekere hoogte, de richting van hun boodschappen kunnen doen

veranderen door mediacommentaren toe te voegen of door de verhouding positieve en negatieve boodschappen in het beleidsdebat te veranderen. Niettemin laat dit proefschrift zien dat kranten de inhoud van het debat grotendeels weerspiegelen in hun nieuwsweergaven.

- ✓ Beleidsmakers moeten ambiguïteit en onzekerheid in de beleidsinhoud vermijden omdat daardoor het aantal negatieve nieuwsweergaven toeneemt.

References

- Baumeister, R.F., Bratslavsky, E., Finkenauer, C., Vohs, K.D. (2001) Bad is stronger than good. *Review of General Psychology Review of General Psychology* 5, 323-370.
- Boomgaarden, H.G., van Spanje, J., Vliegenthart, R., de Vreese, C.H. (2011) Covering the crisis: Media coverage of the economic crisis and citizens' economic expectations. *Acta Politica* 46, 353-379.
- Isaksson, K., Richardson, T. (2009) Building legitimacy for risky policies: The cost of avoiding conflict in Stockholm. *Transportation Research Part A: Policy and Practice* 43, 251-257.
- Koch-Baumgarten, S., Voltmer, K. (2010) *Public policy and the mass media the interplay of mass communication and political decision making*. Taylor & Francis, Hoboken.
- McQuail, D. (1999) *Media performance: Mass communication and the public interest*. SAGE Publ., London [u.a.].
- McQuail, D. (2010) *McQuail's mass communication theory*. SAGE, Los Angeles.
- Mencher, M. (2006) *Melvin Mencher's news reporting and writing*. McGraw-Hill, Boston.
- Perloff, R.M. (2003) The dynamics of persuasion communication and attitudes in the 21st century. Lawrence Erlbaum Associates, Mahwah, N.J.
- Raad voor Verkeer en Waterstaat (2005) *Innoveren, een kwestie van doen: visie op de verschillende rollen van Verkeer en Waterstaat*, Den Haag: de Raad voor Verkeer en Waterstaat.
- Rye, T., Gaunt, M., Ison, S. (2008) Edinburgh's congestion charging plans: An analysis of reasons for non-implementation. *Transportation Planning and Technology* 31, 641-661.
- Sabatier, P.A., Weible, C.M. (2007) The advocacy coalition framework, innovations and clarifications. *Theories of the policy process* ed Sabatier, P.A. Westview Press, Boulder, Colo.
- Schnell, K., Frauke, C. (2001) Assessing the democratic debate: How the news media frame elite policy discourse. *Political Communication* 18, 183-213.
- Soroka, S.N. (2006) Good news and bad news: Asymmetric responses to economic information. *The Journal of Politics* 68, 372-385.
- van Aelst, P., Vliegenthart, R. (2013) Studying the tango. *Journalism Studies* 15, 392-410.
- Verhoef, E.T. (2008) *Pricing in road transport: A multi-disciplinary perspective*. Edward Elgar, Cheltenham, UK; Northampton, MA.
- Vonk Noordegraaf, D., Annema, J.A., van Wee, B. (2014) Policy implementation lessons from six road pricing cases. *Transportation Research Part A: Policy and Practice* 59, 172-191.
- Walgrave, S., van Aelst, P. (2006) The contingency of the mass media's political agenda setting power: Toward a preliminary theory. *Journal of Communication* 56, 88-109.
- Westerstahl, J. (1983) Objective news reporting: General premises. *Communication Research* 10, 403-424.
- Wolfsfeld, G. (2014) *Making sense of media and politics five principles in political communication*. Taylor and Francis, Hoboken.

Zaller, J. (1992) *The nature and origins of mass opinion*. Cambridge University Press, Cambridge [England]; New York, NY, USA.

Zucker, H.G. (1978) The variable nature of new media influence. *Communication Yearbook 2* ed Ruben, B.D. Transaction Books, New Brun

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