Punctuated Gradualism: Policy Images, Public Opinion and Policy Change in Tobacco Control

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I, Matia Vannoni, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

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Abstract

This work poses the question: what explains policy change in tobacco control? To answer it, I draw on studies of public policy that focus on the role of ideas and societal actors in the policy process. In particular, the punctuated equilibrium theory examines how ideas framed in a certain way enter the political agenda and become rooted in society, and predicts that policies emerge dramatically after long periods of stability. Nonetheless, the impact of public opinion has been overlooked in this literature. To address this gap, the theory proposed in this study, called punctuated gradualism theory, refines the punctuated equilibrium theory by incorporating the role of public opinion. Under the punctuated gradualism theory, policies evolve through periods of stability and change, but in some instances they evolve more gradually than in others, depending on how public opinion reacts to how the policy is framed, namely the policy image. Relying on qualitative analysis of the introduction of smoking and advertisement bans in Ireland, France and Italy in the 1990s and 2000s and on the quantitative analysis of polls and surveys, the data collected for this study show that public opinion reactions to the policy image affect how an issue evolves in the agenda-setting process and influence how societal actors interact between each other, thus determining the final policy choice. The contribution of this study is both theoretical and empirical. First, it incorporates public opinion into the theory of policy change; second, it accounts for some important variation in policy dynamics, which the current literature cannot explain.
Acknowledgements

Writing acknowledgements is easier said than done. In my search for inspiration, I have come across some interesting ideas on how to write acknowledgments. For instance, at the beginning of her book, B. S. Johnson leaves a blank page and invites readers to write their name there, if they think they deserve to be thanked. This is brilliant, but a bit lazy. As I believe that one of the main components of writing up a PhD thesis is sufferance, acknowledgements should not spare any: leaving a blank page would be too easy. Under this light, I have come across this piece, written by Brendan Pietsch:

I blame all of you. Writing this book has been an exercise in sustained suffering. The casual reader may, perhaps, exempt herself from excessive guilt, but for those of you who have played the larger role in prolonging my agonies with your encouragement and support, well…you know who you are, and you owe me.

This is funny and more importantly it touches upon the issue of sufferance mentioned above. Yet, it is totally unfair. The sufferance endured by a writer while conceiving his/her ‘masterpiece’ is nothing compared to that caused to relatives, friends and colleagues. For what you are about to read there is only one person to blame and it is me, but there are many people to thank. I know who you are and I owe you all!

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CHAPTER 1: INTRODUCTION

INTRODUCTION

This work seeks to answer the question: what explains policy change in tobacco control? Public policy approaches address policy change by looking at different sets of processes, such as the diffusion of ideas and the influence of societal actors. How networks of societal actors shape policy outcomes has been at the center of the public policy literature since the very beginning of the discipline, with classics such as Maass (1951) and Heclo (1977). Later, the role of ideas became central in the study of public policy, as noted in the literature (p.2; 486) (Béland and Cox 2010; John 2003). Finally, in the 1990s the role of ideas and policy networks were incorporated in complex approaches (or synthetic approaches, as they combine different accounts), which look at how different sets of processes affect policy change.

Although these complex approaches acknowledge that different sets of processes affect policy change simultaneously, they take clear stances on how these processes interact between each other (p.487) (John 2003). One of the most commonly used complex approaches is the punctuated equilibrium theory (Baumgartner and Jones 1993, 2009). By looking at how ideas framed in a certain way swiftly enter the political agenda and how they slowly become rooted in society, the proponents of the punctuated equilibrium theory suggest that policies evolve through periods of stability interrupted by periods of change, what they call punctuations (p.18) (Baumgartner and Jones 1993).

Nonetheless, a set of dynamics has so far been overlooked. Along with ideas and policy networks, socioeconomic factors matter in public policy (89-90; p.484-485) (Cairney, Studlar, and Mamudu 2012; John 2003) and among them, public opinion plays an important role, particularly in tobacco control (p. 90-92; p.6) (Cairney, Studlar, and Mamudu 2012; Marshall...
The public policy literature has studied how the public reacts to the discussion of a policy (Gilens 1999; Gusmano, Schlesinger, and Thomas 2002; Haselswerdt and Bartels 2015; Pacheco 2013; Soss and Schram 2007; Svallfors 2010) and how public reactions in turn affect policy outcomes (Arnold 1992; Bailey 2001; Denzau and Munger 1986; Page and Shapiro 1983; Verdier 1995). Nonetheless, a consistent attempt to incorporate the role of public opinion into a complex approach to policy change, which also takes into consideration other sets of processes, has yet to be made.

In this study I seek to address this gap by proposing a new variant of the punctuated equilibrium theory, which looks at how public opinion mediates the effects of ideas and policy networks on policy change. This theory, called punctuated gradualism theory, suggests that how public opinion reacts to the frame of an issue affects the ease with which that issue goes through the political agenda and the concentration of power in society. An issue discussed as concerning the society as a whole triggers public support and allocates diffuse interests. Policy-makers are strongly incentivised to act and power is diffuse in the society. The result is a drastic policy evolution. Conversely, an issue discussed as concerning only specific parts of society does not trigger public support and allocates concentrated interests. Policy-makers lack the incentives to act and concentrated interests can mobilise and provide strong opposition, thus leading to an incremental policy evolution.

This work contributes to the study of public policy both theoretically and empirically. First, it incorporates the role of public opinion into a complex approach to policy change. Second, it explains some important variation in policy dynamics, which the current literature cannot fully account for.
THE CONTEXT

The cultivation and consumption of tobacco date back to 5000 BC (p.3) (Gately 2001). The indigenous peoples of the Americas used this herb for medical purposes, often in religious rituals (p.7) (Gately 2001). It was not until the 17th century that tobacco started to be grown for commercial purposes and exported to Europe (p.60) (Gately 2001). Tobacco quickly became a large source of revenues for modern states (p.2) (Kagan, Vogel, and Galvan 1991) and a source of employment for many families in depressed regions (p.9) (Bayer and Colgrove 2004). Countries actively promoted tobacco growing and manufacturing, forging close links with the tobacco industry (p.45; p.5-6) (Cairney, Studlar, and Mamudu 2012; Kagan, Vogel, and Galvan 1991). As a result, little regulation was in place until the mid-1980s, and what existed was mostly in the form of trade agreements, taxation and agricultural subsidies.

In recent years, smoking has slowly become as a serious threat to public health. The very first medical evidence on the harmful effects of smoking was published in the late 1930s, but it was not until 1964 that the causal link between smoking and lung cancer was established by the US Surgeons General’s Report (p.88) (Eriksen, Mackay, and Ross 2012). Then, in 1981 a groundbreaking report by a Japanese epidemiologist showed the connection between passive smoking and lung cancer, opening the way to a series of studies in the 1980s which confirmed this link (p.938) (Ong and Glantz 2000). By the end of the 1990s, a series of health conditions were proven to be related to smoking, from respiratory problems, heart diseases and cancer, to psychological and emotional distress (p.4) (ASH 2016).

Today smoking is considered the primary cause of preventable illness and death in the world, accounting for nearly six million deaths a year (p.1; p.16) (ASH 2016; Eriksen, Mackay, and Ross 2012). As smoking becomes increasingly prevalent in developing countries, the death toll is
likely to rise to eight million deaths a year by 2030 (Eriksen, Mackay, and Ross 2012). Not only does smoking impose large human costs, but it also seriously affects national economies. In England alone, the National Health Service estimates that smoking costs two billion pounds a year (ASH 2015). On top of that, smoking imposes huge indirect costs, through loss of economic productivity due to premature deaths, smoking-related sick days and the productivity cost to businesses due to smoking breaks among others. Research commissioned by the main anti-smoking NGO in the UK, Action Against Smoking (ASH) UK, estimates that in England these indirect costs are around 14 billion pounds a year (ASH 2015).

Although tobacco has historically been a major source of revenues for states, in recent decades the economic costs have started to outweigh the benefits.¹ Today, in England tobacco revenues amount to only 12 billion pounds (ASH 2015), which is not enough to compensate the direct and indirect economic costs of smoking. In summary, millions of lives and billions of dollars go up in smoke each year: tobacco control thus represents one of most pressing challenges for regulators.

In light of this, recent years have witnessed unprecedented activity in tobacco control. New and more effective policy instruments have been introduced at a rapid pace across the world. The diffusion of tobacco control measures has not been completely uniform. Some countries have led the way, such as Nordic countries with the regulation of tobacco advertisement and the introduction of health warnings on tobacco products in the 1990s (Cairney, Studlar, and Mamudu 2012) and Anglo-Saxon countries with the regulation of smoking in public places in the 2000s (Cairney, Studlar, and Mamudu 2012). Nonetheless, the

¹ The importance of tobacco revenues for the state is exemplified by this famous quote of Talleyrand (RuderFinn 1991): “I will do all that is within my power to prohibit this awful vice the day that you can show me a single virtue which is capable of bringing 120 million to the national treasury”.
scope of tobacco control measures and their speed of introduction across countries have today reached unprecedented levels. In the course of few years, most countries around the world have established complex tobacco control regimes, characterised by a combination of different policy instruments (Table 1.2 p.14) (Cairney, Studlar, and Mamudu 2012): regulation, such as smoking bans, tobacco advertisement control and sales restriction; finance, such as tobacco taxation; capacity building, such as smoking cessation programmes provided by the national health system; education, such as health warning labels and awareness campaigns; learning and information tools, such as research funding.

Smoking bans represent a perfect example of the increasing strength of tobacco control and the speed of adoption of these measures across countries. Until the mid-1990s smoking was prohibited by law only on public transportation, hospitals and public offices. In the majority of workplaces smoking was still allowed. Smoking started to be banned from public premises in a few US states and cities at the end of the 1990s, such as in California and New York. Shortly after, Ireland introduced the world’s first total smoking ban in public places at national level. Then, smoking bans spread across most Western countries in less than 10 years. Only between 2007 and 2012, more than 30 countries adopted complete smoking bans in public places. As a consequence, the population covered by smoke-free legislation quadrupled (p.64) (Eriksen et al. 2015). The dynamics leading to the swift introduction of new and stronger tobacco control measures represent the subject of this thesis, which addresses the question: what explains policy change in tobacco control?

THEORETICAL APPROACH

In order to answer the research question, in this work I introduce a variant of the punctuated equilibrium theory, called punctuated gradualism theory. The latter builds on two other strands
of the public policy literature, the policy feedback (Gilens 1999; Gusmano, Schlesinger, and Thomas 2002; Haselwerdt and Bartels 2015; Pacheco 2013; Soss and Schram 2007; Svallforfs 2010) and the policy responsiveness theories (Arnold 1992; Bailey 2001; Denzau and Munger 1986; Page and Shapiro 1983; Verdier 1995). These strands study how the policy image affects public reactions and how the latter incentivise policy-makers to legislate on an issue. In so doing, the punctuated gradualism theory specifies the effects of the policy image on policy change by focusing on the mediating role of public opinion. In line with the original punctuated equilibrium theory, this theory posits that policies evolve through punctuations. Yet, this theory suggests that policies can evolve more punctuatedly gradually or drastically, depending on the public reactions to the prioritization of policies underlying different policy images. In other words, how an issue is discussed affects public reactions and this in turn affects the ease with which that issue goes through the political agenda and how societal actors interact between each other, thus determining how the policy evolves.

More formally, the punctuated gradualism theory suggests that an inclusive policy image, which addresses the society as a whole, triggers drastic policy change (H1) and that an exclusive policy image, which addresses only specific segments of society, triggers incremental change (H2). An inclusive policy image triggers public support for the policy at stake, which incentivizes policy-makers to act and put forward strong regulation. Furthermore, an inclusive policy image allocates diffuse costs and benefits on the society, thus preventing the creation of strong interests which can oppose regulation. The result is drastic policy change. Conversely, an exclusive policy image does not trigger public support, thus disincentivising policy-makers to act and it allocates
concentrated interests which can strongly oppose regulation. As such, an exclusive policy image triggers incremental policy change.

Different types of policy prioritization, underlying different policy images, give rise to different policy dynamics. In what I label majoritarian prioritization, an inclusive policy image is associated with a type of policy dynamics called punctuated equilibrium. This type of policy dynamics is composed of long periods of stability punctuated by rare periods of drastic policy change, which disrupt the policy arrangements in place. Conversely, in what I call interest group prioritization, an exclusive policy image gives rise to the punctuated gradualism policy dynamics, where policies evolve through short periods of stability punctuated by recurrent incremental policy changes. These two different types of policy dynamics represent two different ways in which stability and instability interact. In punctuated equilibrium drastic changes disrupt the policy arrangements in place and replace them with strong and resilient ones: rare periods of high instability are associated with long periods of stability. Conversely, in punctuated gradualism incremental changes modify the policy arrangements in place, without disrupting them. In this case more common periods of mild instability are associated with shorter periods of stability.

DATA AND METHODS

As the theoretical model formulates hypotheses on the specific processes linking variables, but it also relies on a series of assumptions which can be tested quantitatively, in this study I use a mixed-method approach to increase the inferential leverage. First, process tracing is used to

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2 The difference between inclusive and exclusive policy images is discussed in detail in Chapter 2 and Chapter 3.
3 Policy change is defined as a change in policy commitment. Gradual policy change indicates the adjustment of policy instruments already in place, whereas drastic change refers to the introduction of new instruments in a policy area. The term policy dynamics involves a wider temporal horizon and refers to how a policy evolves over time. In line with the punctuated equilibrium theory, in this work I conceive policy dynamics as composed of a combination of stability and (different types of) change. Chapter 3 and Chapter 6 define these terms.
investigate the causal mechanisms linking the policy image and policy change and the intervening role of public opinion. I divide the hypotheses discussed above into causal processes and then evidence for these processes is gathered in the form of causal process observations (p.12) (Brady, Collier, and Seawright 2010a). I nest process tracing into a before and after comparison, which allows for variation in the independent and dependent variables, respectively the policy image and policy change, and comparability across cases (p.64) (Hancké 2009). I rely on a new form of quantitative text analysis, which has recently been introduced in the study of tobacco control, called topic modelling (Gilardi, Shipan, and Wueest 2016), to observe policy images in the discussion in the media.

Second, I use statistical analysis, in combination with comparative case studies, to support the evidence gathered with process tracing. I investigate how tobacco control evolves with frequency distributions of policy change in tobacco taxation and regulation, as it is common practice in the public policy literature (p.130) (Jones and Baumgartner 2005). Moreover, I investigate how the policy image affects public opinion by using interrupted time series and difference-in-difference-in-difference analyses. The former allows for testing the effects of a policy, by looking at how time trends, such as in public opinion, vary before and after the introduction of the policy (p.283) (Lee and Lemieux 2010). A difference-in-difference-in-difference analysis allows for observing the effects of a policy on specific target groups, by comparing the situation before and after the policy between those target groups and the rest of the population and between the countries where the policy was introduced and those where it was not (p.2-3) (Imbens and Wooldridge 2007). The qualitative analysis (and topic modelling) relies on archival sources, such as
newspaper articles, parliamentary minutes and tobacco industry documents. The quantitative analysis uses cross-national surveys and national polls.

**FINDINGS**

I answer the research question by introducing the punctuated gradualism theory, which claims that policies evolve through punctuations, but variation in policy dynamics is present and that this variation is explained by the fact that how a policy is framed affects public reactions, which in turn determine how this policy evolves. This theory relies on four main findings. First, I trace the causal processes which link the policy image to policy change and the mediating role of public opinion in a case study. I provide convincing evidence that the difference in how smoking in public places was discussed in the 1990s and in the 2000s in Ireland led to different public reactions, which in turn determined different policy evolutions. I suggest that in mid-1990s public smoking started to be discussed in terms of the protection of workers in public premises. This exclusive policy image did not raise public support, thus disincentivising politicians to act and, by allocating concentrated costs and benefits, it maintained the influence of powerful interests unaltered. As a result, the 1994 voluntary agreement was the transposition of self-regulatory practices already in place, namely an incremental change. Conversely, public smoking in mid-2000s was discussed with a strong focus on the protection of the public as a whole. This in turn triggered a strong public support for the ban, hence incentivising politicians to act and preventing powerful interests, such as publicans, from mobilizing effectively. The result was the introduction of a total smoking ban in public places at national level, namely a drastic change.

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5 As discussed in Chapter 4, tobacco industry documents are documents which were previously internal to the major tobacco companies and which were made publicly available with a court ruling in the US. These documents provide access to first-hand information which is unparalleled in any other policy area.
Then, I provide evidence for the empirically observable implications of the theoretical assumptions derived from the three bodies of literature on which the punctuated gradualism theory builds, namely the punctuated equilibrium, the policy responsiveness and the policy feedback theories. By looking at the distribution of policy change in tobacco taxation and regulation, I show that tobacco control evolves through punctuations. In other words, I find that tobacco control evolves through periods of more or less pronounced change and periods of stability, as assumed by the original punctuated equilibrium theory and the new variant proposed in this work. I also provide evidence that the policy image affects public opinion, by showing that the policy image determines the political support policy-makers receive for introducing a policy and interest allocation in society, as assumed by the policy responsiveness and the policy feedback theories, on which the theory proposed in this study builds.

I do so by demonstrating that how a policy is framed determines whether the introduction of this policy triggers political support for the party in government and that framing influences attitudes in the policy target groups. In fact, the policy responsiveness literature, on which the punctuated gradualism theory builds, assumes that decision-makers act on the basis of expected political returns. When they sense that a policy enjoys public support, thanks to the inclusive policy image with which the issue is discussed, they act in order to turn that support for the policy into political support for themselves. Finding that the introduction of a policy discussed with an inclusive policy image triggers political support for the decision-makers in power suggests that actual political returns depend on how a policy is discussed, thus providing the punctuated gradualism theory with indirect empirical support. Moreover, by taking attitudinal changes as a proxy for interest creation, I demonstrate that differently framed policies trigger different
allocations of interests in the society, as theorised by the policy feedback part of the punctuated gradualism theory.

The theory proposed in this study and the findings on which this theory is based need to be taken with some caveats, due to the complex relationship between policy prioritization and public opinion assumed by the theory and the limitations of the methods used. These caveats are discussed in detail in Chapter 3 and Chapter 4, as well as in the empirical chapters.

CONTRIBUTION

The contribution of this study is both theoretical and empirical. By bridging the gap between the punctuated equilibrium theory and the policy responsiveness and policy feedback strands of literature, the theory proposed in this study looks at how public opinion mediates the impact of the policy image on policy change, something overlooked in the literature. In so doing, it incorporates the role of public opinion into a complex approach to policy change. On the empirical level, this theory accounts for some important variation in policy dynamics which the literature cannot fully explain.

Complex (or synthetic, as I call them below) public policy approaches combine several explanatory factors, such as ideas, namely how policies are framed, and policy networks, namely the influence of powerful interests in the society. The punctuated equilibrium theory can be considered one of the most established complex approaches. By looking at how ideas framed in a new way swiftly enter the political agenda and how they slowly become rooted in society, the proponents of the punctuated equilibrium theory suggest that policies evolve through periods of stability punctuated by periods of instability, namely what they call punctuations (p.18) (Baumgartner and Jones 1993).
One of the main explanations for the punctuated evolution of policies is the shift in the policy image, namely how a policy is framed. When the issue gets to the political agenda, thanks to its policy image, decision-makers are empowered by the public to act (p.7) (John 2013a). Furthermore, the way in which an issue is framed also shifts the allocation of interests in society, thus facilitating policy change (p.7) (John 2013a). The importance of the policy image is widely acknowledged in the comparative politics literature as well (Culpepper 2011; Trumbull 2012).\(^6\)

The proponents of the punctuated equilibrium theory do not neglect public opinion dynamics, but they do not fully incorporate these dynamics in their framework. They suggest that how an issue is framed affects the tone in public attention and that decision-makers take into consideration how the public perceives an issue (p.61 and p.107) (Baumgartner and Jones 1993). Yet, they do not provide a compelling theoretical framework where the relationship between framing, public opinion and policy change is fully fleshed out. For instance, why certain policy images appeal to the public and hence empower decision-makers more than others, why they shift the allocation of interests and how all this affects policy dynamics are questions which have so far received partial answer. As such, although the punctuated equilibrium theory accounts for punctuations in policy dynamics, it cannot account for some important variation in policy dynamics.

For instance, in the 1990s the issue of smoking in public places entered the Irish political agenda. The debate on passive smoking did not gain attention from the public. The lack of public support and the strong opposition from societal actors prevented any attempt to legislate on smoking in public places. The result was the introduction of a voluntary agreement which simply formalized a set of rules already in place. Only a few years later, the issue entered the Irish political agenda

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\(^6\) The policy image is a combination of empirical information and feelings (p.26) (Baumgartner and Jones 1993). It refers to the particular way in which an issue is discussed with reference to public policy. This is discussed in detail in Chapter 2.
again. This time the possibility of a smoking ban received wide public support. After the smoking ban was proposed, citizens showed increasing support, became more in favour of tobacco control in general and they radically changed their behaviours. Strong of this wide public support, in 2004 Irish decision-makers introduced the world’s first smoking ban in public places, which remains one of the strictest today.

In this study I suggest that the role of public opinion may explain these different policy dynamics. In these instances the discussion on smoking in public places was framed in different ways and as such, was perceived differently by the public. These public reactions in turn affected the introduction of these measures. In Ireland in the 1990s the problem of smoking in public places was discussed mainly in terms of the protection of workers in the hospitality sector. This narrow focus did not raise public support. Rather, it encouraged employees and managers in the hospitality sector to collaborate and develop forms of self-regulation. Conversely, in the 2000s passive smoking started to be perceived in terms of public health. The public became very receptive to this new frame and public support incentivised decision-makers to introduce strong legislation.\(^7\) In conclusion, this study provides a theoretical and empirical contribution to the study of policy change.

**PLAN**

This work proceeds as follows. I commence by reviewing the claims the literature has so far put forward about policy change in tobacco control. Then, I emphasise the importance of public opinion in contemporary tobacco control, arguing that the study of policy change cannot overlook this aspect. Accordingly, I propose a variant of the punctuated equilibrium theory

\(^7\) The regulation of smoking in public places in Ireland is the topic of Chapter 5, which expands and provides evidence for the claims in this paragraph.
which incorporates the role of public opinion. Finally, I move to the empirical test of this theory. I trace the processes at the basis of the theory in a set of case studies and I empirically test the implications of the theoretical assumptions of the theory.

More specifically, Chapter 2 reviews the public policy approaches used to study policy change in tobacco control. In the light of this literature review, Chapter 3 introduces the theoretical approach used in this study, the punctuated gradualism theory, and formulates the hypotheses to be tested. Chapter 4 provides an overview of the research design used to empirically test these hypotheses. The following chapters constitute the empirical part of the study. In Chapter 5 I apply process tracing to the regulation of smoking in public places in Ireland in order to trace the effects of the policy image on policy change and the mediating role played by public opinion. In the remaining chapters I investigate the empirically observable implications of the three main theoretical assumptions of the punctuated gradualism theory. In Chapter 6 I show that tobacco control evolves through punctuations, by observing the frequency distribution of annual percentage in policy change in tobacco taxation and regulation across several countries and over time. In Chapter 7 I demonstrate that the policy image affects the political support the party in government receives for introducing a policy, by comparing the effects of the Irish and the Italian smoking bans introduced in mid-2000s with an interrupted time series analysis. In Chapter 8 I test whether the policy image affects the attitudinal changes among the members of the target groups of a policy with a difference-in-difference-in-difference analysis, by comparing the Italian and French tobacco advertisement bans introduced in the 1990s. Chapter 9 reviews the study, presenting its contributions as well as its limitations. It also offers some practical implications for policy-making and possible avenues for future research.
CHAPTER 2: EXPLAINING POLICY CHANGE IN TOBACCO CONTROL: A REVIEW OF THE PUBLIC POLICY LITERATURE

INTRODUCTION

This work seeks to answer the research question: what explains policy change in tobacco control? In order to find an answer, this section reviews the public policy literature on tobacco control, by distinguishing between foundational and synthetic approaches. Foundational approaches are categorized according to three concepts: policy diffusion, agenda setting (ideational approaches) and policy network. By focusing on how ideas and policy practices spread across countries and how cognitively bounded actors legislate at national level, the ideational approaches suggest that policies evolve through drastic changes. Conversely, those works using the concept of policy network emphasise the role of societal actors in bringing about policy change and they draw the opposite conclusion: policy change is mainly incremental.

The foundational approaches give rise to an empirical puzzle. Policies sometimes evolve drastically, as suggested by the ideational approaches. Decision-makers take sudden action on smoking at certain times in history, usually when major medical evidence on the harmful effects of smoking is brought about, and then they shift their attention elsewhere. Yet, most of the time policies evolve gradually, as the policy network strand would suggest. In the past the predominance of the tobacco industry in the national decision-making of several countries prevented the introduction of tough regulation for long periods of time. In conclusion, policies evolve through a combination of periods of inertia and periods of change: policy dynamics are characterised by both stability and instability.

As a result, I argue in favour of a theoretical approach to policy change that synthesizes the foundational approaches mentioned above and hence can account for both stability and
instability in policy dynamics. Three synthetic approaches are commonly used in tobacco control: the multiple stream approach, the advocacy coalition framework and the punctuated equilibrium theory. Although they all take into consideration the role of ideas and policy networks, only the punctuated equilibrium theory synthesizes the foundational approaches in a balanced manner, thus being able to fully account for both stability and instability in policy dynamics. By looking at how ideas framed in a certain manner swiftly enter the political agenda and how they slowly become rooted in society, the punctuated equilibrium theory suggests that policies evolve through periods of stability punctuated by periods of instability, namely punctuations.

The punctuated equilibrium theory has been subject to several amendments in the last years, such as the so-called friction theory. The proponents of the friction theory seek to refine the punctuated equilibrium theory in order to explain variation in policy dynamics, by looking at a central part of the theory, namely political institutions. Policies are characterised by a combination of periods of stability and instability: what they call punctuations are a constant feature of policies, as claimed by the original punctuated equilibrium theory. Nonetheless, the proponents of the friction theory suggest that this combination of periods of stability and instability varies according to the configuration of the national institutional setting. In other words, political institutions determine whether policies evolve more punctuatedly gradually or drastically.

In a similar vein, this work looks at another central part of the original punctuated equilibrium theory, the policy image, namely how an issue is discussed in the political arena. More specifically, the theory proposed in the next chapter looks into the dynamics whereby the framing of a policy, namely its policy image, affects policy change. In so doing, this theory
focuses on a specific aspect which is underdeveloped in the original punctuated equilibrium theory: the role of public opinion. The policy feedback and policy responsiveness strands of the public policy literature can help shed light on this aspect, by looking at how public opinion reacts to different policy images and in turn how decision-makers follow public opinion. By building on the policy feedback and policy responsiveness strands, the next chapter seeks to incorporate the role of public opinion into the punctuated equilibrium theory.

This chapter seeks to find an answer to the research question by discussing how mainstream public policy approaches have so far investigated how tobacco policy evolves and the most important factors in explaining policy dynamics. In so doing, it opens the way to the introduction of a new variant of the punctuated equilibrium theory, called punctuated gradualism theory, in Chapter 3. The punctuated gradualism theory borrows the concept of punctuations and the role of the policy image in policy change from the punctuated equilibrium theory, but it incorporates the mediating role of public opinion, central in the policy feedback and policy responsiveness strands. As such, the punctuated gradualism theory explains some important variation in policy dynamics which the literature cannot. In fact, the focus on the mediating role of the public opinion allows for the theory introduced below to observe different types of policy dynamics, what I call punctuated equilibrium and punctuated gradualism, in turn associated with different types of policy change. Chapter 4 discusses the mixed method approach, which combines process tracing, cross-case comparison and statistical analysis, used to test the theory introduced in this work and the following chapters proceed with the empirical analysis.

FOUNDATIONAL APPROACHES

In the study of public policy ideas play a central role in the traditional literature on social learning (Hall 1993), policy diffusion (Berry and Berry 1990; Hansen 1983), policy transfer
(Dolowitz and Marsh 1996; Dolowitz and Marsh 2000) and agenda setting (Downs 1972; Schattschneider 1975; Simon 1953). The diffusion of ideas and practices across countries is mediated by domestic decision-making dynamics, which in turn can be explained by the cognitive limitations typical of decision-makers. Once new ideas and practices are established in a country, they tend to spread quickly across neighboring countries. Indeed, decision-makers can allocate resources and attention only to a limited array of issues at a time, the so-called bottleneck attention effect (p.302) (Simon 1985), and when new ideas enter the public debate a sudden and drastic shift in political attention occurs (Downs 1972; Schattschneider 1975).

The study of tobacco control addresses questions such as where ideas originate, how they spread across countries and how national decision-makers make use of them (Cairney 2007a, 2007b; Cairney, Studlar, and Mamudu 2012; Studlar 2007). Berridge (2004) (p.122) argues that early medical evidence established a relationship between lung cancer and smoking in the 1960s. The discussion on smoking was focused on individual responsibility. A few decades later, new medical evidence exposed the health risks related to passive smoking: the discussion started to focus on those who unconsciously were subject to the harmful effects of smoking, such as children and bystanders (p.122) (Berridge 2004). This brought the necessity to regulate smoking in public places to the attention of politicians and led to the sudden introduction of tobacco control measures across countries throughout the 2000s: in less than 10 years more than 30 Western countries introduced smoking bans (p.64) (Eriksen et al. 2015). In conclusion, ideational

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8 I am aware of the nuances which differentiate policy diffusion and policy transfer (Marsh and Sharman 2009). Yet, the focus of this work is not on where ideas come from but what happens when they enter the political agenda, as discussed below. As such, throughout the work I generally refer to the dynamics which bring ideas and practices from the outside of the political system under analysis with the concept of policy diffusion.

9 The difference between policy change and policy dynamics and the meaning of terms such as drastic and swift are clarified in the following chapters.
approaches based on policy diffusion and agenda setting dynamics conceive policy change as a sudden and radical response to new ideas (p.9) (Béland and Cox 2010).

Other foundational approaches focus on the concept of policy network (Heclo 1977; Maass 1951; Van Waarden 1992a, 1992b), which refers to the close relationship between public and private actors on the basis of specific issues. This strand of the public policy literature focuses specifically on the role of business in national decision-making, in the context of what Cairney (2007a) (p.47) calls producer dominated policy networks. The main argument is that decision-making is compartmentalised into policy subsystems where business monopolises decision-making, thanks to its importance for the national economy (p.175-177) (Lindblom 1977). In several countries the long-term relationship between the tobacco industry and key ministries and departments is studied through the lenses of policy network (Cairney 2007a; Cairney, Studlar, and Mamudu 2012). The monopoly exerted by the industry and its allies on tobacco policy is one of the main explanations for the slow introduction of tobacco control measures throughout the 1980s in most Western countries. In contrast to ideational approaches, policy network approaches conceive policy change as mainly incremental.

SYNTHETIC APPROACHES

Foundational approaches can be reconciled with broad public policy concepts: policy diffusion, agenda-setting and policy network. In other words, they identify respectively the diffusion and

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10 In line with the traditional literature on state government innovation and policy diffusion (Berry and Berry 1990; Hansen 1983), the tobacco control scholarship demonstrates that the diffusion of new ideas in tobacco control is facilitated by the presence of international organizations (p.43) (Cairney, Studlar, and Mamudu 2012) and cultural/epistemic communities, such as the Protestant moral populism in place in Anglo-Saxon countries (p.286) (Marmor and Lieberman 2004). Another strand focuses more on policy diffusion within countries (Albæk, Green-Pedersen, and Nielsen 2007; Asare, Cairney, and Studlar 2009; Marmor and Lieberman 2004; Studlar 2010). Recent accounts shift the attention to the role of public opinion in mediating policy diffusion. The social contagion model (Pacheco 2012), discussed in more details below, posits that policy implementation abroad changes public attitudes and that governments are responsive to these changes.

11 Those approaches which focus on policy diffusion and agenda-setting are part of the common field of ideational research, which studies the role of ideas in public policy. Ideational approaches share similar premises and draw similar conclusions with respect to policy change.
reception of ideas by policymakers and the interaction among societal actors as the main drivers of policy change. Nonetheless, as underlined by John (2003) (p.487), these processes interact with each other and a theoretical framework which takes clear stances on the interaction between them and on how they affect policy change is needed. As such, I argue that a synthetic approach, which takes into consideration both sets of processes, is necessary. In fact, ideational approaches suggest that policy change is a drastic reaction to new ideas and practices, whereas policy network approaches focus on incremental change brought about by societal actors. Yet, both views are right at the same time: already in the 1990s the public policy literature demonstrated that policies evolve through a combination of periods of stability followed by periods of instability. Accordingly, in order to account for both stability and instability in policy dynamics we need to synthesize the foundational approaches discussed above.

Studies of policy dynamics in tobacco control have so far used three synthetic approaches: the multiple stream approach, the advocacy coalition framework and the punctuated equilibrium theory. The multiple stream approach focuses on how policy change is triggered by the combination of different favorable conditions, such as the shift of competences to a ministry more open to certain ideas and the mobilization of like-minded societal actors. The advocacy coalition framework emphasizes the importance of societal actors in supporting certain ideas and how these ideas affect policy change. The punctuated equilibrium theory focuses on how ideas and policies enter the political arena and how societal actors interact with the public authority. The proponents of the punctuated equilibrium theory conceive policy change as a cyclical event where the policy arrangements in place, supported by determined societal actors and ideas, are

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12 In this study I use the customary terminology used by the public policy literature to refer to these three approaches. Nonetheless, terms such as theory, framework and model have different meanings. A detailed discussion on these terms is provided below.
suddenly disrupted by the introduction of new policy arrangements, supported by new societal actors and ideas.

Cairney (2009) uses the multiple stream approach (Kingdon 1995; Kingdon and Thurber 2011; Zahariadis 2003) to investigate the introduction of tobacco control policies in the UK. By starting from the assumption that “while we can identify the strength and promotion of ideas, we know much less about the receptivity to ideas in particular circumstances” (p.475) (Cairney 2009), Cairney (2009) shows that windows of policy change, called policy windows, arise when a new problem comes about, attracting attention from key decision-makers, such as health ministers, and triggering a shift in public mood. Policy windows in turn allow for issues to enter the political agenda. The creation of policy windows depends on the policy environment, more specifically the institutional rules that regulate agenda setting, and the relationship between societal actors and public authority. The presence of policy windows in the UK determined the shift in policy paradigm in tobacco regulation and eventually the introduction of smoking bans (p.485) (Cairney 2009).

The advocacy coalition framework (Sabatier 1988; Sabatier 1998; Sabatier and Jenkins-Smith 1993) is applied to policy change in tobacco control in several studies (Cairney 2007a; Cairney, Studlar, and Mamudu 2012). Cairney (2007a) studies how in the UK the dominant coalition in tobacco policy composed of the tobacco industry and key government departments, such as the Treasury Ministry, reacted to the mounting medical evidence on the effects of smoking in the 1980s and the related shift in policy paradigm. Despite maintaining its core belief, namely that tobacco production is beneficial to the national economy, this coalition initially reacted to the new wave of medical evidence by mutating what the literature calls policy beliefs (p.57-58)
The advocacy coalition framework distinguishes between core and policy beliefs. Core beliefs are fundamental views on abstract issues and are unlikely to change. Policy beliefs, instead, represent the translation of those core beliefs into the public policy debate (Table 1, p.45) (Sabatier 1988).

A similar approach is taken by Albrek (2004) (p.5), who argues that the imposition of increasingly high duties on tobacco products was accepted by the Danish tobacco industry throughout the 20th century because taxation did not violate the industry’s two fundamental core beliefs, namely that tobacco consumption is a private affair and that it cannot be regulated by legal means.
positive feedback effects. The proponents of the punctuated equilibrium theory conceive policy change as characterized by periods of negative feedback effects, characterised by the monopoly exercised by the incumbent policy network in policy-making, and periods of positive feedback effects, associated with the access of a new issue (or a new framing of an old issue) to the political agenda, sustained by a new coalition of policy actors.

Although these synthetic approaches take into consideration both agenda setting and policy network dynamics, the public policy literature agrees that the multiple stream approach and the advocacy coalition framework grant more importance respectively to ideas and policy networks, thus being more focused respectively on change and stability (p.8 and p.10) (John 2013b). The multiple stream approach and its focus on policy windows as fortunate conjectures where policy change occurs in part overlooks why and how policies remain stable for a long time (p.10) (John 2013b). Instead, the advocacy coalition framework is better able to explain why policies remain stable over a long period of time, rather than why they change (p.8) (John 2013b). Conversely, the punctuated equilibrium theory accounts for both positive and negative feedback effects, with the role of ideas and policy network, associated respectively with periods of instability and stability. As such, it accounts for both stability and stability in policy dynamics (p.18) (Baumgartner and Jones 1993).

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15 The use of the concepts of negative and positive feedback effects is common practice in the literature on public policy. The former refer to those mechanisms which prevent change and perpetuate the same dynamics over time, while the latter refer to those mechanisms which trigger change.

16 The terms used for the two types of mobilization, associated respectively with negative and positive feedback effects, are Downsian and Schattschneider. Downsian mobilization is associated with the establishment of a new policy subsystem (or policy network), whereas Schattschneider mobilization refers to the destruction of the policy subsystem in place (or policy network) (p.97-100) (Baumgartner and Jones 1993), as discussed in more detail below.

17 It should be noted that the advocacy coalition framework has recently acknowledged the possibility of drastic change in its new developments (Sabatier and Weible 2007). Conversely, despite the great success in terms of application (Jones et al. 2016), the multiple stream approach has not been subject to significant revisions, until very recently (Knaggard 2015; Zohnhöfer, Herweg, and Rüb 2015). Yet, little attention on stability in policy dynamics is still present.
POLITICAL INSTITUTIONS AND POLICY CHANGE

The punctuated equilibrium theory provides a well-balanced synthesis of the foundational approaches, thus being able to account for both stability and instability. The recurrent combination of positive and negative feedback effects, respectively related to periods of instability and stability, leads to the recurrence of rare but drastic policy changes which disrupt equilibria (p.18) (Baumgartner and Jones 1993). In the original punctuated equilibrium theory the process through which issues enter the political agenda, which represents the first step to policy change, is determined by two factors: the political venue and the policy image (p.9) (John 2013a).18

An important development of the punctuated equilibrium theory, namely the so-called friction theory (Baumgartner et al. 2009; Jones et al. 2009), focuses on the political venue, by looking at how policy dynamics vary across different national institutional settings. In so doing, the friction theory builds on those strands of the public policy scholarship which deal with how policy responsiveness is mediated by political institutions.

In a similar vein, the aim of this work is to focus on the other central aspect of the punctuated equilibrium theory, namely the policy image. By bringing the insights of the policy feedback and policy responsiveness strands into the study of policy change, I incorporate the effects of public opinion reactions to the policy image on policy change into the punctuated equilibrium theory.

18 The proponents of the punctuated equilibrium theory acknowledge that several dynamics underlie the process through which an issue enters the political agenda, such as venue shopping and strategic re-framing (p.35-36 and p.151) (Baumgartner and Jones 1993). In other words, actors in favour or against a particular issue can strategically choose to address the most like-minded political venue and/or change how an issue is framed to make that issue more acceptable for certain decision-makers. This study does not focus on these dynamics, as they have been discussed in a compelling way by the new developments of the punctuated equilibrium theory mentioned below.
This section reviews the policy responsiveness literature and the contribution made by the friction theory. The following section focuses on the role of the policy image in the original punctuated equilibrium theory and how the policy feedback and policy responsiveness strands can help shed light on how the policy image affects policy change by looking at public opinion.

Normative (Arrow 1963; Dahl 1971) and empirical (Downs 1957; Schattschneider 1975) theories of democracy focus on whether and to what extent politicians (should) listen to the public. From a public policy perspective, the policy responsiveness literature suggests that when public support for a policy is present, legislators will act following this support (Arnold 1992; Bailey 2001; Denzau and Munger 1986; Page and Shapiro 1983; Verdier 1995), driven by electoral considerations (p.148) (Bertelli and John 2013). The American public policy literature suggests that various aspects mediate policy responsiveness (p.651) (Manza and Cook 2002): whether the Congress or the President is the relevant policy-making body (p.176; p.558-559) (Page and Shapiro 1983; Stimson, MacKuen, and Erikson 1995) and the type of policy domain (p.3-4) (Wlezien 2004). Yet, only recently the policy responsiveness literature has started to deal with variation in policy dynamics across countries (Soroka and Wlezien 2005; Wlezien and Soroka 2012). The focus has moved to traditional institutions, building on rational choice institutionalism (Hall and Taylor 1996) and especially the veto players argument (Scharpf 1988, 2006; Tsebelis 2002): federalism, executive-legislative imbalance and the electoral system (Hobolt and Klemmensen 2005; Hobolt and Klemmensen 2008; Wlezien and Soroka 2012).  

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19 The role of the public opinion in driving decision-makers’ action is central also for those decision-makers who are not directly elected, such as regulators in national and international agencies. By building on the traditional public interest theory (Levine and Forrence 1990; Mitnick 1980), a recent body of the regulation literature has focused on the legal-procedural aspects of delegation from a principal agent perspective (Croley 2008; Feintuck 2005; Haber 2007). Some of these studies, such as Yackee (2006) (p.728-729), demonstrate that regulators follow public opinion in order to exploit public support and reduce the control exerted by legislators.

20 The comparative literature looks at policy responsiveness through different theoretical lenses, drawing different conclusions. A strand of the comparative politics literature suggests that majoritarian rules are more responsive to the public (Boix 1999; Lipset and Rokkan 1967). Another strand argues that proportional systems are more congruent with the majority of voters (Lijphart
Particular attention has been given to party control over government (p.169; p.676) (Hobolt, Tilley, and Banducci 2013; Soroka and Wlezien 2005) and how it varies according to the electoral system. The argument put forward by the proponents of this strand is that in disproportional systems governments are more responsive, due to party control over government. When a single party has a firm control over the government, it can impose its political agenda more easily due to less transaction costs (p.1414) (Wlezien and Soroka 2012) and, more importantly, individual politicians (and their parties) are easily identifiable as the proponents of legislation (p.170-171) (Hobolt, Tilley, and Banducci 2013) and hence easily held accountable by the public.21 Recent evidence highlights the importance of party control over government in policy responsiveness in tobacco control (p.171) (Marshall 2016).

By building on the policy responsiveness literature, the friction theory specifies the punctuated equilibrium theory, by focusing on the effects of political institutions on policy change.22 In so doing, this theory demonstrates that although policy dynamics are similar across countries,
institutional differences account for some important variation. These studies observe that punctuations, namely the combination of periods of stability and periods of change, are a constant feature of policies across countries, but in some countries policies evolve more punctuatedly gradually than in others. In political systems with few frictions, such as in unitary countries with unicameral parliaments, issues get more easily to the political agenda and hence policies evolve more punctuatedly gradually (p.868) (Jones et al. 2009). The proponents of the friction theory provide evidence for the importance of institutional frictions in determining punctuations also by looking at different types of policy commitment: inputs, such as media attention; processes, such as political commitment in the form of parliamentary hearings, laws and so on; outputs, such as budget expenditures (Figure 1 p.611) (Baumgartner et al. 2009). In so doing, they demonstrate that the degree of punctuation is smallest for inputs and highest for outputs, because the decision-making process associated with outputs is usually characterised by more institutional frictions (p.613) (Baumgartner et al. 2009).

In conclusion, the friction theory focuses on a specific aspect of the punctuated equilibrium theory: the role of institutions. In so doing, the friction theory demonstrates that in some countries policies evolve more punctuatedly gradually than in others. In a similar vein, this study focuses on another central aspect of the original punctuated equilibrium theory, namely the policy image. The ensuing section emphasises the centrality of the policy image in the punctuated equilibrium theory. It discusses how, by looking at the role of public opinion, other strands of the public policy literature, such as the policy responsiveness and policy feedback theories, can help specify how the policy image affects policy change.

It should be noted that the proponents of the original punctuated equilibrium theory acknowledge that variation in policy dynamics across policies, for instance, is present, but they do not go as far as the friction theory in measuring and explaining this variation.
POLICY IMAGE, PUBLIC OPINION AND POLICY CHANGE

The proponents of the punctuated equilibrium theory argue that whether an issue enters the political agenda depends on the fit between the political venue and the policy image (p.9) (John 2013a). The policy image is considered as a combination of empirical information and emotive appeal (p.26) (Baumgartner and Jones 1993), which in turn relies on common values, such as fairness and economic growth (p.185) (Cairney 2011). The proponents of the punctuated equilibrium theory suggest that if thanks to its policy image, the issue gets to the political agenda, decision-makers are empowered by the public to act (p.7) (John 2013a). Furthermore, in the original variant of the punctuated equilibrium theory the way in which an issue is framed shifts the allocation of interests in society, thus affecting policy change (p.7) (John 2013a). The discussion of an issue in a negative tone leads to the destruction of the policy subsystem in place: what the literature defines Schattschneider mobilization. The destruction of the old policy subsystem is usually followed by the emergence of a new policy subsystem and its consolidation during time: what the literature calls Downsonian mobilization (p.92-93) (Baumgartner and Jones 1993). In conclusion, a shift in the policy image facilitates policy change. How the policy image affects policy change has also received attention in comparative works, such as Culpepper (2011) and Trumbull (2012).

24 The punctuated equilibrium theory acknowledges that the policy image can be the result of the combination of several factors, such as the type of issue itself, the political context and strategic framing on the part of political and societal actors. Nonetheless, this work focuses on the effects of a specific type of policy image on how policies evolve, rather than on the dynamics which give rise to that specific image. The latter are discussed in detail in what I call the politics of attention approach mentioned above.

25 Trumbull (2012) investigates how framing affects the allocation of interests and eventually policy change (p.26-27). He does so by studying the liberalization of retailing in France and Germany. In the former the introduction of large-scale distribution was prominent, whereas in the latter traditional retailers managed to mitigate this trend. The reason lies in the different coalitions supported in turn by different legitimating narratives (close in spirit to the concept of policy images). In France the main narrative based on low prices, namely an access narrative, triggered the creation of a coalition between large retailers and consumer groups, which eventually pushed for a strong reform of the retailing system (p.101-102) (Trumbull 2012). Conversely, in Germany the narrative of small shop-keeping as champion of the family life, namely a protection narrative, triggered a cross-class coalition between small retailers, workers and the Catholic right, which pushed reforms back (p.100-101) (Trumbull 2012). Furthermore, as a result of the analysis of the reforms of corporate control and executive pay in the 1990s in Japan and in Continental Europe, Culpepper (2011) shows that when media attention to an issue starts to be increasingly negative, such as
Yet, why certain policy images appeal to the public and hence empower decision-makers more than others, why they shift the allocation of interests thus triggering different combinations of the two types of mobilization mentioned above and how all this affects policy change, are questions which have so far received partial answers. Baumgartner and Jones (1993) (Table 6.2, p.115) find that certain policy images are more likely to be associated with a positive or a negative tone in public attention. Furthermore, they acknowledge that public opinion plays an important role in affecting political attention (p.61 and p.107) (Baumgartner and Jones 1993). Yet, the relationship between the policy image, public opinion and policy change is not theoretically or empirically fleshed out. In fact, little if no attention is paid to decision-makers’ incentives to select policies and push them through the decision-making process (p.21-22) (John 2013b). Moreover, as it has already been noted by the public policy literature, the proponents of the punctuated equilibrium theory find identities and not (causal) relationships between public opinion, political attention and policy change (p.21;p.920) (John 2013b; Sharp 1994).

The policy responsiveness literature discussed above already sheds light on the mechanisms through which decision-makers act in response to public support for a policy: electoral incentives push decision-makers to focus on those issues which enjoy high public support. For its part, the policy feedback literature can help explain those mechanisms through which that public support is created, by focusing on how the policy image affects public opinion. Furthermore, the policy feedback literature can also explain how the policy image affects interest allocation. In conclusion, the insights from these two strands of the public policy literature and their focus on public opinion are essential for explaining how the policy image affects policy change. In this

when media coverage focuses on scandals in executive pay (Figure 6.6, p.163), the configuration of interests at play as well as policy outcomes differ drastically with respect to a situation where media attention is low and relatively positive (p.145-146). Although Baumgartner and Jones (1993) mention the concept of policy responsiveness (Chapter 7, for instance) and discuss the classics of the policy feedback literature (Chapter 3, for instance), they do not fully incorporate these two insights into their framework.
section I commence by discussing how the policy responsiveness and policy feedback strands can help explain why certain policy images trigger public support and hence incentivise decision-makers to act. Then, in the final part I focus on how the policy image affects the allocation of interests in society.

The literature which has most consistently dealt with how public opinion reacts to framing is the policy feedback literature (Gilens 1999; Gusmano, Schlesinger, and Thomas 2002; Haselswerdt and Bartels 2015; Pacheco 2013; Soss and Schram 2007; Svallfors 2010). The proponents of this literature look at how the public reacts to public policy, by focusing on the process of signaling, namely information exchange between the political elites and the public. More specifically, the focus is on how elites frame policies and how these frames are perceived by the public (Brewer 2003; Gusmano, Schlesinger, and Thomas 2002; Johnson, Brace, and Arceneaux 2005). This strand builds on the historical institutionalist tradition for the role of social and political elites (Pierson 1993; Skocpol 1992) and on the literature on political communication for the role of framing (Arbour 2014; Budge and Farlie 1983; Holian 2004; Petrocik 1996; Zaller 1992).

This process of signaling (or framing) works by emphasizing certain characteristics of the policy, such as whether a policy has broad effects on the society as a whole or proximate effects on specific target groups (p.734-735; p.121) (Gusmano, Schlesinger, and Thomas 2002; Soss and Schram 2007). It should be noted that proximity may be conceived in different ways: it may refer to proximity in terms of geographical distance, but also in terms of social relations (p.121) (Soss and Schram 2007). Public opinion reactions to a policy depend on whether that policy bears broad effects on the society as a whole or proximate effects only on certain segments (or whether it is framed as such).
The policy feedback and policy responsiveness strands help shed light on whether the policy image triggers public support for a policy and why decision-makers act following that support. In other words, they explain why certain policy images appeal to the public and hence empower decision-makers more than others. Policies framed as bearing consequences for the society as a whole are more likely to receive public support and decision-makers are more likely to act following that support.

The literature on policy feedback can also help explain how policy images shift the allocation of interests, triggering different combinations of the two types of mobilization mentioned above. Indeed, other work on policy feedback, which builds on the regulation strand of the public policy literature, argues that not only does the policy image determine the support for a policy, but it also affects the perceived allocation of costs and benefits of a policy and hence the allocation of interests in the society. By building on the traditional work in public policy and regulation studies which investigate how policy makes politics (Lowi 1964; Wilson 1980) and on the historical institutionalist approaches to the role of elites in state formation (Skocpol 1991), some work on policy feedback in the 1990s suggests that political action shapes individuals’ behaviours by constraining or empowering certain actors and by shaping their perceptions (Campbell 2012; Pierson 1993; Schneider and Ingram 1993). The main argument of this strand is that political action triggers the social construction of target populations (p.334-335) (Schneider and Ingram 1993), contributing to the mobilization of public constituencies or interest groups. Examples are the creation of organizations of veterans as a result of the establishment of war

27 To a certain extent, also the public policy literature on issue ownership has looked into the role of framing. The literature on issue ownership argues that voters identify the most credible proponent of an issue (Bélanger and Meguid 2008). In its original form (Budge and Farlie 1983; Petrocik 1996), the issue ownership scholarship deals specifically with the effectiveness of political campaigns, maintaining also nowadays a strong interest in political communication (Arbour 2014; Holtan 2004). Whether voters associate an issue with particular politicians depends on these politicians’ efforts to frame this issue as their own (p.826) (Petrocik 1996).
pensions in the US (p.59) (Skocpol 1992) and the emergence of strong interest groups as a consequence of the privatization wave in the UK in the 1980s (p.67-68) (Dunleavy 1991).

The central claim is that by imposing costs and benefits on the society, public policy creates interests: “it is at the intersection of public policy and the wants and values of private actors that we discover interests” (p. 24) (Heinz 1993). In this vein, a policy imposing concentrated costs and benefits (or framed as such) creates concentrated interests with the ability to coordinate and mobilise. The result is a mode of politics characterized by powerful and highly coordinated actors which compete to influence decision-making: what Wilson (1980) calls interest group politics (p.368). Conversely, diffuse costs and benefits create diffuse interests, which most of the times remain latent. The result is a mosaic of different societal actors which lack coordination and capacity to act effectively: what Wilson (1980) calls majoritarian politics (p.367). In conclusion, the concentration of costs and benefits brought by a policy (or its policy image) determines the allocation of interest in society.

Finally, the importance of framing and public reactions in the context of tobacco control is acknowledged also in other disciplines, such as the behavioural literature, which may also be useful in refining the punctuated equilibrium theory. The public health communication literature investigates the effects of framing in health messages on behavioural change and the welfare economics literature focuses on how the public reacts to public health policies. Since the seminal work by Meyerowitz and Chaiken (1987), the risk framing hypothesis has come predominantly

28 I acknowledge that Wilson (1980) (p.366-370) theorizes four modes of politics depending on whether the policy allocates diffuse or concentrated costs and benefits. Interest group politics is associated with concentrated costs and benefits, entrepreneurship politics with concentrated costs and diffuse benefits, capture politics with the opposite situation and majoritarian politics with diffuse costs and benefits. As the aim of this work is not categorizing policy types, I focus on the two extreme scenarios, namely the situation where costs and benefits are concentrated and the situation where costs and benefits are diffuse. This limited focus increases the theoretical power of the punctuated gradualism theory, without affecting the empirical accuracy in a significant manner.
to the fore in public health communication and has become widely used to explain health behaviours (Gallagher and Updegraff 2012; Rothman and Salovey 1997; Rothman et al. 1993; Toll et al. 2007; Toll et al. 2014; Van ’t Riet et al. 2014). By building on the prospect theory, which posits that individuals underweight likely outcomes with respect to certain ones and hence assume risk averse behaviours when gains are sure, Rothman and Salovey (1997) (p.9) put forward the distinction between detection and prevention behaviours. Detection behaviours, such as cancer screening, bear risks for the individuals and thus loss framed messages are more persuasive, while relatively riskless prevention behaviours, such as quitting smoking, are better addressed with gain framed messages. Although the evidence is mixed for detection behaviours, consensus in the literature is present on the higher effectiveness of gain framed messages in prevention behaviours, such as quitting smoking (p.2; p.2) (Gallagher and Updegraff 2012; Toll et al. 2007). In conclusion, the public health communication literature provides confirmation that framing significantly affects (health) behaviours.

The welfare economics literature (Bernheim and Rangel 2004; Gruber and Köszegi 2004; O’Donoghue and Rabin 1999) suggests that the public may react differently to the same policy depending on how that policy is perceived. For instance, where the introduction of tobacco control measures is perceived as bearing costs for smokers, this will trigger a negative reaction known as reactance (Rains and Turner 2007), namely a reaction common among individuals subject to the restriction of their freedom. Reactance in turn can lead to different behaviours, from simple counter-arguing to more active behaviours, such as organizing in smokers’ groups and becoming politically active in order to prevent further regulation. Conversely, the scenario where the introduction of tobacco control measures bears benefits for smokers, thus triggering a positive reaction among them, can be explained with the concept of commitment. It has been
proved that smokers sometimes perceive tobacco control measures as credible commitment devices which might help them quit smoking (p.8) (Odermatt and Stutzer 2013) and in this case they will be more in favour of tobacco control. As such, the welfare economics literature provides further support for the fact that policies bear different effects on society based on how they are perceived.

In summary, the policy feedback literature emphasises the importance of framing in how the public reacts to a policy: a policy image which appeals to everyone will trigger support for the policy under discussion. For its part, the policy responsiveness literature posits that decision-makers will respond to the public, by trying to capitalise on that support for the policy and turning it into political support for them and their parties. The policy feedback theory argues also that different policies allocate different costs and benefits, thus putting in place different types of politics. Policies framed as bearing concentrated interests will create powerful and highly coordinated interests which compete to influence decision-making. Conversely, policies framed as bearing diffuse costs and benefits will create uncoordinated actors which lack the capabilities to mobilise and influence decision-making. The central role of framing and public perceptions is also emphasised by several strands of the behavioural literature.

In conclusion, I show that the policy responsiveness and policy feedback strands can help answer the research question from which this work starts, namely what explains policy change in tobacco control. The next chapter incorporates these insights into a new variant of the punctuated equilibrium theory. By borrowing the concept of punctuations and the role of the policy image from the punctuated equilibrium theory and by incorporating the mediating role of public opinion, central in the policy responsiveness and policy feedback strands, I introduce the punctuated gradualism theory. The focus on the mediating role of the public opinion allows for
the theory introduced below to observe different types of policy dynamics, what I call punctuated equilibrium and punctuated gradualism, in turn composed of different types of policy change.

CONCLUSION

This chapter discussed the public policy approaches used to analyse policy change in tobacco control. Some approaches have a too narrow focus of analysis and hence they cannot explain the complexity of policy dynamics. Others are more equipped to account for a complex reality, but they still overlook important aspects of how policies evolve. Foundational approaches, such as those based on ideas and policy networks, fall short in accounting for the fact that policies sometimes evolve drastically, but most of the times incrementally. Synthetic approaches, like the punctuated equilibrium theory and its new developments, have a broader picture of reality. Indeed, these approaches can account for punctuations in policy dynamics and also for the variation in punctuations across countries, namely why in some countries policies evolve more punctuatedly gradually than in others. Yet, they overlook important aspects of how policies evolve. Indeed, the punctuated equilibrium theory and its new developments do not specify how the policy image affects policy change.

The policy feedback and the policy responsiveness strands provide theoretical basis to explain how the policy image affects policy change and, more specifically, why certain policy images trigger public support for a policy, why decision-makers respond to that support and also why different policy images allocate different interests in the society. In so doing, these bodies of literature focus on the mediating role of public opinion and how public opinion reacts to different policy images. They suggest that policies that are conceived as bearing effects on the society as a whole will trigger public support and that decision-makers will act on the basis of that support. Furthermore, they suggest that policies bearing concentrated costs and benefits on the society
will trigger a situation in which strong and coordinated interests are in competition to influence the decision-making process.

In the light of the literature review carried out above, the next chapter introduces a new variant of the punctuated equilibrium theory, which I label punctuated gradualism theory. In order to provide a valid answer to the research question, this theory borrows the concept of punctuation and the central role of the policy image from the original punctuated equilibrium theory and the focus on public opinion dynamics from the policy responsiveness and policy feedback strands. As such, not only does the punctuated gradualism theory account for punctuations in policy dynamics, but it can also account for variation in policy dynamics. Indeed, the main argument is that policies can evolve differently depending on the public reactions to the prioritization of policies underlying different policy images. In other words, how an issue is discussed affects public reactions and this in turn affects the ease with which that issue goes through the political agenda and how societal actors interact between each other, thus determining how the policy evolves. The following chapters set out the research design used in this work and proceed to the analysis.
CHAPTER 3: THE PUNCTUATED GRADUALISM THEORY

INTRODUCTION

The previous chapter showed that the policy feedback and policy responsiveness strands can help answer the research question, by explaining why certain policy images trigger public support and shift the allocation of interests in the society and why decision-makers will follow this public support. This chapter discusses how these processes affect policy change and in turn policy dynamics. In so doing, I introduce a new variant of the punctuated equilibrium theory, called punctuated gradualism theory. The latter builds on the policy responsiveness and policy feedback strands of scholarship and specifies the effects of the policy image on policy change, by focusing on the mediating role of public opinion. This theory suggests that policies can evolve differently depending on the public reactions to the prioritization of policies underlying different policy images. In other words, how an issue is discussed affects public reactions and this in turn affects the ease with which that issue goes through the political agenda and how societal actors interact between each other, thus determining how the policy evolves. The inclusion of public opinion dynamics in a complex approach to policy change is the main theoretical contribution of this study.

The punctuated gradualism theory suggests that different types of policy image are associated with different types of policy change and in turn different types of policy dynamics: policies can evolve more punctuatedly drastically or gradually. Although the combination of positive and negative feedback effects, respectively related to stability and instability in policy dynamics, is a common feature of policies, as acknowledged by the punctuated equilibrium theory, this combination varies in degree and intensity. As such, I refine the concept of policy dynamics so far conceived by the punctuated equilibrium theory: this study introduces the concept of
punctuated gradualism. Different policy images are associated with different types of policy change and in turn different types of policy dynamics, namely punctuated equilibrium and punctuated gradualism. Accounting for variation in policy dynamics which the literature cannot explain is the main empirical contribution of this study.

This chapter proceeds as follows. First, the concept of punctuated gradualism is introduced. I posit that although the combination of periods of stability and instability is a common feature of public policy, this combination varies in intensity and degree. Second, I introduce the punctuated gradualism theory, which focuses on the role of the policy image and public opinion, by building on the punctuated equilibrium theory, as well as on the policy responsiveness and policy feedback strands. In so doing, I summarize the insights from these bodies of literature, discussed in detail in Chapter 2, and I formulate the hypotheses to be tested in the chapters below. Then, I introduce two different types of policy prioritization, namely interest group and majoritarian, which are underpinned by different policy images. I suggest that these different types of policy prioritization are associated with different policy dynamics, respectively punctuated gradualism and punctuated equilibrium. I proceed to discussing the caveats to the punctuated gradualism theory. The final section emphasises the empirical and theoretical contribution of the theory proposed in this study.

Chapter 4 provides an overview of the research design used to empirically test the punctuated gradualism theory. The latter is divided into processes, which are then investigated through process tracing in a before and after comparison. In this vein, I show that how an issue is discussed affects the ease with which that issue goes through the political agenda and the concentration of power in society. In the following chapters I use statistical analysis to test the assumptions of the punctuated gradualism theory.
Before providing an answer to the research question what explains policy change, I need to explain how policies change and evolve over time. Although more recent categorizations of policy change have been introduced by the literature (Howlett and Cashore 2009; Real-Dato 2009; Streeck and Thelen 2005), this work uses the categorization proposed by Hall (1993) (p.278-279), which is resonant and parsimonious at the same time. Furthermore, it is more compatible with the categorization of policy change already in use in the public policy literature on tobacco control (Cairney, Studlar, and Mamudu 2012; Studlar 2007; Studlar and Cairney 2014; Studlar, Christensen, and Sitasari 2011) and in the traditional literature on state government innovation and policy diffusion (Berry and Berry 1990; Walker 1969).

Two types of policy change are considered in this work: first order and second order changes (p.278-279) (Hall 1993). Second order policy changes refer to drastic changes, such as the introduction of new policy tools in a policy area, namely what the literature on tobacco control terms innovation (p.40; p.75) (Cairney, Studlar, and Mamudu 2012; Studlar 2009). For instance, the introduction of strong national legislation prohibiting smoking in public places in some countries in the 2000s represents an example of second order policy change. First order policy changes refer to more incremental changes, namely the adjustment of policy instruments in an area, such as the formalization or strengthening of regulatory standards: what the literature on tobacco control terms reinvention (p.94; p.75) (Cairney, Studlar, and Mamudu 2012; Studlar 2009). For instance, the formalization of self-regulation practices already in place in several
areas since the aftermath of WWII into voluntary agreements supported by governments in the 1980s and 1990s is an example of first order policy change.29

These two types of policy change are associated with two distinct types of policy dynamics: punctuated equilibrium and punctuated gradualism. The public policy literature and especially the strand of the punctuated equilibrium theory have a long-lasting tradition of borrowing terms from biological sciences and in this study I continue with this tradition. In evolutionary biology two models conceive evolution as characterized by long periods of stasis and sudden but short periods of evolutionary change from a long-stable state to another: punctuated equilibrium, which has already been borrowed by the public policy literature, and punctuated gradualism, which I borrow in this work. The difference between these two models lies in the speciation. In punctuated equilibrium the passage from one long-stable state to another is associated with the formation of distinct species, whereas in punctuated gradualism it is not (Futuyma 1997; Malmgren, Berggren, and Lohmann 1983). By applying this metaphor to public policy, policy change in punctuated equilibrium comes to be perceived as a rapid and drastic event disrupting previous arrangements, as posited by the literature (Baumgartner et al. 2009; Baumgartner and Jones 1993, 2002, 2009; Jones and Baumgartner 2012). Conversely, policy change in punctuated gradualism is defined as a more recurrent and less drastic event.

29 I acknowledge that Hall (1993) (p.279) suggests the presence of a third type of policy change, namely paradigm shifts. Nonetheless, this is not the primary focus of this study. The latter focuses on how issues go through the political agenda and how this process is facilitated by the specific conceptualizations of these issues as applied to public policy, namely policy images, and not the diffusion of broad paradigms and how they enter the political agenda. The latter aspect is discussed in a compelling manner in the politics of attention development of the punctuated equilibrium theory, as mentioned in Chapter 2. Moreover, it should be noted that not only does Hall (1993) provide a categorization of policy change, but he also provides a set of explanations according to which the different types of change take place. In first order changes technical expertise plays a central role (p. 281) (Hall 1993), whereas in second order changes the focus is on national politics, such as how politicians follow public reactions to previous policies (p. 283) (Hall 1993). Instead, third order changes can be better explained by looking at the role of ideas outside the state itself (p. 287) (Hall 1993). In this work, I incorporate the categorization provided by Hall (1993), due to its parsimony and complementarity with the tobacco control literature, without transposing also the theoretical explanations behind the different types of change.
The punctuated gradualism theory suggests that punctuations are common characteristics of policy dynamics, but variation in the intensity and degree of punctuations is present. In punctuated equilibrium policy dynamics are composed of long periods of inertia punctuated by rare and short periods of second order policy changes, which disrupt the policy arrangements in place. Conversely, in what I label punctuated gradualism, policies evolve through short periods of inertia punctuated by recurrent first order policy changes. These two different policy dynamics represent two different ways in which stability and instability interact in public policy. In punctuated equilibrium second order changes disrupt the policy arrangements in place and replace them with strong and resilient ones: rare periods of high instability are associated with long periods of stability. In this case both positive and negative feedback effects, related respectively to the destruction of policy arrangements and the creation of new ones, are strong. Conversely, in punctuated gradualism first order changes modify the policy arrangements in place, without disrupting them. In this case more common periods of mild instability are associated with shorter periods of stability: both positive and negative feedback effects are rather weak.\(^{30}\)

In conclusion, in line with the punctuated equilibrium theory, the punctuated gradualism theory argues that punctuations are a characteristic common to public policy. Yet, the punctuated gradualism theory seeks to account for variation in policy dynamics, by suggesting that sometimes policies evolve more punctuatedly gradually. It should be noted that the fact that punctuations in policy dynamics can vary in degree and intensity is not entirely new. In fact, the proponents of the original punctuated equilibrium theory discuss this possibility and the friction theory brings this further, by studying variation in policy dynamics across countries. In this

\(^{30}\) The punctuated gradualism theory considers these two extreme scenarios in order to maximize its theoretical power. Nonetheless, I acknowledge that reality is more complex and policy dynamics can assume various forms in between these two extremes.
respect, the contribution of this study is to provide a categorization of policy change and policy dynamics that allows for accounting for variation in punctuations beyond the one across countries, which the literature cannot explain, and to investigate this variation empirically.\textsuperscript{31} By relying on a set of descriptive statistics in use in the public policy literature, Chapter 6 tests whether punctuations are present in tobacco control. In so doing, I also empirically define those terms used so far to describe policy change, such as drastic and incremental, as well as those used to describe policy dynamics, such as punctuated equilibrium and punctuated gradualism.

\textbf{THE PUNCTUATED GRADUALISM THEORY}

This section commences by summarizing the claims put forward by the policy feedback and policy responsiveness strands, discussed in detail above. These two strands focus on the dynamics whereby the policy image affects public opinion and public reactions incentivise decision-makers to act. Then, I incorporate these dynamics into a new variant of the punctuated equilibrium theory, which focuses on how the policy image affects policy change through the mediating role of public opinion and how policy dynamics vary depending on the policy image. In so doing, I formulate the causal processes which connect different policy images with different types of policy change and which are empirically investigated below.

I proceed to discuss two types of policy prioritization, which in turn depend on the type of the policy image: majoritarian and interest group, associated respectively with an inclusive and exclusive policy image. The former triggers public support for the policy and diffuse costs and benefits, whereas the latter does not trigger public support for the policy and allocates concentrated costs and benefits. Then, I discuss how these two types of policy prioritization

\textsuperscript{31} Gradualism has already been discussed in the public policy literature, such as in Howlett and Migone (2011), also with particular attention to tobacco control, such as in Studlar and Cairney (2014). Yet, a definition of gradualism which encompasses the recurrence of periods of stability and instability, namely punctuations, which are central to the punctuated equilibrium theory, is missing.
affect how policies evolve, by positing that majoritarian prioritization is associated with punctuated equilibrium and interest group prioritization with punctuated gradualism. The final sections discuss the caveats to the theory as well as its contributions.

Policy Image, Public Opinion and Policy Change

In this section I rely on the insights from the policy feedback and policy responsiveness strands, discussed in detail in Chapter 2, which help shed light on how certain policy images trigger public support for a policy, how decision-makers respond to that support and also how different policy images allocate different interests in the society. In so doing, I formulate hypotheses on how these processes affect policy change. As seen above, the policy feedback literature suggests that policies with broad effects for everyone trigger public support. When an issue is discussed in the political arena, the public assesses this issue against the signals sent by decision-makers through the policy image. In this vein, high public support will be present, if the issue is discussed as bearing effects on the society as a whole and not on specific groups, namely an inclusive policy image. For its part, the policy responsiveness literature argues that decision-makers will act following that public support. Accordingly, policy prioritization triggering public support for a specific policy leads to drastic policy change (or second order policy change, as defined above), because decision-makers are incentivised to act. By bridging the gap between the policy responsiveness and policy feedback strands, I argue that there is a two-way signalling process in place between policy-makers and the public. Not only does the policy image signal information about the policy to the public, but the public also signals information back to politicians. If decision-makers sense public support for a policy, they will read this as signal of potential support in electoral terms and hence strong incentives to act will be in place. In the
policy responsiveness literature, this set of dynamics is called anticipation (p.46; p.544-545) (Bailey 2001; Stimson, MacKuen, and Erikson 1995).

In conclusion, the first process under analysis claims that an inclusive policy image triggers public support for the policy at stake, which incentivizes policy-makers to act and put forward strong regulation (P1 in Chapter 4 and Chapter 5). The opposite process states that an exclusive policy image does not trigger public support for the policy at stake, thus disincentivising policy-makers to act and put forward strong regulation (P3 in Chapter 4 and Chapter 5).

The policy feedback literature also sheds light on how the policy image shifts the allocation of interests in society, thus creating different types of politics, which in turn make policy change easier or more difficult. An inclusive policy image allocates diffuse costs and benefits, as the effects of the policy are perceived as affecting the society as a whole. Conversely, an exclusive policy image allocates concentrated costs and benefits. As seen in Chapter 2, some work on policy feedback, close in spirit to the regulation strand of the public policy literature, suggests that different policies allocate different costs and benefits, thus triggering different types of politics (Lowi 1964; Wilson 1980). In this study I argue that depending on their policy image policies allocate different costs and benefits and in turn different configurations of interests in the society. A policy perceived as bearing concentrated costs and benefits only on specific segments of society will trigger the creation of concentrated interests. Conversely, a policy perceived as bearing diffuse costs and benefits on the society as a whole will trigger the creation of diffuse interests. The allocation of costs and benefits and hence the allocation of interests in the society makes policy change easier or more difficult. As argued by the policy feedback literature, in a type of politics where concentrated interests oppose each other, the policy outcome will be the result of a bargaining process between decision-makers and strong societal actors (p.368)
(Wilson 1980). This situation will drag the policy outcome to the lowest common denominator. Instead, diffuse interests do not easily mobilise and hence they cannot exert pressure on decision-makers and oppose regulation in a specific area.

In summary, the two other causal processes theorised in this study are as follows: an inclusive policy image allocates diffuse costs and benefits on the society thus preventing the creation of strong interests which can oppose regulation (P2 in Chapter 4 and Chapter 5); an exclusive policy image allocates concentrated costs and benefits on the society thus leading to the creation of strong interests which can oppose regulation (P4 in Chapter 4 and Chapter 5).

In conclusion, a policy framed in a way which appeals to the majority of people will evolve more drastically through second order changes because decision-makers are more incentivised to act and because they do not face the opposition of strong and coordinated actors. Conversely, when public policy speaks only to certain segments of society, policies evolve more gradually through first order changes, as politicians are not incentivised to take action and they face strong opposition in society. From the causal processes discussed above I derive two broad hypotheses, which link the policy image with policy change:

**H1:** An inclusive policy image triggers drastic policy change (or second order policy change)

**H2:** An exclusive policy image triggers incremental policy change (or first order policy change)
Policy Prioritization and Policy Dynamics

By building on the policy responsiveness and policy feedback strands, the punctuated gradualism theory suggests that different types of policy image activate the public in different ways and bear different (perceived) costs and benefits for different segments of society, thus triggering different types of policy change. An exclusive policy image does not activate public opinion and allocates (perceived) concentrated costs and benefits. Drastic policy change (or second order policy change) is not possible, due to the lack of public support and because stakeholders are strongly incentivised to coalesce among each other. The result is incremental change (or first order policy change). Conversely, an inclusive policy image activates public opinion and bears diffuse costs and benefits. As such, decision-makers are incentivised to act. Furthermore, coordination between stakeholders in society becomes more difficult since they do not face concentrated costs or benefits: power is diffuse in society. Hence, societal actors are not incentivised to coalesce among each other. This lack of opposition in the society in turn makes second order policy change easier.

The section above discusses how different policy images are associated with different types of policy change. This section looks at how different types of policy prioritization are associated with the different types of policy dynamics discussed above. I theorise two types of policy prioritization, which in turn are associated with the two types of policy image seen above. In line with the terminology used by Wilson (1980) (p.367-368), in what I label majoritarian prioritization an inclusive policy image triggers public support on the issue at stake. An inclusive policy image also elicits diffuse costs and benefits across society. Conversely, in what I label interest group prioritization an exclusive policy image does not trigger public support for a

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32 The difference between policy change and policy dynamics is discussed further in Chapter 6.
specific policy. Furthermore, it bears perceived concentrated costs and benefits. Different types of policy prioritization are associated with different types of policy dynamics: interest group prioritization is associated with punctuated gradualism and majoritarian prioritization with punctuated equilibrium. Different types of policy prioritization also elicit different implications on how positive and negative feedback effects, associated with respectively periods of instability and stability, interact between each other. High public support for an issue and the diffusion of costs and benefits are associated with strong negative and positive feedback effects. Policies evolve through long periods of stability punctuated by short periods of high instability: what the literature calls punctuated equilibrium. Conversely, the lack of public support and concentrated costs and benefits are associated with mild positive and negative feedback effects. Hence, policies evolve through shorter periods of stability punctuated by more recurrent and less drastic periods of instability: what I call punctuated gradualism.

THE CAVEATS TO THE PUNCTUATED GRADUALISM THEORY

This section discusses the caveats to the theory proposed above. More specifically, in these paragraphs I justify the choice of the variables and mechanisms on which the theory focuses and the consequences of this choice in terms of explanatory power. Moreover, I look in more detail into these variables and mechanisms, by questioning whether policy-makers influence public opinion and/or the other way around (endogeneity) and whether they are codetermined by a third factor, such as the media (simultaneity).

The punctuated gradualism theory proposed in this work looks at specific variables and dynamics. What in social research is called framework provides the meta-theoretical language to discuss and compare theories. The latter specify which variables of the framework are useful to explain some outcomes instead of others (p.414) (Ostrom 2009). Models in turn rely on precise
assumptions about a limited number of variables of the theory and look into their consequences (p.414) (Ostrom 2009). By applying this categorization to the study of policy change, the public policy literature can be considered as a framework, which instructs the researcher to look at the role of ideas and societal actors, also outside formal decision-making arenas, to explain policy change. By following these guidelines, the punctuated equilibrium theory looks at the interaction between the policy image and the venue, which affects agenda setting and policy network dynamics and in turn determines policy outcomes. Finally, the punctuated gradualism theory proposed above focuses on a specific variable, namely the policy image, and looks at how this variable affects policy change, through specific dynamics, namely public opinion dynamics. As such, the punctuated gradualism theory proposed in this study is closer in spirit to a model than a theory. The same holds true for the friction theory discussed above, which looks specifically at another factor central to the punctuated gradualism theory, namely the political venue. As explained in detail throughout this work, the need to focus on the policy image and public opinion dynamics is dictated by the lack of attention on these aspects on the part of the public policy literature. The latter, indeed, has already specified different aspects of the punctuated equilibrium theory, such as how ideas enter the political agenda, with the politics of attention strand, and political institutions, with the friction theory, but not how public opinion affects policy change.

Given the specific focus of the punctuated gradualism theory, I cannot exclude the possibility that other variables and dynamics outside the causal model presented above might affect policy change. Drastic policy change might be triggered (also) by other factors outside the model presented above. For instance, certain institutional environments might facilitate drastic change, as discussed above. Moreover, certain political and societal actors might be more inclined to
coalesce and act, thanks to organizational factors such as their size and the presence of strong incentives, hence being better able to oppose strong regulation in a policy area. Moreover, not only might other variables affect policy change, but also other mechanisms than those under analysis in this study might mediate the relation between the variables in the hypotheses formulated above, namely the policy image and policy change. Indeed, the relation between the variables in the hypotheses above is not deterministic. I cannot exclude the possibility that an inclusive policy image might not lead to drastic policy change, if other dynamics than those under analysis in this work, namely public opinion dynamics, are taken into consideration. In conclusion, given its specificity, the theoretical power of the punctuated gradualism theory is limited to some extent.

The part above acknowledged the presence of other variables and dynamics at play. This final part looks in more detail into the variables and mechanisms under analysis in this study. The public policy literature has always been aware of the complex relationship between public opinion and public policy (Page and Shapiro 1983; Stimson, MacKuen, and Erikson 1995). As seen above, public opinion is deemed to affect public policy, as in the literature on policy responsiveness, but also public policy is argued to affect public opinion, as in the literature on policy feedback (and the economic voting literature, which focuses on whether and to what extent the economic consequences of public policy have effects on public opinion). Some studies have tried to combine these two perspectives, by arguing that the relationship between public opinion and public policy works like a thermostat. When the public mood shifts towards more conservative positions, for instance, politicians will adapt to this shift, by adjusting public policy accordingly and, as a result, public opinion will go back to its equilibrium position. This approach is known as thermostatic model (Wlezien 1995). Other studies have focused on the
different patterns of linkage between public policy and public opinion (Sharp 1994). The interaction between public policy and public opinion has been recently studied also in tobacco control (p.8-9) (Marshall 2016).

Not only does the endogeneity problem have to be dealt with in the empirical analysis (see the discussion on endogeneity in the empirical analysis in Chapter 4 and in the empirical chapters), but it needs to be addressed also in the discussion of the theoretical model. As discussed above, this work theorizes that public policy is the result of a two-way signaling process in place between policy-makers and public opinion. By combining the insights from the policy responsiveness and policy feedback strands, I argue that how an issue is framed determines public opinion reactions, which in turn affect how politicians behave and eventually public policy. The first part of this process is the prioritization of a policy and it is based on the signals sent by politicians to the public through the policy image. For instance, prioritizing an issue in terms of broad effects on the society as a whole signals to the citizens that this issue concerns everyone and this will trigger public support. The second part of this process is the public reaction to the prioritization of a policy and it is based on the signals sent by the public to politicians: public support for a policy signals the presence of potential political support for policy-makers, who will be incentivised to act. In conclusion, I acknowledge that public policy is the result of complex interaction between policy-makers and public opinion, which involves the exchange of information in both directions. Yet, the theoretical model proposed above specifies the two-way signaling process in place between policy-makers and public opinion, by dividing it up into different stages where different dynamics are at play. A first stage where policy prioritization affects public opinion through the policy image is followed by a second stage
where public reactions to that policy image affects decision-makers’ action and in turn public policy.

Nonetheless, reality is more complex and the interaction between policy-makers and public opinion is characterised by further feedback effects. For instance, policy-makers might adjust how an issue is framed in response to public reactions and public reactions might be affected (also) by the introduction of a policy and not (only) by its prioritization. As such, the theory proposed in this work needs to be taken with the caveat that these further feedback effects do not distort the basic functioning of the model described above. Recent evidence suggests that this might be the case, as the interaction between public opinion and public policy in tobacco control is not characterised by backlashes or complex feedback effects (p.171) (Marshall 2016).

It might also be argued that public opinion leads to policy prioritization. It might be that citizens have preferences over potential policies before these policies are actually introduced into the political arena and that policy-makers take these preferences into consideration. Yet, I assume that public support for a specific policy is activated only when an issue is prioritized with a specific policy image. As discussed above, this model is interested in what pushes a policy through the decision-making process once it is prioritized and not how this policy enters the political agenda, which has already been extensively studied in the public policy literature. In Chapter 4 and the empirical chapters the endogeneity problem is discussed from the perspective of the empirical analysis.

Moreover, it might be argued that the relationship between policy-makers and public opinion is spurious and that other factors might influence both. As with endogeneity, simultaneity must be addressed in the empirical analysis, but it must also be dealt with in the discussion of the
theoretical model. The two-way process of exchange of signals discussed above is characterised by a high level of noise.\footnote{For a discussion on the noise in the interaction between public opinion and policy-makers see Bertelli and John (2012) (p.742-743 and p. 750)} In other words, it might be that how politicians frame a policy does not correspond to how citizens will perceive it and might also happen that politicians are not able to read the public support for that policy in a clear manner. In contemporary democracies the relationship between the public and elites is mainly facilitated by the media, which play a central role in political communication. Much of the noise in place along the process discussed above depends on the accuracy with which the media deliver the signals from politicians to citizens and back. In an extreme scenario, it might even be argued that the media drive both the public and political agenda. For reasons of space and parsimony, in this work I do not investigate the role of the media any further. Hence, findings from this study needs to be taken with the caveat that although the media play a central role in the signaling process discussed above, this role is not an active one. In other words, I assume that the media might sometimes fail to convey the right signals from policy-makers to public opinion and the other way round, but they do not determine the political and public agenda.

Before discussing the contributions of the theory proposed in this study, this paragraph highlights the normative implications of the two caveats discussed above. The questions of whether policy-makers follow public opinion and/or the other way around and what the role of the media is elicit important considerations for the role of masses, political elites and the media in contemporary democracies. In this work I suggest that public policy is not unilaterally determined by political elites, masses or the media, but it is the result of a complex process in which all three play an important role. A democracy where public policy blindly follows the public mood is as much undesirable as a democracy where decision-making is in the hands of a few politicians or media
outlets. The model proposed in this work suggests a type of democracy where policy-makers engage in an open dialogue with the public and a policy is introduced once agreement over that policy prevails.

**THE CONTRIBUTION OF THE PUNCTUATED GRADUALISM THEORY**

By looking at the role of public opinion the punctuated gradualism theory explains why in some instances tough tobacco control measures have been widely welcomed by the population as a whole and have been promptly introduced, whereas in other instances similar measures have faced the opposition from large segments of the society, leading to the watering down of those measures and delay in their introduction. For instance, in the 1990s the issue of smoking in public places entered the Irish political agenda. The debate on passive smoking did not gain any attention from the public. The lack of public support and the strong opposition from societal actors prevented any attempt to legislate on smoking in public places. The result was the introduction of a voluntary agreement which simply formalized a set of rules already in place. Only a few years later, the issue entered the Irish political agenda again. This time the possibility of a smoking ban received wide public support. After the smoking ban was proposed citizens showed increasing support, became more in favour of tobacco control in general and radically changed their behaviours. Strong of this wide public support, in 2004 Irish decision-makers introduced the world’s first smoking ban, which remains one of the strictest today.

The theoretical contribution of the punctuated gradualism theory is the incorporation of public opinion dynamics into a complex public policy approach. More than four decades of public policy research have sought to understand how policies evolve and the main factors at play. The synthetic approaches to policy change discussed in Chapter 2 take clear stances on how public policy evolves and on the main explanatory factors, namely ideas, such as how policies are
framed, and policy networks, such as the presence of powerful interests in the society. The proponents of these approaches do not neglect public opinion dynamics, but they do not fully incorporate them in their frameworks. For instance, the punctuated equilibrium theory suggests that certain policy images are associated with a negative or positive tone in public attention and that decision-makers take into consideration how the public perceives an issue, as discussed in more details above. Yet, the punctuated equilibrium theory does not provide a compelling theoretical framework where the relationship between the policy image, public opinion and policy change is fully fleshed out and, moreover, it falls short in empirically testing this relationship. By bringing together the contribution of different bodies of the public policy literature, this work incorporates public opinion dynamics into a complex approach to policy change.

CONCLUSION

The punctuated gradualism theory focuses on a central aspect of the punctuated equilibrium theory, namely the policy image, and by building on the policy responsiveness and policy feedback strands, this theory seeks to explain how different policy images trigger different public opinion reactions and hence lead to different types of policy dynamics. By building on the policy responsiveness and policy feedback strands, the punctuated gradualism theory posits that how an issue is framed determines public reactions. The latter in turn affect the facility with which the issue goes through the political agenda and is transposed into legislation as well as the resilience of society to change. Despite the caveats discussed above, the punctuated equilibrium theory provides a valid answer to the research question: what explains policy change?

Moreover, the punctuated gradualism theory allows for accounting for some variation in policy dynamics which the literature cannot explain. Indeed, depending on how the public reacts to
policy prioritization policies can evolve more (punctuatedly) drastically or gradually. This is the main empirical contribution of the punctuated gradualism theory. Furthermore, although several strands of scholarship have studied how public policy affects public opinion and the other way around and others have investigated how and why policies change, no consistent attempt to bring these two aspects together has been made so far. The inclusion of public opinion in a complex public policy approach is the main theoretical contribution of this study.

The following chapter introduces the mixed method approach used to investigate the theory proposed above. This approach combines process tracing, case study comparison and statistical analysis, with each method performing a precise task. Process tracing is used to observe the causal processes which constitute the theory and case study comparison is functional to allow for variation in the main variables of interest as well as control for factors which are relevant for policy change but not central in the theory. Finally, statistical analysis empirically tests the theoretical assumptions of the theory.
CHAPTER 4: RESEARCH DESIGN

INTRODUCTION

By building on the insights of the policy responsiveness and policy feedback strands, the theory proposed in this work, the punctuated gradualism theory, refines the punctuated equilibrium theory, in order to answer the research question. In so doing, it focuses on the role of public opinion and how the latter mediates the effects of the policy image on policy change. More specifically, I posit that an inclusive policy image triggers public support for the issue under discussion and allocates diffuse costs and benefits. Policy-makers are strongly incentivised to act and power is diffuse in the society: this in turn leads to drastic policy change. Conversely, an exclusive policy image does not trigger public support for the issue at stake and allocates concentrated costs and benefits. Policy-makers lack the incentives to act and concentrated interests can mobilise and provide strong opposition. In this case the result is incremental policy change.

The empirical investigation of the punctuated gradualism theory needs to perform a central task: to demonstrate the role of public opinion in mediating the effects of the policy image on policy change. As such, in this study I use process tracing, which is regarded in the methodology literature as the most appropriate method to identify causal mechanisms (or intervening processes) connecting two or more factors. In this study process tracing is used to assess the link between the policy image and policy change and the mediating role of public opinion reactions.

I use process tracing in conjunction with comparative case study research. The reason is that in order to assess the causal mechanisms linking the policy image and policy change and the mediating role of public opinion reactions, I need variation in the independent and the dependent variables, respectively the policy image and policy change. More specifically, I compare two
cases which are similar in every aspect but the policy image and policy change. As such, comparative case study research is also functional to control for other factors which are not central in this theory, but which can affect policy change. Furthermore, for the purposes of carrying out process tracing the comparability between cases is central. Accordingly, in this work I assess how public opinion reactions mediate the link between the policy image and policy change by using a before and after comparison in the same country. I compare two cases where different policy images led to different types of policy change, but where a series of country and policy specific factors were similar. This comparison across time, called diachronic design, allows for a good combination of comparability of cases and variation in key variables across them.

Process tracing used in conjunction with comparative case study research is appropriate for the in-depth analysis of causal mechanisms and the role of intervening variables. Instead, statistical analysis is more suitable to study specific variables across a large number of cases and to test their relationships. In the subsequent chapters I test the empirically observable implications of the three theoretical assumptions on which the punctuated gradualism theory relies: whether public policy evolves through punctuations, whether the policy image determines political support for the introduction of a policy and whether the policy image triggers attitudinal changes in the target groups of a policy. These are the empirically observable implications of the central theoretical assumptions derived from the three bodies of literature on which the punctuated gradualism theory builds, respectively the punctuated equilibrium, the policy responsiveness and the policy feedback theories.

This chapter develops as follows. First, I introduce process tracing as the main method to assess causal mechanisms and intervening factors and then I specify how it is applied in conjunction
with comparative case study in this study. Then, I discuss how one of the main theoretical assumptions of the theory proposed in this work, namely the punctuation rule, is empirically tested by using a series of descriptive statistics, as it is common practice in the public policy literature. Finally, I provide an overview of the statistical methods used in the final chapters to test the empirically observable implications of the remaining core theoretical assumption of the punctuated gradualism theory. This chapter concludes with some considerations on what each method adds to the study of policy change in tobacco control and how they complement each other.

**THE REGULATION OF SMOKING IN PUBLIC PLACES IN IRELAND**

In Chapter 5 the theory proposed in this work is tested by relying on process tracing, applied to a before and after comparison. More specifically, I compare how an exclusive policy image, namely the one with which smoking in public places was discussed in mid-1990s in Ireland, led to an incremental change, namely the transposition of rules already in place into a voluntary agreement among Irish publicans, with how an inclusive policy image, namely the one in place in the same area a decade later, led to a drastic change, namely the introduction of a total smoking ban in public places. In this section I commence by discussing comparative case study research and how it is applied in this work. Then, I move the discussion to process tracing and the identification of the processes to be empirically assessed.

**Comparative Case Study**

A case is a spatially and temporally bounded political or social instance, where the spatial and temporal boundaries are determined according to the theory the researcher addresses. Similar cases (similar with respect to the theory) form a population for which the researcher aims to make inferences by extracting a sample. Cases are in turn divided into variables or factors for
which observations are collected (p.342) (Gerring 2004). Comparative case study is a qualitative research method, which aims to infer relationships between factors by systematically comparing instances of a phenomenon, namely cases conceived as different configurations of variables or factors (p.13) (Rihoux and Ragin 2009).

A criterion defining comparative case study is the number of instances under analysis, which is inferior to those analyzed with statistical methods. Comparative case study can be performed even on a single case. In fact, some single case studies, are comparative research conducted in an implicit (p.691) (Lijphart 1971) or introverted manner (p.454) (Rose 1991). They, indeed, compare the case under analysis with the hypothetical population of cases to which the theory at stake applies with inferential purposes.

Although using different labels, scholars have mainly used the method of difference and the method of agreement to compare cases. The foundation of these two methods may be traced back to Mill (1888) (Book 3, Chapter 8), where two methods for the elimination of potential explanations for a phenomenon are identified. He argues that two methods may be used to inquire the potential cause of an effect (or the potential effect of a cause): either the researcher compares cases as similar as possible or as different as possible, except for the dimensions in which he or she is interested. These two methods are called method of difference and method of agreement. The method of agreement compares two (or more) cases as different as possible, with the exception of the dependent and the independent variables, whereas the method of difference compares similar cases, with the exception of the dependent and the independent variables. In the former, the researcher proceeds by eliminating the differences between the two cases as potential explanations, whereas in the latter he or she eliminates the similarities (p.203-204; p.153-156; p.183) (Della Porta 2008; George and Bennett 2005; Skocpol and Somers 1980).
These ways to carry out cross-case comparison have been extensively used in social research. In fact, they are considered effective and efficient methods to tease out associations between variables across cases, by controlling for differences or similarities across them. Nonetheless, cross-case comparisons are not without criticisms. In fact, it might be argued that the low number of units leads to over-determination, namely the risk of falsely rejecting a true null hypothesis (p.350-351) (Gerring 2004). Indeed, cross-case comparison are characterised by the problem of too many variables and too few cases (p.199) (King, Keohane, and Verba 1994). In other words, the differences between two cases are never exhausted by the factors considered in the comparison.

Findings drawn from comparative case studies should always be taken with this caveat. Yet, a careful case selection, which identifies cases as similar as possible with respect to those factors which can affect the outcome and as different as possible with respect to the independent variable, can mitigate the problem of unobserved heterogeneity, namely the presence of unobserved variables which are correlated with the observed ones. Furthermore, it might be argued that the researcher should mainly control for theoretically relevant factors which might bias the analysis. In other words, the researcher should mainly control for those factors identified by the theory he/she originally addresses.

Case Selection

In this work I assess the link between the policy image and policy change and the mediating role of public opinion in Ireland in two different cases of the regulation of environmental tobacco smoke in public places, namely public smoking: the 1994 voluntary agreement and the 2004 smoking ban. The logic of this is a before and after comparison (p.64) (Hancké 2009), based on the method of difference described above. In other words, I compare two cases occurring in the
same country across time, which are similar in several respects but the variable of interest, namely the policy image, and the outcome, namely policy change.

This way of conducting cross-case comparison, called diachronic comparison (p.343) (Gerring 2004), allows for the comparability of cases, making process tracing easier to perform. Furthermore, enough variation is present in the independent and dependent variables, respectively the policy image and policy change, to allow for teasing out the relationship between them. In fact, in the mid-1990s smoking in public places was discussed mainly in terms of the protection for workers in the hospitality sector: an exclusive policy image. Conversely, in the mid-2000s attention shifts to the protection of the society as a whole: an inclusive policy image. The results were rather different. In the 1990s a voluntary agreement between the managers and the employees in the hospitality sector formalized self-regulation practices already in place, whereas in the 2000s a total smoking ban in public places was introduced, respectively an example of gradual and drastic policy change. In this vein, I compare how different policy images are associated with different types of policy change in the same political system, thus controlling for country and policy specific factors.

It should be noted that country specific and policy specific factors play an important role in balancing each other out in this comparison. Although the diachronic comparison described above is functional to control for other factors than those central in the theory tested, the Irish political system underwent several institutional reforms in the ten years which passed from the introduction of the voluntary agreement to the enactment of the smoking ban. For instance, the disproportionality of the electoral system, which affects important political factors such as party control over government, increased from 3.1 in 1994 to 6.6 in 2004 (online appendix) (Gallagher and Mitchell 2005). As such, the choice of the policy area becomes crucial to further control for
factors such as political institutions. Indeed, the tobacco control measures studied in this work, namely those addressing environmental tobacco smoke and advertisement, are usually implemented through administrative acts, thus not following the usual legislative process. As such, the potential effects of political institutions are further reduced. Indeed, environmental tobacco smoke and tobacco advertisement regulation are closer in spirit to what the friction theory calls processes, for which the role of institutions is less prominent than for policy outputs, as discussed in more detail in Chapter 5.

As discussed above, a case needs to be defined with precision also in temporal terms. The choice of the time period for the cases under study in this work is dictated by key events. The investigation of the 2004 smoking ban starts in 1998, when the parliamentary committee which produced the key report on public smoking in Ireland was established, and finishes with the implementation of the ban in March 2004. As for the voluntary agreement, the analysis goes from 1992, when Minister Howlin announced the intention to revise environmental tobacco smoke regulation, to the introduction of the voluntary agreement in 1994.

Finally, an important reason to study Irish tobacco control is more substantive than methodological: the lack of studies on tobacco control in Ireland, despite its substantive interest. Tobacco control in Ireland has received scattered attention in cross-country comparisons and large-N analyses (Cairney, Studlar, and Mamudu 2012; Studlar 2009; Studlar, Christensen, and Sitasari 2011). Although some recent work has started to focus on Irish tobacco control (Studlar 2015), more research is needed, given the importance of the Irish experience. Indeed, Ireland has always been in the forefront of tobacco control, both in terms of the comprehensiveness and the speed of introduction of regulation. Indeed, the Tobacco Control Scale (Joossens and Raw 2006; Joossens and Raw 2007; Joossens and Raw 2011), an index of comprehensiveness of tobacco
control measures calculated on the basis of expert surveys, ranks Ireland at the first place in 2005 and at the second place in 2010 among European countries. The strength of the Irish tobacco control regime is confirmed by other studies (Figure 1 p.737) (Studlar, Christensen, and Sitarsari 2011). On top of that, tobacco control scholars demonstrate that Ireland has been a leader in tobacco control since the 1980s, along with countries such as Canada and Australia, in terms of legislation, taxation and education (p.377) (Studlar 2006). Last but not least, some studies (p.199) (Cairney, Studlar, and Mamudu 2012) prove that the Irish smoking ban strongly influenced Scottish and English decision-makers.

**Process Tracing**

Process tracing is a form of within case analysis (p.16) (George and Bennett 2005), aimed to describe the causal mechanisms linking two factors and identify the role played by intervening factors (p.348; p.163; p.233-235) (Gerring 2004, 2008; Vennesson 2008). Hypotheses concerning the relationship between two variables are transposed into causal processes and evidence is brought in support of these processes in the form of causal process observations (p.12) (Brady, Collier, and Seawright 2010a). A causal process observation is defined as (p.252-253) (Brady, Collier, and Seawright 2010b):

an insight or piece of data that provides information about context, process or mechanism, and that contributes distinctive leverage in causal inference […] a causal-process observation may be like a “smoking gun.” It gives insight into causal mechanisms, insight that is essential to causal assessment and is an indispensable alternative and/or supplement to correlation-based causal inference
Process tracing is applied to the two cases under analysis in Chapter 5 to assess the causal mechanism linking the policy image and policy change and the intervening role of public opinion. The punctuated gradualism theory hypothesizes a relationship between the policy image and policy change. More specifically, it posits that an inclusive policy image triggers drastic policy change and that an exclusive policy image triggers incremental change. The theory specifies the processes which link the policy image to policy change and the intervening role of public opinion. An inclusive policy image triggers public support for the policy at stake, which incentivizes policy-makers to act and put forward strong regulation. Furthermore, an inclusive policy image allocates diffuse costs and benefits on the society thus preventing the creation of strong interests opposing regulation. Conversely, an exclusive policy image does not trigger public support thus dis-incentivising policy-makers to act and it allocates concentrated interests which can strongly oppose regulation.

Two main limitations affect process tracing: the lack of evidence for every step in the processes and the presence of alternative explanations (p.12) (Bennett and George 1997). First, in process tracing the researcher needs to make specific predictions on all the steps in the causal processes and empirical evidence needs to be collected for each of those predictions (p.12) (Bennett and George 1997). This is very difficult in practice, especially with complex theoretical models like those discussed in Chapter 2 and with the punctuated gradualism theory introduced in this study. It might happen that evidence for a specific prediction is not available or is not as supportive as the evidence for another prediction. In the application of process tracing in Chapter 5, I seek to follow a clear procedure and divide the hypotheses derived from the punctuated gradualism theory into causal processes and then, predictions are made for each one of them. Nonetheless, due to data availability, evidence for some predictions, such as the presence of a specific policy
image (see causal process observations CPO1, CPO5, CPO9 and CPO13 below), is stronger than evidence for others, such as the impact of that policy image on public opinion (see causal process observations CPO6 and CPO14). This is a limitation to the application of process tracing to theories which include processes, such as public reactions, which are very difficult to observe empirically. This is why in this study I use statistical analysis to support the findings drawn with process tracing.

The second limitation which affects the application of process tracing is the presence of alternative explanations for the same causal process (p.12) (Bennett and George 1997). To a certain extent, this is an inherent limitation to process tracing, which cannot be fully addressed by the use of cross-case comparison. In Chapter 5 I combine process tracing with cross-case comparison and hence I tease out the relationship between policy image and policy change and I (partially) control for some factors which can explain the outcome, such as political institutions. Nonetheless, it might be that the processes which link the policy image and policy change are not (only) mediated by public reactions but (also) by other factors. There is no way to categorically exclude this possibility, but this problem may be mitigated by a careful specification of the processes. If the researcher specifies in detail every step in the causal processes, the likelihood that the same process may be explained by something else is reduced.

Causal Process Observations

In this section I discuss the causal processes identified in Chapter 3 and I divide them into causal process observations. The first process under analysis (P1) is that an inclusive policy image triggers public support for the policy at stake, which incentivizes policy-makers to act and put forward strong regulation. As applied to the 2004 smoking ban, I expect that the political debate on environmental tobacco smoke based on the protection of the public as a whole triggered
public support for the smoking ban hence creating incentives for policy-makers to act. In terms of causal process observations (CPOs), I expect to observe the following: the issue of environmental tobacco smoke started to be discussed in terms of the protection of the public as a whole (CPO1); public opinion reacted positively to this new policy image starting to be in support of the ban (CPO2); electoral considerations were central in the political debate (CPO3); the smoking ban was enacted without major amendments and in a timely manner (CPO4).

The second process (P2) is that an inclusive policy image allocates diffuse costs and benefits on the society thus preventing the creation of strong interests that can oppose regulation. As applied to the case under analysis, I expect that the political debate on environmental tobacco smoke was strongly focused on the role of the public and this bore diffuse costs and benefits for large segments of the society and hence hindered coordination between societal actors thus making drastic policy change possible. In terms of causal process observations, I expect to observe the following: the issue of environmental tobacco smoke started to be discussed in terms of the protection of the public as a whole (CPO5); the public started to perceive the costs and benefits of the smoking ban as diffuse throughout society (CPO6); coordination between societal actors became more difficult (CPO7); the pressure exerted by stakeholders on decision-makers proved to be ineffective and self-regulation among societal actors became an unfeasible solution (CPO8).

In the analysis of the 1994 voluntary agreement ban I expect to find the following causal process observations. The first process under analysis (P3) is that an exclusive policy image does not trigger public support for the policy at stake disincentivising policy-makers to act and put forward strong regulation. As applied to the case under analysis, I expect that the political debate on environmental tobacco smoke based on the protection of the workers in public premises did
not trigger public support for political action disincentivising policy-makers to act. In terms of causal observations, I expect to observe the following: the issue of environmental tobacco smoke was discussed in terms of the protection of the workers (CPO9); public opinion remained indifferent to this debate (CPO10); electoral considerations were not central in the political debate (CPO11); a voluntary code was enacted transposing regulation already in place (CPO12).

The second process (P4) under analysis is that an exclusive policy image allocates concentrated costs and benefits on the society thus leading to the creation of strong interests which can oppose regulation. As applied to the case under analysis, I expect that the political debate on environmental tobacco smoke based on the protection of the workers in public premises bore concentrated costs and benefits for small segments of the society enhancing coordination between societal actors thus making drastic policy change more difficult. In terms of causal observations, I expect to observe the following: the issue of environmental tobacco smoke was discussed in terms of the protection of the workers (CPO13); public premises’ managers and employees faced concentrated costs and benefits (CPO14); coordination between public premises’ managers and employees increased (CPO15); the pressure exerted by public premises’ managers and employees on decision-makers proved to be effective and self-regulation among societal actors became a feasible solution (CPO16). Appendix Table 1 in the Appendix summarizes the discussion.

Method and Sources

In finding evidence for these observations, I combine the historical/archival research typical of the public health strand of the tobacco control literature with the political science approach typical of the public policy strand. I investigate the causal process observations set out above through process tracing by reviewing primary sources, such as newspaper articles, national
legislation and documents from tobacco companies, as well as from public and private bodies. In analyzing the texts, I follow the critical contextualist approach typical of historical sciences (p.39-40) (Skinner 1969), according to which attention should be paid not only to the content of texts, but also to the source and, especially, the context (also in temporal terms). This approach has been borrowed by the methodological literature on process tracing based on archival sources. George and Bennett (2005) (p.99) suggest that in the analysis of primary sources the researcher should always pay attention to the speaker, the audience, the purpose of the speech/conversation and its context. In this vein, I substantiate the claims put forward below by taking into consideration who did and/or said what and in which context.

I choose newspaper articles and parliamentary discussions as primary sources mainly because media and political attention represent the traditional foci of analysis in public policy theories, especially in the punctuated equilibrium theory research programme. More specifically, I review all newspaper articles on the Irish ban in the Irish Times from 1998 to 2005. The time period starts with the establishment of the parliamentary joint committee that produced the report which brought environmental tobacco smoke back into the political debate and ends with the introduction of the ban. The choice of the newspaper is dictated by its high circulation. The Irish Times is the first non-tabloid daily newspapers in Ireland in terms of circulation and its main audience comprises people with liberal and progressive views on politics. Articles from the Irish Times are complemented by a series of articles on the Sunday Tribune published in August 2003, where the media campaign on the ban peaked. In that occasion the Sunday Tribune carried out an important survey among Fianna Fail members on their attitudes towards the ban and reported the results in a series of articles.
Secondly, I review the parliamentary discussions dealing with the Irish smoking ban. I start with all the written answers and debates in the Dail Eireann with Michael Martin (the Health Minister who pushed the introduction of the ban) as proponent, respondent or participant. I then narrow down the search by focusing on two reports which were central in the discussion on environmental tobacco smoke. In this vein, I review all the written answers and debates in the Dail Eireann, the Seanad Éireann and the various committees mentioning these particular reports. It should be noted that the review of the sources for the case of the smoking ban is functional to the identification of the sources for the case of the voluntary agreement. In fact, little was said on that agreement in the newspapers and in parliament at the time of its implementation. It started receiving attention at the time the smoking ban was discussed in mid-2000s.

Awareness of the need for transparency and openness has risen among scholars employing qualitative and mixed method research, as shown by several initiatives in the field, such as the Data Access and Research Transparency initiative of the American Political Science Association. This initiative had a huge impact on academia, as demonstrated by two symposia published in top-ranking journals (Büthe and Jacobs 2015; Lupia and Elman 2014). The main idea was to set up a community standards approach (Lupia and Elman 2014) on how to produce and disseminate research using qualitative and mixed methods. Three standards were identified: production transparency, analytic transparency and data access (p.3; p.21) (Büthe and Jacobs 2015; Lupia and Elman 2014).

The analysis in Chapter 5 aims to apply these standards to the specific case of process tracing based on written primary sources. The data access standard requires that the evidence on which claims are made needs to be easily accessible to the public. This standard elicits two considerations for this study, respectively on the preferable types of sources and how to use
them. In this study only written sources from publicly available repositories are used and, where possible, page specific references are provided (p.14) (Trachtenberg 2015). Production and analytic transparency refer to the process through which evidence was gathered and the link between conclusions and that evidence (p.3) (Büthe and Jacobs 2015). In this vein, I provide a specific account of the process through which written sources have been collected and, as mentioned above, I use a rigorous method to substantiate my claims with the written sources, by dividing hypotheses into causal processes and in turn in causal process observations, in line with the best practices in process tracing (Fairfield 2013, 2015).

THE PUNCTUATION HYPOTHESIS IN TOBACCO CONTROL

By building on the original punctuated equilibrium theory, the punctuated gradualism theory conceives policies as evolving through a combination of periods of policy inertia punctuated by periods of change. The presence of punctuations in policy dynamics is a central assumption of both the punctuated equilibrium theory and its new variant presented in this study. Chapter 6 tests whether this assumption is borne out. More specifically, by relying on a set of descriptive statistics, as it is common practice in the public policy literature, I test whether policy change in tobacco control is characterised by punctuations. Not only is this test functional to corroborate the theoretical assumption on policy change on which the punctuated gradualism theory relies, but also to demonstrate that tobacco control is not a special policy. As such, it is reasonable to assume that the dynamics identified in this study may be applicable to other policies, even though to a limited extent.

Frequency Distributions of Policy Change

As acknowledged in John and Margetts (2003) (p.415), different ways to measure how policies evolve are present in the literature. Frequency distributions of annual percentage change
represent the mainstream approach in the punctuated equilibrium theory research program (p.130) (Jones and Baumgartner 2005), which in turn builds on classic work on public budget, such as Davis, Dempster, and Wildavsky (1966). In this approach “a policy change is an alteration in the commitment of a government to an objective” (p. 141) (Jones and Baumgartner 2005) and researchers pool frequency distributions of changes across different policy areas. The use of annual percentage changes allows for taking into consideration the different scales of the different series pooled together. Although policy commitments can take different forms, public spending has been the most studied one (p.194) (Cairney 2011).

The logic is to compare the distribution obtained with a normal one, which is associated with incremental policy dynamics. Indeed, in a normal distribution the majority of the observations (policy changes in this case) are clustered around the median (or the zero value, if the curve is standardized, as it is the case if percentage changes are plotted). As applied to this case, this means that the majority of changes are close to zero and hence they are considered incremental changes. Instead, if policy change follows the punctuation law, as suggested by the punctuated equilibrium theory, the distribution of policy change will be a Pareto or power distribution, taking a leptokurtic shape. The latter is characterized by heavy tails, suggesting the presence of a few outliers (more than in the normal distribution), which represent rare episodes of drastic policy change, and high frequency of median values, which represent recurrent episodes of policy inertia. Furthermore, the public policy literature uses the kurtosis of a distribution to measure its skewness and hence compare it with the normal distribution, which has kurtosis of 3.
(and L-moments kurtosis of about 0.123).\textsuperscript{34} It is common practice to use statistical tests for normality, such as the Skewness/Kurtosis, Shapiro-Wilk W and the Shapiro-Francia W'.

Another method to test the punctuation hypothesis in policy dynamics is to visualize the distribution of percentage in policy change in a log-log plot (with the cumulative frequencies on the vertical axis, representing how many observations have a certain degree of change or higher). When plotted on a log-log graph a Pareto or power distribution (which in turn is a derivation of an exponential distribution) appears as a straight line, because the logarithmic function is the inverse function of the exponential function. Instead, in a log-log plot a normal distribution is characterised by a downward curvature (p.422-423) (John and Margetts 2003).

This method has also been used by dividing the distribution of policy changes into two different sub-distributions, respectively of increases and decreases (p.422-423) (John and Margetts 2003). The logic behind this distinction is that positive changes, such as increases in expenditures in a policy area, represent the result of positive feedback effects. When an issue suddenly enters the political agenda, decision-makers will take action by allocating more resources on it. Conversely, decreases in expenditures may not reflect these sudden changes in political attention, as retrenchment is inherently more resilient, being subject to path dependence. In this vein, we would expect the right tail, namely the positive changes, to behave like a power distribution and the left tail, namely the negative changes, to behave more like a normal one (p.860-862) (Jones et al. 2009).

\textsuperscript{34} Kurtosis calculated with moments is scale-free, more stable and less affected by outliers and as such, is considered a better measure by the punctuated equilibrium theory (p.612) (Baumgartner et al. 2009).
In this chapter I use tobacco taxation as a valid policy instrument to test the punctuation hypothesis, as it has similar characteristics with public spending, such as comparability across countries and time. In the 1980s tobacco taxation started to be widely used to curb tobacco consumption among advanced democratic countries, becoming “a major policy instrument in the past 20–30 years” (p.18) (Cairney, Studlar, and Mamudu 2012). The importance of taxation was formally acknowledged in art.6 of the World Health Organization Framework Convention on Tobacco Control, which mentions price and tax measures among the most effective means to curb smoking, especially among young people. The decision-making behind tobacco taxation is today characterised by the interplay of different positions, supported by different and often contrasting interests. Health non-governmental organizations and the medical community push for higher taxation as a way to curb smoking, whereas the tobacco industry warns decision-makers of the negative economic effects of tobacco taxation, such as the loss in state revenues and jobs, along with a series of indirect effects, such as the increase in illicit trade. In the last decades decision-makers have shifted from supporting one position to the other and political attention to the issue has been spasmodic. Tobacco control and more specifically tobacco taxation has become a priority for national politicians, especially in the occasion of the publication of important medical evidence and when more action on smoking was urged by the international community. In conclusion, tobacco taxation arguably represents the output of a process presenting all the common characteristics of a normal public policy process, as envisaged by the public policy literature and more specifically by the punctuated equilibrium theory.
Several issues need to be discussed when using tobacco taxation to measure policy change in tobacco control. First, different systems of tobacco taxation are in place across the world, characterised by two types of excise duties: ad valorem, which represents a percentage of the price of the cigarette packet, and specific, which represents a specific amount per cigarette (p.28) (WHO 2010). These excise duties are levied along with the regular Value Added Tax (VAT) and import duties. Ad valorem excises arguably represent the most valid and reliable measure to be used in annual percentage change distributions. Indeed, this measure allows controlling for inflation and different purchasing power across countries and over time, as it is calculated as a percentage of the price of cigarettes. Furthermore, although ad valorem excises have been recently criticized for their ineffectiveness in curbing smoking, due to the counter-effect produced by tobacco industry’s pricing (p.1323-1324; p.34-36) (Gilmore et al. 2013; Smith et al. 2011), and although historically countries vary in their tax structure (p.77) (Aspect 2004), ad valorem taxes are still commonly used nowadays (p.731; Table 3 and Figure 5) (Studlar, Christensen, and Sitasari 2011; WHO 2010).

Second, the European Union has increasingly played a role in determining the tobacco tax structure of its member states. In 1992 two Council Directives (92/79/EEC and 95/59/EC) harmonized tobacco tax levels. More specifically, they established a minimum rate of excise duties to be levied, but left countries free to set the balance between ad valorem and specific taxes and go beyond the minimum threshold. A series of amendments in following years culminated with Council Directive 2011/64/EU, which clarified the exact composition of the minimum level of excise duties, in terms of specific and ad valorem duties. Nonetheless, high

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35 For instance, in the UK in 2016 the ad valorem excise duty equals 16.5 per cent of the retail price and the specific one is £3.93 on a packet of 20 cigarettes.

36 Detailed information on each country’s tobacco tax structure can be found in the Annex of World Health Organization Technical Manual on Tobacco Tax Administration (Table 3 and Figure 5) (WHO 2010).
variation is still present across European Union countries in the levels of these two types of excises. These directives also harmonized the way in which Member States calculate and report excise duty figures. As such, the analysis needs to take into consideration only those countries which are subject to European Union regulation. In conclusion, in this chapter I use the percentage in annual change in ad valorem excise duties on cigarettes (more specifically, on manufactured cigarettes) pooled across the European Union 12 old Member States over time, from 1992 to 2013.37

Third, it might be argued that tobacco taxation has constantly increased in the last decades due to several reasons, such as the increasing attention to tobacco control across European countries and the European Union raising the minimum rate of duties to be levied by its members, and that these trends somehow bias the analysis. Yet, it should be noted that this is not necessarily true, as tobacco taxation is one of the areas where most action is still needed, also among developed countries (p.79-80) (WHO 2013). Furthermore, these trends are present also in public budget, namely what Jones and Baumgartner (2005) (p.146-147) call incrementalism with upward drift, and they do not prevent the researcher from using annual percentage change distributions to study policy dynamics.

This section discusses the number of observations needed for the analysis in Chapter 6. When using the device of annual percentage change distributions to study policy dynamics, a large number of observations, more specifically a large number of distributions, is needed (p.858) (Jones et al. 2009). The reason is that the larger the number of distributions pooled together and the more likely these distributions are to be independent from one another. The independence

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assumption allows for the researcher to associate punctuations with cognitive dynamics typical of decision-makers and exclude other potential dynamics at play. Indeed, the researcher assumes that if a decision-maker processes information from a large number of different and independent sources (in turn driven by different and independent social and political processes) by weighing them equally, all the idiosyncratic aspects typical of the processes underlying each source will cancel out. In this vein, according to the Central Limit Theorem (CLT), when a sufficiently large number of these sources/processes are included in the analysis, researchers expect the distribution of changes to take a normal shape. If that is not the case, researchers point to cognitive dynamics to explain why the distribution of changes assumes another shape. It might be that, for instance, the decision-maker weighs some sources more than others, due to the fact that these particular sources are more in line with their priors (p.155-156) (Jones and Baumgartner 2005).

This line of reasoning is typical of the politics of attention strand of the punctuated equilibrium theory (Jones and Baumgartner 2005), which focuses mainly on the cognitive processes behind policy-making and identifies these cognitive processes as the main reasons for punctuations in policy dynamics. Yet, as acknowledged by Jones and Baumgartner (2005) (p. 231) “heavy tails in frequency distributions can be caused by policy cascades […] in such situations, cases are interdependent”. With the term policy cascades they refer to the positive feedback effects discussed above, which I assume in this work to be caused by a combination of cognitive limitations of decision-makers and external shocks, in line with the original punctuated equilibrium theory. Accordingly, if I assume that punctuations are not only a consequence of cognitive dynamics, but also external shocks transmitted through policy diffusion, for instance,
the independence assumption can be relaxed and the number of distributions become less
critical.\textsuperscript{38}

Finally, in line with recent developments in the punctuated equilibrium theory literature, I use
different types of policy commitments to measure punctuations. In so doing, I rely on a large
dataset containing information on all tobacco control measures in four broad policy categories,
advertising and sales restriction, education and environmental tobacco smoke regulation, adopted
in 24 countries in the post-WWII period.\textsuperscript{39 40} Advertisement and sales restriction refer
respectively to those measures which prohibit tobacco advertisement and sponsorship of sports
and cultural events and those measures which prevent selling tobacco products to minors, for
instance. Education refers to regulation establishing health warning labels on tobacco products.
Environmental tobacco smoke regulation refers to the regulation of smoking in working and
public places, such as the smoking bans in the hospitality sector studied in this work.

\textbf{POLICY IMAGE AND PUBLIC OPINION}

In Chapter 7 and Chapter 8 I test whether the policy image affects public opinion, one of the core
tenets of the punctuated gradualism theory. More specifically, I test whether the policy image
affects the political support decision-makers receive for introducing a policy and whether it
changes attitudes in policy target groups, which represent the empirically observable
implications of the two theories on which the punctuated gradualism theory relies (along with the
punctuated equilibrium theory), respectively the policy responsiveness and policy feedback
theories. In so doing, I rely on statistical analysis, as the most appropriate method to test

\textsuperscript{38} Studies of policy diffusion rely on a series of statistical tests of policy clustering, which underlie a similar logic (p.172)
(Simmons and Elkins 2004).
\textsuperscript{39} I owe my gratitude to Donley Studlar, who kindly shared this dataset with me.
\textsuperscript{40} The countries are US, Canada, UK, France, Germany, Italy, Norway, Finland, Israel, Ireland, Australia, New Zealand,
Denmark, Spain, Belgium, Greece, Austria, Luxembourg, Iceland, Netherlands, Switzerland, Portugal and Sweden.
relationships between variables across a large number of cases, in combination with comparative case study.

**Policy Image and Political Support**

By building on the policy responsiveness literature, the punctuated gradualism theory assumes that decision-makers act on the basis of expected political returns. When they sense that a policy enjoys public support, thanks to the inclusive policy image with which the issue is discussed, they act in order to turn that support for the policy into political support for them. In Chapter 7 I compare two cases where tobacco control policies were discussed with different policy images to test whether this difference translated into different levels of political support for the party in place. I use interrupted time series analysis to measure the changes in political support triggered by the introduction of the policies. By demonstrating that actual political support for a policy depends on how that policy is framed, I find indirect evidence that expected political returns, on the basis of which decision-makers act, depend on the policy image, as theorised by the policy responsiveness literature on which the punctuated gradualism theory builds. Decision-makers will be more incentivised to legislate on a particular issue when that issue is framed in a particular way.

**Case Selection and Sources**

The analysis investigates whether the Irish smoking ban, where an inclusive policy image triggered high support for political action as a result of its announcement and hence drastic policy change, triggered high political support for the party in government as a result of its introduction. Conversely, in Italy, where the exclusive policy image did not trigger any public support for the policy as a result of its announcement and hence a less drastic policy change, I expect no increase in political support for the party in government as a consequence of the
introduction of the ban. In so doing, I allow for comparability of cases, since both cases concern the regulation of smoking in public places, but I also control for the role of political institutions, which can affect the link between the introduction of a policy and political support for the party in government.

In this chapter I control for the role of political institutions and more specifically, for party control over government in two ways. First, by choosing the regulation of environmental tobacco smoke as the policy area to investigate, I partially control for the role played by formal institutions. As already discussed above, smoking bans are usually enacted through administrative acts and hence they rarely go through the formal decision-making process: they are what the friction theory calls policy processes, for which the role of institutions is less prominent than for policy outputs (p.604) (Baumgartner et al. 2009). Indeed, although the broad legislative acts on which they were based had been both gone through the formal legislative process, the actual details of the smoking bans were set out in administrative acts.41

Second, the Italian and the Irish main parties in government which enacted those bans were equally powerful in terms of control over the executive. In Ireland two different cabinets succeeded one another between June 2002 and February 2011. Those cabinets were led by Fianna Fail with roughly 40 per cent of vote share, which translated in almost half of the seats in the parliament, in cooperation with the Progressive Democrats, dissolved in 2009, and the Green Party. The disproportionality of the electoral system in the date of the enactment of the ban in Ireland was 6.62 (online appendix) (Gallagher and Mitchell 2005). The Irish case is compared

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41 The Italian smoking ban was included in the art.51 of the Law 15 of 20 January 2003, which was mostly about the reform of the public sector. As shown below, the inclusion of the ban in this law was harshly criticized by its opponents. In 2004 an administrative act (“circolare”) implemented the law, by providing the details of the introduction of the smoking ban. The Irish ban was enacted through a regulation under the section 47 of the Public Health (Tobacco) Act, 2002. That section empowers the Minister to prohibit or restrict smoking in public premises.
with a case where a similarly powerful party enacted and introduced a smoking ban, but where the policy image through which that ban was put forward differed: the Italian smoking ban. The (coalition) party in power at the time when the ban was enacted was Berlusconi’s Popolo della Libertà, with more than 45 per cent of seats in the Parliament, as a result of the 2001 general elections. This high share of seats was the consequence of the highly disproportional electoral system, even more disproportional than the Irish one: the disproportionality index in Italy in 2001 was 10.22 (online appendix) (Gallagher and Mitchell 2005). Berlusconi’s government was in power from June 2001 until the general elections in April 2006.

Lastly, I need to compare the effects of the introduction of the bans on the political support for two parties of the same political orientation. Indeed, if I assume that left-wing voters are more in favour of tobacco control, perhaps because they are more inclined to state intervention, a right-wing party which introduces a smoking ban will not trigger any effect on the population for this reason. Accordingly, if I compare two countries with parties in government with different political orientation, I will not be able to rule this option out. In this vein, I choose the cases discussed above as the 21st Government of Ireland with Fianna Fail as the main party in government and the 2nd Berlusconi’s government were both right-wing. Table 1 summarises the discussion.
Table 1 Policy Image and Political Support

<table>
<thead>
<tr>
<th>Method of Difference</th>
<th>Ireland</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political Institutions</td>
<td>High party control over government</td>
<td>High party control over government</td>
</tr>
<tr>
<td>Smoking ban enacted as administrative act outside the legislative process. Hence low role of formal political institutions</td>
<td>Smoking ban enacted as administrative act outside the legislative process. Hence low role of formal political institutions</td>
<td></td>
</tr>
<tr>
<td>Party in Government</td>
<td>Right-wing</td>
<td>Right-wing</td>
</tr>
<tr>
<td>IV: Type of policy image</td>
<td>Inclusive policy image</td>
<td>Exclusive policy image</td>
</tr>
<tr>
<td>DV: Political support for the party in government</td>
<td>Increase in the political support for the party in government</td>
<td>No increase in the political support for the party in government</td>
</tr>
</tbody>
</table>

The study of the characteristics of the policy image of the Irish smoking ban relies on the analysis in Chapter 5. As for the Italian ban, a systematic review was conducted on all the Resoconti dell’ Assemblea (parliamentary minutes) for the 14th legislature, namely from May 2001 to April 2006, and on the archives of the first Italian newspaper in terms of diffusion, namely Il Corriere della Sera. The keywords ‘divieto di fumo’ (smoking ban) OR ‘legge Sirchia’ (Sirchia law) are searched in the Corriere della Sera’s archives and 116 articles are found.

As discussed above with respect to the cross-case comparison in Chapter 5, comparative case study research has some limitations. Unobserved heterogeneity may bias the findings. Nonetheless, a careful case selection is carried out for the analysis in Chapter 7 and the analysis controls for the theoretically relevant aspects. By starting from the policy responsiveness literature and the new developments of the punctuated equilibrium theory (the so-called friction theory), in Chapter 7 I test whether something other than political institutions affects how public opinion reacts to public policy. In this case the most relevant factors which need to be controlled for are political institutions and more specifically party control over the government.
In this chapter I use quantitative text analysis to trace the media attention to the issue of environmental tobacco smoke and to observe policy images in a valid and reliable manner. The use of text analysis on newspaper articles is common practice in the punctuated equilibrium theory research programme (Baumgartner and Jones 1993, 2009) and in similar work (Culpepper 2011). Nonetheless, the literature has so far used manual content. In line with very recent developments in the policy diffusion scholarship (Gilardi, Shipan, and Wueest 2016), this chapter uses topic modelling to extrapolate policy topics and find evidence for the presence of policy images. It should be noted that policy topics derived from topic modelling do not necessarily coincide with policy images, as conceived in the punctuated equilibrium theory literature. Yet, the observation of certain topics provides empirical evidence for the presence of certain policy images.

The analysis for the Irish case relies on a corpus of 1414 Irish newspaper articles published from 1 January 1998 to 31 December 2004 and retrieved from LexisNexis with the following combination of words in the text: ‘smoking ban’ OR ‘passive smoking’. In the Italian case I retrieve 491 articles published from 1 January 1998 to 31 December 2005 from LexisNexis containing the following words in the text: ‘divieto di fumo’ (smoking ban) OR ‘legge Sirchia’ (Sirchia law) OR ‘fumo passivo’ (passive smoking). I pre-processed the corpus by converting words to lowercase and plurals to singulars and removing punctuations, stop words, numbers and common word endings with the R package tm (Meyer, Hornik, and Feinerer 2008).

I start from the corpus of texts from the newspaper articles and I extrapolate topics through topic modelling by using the R package topicmodels (Hornik and Grün 2011). The application of topic modelling has become common in social sciences in the last decades (Lucas et al. 2015; Nowlin
2016; Roberts et al. 2014) and it has been very recently used to observe policy perceptions in the discussion of smoking bans in US states (Gilardi, Shipan, and Wueest 2016). This method uses an algorithm, Latent Dirichlet Allocation (LDA), to extrapolate topics from a corpus of texts. This algorithm assumes that every document is a combination of different topics (p.18-19) (Grimmer and Stewart 2013) and it infers the latent topic structure of documents with the following procedure.\(^{42}\) It starts by going through all the documents and randomly assigning each word to a topic and then document by document it reassigns words to topics, based on the probability that a word belongs to a topic over the entire corpus and that a topic is contained in a specific document (p.283-284) (Blei, Ng, and Jordan 2003). The final result is a list of topics which most frequently appear in a specific document and a list of words associated with those topics. I then plot the frequencies of articles associated with different topics in the period under analysis.\(^{43}\)

**Interrupted Time Series**

I use an interrupted time series design to analyze whether the introduction of the smoking ban increases political support for the party in government. Interrupted time series designs are regression models which take inspiration from experimental designs. As such, they seek to estimate the equivalent of a treatment effect in an observational setting, where the equivalent of a treatment assignment is determined by whether the value of an observed covariate, in this case time, is above or below a known threshold (p.283) (Lee and Lemieux 2010). Interrupted time series designs assume that variation in the variables which might affect the outcome is approximately randomized in proximity of the equivalent of the treatment point, the introduction

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\(^{42}\) Gilardi, Shipan, and Wueest (2016) note that the assumption on which this algorithm relies are similar to those underlying the manual content analysis in use in the punctuated equilibrium theory research programme. As such, topic modelling is a particularly appropriate approach to study policy images.

\(^{43}\) For presentation purposes, the findings for the Irish case are discussed in Chapter 5.
of the ban in this case (p.283) (Lee and Lemieux 2010). In other words, the probability of an observation of being just below or just above the treatment point depends mainly on the treatment itself.

Local randomization rests on the assumption that the equivalent of the treatment variable should be discontinuous in the cutoff point, whereas other variables should be continuous. More importantly, it does not matter whether other variables are related to the treatment or the dependent variable, as long as this relationship is continuous (p.292) (Lee and Lemieux 2010). In other words, the researcher should only be concerned by those variables which have a discontinuous effect either on the treatment or on the dependent variables. This makes the specification of the model rather straightforward. The regression model used in this work is the following:

\[ Y_t = \beta_0 + \beta_1 (Time) + \beta_2 (Intro Ban) + \beta_3 (Post Intro Ban) + u_t \]

The response variable represents political support for the party in government at time t. \( \beta_0 \) is the intercept and \( Intro Ban \) is a dummy variable assuming the value 0 before the introduction of the ban and 1 after the introduction of the ban. \( \beta_2 \) and \( \beta_1 \) represent respectively the effect of the introduction of the smoking ban (the change in the intercept as a result of the ban) and the effect of time on political support.\(^{44}\) Last but not least, \( \beta_3 \) represents the effect of time on political support after the introduction of the ban (the change in the slope as a result of the ban) and \( u_t \) represents the error term. The full model includes also a dummy variable for the year in which

\(^{44}\) It should be noted that the intercept in this case has no substantive meaning in that t cannot equal zero. If time was substituted with a forcing variable ranging from zero to 82, as it would be the case for Ireland, for instance, the intercept would represent the base level of the outcome at the beginning of the series: in this case the political support level at the beginning of the time period under analysis.
the general elections took place, as it is common practice in similar work (Marsh and Mikhaylov 2012).

In Ireland the ban entered into force on 29 March 2004. The period under analysis is between June 2002 and March 2009. The reason is threefold. First, I need to balance a number of observations sufficient for the analysis and the need to maintain observations as close to the treatment as possible, following the principle of local randomized control (Lee and Lemieux 2010). Second, I need observations only for the period when the party which introduced the ban was in government. Third, given the measurement of political support, data availability represents an issue. Political support for the party in government is measured through monthly polls for vote intention for Fianna Fail using two sources: the Irish Political Survey Data and the REDC polls contained, already used in Marsh and Mikhaylov (2012).45

In the Italian case the dependent variable is the vote intention for the party in power, namely Popolo della Libertà.46 Due to data availability, the period under analysis starts in January 2002 and ends in May 2006. The Italian smoking ban was introduced on 10 January 2005, only a year after the Irish one. A remark is needed. In the period under analysis Popolo della Libertà passed from a coalition of parties, namely Forza Italia and Alleanza Nazionale, to a coalition party. For the sake of comparability of data, throughout this period I pool the vote intention for Forza Italia and Alleanza Nazionale together into a single value associated with the coalition party Popolo della Libertà. Lastly, it should be noted that multiple imputation was needed for roughly 15 per cent of the data in the Irish case and 5 per cent in the Italian one.

45 I owe my gratitude to Pat Lyons and Slava Mikhaylov for providing me with this data. See: http://www.tcd.ie/Political_Science/IOPA/; http://thedata.harvard.edu/dvn/dv/Mikhaylov/faces/study/StudyPage.xhtml;jsessionid=40a3c5ac7dd43a034828f0423711?studyId =85575&versionNumbers=1 (accessed November 2013).
Interrupted time series designs only approximate experimental research and although results are more robust than in traditional regression models, they need to be taken with some caveats. As seen above, the introduction of the smoking ban needs to be the only variable discontinuously related to vote intention in the same interval of time. I assume that smoking bans have discontinuous effects on political support (or more specifically vote intention). In other words, the introduction of smoking bans represents a valid approximation of treatment in non-randomized experimental terms. This assumption is supported by the sudden implementation, which usually does not envisage phasing-in periods and occurs almost overnight, and by the high levels of enforcement of smoking bans. The effects of smoking bans have already been extensively analysed in the literature with similar research designs (Abadie, Diamond, and Hainmueller 2010; Adda and Cornaglia 2006, 2010; Fong et al. 2006; Odermatt and Stutzer 2013; Pacheco 2013). The second assumption on which the application of the interrupted time series relies is that the introduction of the smoking ban is the only discontinuous variable related to the vote intention in the same interval of time. This assumption is met in two ways. First, by measuring time intervals monthly, the likelihood that other main political events may occur simultaneously to the treatment is reduced. Second, by applying process tracing, I seek to rule out the presence of other main political events occurring in the same period.

Yet, these devices only mitigate the problems in the application of interrupted time series and hence results need to be taken with some caveats. It should be noted that the independent variable in the analysis in Chapter 7 is the introduction of the smoking bans, namely the entering into force of these bans, not their prioritization. Results need to be taken with the caveat that although the prioritization of a policy, namely when the policy starts to be discussed in the political arena, affects public reactions in terms of support for a specific policy, as theorised by
the punctuated gradualism theory (see Chapter 3), it is the introduction of a policy which mainly affects public reactions in terms of political support for the party in government. It is reasonable to assume that citizens allocate electoral rewards only when a policy enters into force and not when this policy is simply under discussion. Moreover, this process is also observed with process tracing in Chapter 5. The final caveat regards the endogeneity problem. I assume that it is very unlikely that political support for the party in government affects the introduction of a policy and that public support for a specific policy is associated with political support for the party in government before the introduction of the policy.

**Policy Image and Attitudinal Changes**

By building on the policy feedback literature, the punctuated gradualism theory posits that the policy image affects the allocation of interests in the society and this in turn determines how the policy will evolve. A policy discussed with an exclusive policy image bearing proximate effects on specific segments of society will bring concentrated costs and benefits thus triggering the emergence of concentrated interests and hence this policy will evolve differently than in the scenario where a policy bears diffuse effects on the society as a whole. If this is true, in Chapter 8 I expect to find that the prioritization of a policy with an exclusive frame as bearing proximate effects on specific target groups, such as smokers and non-smokers, will trigger attitudinal changes among members of those groups. By relying on the insights of the behavioural literature discussed in Chapter 2, in this analysis I take attitudinal changes as prerequisite for behavioural changes and in turn interest creation.

**Case Selection and Sources**

The analysis focuses on the tobacco advertisement bans in Italy and France entered into force respectively on 22 January 1992 and 30 January 1993. The rationale for this comparison is the
method of difference (p.203-204; p.153-156; p.183) (Della Porta 2008; George and Bennett 2005; Mill 1888; Skocpol and Somers 1980), as already used above. First, Italy and France do not differ greatly in their general approach to tobacco control (Table 4.3 p.80) (Cairney, Studlar, and Mamudu 2012). Furthermore, the Italian and French bans did not differ greatly in terms of their content as well as their implementation and enforcement. 47 Nonetheless, strong differences in how these advertisement bans were discussed, namely their policy images, are present. The French ban was the result of a small group of academics who co-opted the Health Minister and it was discussed mainly in terms of the positive effects for smokers, leading to a strong division between smokers and non-smokers. Conversely, in the Italian ban high attention in the media was given to general public health, from education to children protection: no specific group was targeted by the policy. In conclusion, I expect to observe attitudinal changes among smokers and non-smokers in France, but not in Italy. A difference-in-difference-in-difference analysis is used to measure attitudinal changes in target groups, namely smokers and non-smokers, in both countries. The logic underlying this comparison is visualized in Table 2.

47 Although these two advertisement bans do not differ greatly from one another, thus making the comparative case study in Chapter 8 possible, they represent different types of policy change. The French ban underwent a series of amendments before its introduction, which watered down the original proposal. As it entered into force, the Evin law (the law enacting the ban was named after the then Health Minister) was little more than the transposition of the rules already in place with the Veil law, a law introduced in the 1970s, which sought to restrict tobacco advertisement, but with scarce results. Conversely, in Italy before the ban in 1992, no regulation of tobacco advertisement was in place, apart from some minor provisions from the 1960s. The law enacting the ban, strong of its public support, managed to go through the decision-making process without any major amendment. This is in line with the punctuated gradualism theory, which associates an inclusive policy image with a drastic policy change and an exclusive policy image with an incremental policy change. The focus of Chapter 8 is, nonetheless, more specific, namely whether differently framed policies affect attitudes in policy target groups in a different manner.
Table 2 Policy Image and Attitudinal Changes

<table>
<thead>
<tr>
<th>Method of Difference</th>
<th>France</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength and comprehensiveness of the ban</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Levels of implementation and enforcement of the ban</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Tobacco control regime</td>
<td>Mediterranean</td>
<td>Mediterranean</td>
</tr>
<tr>
<td><strong>IV: Policy image</strong></td>
<td><strong>Exclusive policy image with proximate effects on target groups</strong></td>
<td><strong>Inclusive policy image with broad effects on the society as a whole</strong></td>
</tr>
<tr>
<td><strong>DV: Attitudinal changes</strong></td>
<td><strong>Change in attitudes towards tobacco control among smokers and non-smokers</strong></td>
<td><strong>No change in attitudes towards tobacco control among smokers and non-smokers</strong></td>
</tr>
</tbody>
</table>

In order to demonstrate the similarities between the cases and the difference in policy image, I carry out an extensive archival research on the main tobacco industry repository. The 1998 US Master Settlement Agreement forced the major tobacco companies to make previously secret internal industry documents publicly available in online repositories. The documents used for the analysis in this chapter are drawn from the Philip Morris documents site, one of the most comprehensive archives used extensively in the public health literature (Bitton, Neuman, and Glantz 2002; Neuman, Bitton, and Glantz 2002).48 This repository contains all the documents produced by the Philip Morris and Altria Group in court and administrative cases in the US concerning health and smoking. These hundreds of thousands of documents span from weekly newsletters sponsored by the industry association containing news on tobacco control in newspapers worldwide, through market and business plans and private communications between senior managers, to reports produced by public affairs consultants on behalf of the tobacco industry with the aim to assess and support its business strategies.

The archival search is conducted as follows. First, I search for country terms, such as ‘France’, ‘French’, ‘Italy’, ‘Italian’. Second, I restrict the focus by using the Boolean operative terms AND and OR with the words ‘advertisement’ and ‘sponsorship’. As the secondary literature and the tobacco industry documents provide less information for the Italian case, I also look for articles with the terms ‘sigaretta’ (cigarette) and ‘pubblicità’ (advertisement) published from 1985 to 1995 in one of the main Italian newspapers, namely La Repubblica.49

**Difference-in-Difference-in-Difference**

A difference-in-difference-in-difference analysis applied to a series of cross-sectional surveys is used to test whether the prioritization of the French and Italian smoking bans triggered attitudinal changes among smokers and non-smokers. Traditional difference-in-difference analyses are commonly applied to tobacco control measures (Fong et al. 2006; Odermatt and Stutzer 2013; Pacheco 2013; Svallfors 2010), also with specific reference to attitudes towards tobacco control (Pacheco 2013). A difference-in-difference analysis allows for observing the effects of a policy. By comparing the situation before and after a policy in those countries where that policy was introduced with those where it was not, this research design allows for inferring causality with a good degree of confidence. In this chapter I include in the analysis a further comparison term, namely smoker, to test the effect of the policy among specific target groups. This method takes the name of difference-in-difference-in-difference.

I use a difference-in-difference-in-difference strategy to test whether the prioritization of the smoking bans triggered an increase in the likelihood of being in favour of tobacco advertisement

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49 I choose this newspaper and not Corriere della Sera, which is used in the analysis of the previous chapter, because the former has a more accessible historical archive, which goes back to the 1980s. La Repubblica is the second most read newspaper in Italy and it does not differ greatly from Corriere della Sera in terms of political orientation.
control in specific target groups, namely smokers and non-smokers. The baseline model for the Italian case is as follows:

\[ Y = \beta_0 + \beta_1 \text{ (1992) } + \beta_2 \text{ (IT) } + \beta_3 \text{ (IT * 1992) } + \beta_4 \text{ (smoker) } + \beta_5 \text{ (smoker * 1992) } + \beta_6 \text{ (smoker * IT) } + \beta_7 \text{ (smoker * IT * 1992) } + u \]

\[ \hat{\beta}_7 = [(\bar{Y} \text{ 1992, IT, smoker } - \bar{Y} \text{ 1991, IT, smoker })
- (\bar{Y} \text{ 1992, Other, smoker } - \bar{Y} \text{ 1991, Other, smoker })
- (\bar{Y} \text{ 1992, IT, non } - \bar{Y} \text{ 1991, IT, non } - \text{ smoker })] \]

There are three dummy variables: 1992, which assumes value 0 before the introduction of the ban and value 1 after the introduction of the ban; IT, which assumes value 1 for Italy and 0 for the other countries; smoker, which assumes value 1 if the individual is a smoker and 0 if he/she is not. I use a difference-in-difference-in-difference method (Imbens and Wooldridge 2007), which allows for testing for the effects of public policy on target groups, such as smokers and non-smokers, by analyzing the effects of the interaction between the three dummy variables above. This triple interaction starts with the time changes in averages for the smokers in Italy and then nets out the change in means for smokers in the other countries and the change in means for the non-smokers in Italy (p.2-3) (Imbens and Wooldridge 2007). In the full model I include state and year fixed effects, along with country-specific time trends, and weights to account for the complex survey design, in line with the work on policy feedback in tobacco control using similar surveys (Odermatt and Stutzer 2013; Pacheco 2013).\(^{50}\) \(^{51}\) Furthermore, I cluster standard errors

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\(^{50}\) The use of fixed effects for countries is common practice when using cross-sectional data across different countries. There are also substantial reasons for doing so in tobacco control. Indeed, according to the mainstream literature on tobacco control (Cairney, Studlar, and Mamudu 2012; Marmor and Lieberman 2004) differences across tobacco regimes are highly significant.

\(^{51}\) The weights are provided by Eurobarometer in order to control for the fact that although population across member states varies considerably national samples in the surveys are roughly of the same size.
on country and I also control for a series of individual demographic characteristics. In this way, I control for unobserved heterogeneity at individual, country, year and country-year level.

The difference-in-difference-in-difference analysis relies on cross-sectional surveys. The most common approach to analyse this type of survey is called the pooled approach (Horton and Fitzmaurice 2004; Roberts and Binder 2009; Schenker and Raghunathan 2007). This approach allows for obtaining overall estimates by combining different samples with different weights into a larger one. The result is a sample containing independent and not identically distributed observations, with separate dummy variables for each time period (p.128-129) (Wooldridge 2002). The use of difference-in-difference analysis which relies on cross-sectional surveys is common in the literature on tobacco control (Odermatt and Stutzer 2013).

I pool four survey samples to analyze the effect of the introduction of the advertisement bans in Italy and France: CEC (1991a), CEC (1992a), CEC (1994a) and CEC (1995a). Each of these survey waves questioned more than 1000 individuals from random samples drawn in 12 European countries on several topics. The Italian ban entered into force on 22 January 1992. Accordingly, in order to test its effects I compare CEC (1991), where the research was conducted roughly from mid-October to mid-November 1991, and CEC (1992a), where the research was conducted roughly from mid-September to mid-October 1992. The same logic applies to the French ban, but as there is no survey available for 1993 I use the one carried out in 1994.

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52 The use of cross-sectional surveys is standard practice in the literature on policy feedback (Gusmano, Schlesinger, and Thomas 2002; Haselswerdt and Bartels 2015; Marshall 2014; Pacheco 2013; Svallfors 2010).
53 In 1993 no Eurobarometer survey with questions on tobacco control was carried out.
54 Originally, more countries were included in these surveys, but observations from some countries needed to be dropped, due to comparability and other issues. I dropped the observations from Norway, due to the lack of several important questions. Furthermore, in 1994 Finland and in 1995 Sweden and Austria were added, but I dropped the observations from these countries to maintain the comparability. Finally, I also pooled observations from West Germany and East Germany together.
As for the choice of the questions, Appendix Table 2 in the Appendix illustrates how variables are coded from the survey questions. It should be noted that some questions and answers are phrased differently across survey waves: for instance, the dependent variable measuring attitudes towards tobacco advertisement control, which is derived from the questions Q62, Q103, Q.71_3 and Q26. All these questions are phrased in a relatively neutral manner, in the form of “are you, personally, for or against such a ban?”, but Q.71_3 from the 1994 survey phrases the question in a relatively negative manner, namely “advertising for cigarettes and tobacco should not be regulated in any way”.

This section concludes with a remark on the validity of the results drawn from the difference-in-difference-in-difference analysis and a more general consideration on endogeneity. As with interrupted time series, difference-in-difference-in-difference analyses seek to approximate experimental research. By relying on a comparison across time between those countries which experience the introduction of a policy with those which do not, a difference-in-difference-in-difference analysis manages to reduce unobserved heterogeneity. Furthermore, by including country, year and country-year fixed effects, as well as individual characteristics in the regression model, I further reduce unobserved heterogeneity. Nonetheless, difference-in-difference-in-difference analyses are not characterised by the same robustness of results of experimental research and a certain degree of unobserved heterogeneity is always present.

The specific research design employed in this chapter, which allows for observing a direct link between the independent and dependent variables, addresses some of these concerns. This is not necessarily the case in other studies which use similar research designs. For instance, Odermatt and Stutzer (2013) apply a similar research design to Eurobarometer surveys, to test whether the introduction of tobacco control measures affect people’s life satisfaction. In this study the
authors control for several factors which can affect individual life satisfaction, including macro-economic factors, taxation levels and so on. Nonetheless, the potential effect of unobserved heterogeneity in this case remains rather high, since several factors might affect life satisfaction. In the analysis in Chapter 8, instead, the independent variable is more directly linked to the outcome. Once controlled for several key factors at individual, country and year level, it is reasonable to assume that the main effect on the propensity of being in favour of tobacco advertisement is driven by the prioritization of regulation addressing specifically tobacco advertisement.

Nonetheless, unobserved heterogeneity might arise from some aspects of the measurement of the outcome. As seen above, there are some differences in the question wording across survey waves. This surely might bias results. Yet, since the focus of this analysis is on the effects on target groups this is not a major concern. Indeed, if the different wording had an effect on responses, this effect would be uniform across individuals and, when comparing responses between smokers and non-smokers across surveys, the differences due to the wording would balance out.

Finally, another aspect of the measurement of the outcome might be problematic, namely the timing. As discussed in Chapter 4, in the Italian case the time lag between the first survey and the introduction of the ban and the time lag between the introduction of the ban and the second survey are both roughly seven months. Conversely, in the French case these time lags are much longer and, furthermore, they are different between each other. In this light, a caveat to the results above needs to be introduced, namely that policy prioritization affects individual attitudes almost immediately (e.g. within the immediate months) and that these effects remain in place
over a relatively long period of time (e.g. also after more than a year from the prioritization of the policy).

Although the endogeneity between policy-makers and public opinion is discussed from a theoretical perspective in Chapter 3, this chapter addresses this issue from the perspective of the analysis carried out in Chapter 8. The theory tested in this work claims that the prioritization of a policy framed in a particular manner shifts the allocation of interests in the society and this shift in turn affects policy change. Chapter 8 seeks to find indirect empirical evidence for this claim, by testing whether the prioritization of the advertisement bans in France and Italy in the 1990s with different policy image has different effects on target groups, namely smokers and non-smokers. It should be noted that in the analysis in Chapter 8 the independent variable is the prioritization of the bans and not their introduction, differently from Chapter 7. Nonetheless, since the identification of the moment when an issue starts to be discussed in the political arena is difficult, this chapter takes the introduction of the policy as reference point.

As such, the results in Chapter 8 need to be taken with three caveats. First, I assume that the prioritization of the advertisement bans did not occur too far from the introduction of these bans, so that its effects were measured by the surveys used in the analysis. Second, there is no way to empirically distinguish between the effects of the prioritization of the bans and their introduction in the analysis in Chapter 8. Hence, I assume that support for a specific policy among the members of the target groups changes as a consequence of the prioritization of this policy and that the introduction of this policy simply reinforces this change. As discussed with reference to the analysis in Chapter 7, it is likely that the discussion of a policy affects public reactions in terms of support for a specific policy, whereas the introduction of that policy affects public reactions in terms of political support for the party in government. Empirical evidence for this
process is provided with process tracing in Chapter 5. Finally, in the analysis in Chapter 8 the endogeneity problem concerns also whether public support for a policy affects the prioritization of that policy (with an inclusive policy image). It should be noted that the model introduced in this work assumes that public opinion is activated by policy prioritization, as discussed in Chapter 3. Although people might have their preferences over a range of potential policies before these policies start to be discussed in the political arena, I assume that it is the prioritization of a policy that activates the public support for that specific policy. Moreover, it should be noted that in Chapter 8 the independent variable is the prioritization of a policy with a specific policy image and the dependent variable is public support for that policy. As such, although it might be that a policy is prioritized following the public mood, it is unlikely that public support affects the policy image with which that policy is prioritized.

SUMMARY OF METHODS

This final section concludes by summarizing the methods used in this study, discussing what each method adds to the study of policy change in tobacco control and how they complement each other with their strengths and their weaknesses. Appendix Table 3 summarizes the discussion in this section.55

In Chapter 5 I trace the effects of the policy image on policy change and the mediating role played by public opinion in a set of cases. In so doing, I use a combination of process tracing to observe the processes which link the policy image and policy image, based on the mediating role of public opinion, and cross-case comparison to allow for variation in the independent and dependent variables, respectively the policy image and policy change, as well as to control for other factors not relevant for the theory. The rationale is an overall test of the punctuated

gradualism theory by assessing the causal mechanisms between variables and the role of intervening factors as posited by the theory.

In Chapter 6 I observe how tobacco control evolves across countries and time, by employing a series of descriptive statistics to test whether the distribution of annual percentage in policy change in tobacco control assumes a normal distribution, as it is common practice in the public policy literature. In so doing, I empirically test the punctuations hypothesis as one of the theoretical assumptions of the punctuated gradualism theory, shared with the original punctuated equilibrium theory.

Finally, in Chapter 7 and Chapter 8 I test the empirically observable implications of the two other theoretical assumptions of the punctuated gradualism theory, derived from the two bodies of literature on which this study builds, respectively the policy responsiveness and policy feedback strands. In so doing, I use a combination of cross-case comparison and statistical analysis. More specifically, in Chapter 7 I test whether the policy image affects the political support the party in government receives for implementing a policy, by comparing two similar cases with variation in the policy image. I use topic modelling to observe policy images in a valid and reliable manner and I use interrupted time series analysis to measure the dependent variable, namely the effects of the introduction of a policy on the political support for the party in government. In so doing, I find indirect evidence that decision-makers act on the basis of expected political returns and that these returns depend on the policy image, as theorised by the policy responsiveness literature on which the punctuated gradualism theory builds.

In Chapter 8 I test whether the policy image affects the attitudinal changes among the members of the target groups of a policy by comparing two cases with different policy images. I use a
difference-in-difference-in-difference analysis to measure the effects of the prioritization of a policy on the attitudes of members of target groups. In so doing, I find indirect evidence that the policy image affects the allocation of interests in the society, as theorised by the policy feedback literature on which the punctuated gradualism theory builds. Indeed, attitudinal changes are taken in this work as prerequisite for behavioural changes and eventually interest creation.

In conclusion, each method adds something to the study of policy change in tobacco control. Process tracing allows for an in-depth analysis of the causal processes between variables theorised by the punctuated gradualism theory. In this way, I can observe in detail the intervening role of public opinion in this process, as the main focus of the punctuated gradualism theory. Descriptive statistics, as in Chapter 6, are functional to study how tobacco control evolves across different countries and over long periods of time. Demonstrating that tobacco control evolves through punctuations corroborates the theoretical assumption on policy change shared by the punctuated gradualism and punctuated equilibrium theory. Finally, by combining statistical analysis and cross-case comparisons in Chapter 7 and Chapter 8, I study specific relationships between variables to find indirect evidence for the theory under study, controlling for factors at national level which can affect the analysis. In this way, I test whether the policy image affects public opinion, as one of the core tenets of the punctuated gradualism theory.

**CONCLUSION**

This chapter discussed the mixed-method approach used to test the punctuated equilibrium theory introduced in this work. Each empirical chapter addresses the theory from a different perspective, relying on the comparative advantages of the different methods used. Chapter 5 takes a more qualitative approach by providing an in-depth analysis of how the policy image affects policy change and how this relationship is mediated by public opinion. The ensuing
Chapter investigates how tobacco policy evolves by using a more quantitative approach. Finally, Chapter 7 and Chapter 8 provide further empirical support for the theory proposed in this work, by looking at the relationship between policy image and public opinion from a statistical perspective.

In the next chapter I assess the causal mechanism linking the policy image and policy change in two cases, namely the voluntary agreement regulating environmental tobacco smoke and the smoking ban introduced in Ireland respectively in 1994 and 2004. Process tracing is used to investigate the intervening role of public opinion in this link. The investigation of causal process observations is nested within cross-case comparisons to allow for comparability of cases, hence making the assessment of the mechanism easier, but also allowing for variation in the independent and dependent variables, namely the policy image and policy change.

By using a series of descriptive statistics Chapter 6 investigates whether tobacco control is characterised by punctuations, as both the punctuated equilibrium and punctuated gradualism theory would expect. The final chapters investigate whether the introduction of the smoking bans in Ireland and Italy in the 2000s triggered an increase in political support for the party in government and whether the prioritization of the advertisement bans in France and Italy in the 1990s triggered changes in attitudes among smokers and non-smokers. In these two chapters, I rely on a combination of comparative research and statistical analysis.
CHAPTER 5: THE REGULATION OF SMOKING IN PUBLIC PLACES IN IRELAND

INTRODUCTION

By building on the insights of the policy responsiveness and policy feedback strands, the punctuated gradualism theory hypothesizes a relationship between the policy image and policy change, mediated by the role of public opinion. More specifically, it posits that an inclusive policy image triggers drastic policy change and that an exclusive policy image triggers incremental change. The theory specifies the processes which link the policy image to policy change, by focusing on the intervening role of public opinion. An inclusive policy image triggers public support for the policy at stake, which incentivizes policy-makers to act and put forward strong regulation. Furthermore, an inclusive policy image allocates diffuse costs and benefits on the society thus preventing the creation of strong interests which can oppose regulation. Conversely, an exclusive policy image does not trigger public support thus disincentivising policy-makers to act and it allocates concentrated interests which can strongly oppose regulation.

In this chapter process tracing is applied to two cases to assess the causal mechanisms linking the policy image and policy change and the intervening role of public opinion. The hypotheses concerning the relationship between the two variables are transposed into causal processes and evidence is brought in the form of causal process observations. In investigating these causal process observations, I compare how environmental tobacco smoke regulation, namely the regulation of smoking in public places, evolved in Ireland in two instances: the introduction of the smoking ban in 2004 and the introduction of the 1994 voluntary code. More specifically, I demonstrate that environmental tobacco smoke in mid-2000s was discussed with a strong focus on the protection of the public as a whole. This inclusive policy image in turn triggered a strong public support for the ban hence incentivising politicians to act and preventing powerful
interests, such as publicans, from mobilizing effectively. The result was the introduction of a total smoking ban in public places at national level. Conversely, in mid-1990s environmental tobacco smoke was discussed in terms of the protection of workers in public premises. This exclusive policy image did not raise public support thus disincentivising politicians to act and by allocating concentrated costs and benefits it maintained the influence of powerful interests unaltered. As a result, the 1994 voluntary agreement was the transposition of self-regulatory practices already in place in the regulation of smoking in public premises, namely what can be conceived as an incremental change. By comparing these two instances I show how within the same political system the same issue evolved differently depending on how it was discussed in the political arena, namely the policy image. This diachronic design allows for a good combination of comparability of cases and variation in key variables across them.

This chapter investigates the causal process observations set out in Chapter 4 in the 2004 smoking band and the 1994 voluntary agreement in two separate sections. Then, I proceed to summarizing the findings and discussing more in general how different types of policy prioritization underlying different policy images were associated with the different types of policy dynamics, as seen in Chapter 3. The final section discusses also the limitations of process tracing.

The next chapters test the empirically observable implications of the theoretical assumptions on which the punctuated gradualism theory relies. Chapter 6 brings evidence in support of the main theoretical assumption on policy change of the punctuated gradualism theory (borrowed from the punctuated equilibrium theory), by showing that tobacco control evolves through punctuations. Chapter 7 and Chapter 8 find empirical support for the other theoretical components of the theory.
THE 2004 SMOKING BAN

This section investigates how the inclusive policy image with which environmental tobacco smoke was discussed in mid-2000s led to a drastic policy change. The diffusion of medical evidence and policy practices from the US brought the issue of passive smoking into the Irish political agenda. That issue was then transposed by Irish decision-makers into a new policy image, which stretched the focus of the political debate beyond the negative effects of smoking on workers in the hospitality sector. Indeed, the debate in media and in the parliament started to be focused on the necessity to protect the society as a whole. As a consequence, the public started to be more receptive to this new policy image. That inclusive policy image changed also how people perceived tobacco control and its effects: people started to perceive it as beneficial for the entire community. This dwarfed the role of the powerful entrenched interests, such as publicans, who had enjoyed privileged access to the decision-making process and in turn facilitated policy change. The high public support enjoyed by the ban and the related incentives for decision-makers to act, coupled with the lack of coordination among stakeholders, led to the introduction of a total smoking ban in public places.

The following section investigates how the different political discussion on environmental tobacco smoke in the 1990s led to a different policy evolution. More specifically, it shows how the exclusive policy image with which environmental tobacco smoke was discussed led to a gradual policy change, namely the transposition of rules and practices already in place. The first wave of medical evidence from the US brought the issue of environmental tobacco smoke to the attention of several legislators and practitioners at the beginning of the 1990s. Until then, attention had been mainly on education and children protection. Medical evidence and litigation cases from the US moved the attention from education to smoking regulation and, more
specifically, from children education to workers’ safety, as happened with the smoking ban a decade later. Yet, the exclusive policy image based on workers’ safety left the public almost indifferent. Furthermore, the issue was considered as something concerning exclusively the various stakeholders, such as public premises’ employees and owners. As a consequence, no incentives were present for policy-makers to push the issue through the political agenda and legislate on it. Rather, high incentives were present for stakeholders to coordinate between each other in order to avoid strong legislation. These dynamics led to the transposition of self-regulatory practices already in place into the 1994 voluntary agreement, which was then subject to continuous revisions.

**Policy Image, Public Support and Policy Change (P1)**

The diffusion of medical evidence and policy practices from the US shifted the discussion on tobacco control to the problem of passive smoking in public premises and the need for a total ban to address such a problem. This section investigates how environmental tobacco smoke went through the Irish political agenda and eventually was transposed into legislation, by looking at the policy image through which that issue was discussed in the Irish political arena and how public opinion reacted to it. This part investigates the first process (P1) theorised by the punctuated gradualism theory, namely that an inclusive policy image triggers public support for the policy at stake, which incentivizes policy-makers to act and put forward strong regulation. More specifically, I expect that the political debate on environmental tobacco smoke based on the protection of the public as a whole triggered public support for the smoking ban hence creating incentives for policy-makers to act. In this section I test the causal process observations derived from P1, as discussed in Chapter 4: the issue of environmental tobacco smoke started to be discussed in terms of the protection of the public as a whole (CPO1); public opinion reacted
positively to this new policy image starting to be in support of the ban (CPO2); electoral considerations were central in the political debate (CPO3); the smoking ban was enacted without major amendments and in a timely manner (CPO4).  

The Shift in Policy Image (CPO1)

A systematic review of the parliamentary debates and the newspaper articles on the smoking ban reveals the central role of two reports on environmental tobacco smoke: the 1999 report titled A National Anti-Smoking Strategy, published by the Joint Committee on Health and Children (JointCommitteeonHealthandChildren 1999), and the 2002 Report On The Health Effects Of Environmental Tobacco Smoke (ETS) In The Workplace, published by the Health and Safety Agency in collaboration with the Office of Tobacco Control (HSA-OTC 2002). These two reports are exemplary with respect to the two policy images with which environmental tobacco smoke was discussed before 2003.

The former is a report published by the cross-party committee on Health in the lower house, established in November 1997 with Alan Shatter (Fine Gale) as rapporteur. As stated in the committee’s terms of reference, the aim was to review the situation of the national anti-smoking strategy and to consider “such matters of policy for which the Minister in charge of that Department is officially responsible” and then “report thereon to both Houses of the Oireachtas” (p.1) (JointCommitteeonHealthandChildren 1999). The second report was commissioned by

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56 See Appendix Table 1 in the Appendix.
57 The implementation strategy for the 1999 report was set up in another report published in 2000 by the Tobacco-Free Policy Review Group.
58 The Irish parliament is called Oireachtas and it is composed of the lower house, namely the Dáil Éireann (House of Deputies), and the upper house, namely the Seanad Éireann (Senate). Other terms of the Irish political dictionary which are useful for this chapter are Taoiseach, namely the head of government or prime minister, and ardfeis, which refers to annual party conferences.
the Minister Michael Martin to the Health and Safety Agency and the Office of Tobacco Control and it was published in January 2003.\textsuperscript{59}

In the 1990s the debate on tobacco control in the parliament was centered on the role of advertisement addressing children, as acknowledged by Mary Henry (Independent) on the occasion of the discussion in the upper house of the results from a survey led by ASH Ireland: “Much of the emphasis in health promotion literature is on stopping smoking. Advertising, while it is not supposed to be directed at children, is often subtle and appeals to children” (p. 1471) (Adjournment Matters. - Ash Survey. 1995). The same focus on children was transposed into the little political debate on environmental tobacco smoke at the end of the 1990s, also when specifically concerning the hospitality sector (p.1404; p. 434) (Adjournment Debate. - Restrictions on Smoking. 1995; Written Answers. - Anti-Smoking Campaign 1997).\textsuperscript{60} The 1999 report is exemplary of this way of addressing the issue of passive smoking. Indeed, although it partially moved the attention from advertisement and education to the need to tackle passive smoking (Report on Health and Smoking: Statements 1999), the latter is discussed by starting from the “F.D.A.’s description of tobacco addiction as a "paediatric disease"” (p.80) (JointCommitteeonHealthandChildren 1999).

The 2002 report added a new policy image, namely working environment safety, which addressed a new target group: workers in public premises. The focus of the discussion moved to passive smoking in public places discussed in terms of the protection of employees. The report is

\textsuperscript{59} The Office of Tobacco Control was established by the Health Minister Michael Martin on the basis of Part 2 of the Public Health (Tobacco) Act, 2002 on 27 March 2002. The role of the office was to implement the anti-smoking strategy set up in the Public Health (Tobacco) Bill, 2001 and to coordinate health boards. Tom Power, who received personal credit for the introduction of the ban, was chosen as the first chairman.

\textsuperscript{60} The focus on children in the specific context of passive smoking in public houses/licenced premises is justified, according to the report’s authors, by the fact that licensing laws (which do not allow minors inside public houses) are not respected, thus putting also children at risk of the negative effects of passive smoking (p.90) (JointCommitteeonHealthandChildren 1999).
clear in this regard (p.8) (HSA-OTC 2002): “the focus of occupational legislation is to provide safe work environments”. This new frame started to be fully embraced by politicians and the media at the beginning of the 2000s. On the occasion of the discussion of the report in the Seanad Eireann, the focus of the comments was exclusively on the safety of the working environment (p.1273) (Tobacco and Alcohol Consumption: Motion. 2003). In the words of Camillus Glynn (Fianna Fail) (p.1280) (Tobacco and Alcohol Consumption: Motion. 2003): “if ever there was a reason for the creation of the Health and Safety Authority, it was the problem of environmental tobacco smoke and its ill-effects, not only on the people who generate it but also on those who are obliged to inhale it, even though they were not responsible for the origination of that particular atmospheric pollutant”.

At the beginning of the 2000s the focus on workers was central also in Michael Martin’s contributions to the debates in the lower house of the Irish parliament (p. 1097; p. 203; p. 1248) (Written Answers. - Smoking Prohibition 2002; Tobacco Regulations: Statements 2003; Written Answers. - Smoking Ban 2003c). On the occasion of the announcement of the smoking ban by Minister Martin in January 2003, Louise O’Donnell (Independent) showed support for Michael Martin’s initiative, by stating that “passive smoking kills. Experts estimate that 150 Irish bar staff die from the effects of passive smoking every year” (p. 11) (Robinson 2003).61

61 It should be noted that in the 2002 report medical evidence on the harmful effects of smoking is often cited alongside the litigation cases in the US, especially related to working environment safety. As for the medical evidence, the 2002 cites the 2000 US National Institutes of Health National Toxicology Program 9th Report on Carcinogens as the main piece of medical evidence used to support the propositions made (p.15) (HSA-OTC 2002). Moreover, the 1986 report on passive smoking by the US Surgeon General is considered by the report as the path-breaking work on environmental tobacco smoke. As for the litigation, the report reads: “recent court cases have demonstrated that the protection of workers from environmental tobacco smoke at their place of work is becoming an important occupational health issue” (p.8) (HSA-OTC 2002). The influence of the US on this report was not only in terms of bringing attention to the problem of passive smoking in public places with medical evidence and litigation, but also in terms of policy solutions, namely total smoking bans. By considering the legislative examples around the world, the report compares the voluntarist approach of the UK with the total ban in California concluding that “it would appear that the only effective way to control environmental tobacco smoke in workplaces is to have legislation banning the exposure of workers to ETS” (p.37) (HSA-OTC 2002).
The year 2003 marked a watershed in the debate on environmental tobacco smoke, with a drastic increase in media attention (p.35) (Gilmore 2005) and with a series of important debates in the lower house (Tobacco and Alcohol Consumption: Motion. 2003; Tobacco Regulations: Statements 2003; Written Answers - Legislative Programme 2003; Written Answers. - Anti-Smoking Campaign 2003; Written Answers. - Smoking Ban 2003b; Written Answers. - Smoking Ban 2003a). In other words, the issue reached its momentum in 2003, as also noted by several key actors involved in the debate, such as Tom Power (online) (Alvarez 2003). The reason was arguably the change in the policy image through which the issue was discussed. The focus shifted from workers’ safety and education, to public health and more generally the public as a whole, as the following quote suggests: “the primary purpose of the prohibition is to protect the health and safety of workers and the public from toxic environmental tobacco smoke” (p.1248 emphasis added) (Tobacco Regulations: Statements 2003).

In this section I use quantitative text analysis to trace the media attention to the issue of environmental tobacco smoke and to observe the shift in policy image. The use of text analysis on newspaper articles is common practice in the punctuated equilibrium theory research programme (Baumgartner and Jones 1993, 2009) and in similar works (Culpepper 2011) to trace the media attention to an issue. Nonetheless, the literature has so far used manual content analysis to detect the policy tone and policy image. In line with very recent developments in the policy diffusion scholarship (Gilardi, Shipan, and Wueest 2016), this chapter uses topic modelling. More details of this method can be found in Chapter 4.

Table 3 shows the 10 words which are more likely to be associated with the 10 most frequent topics and Figure 1 plots the frequency of newspaper articles associated with different topics.
throughout the periods under analysis.\textsuperscript{62} It should be noted that I am interested in the relative frequency of a topic year by year and not its absolute frequency, since the overall media attention to environmental tobacco smoke and the smoking ban rose drastically from 2002 to 2004. Before proceeding to the discussion of the findings from the topic modelling analysis a caveat is needed. In fact, policy topics, as derived from topic modelling, do not exactly coincide with the concept of policy image used in this study, as discussed in Chapter 4. Yet, the observation of certain topics provides indirect empirical evidence for the presence of certain policy images in the political debate.

Topic 1 refers to an important health and social problem in Ireland, namely drinking. The latter is often discussed in conjunction with smoking, especially with reference to children. The relative importance of this topic decreased constantly from 2002 to 2004. As seen above, before environmental tobacco smoke started to be discussed in terms of the protection of public health more in general, the discussion was still focused on children protection, drawing mainly from the debate on tobacco advertisement. This shift in attention explains also the drastic decrease in the frequency of Topic 5, which links smoking and advertisement. Topic 6 decreased in its relevance over time as well. This topic refers to medical evidence and public health. As seen below, the high role of medical evidence characterised the political debate before 2002, with the central role of the two reports mentioned above, but afterwards the discussion started to be focused more on broad concepts such as public health and freedom of choice. Other topics were relatively less important in 2002 and they remained such. Topic 4 and Topic 8, which respectively refer to health habits (similarly to Topic 1) and the presence of Minister Martin in the media, such as journals and televisions, remained low throughout the period under analysis.

\textsuperscript{62} By relying on previous work using this approach in tobacco control (Gilardi, Shipan, and Wueest 2016), I set the number of topics to be detected at 10.
In line with the expectations set out above, the relative importance of those topics which can be reconciled with the more inclusive policy image based on the broad effects of the ban on public health increased in the period under analysis. Topic 2 refers to the support for the smoking ban and for Fianna Fail and Minister Martin. As discussed below, the strong link between the inclusive policy image, the public support for the smoking ban and the political support for the government and the minister characterised the political debate in 2003 and 2004. Topic 10 refers to the central role local councils and more generally local politics played in the political debate, as discussed in more details below. The attention to local politics is taken below as evidence for the central role electoral considerations played in the introduction of the smoking ban. The relative frequency of this topic increased from 2002 to 2003. Topic 3 and Topic 9 are related to the economic considerations of the effects of the smoking ban, which represented the main argument of the anti-ban coalition throughout the period under analysis and especially after 2003. Finally, Topic 7 represents the link between the Minister, the smoking ban and public health. In line with the expectation set out above, the relative frequency of this topic peaked in 2004, becoming the most important topic in that year.
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The Role of the Public Opinion (CPO2)

Public opinion started to be very receptive to this new inclusive policy image, as emphasised by Liz MacManus (Labour) in one of the first debates in the lower house right after Martin’s announcement (p. 1270) (Tobacco Regulations: Statements 2003): “recent opinion polls seem to indicate huge public support for this measure. I am struck by the support of a huge silent
majority”. In a study of the public campaign surrounding the smoking ban, Gilmore (2005) gathers information on public opinion from different sources and keeps track of its evolution over time. The public support for the ban increased from 59 per cent in February 2003 (p.94) (Gilmore 2005), to 67 per cent in spring 2003 (p.25) (Gilmore 2005) and to 81 per cent in November 2003 (p.135) (Gilmore 2005). A temporary drop in the support took place in summer 2003, when the publicans’ pressure on media peaked (p.45; 94) (Gilmore 2005). Remarkably, also support among smokers rose, from 37 per cent in spring 2003 (p.25) (Gilmore 2005), to 40 per cent in June 2003 (p.36) (Gilmore 2005) and to 61 per cent in November 2003 (p.135) (Gilmore 2005).

In the media and in the parliament public opinion started to be portrayed by both sides of the debate as the key to win the battle on the smoking ban. Evidence for this claim is provided above in the analysis of the topics with which the smoking ban was discussed in the media. Topic 2, which links the public support for the smoking ban and the political support for the government and the minister, was prominent in 2003 and 2004. Evidence is also found through the archival research of parliamentary debates and newspaper articles. When debating the ban for the first time in the lower house Martin stated: “the strong and cohesive position taken by the Oireachtas on this matter has been an important factor in winning the political debate and bringing public opinion with us on an important public health measure” (p. 1249) (Tobacco Regulations: Statements 2003). The central role of public opinion was emphasised also by the Minister of State when discussing the announcement of the ban in the upper house: “there will be a huge battle to win public opinion” (p. 1292) (Tobacco and Alcohol Consumption: Motion. 2003). The role of public opinion was central also in the rhetoric of the anti-ban coalition. As in the words of
the vintners’ associations, the main actor opposing the ban: “we don't expect Michael Martin to bend just yet but bend he will once he feels the tide of public opinion” (p.10) (Pogatchnik 2003).

In conclusion, until 2003 smoking in public places was discussed in terms of children education and the harmful effects on workers in public premises. In 2003 the smoking ban started to be discussed with a more inclusive policy image, namely in terms of positive effects on the society as a whole. This new policy image arguably triggered a strong public support for the introduction of the smoking ban. The ensuing part discusses how the public support for the ban incentivised policy-makers to act.

**Electoral Considerations (CPO3)**

As theorised above, public support for the policy under discussion is taken as a signal for potential support for the party and for individual decision-makers as well. This creates strong incentives for decision-makers to capitalize on that support and try to turn it into political support. In this part I discuss the strong link between the smoking ban and Fianna Fail (and Minister Martin at a more individual level) which characterised the discussion before and after the introduction of the smoking ban. I also show how this link was discussed in electoral terms and more generally, how electoral considerations were at the center of the debate. In so doing, I demonstrate that strong incentives were present to legislate on environmental tobacco smoke, both at party and individual level.

One of the most prevalent aspects of the political debate was Fianna Fail members underlying their prominent role in the regulation of environmental tobacco smoke. On the occasion of the first discussion of the announcement of the ban in the upper house Camillus Glynn (Fianna Fail) concluded his statement by emphasizing that “it was the current Administration that, for the first
time in the history of the State, seriously highlighted the right of people to work and socialise in a healthy, smoke-free atmosphere” (p.1281) (Tobacco and Alcohol Consumption: Motion. 2003).

The debate centered even more markedly on Martin’s personal involvement in the introduction of the ban. Statements by Martin himself in the parliament (p.579) (Written Answers - Legislative Programme 2003; Written Answers. - Smoking Ban 2003b) and contributions from various political correspondents (p.3; p.11; p.24; p.14) (Doyle 2003; Hennessy 2003b; na 2003a; Nesbitt 2003) emphasised the commitment put by the Minister in personal terms. The high stakes for his career became the center of the debate (online; p.3; p.12; p.14; p.7) (Alvarez 2003; Collins 2003; Hennessy 2003a, 2003b; na 2003a). As Mark Hennessy (p.14) (2003b), one of the Irish Times political correspondents who followed the campaign, put it: “in simple terms, Martin is betting his career on his proposal, because his political capital will not be worth a fag butt on the pavement if he does not get it through”. Similarly, the political correspondent for the New York Times noted that “he has made the issue a linchpin in his career” (online) (Alvarez 2003).

In conclusion, a strong link was present between Fianna Fail (and Minister Martin) and the smoking ban. This part shows how this link was discussed from an electoral perspective. The link between Fianna Fail (and Michael Martin), the smoking ban and the great public support enjoyed by the latter was functional to divert criticisms on how the government managed the public health agenda, which could have had negative effects in electoral terms. The Fianna Fail

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63 It should be noted that by mentioning the word socialise, this quotation brings further evidence to the presence of a new policy image focused on the protection of the public as whole.
64 A study on the media campaign from the agency Media Market, as reported in Gilmore (2005) (p.156), shows that Minister Martin features in 34.5 per cent of all the newspaper articles on the smoking ban, being by far the dominant contributor for the pro-ban alliance.
65 Rumors of Martin’s ambitions to overthrow Ahern dated back to 2002 when a secret meeting among Fianna Fail prominent figures was held in Dublin to discuss Ahern’s potential successors. The article speculates that the two main candidates were Cowen and Martin (p.50) (Hennessy 2002).
government and Minister Martin in particular had been strongly criticized by the opposition for their incapacity to put forward the health reforms promised at the beginning of their mandate (p. 1098) (Priority Questions. - National Health Strategy 2002). Criticisms carried in the media (p.12; p.15) (na 2003b; Wall and Coleman 2003), even after the announcement of the ban. Nonetheless, after the announcement of the ban the Minister and the government started to use the smoking ban in a strategic way. For instance, when criticized by Sinn Fein members for the health sector reform in the lower house, Martin replied by citing the smoking ban as the main example of his personal commitment (and his government’s) to public health (p.344) (Health Care: Motion 2004). This strategic shift in focus with respect to the health agenda was emphasised also in the media (p.15) (na 2003b).

Electoral considerations played also a more general role in the debate of the smoking ban. Evidence on the role of the public support for the ban and the political support for the government and Minister Martin in the political debate is provided above, where I show that Topic 2 and Topic 7 became prominent in 2003 and 2004. Further evidence for the importance of electoral considerations is found in the high attention local politics received during that debate, as can be seen by the high relevance of Topic 10. The high role local politics had in this matter since the end of summer 2003, right after Fianna Fail ardfeis (party national meeting), was emphasised by many commentators, in the media (p.72; p.9; p.7) (Gilmore 2005; Humphreys 2003; O’Brien 2003a) and in the parliament (p. 1254) (Tobacco Regulations: Statements 2003). For instance, local politics became one of the central topics in the national meeting publicans held at the end of the summer 2003 (p. 6) (O’Brien 2003b). To a certain extent, publicans had always enjoyed more access to local politics than national politics, due to their social and economic contribution to local communities (p.18) (Reid 2003). Nonetheless, that unprecedented
shift in attention from national to local politics occurred in the summer 2003 can arguably be explained with the shift to a policy image which addressed directly the public, thus making electoral considerations central. Until the summer 2003 publicans were more focused on direct contacts with Fianna Fail backbenchers. Since the end of summer 2003 publicans started to focus on local politics, arguably because electoral considerations there were stronger than at national level. Indeed, local elections would have taken place in less than a year, whereas general elections only in 2007. Publicans even threatened Fianna Fail politicians to propose protest candidates in key constituencies for the local elections (p. 6) (O'Brien 2003b). During a local event O’Sullivan told a Sunday Times journalist (p. 81) (Gilmore 2005): “ Forty publicans in a small town, where pubs are an integral part of the social fabric, have a lot of power […] Multiply that forty by two or three hundred and you get an idea of the number of the votes stake”. Indirect empirical evidence for the link between local politics and publicans is also suggested by the fact that local politicians were more vocal against the ban in those regions with high concentration of local pubs, such as in the West and in the East (p.69-71) (Gilmore 2005).

Drastic Policy Change (CPO4)

The involvement of the public opinion and the potential electoral support at stake arguably made the enactment of the ban possible. As seen above, in the public eye the ban was inextricably associated with the Fianna Fail government and more specifically Minister Martin. Accordingly, watering down the act or postponing its implementation would have had negative consequences for the government in electoral terms and for the Minister in career terms. As noted by the Sunday Tribune political correspondents Collins (2003) and Wall and Coleman (2003) (p.12; p.12): “ the fact that Martin has announced his intended measures will make it far more difficult for him to back down, even if the publicans manage to persuade most of his cabinet colleagues
that he is wrong […] By going out on a limb, Martin has raised the stakes for himself and for his opponents”; “if he is forced into an embarrassing U-turn, then his plans to succeed Ahern will be dealt another major and probably decisive blow”.

That is arguably why the smoking ban was implemented in the form it was originally conceived and without any delay. Few minor exemptions, such as for prisons and psychiatric hospitals, were introduced at a later stage without raising any criticisms. Moreover, the introduction of the ban was only delayed for few weeks due to the fact that a draft of the act had to be notified to the European Commission (p.141) (Gilmore 2005).

The main stakeholders involved in the anti-ban coalition kept pushing for a compromise based on smoke free areas and ventilation, the so-called Customer Choice and Common Sense proposal. The campaign for compromise was mentioned in several newspaper articles (p.3; p.7; p.18; p.7; p.13) (Coleman 2003; na 2003a; O'Brien 2003a; O'Halloran 2003b; Reid 2003), and it received high media attention in August 2003 (p.67) (Gilmore 2005), but it never managed to succeed. The Minister repeatedly stated his willingness to carry on with the initial plan throughout all 2003, both in the parliament and in the media (p.10; p.3; p.1) (na 2003a; O'Halloran 2003a; Pogatchnik 2003): “the Minister's mantra is that there can be no compromise on health” (p.3) (na 2003a).

In conclusion, I show that passive smoking was originally an issue which concerned the protection of children and workers in public premises. The new and more inclusive policy image with which the issue started to be discussed in 2003 gained strong public support, which arguably pushed the issue through the political agenda and eventually led to the introduction of a total smoking ban in public places.
It should be noted that although evidence for the shift in the policy image is rather robust, thanks also to the use of topic modelling, the presence of a link between the inclusive policy image and policy change is established indirectly, namely by providing evidence for the increase in public support for the smoking ban and the discussion of the ban in electoral terms, as a result of the new policy image. As discussed in Chapter 4, the application of process tracing to theoretical models which concern complex processes, such as how public reactions affect decision-makers’ incentives to push legislation forward, has some limitations. That is why in Chapter 7 I use statistical analysis to provide further evidence on how the policy image and in turn public reactions are associated with decision-makers’ incentives.

**Policy Image, Costs and Benefits and Policy Change (P2)**

As seen in Chapter 4, the second process (P2) is that an inclusive policy image allocates diffuse costs and benefits on the society thus preventing the creation of strong interests which can oppose regulation. As applied to the case under analysis, I expect that the political debate on environmental tobacco smoke was strongly focused on the role of the public and this bore diffuse costs and benefits for large segments of the society and hence hindered coordination between societal actors thus making drastic policy change possible. In terms of causal process observations, I expect to observe the following: the issue of environmental tobacco smoke started to be discussed in terms of the protection of the public as a whole (CPO5), as already demonstrated above; the public started to perceive the costs and benefits of the smoking ban as diffuse throughout society (CPO6); coordination between societal actors became more difficult (CPO7); the pressure exerted by stakeholders on decision-makers proved to be ineffective and self-regulation among societal actors became an unfeasible solution (CPO8).
The Policy Image, Costs and Benefits (CPO5 and CPO6)

As evidence for the causal process observation stating that the issue of environmental tobacco smoke started to be discussed in terms of the protection of the public as a whole in 2003 (CPO5) is already provided above, this section focuses on the remaining causal process observations. I commence by discussing how the inclusive policy image with which the smoking ban started to be discussed in 2003 arguably triggered perceived diffuse costs and benefits in the society. The next section focuses on the monopoly in the regulation of smoking in public premises business interests had enjoyed for decades and how the inclusive policy image and the related diffuse costs and benefits made coordination between them increasingly difficult.

The debate surrounding the announcement of the ban in 2003, based on the inclusive policy image discussed above, arguably elicited perceived diffuse costs and benefits on the society as a whole. The repeated references to freedom of choice made by the opponents of the ban, in order to gain public support, and the references to public health made by those who favored the ban moved the debate to another level. Environmental tobacco smoke regulation was no longer conceived as something concerning only public premises’ owners and employees, but something concerning the society as a whole. This shift in policy image in turn undermined the capacity of publicans to organize among each other and with employees, as well as the political access they had previously enjoyed.

As come out from the systematic review of the media conducted for this work, until 2003 publicans had focused on feasible alternatives to a total smoking ban (p. 11) (Robinson 2003), such as ventilation (p.9; p.2) (O'Sullivan 2000; Timmins 1999), separate spaces for smokers and non-smokers (p.10; p.1) (Murphy 1998; Pogatchnik 2003). Both in the media and in the parliament the focus of the debate had previously been on the content of regulation. In 2003
publicans started to emphasise the broad negative costs of the ban in terms of public security
(p.9) (na 2003c) and national economy (p.2; p.7; p.11) (Donnellan 2004; Nesbitt 2003;
O'Halloran 2003b). Also references to freedom of choice and the positive role of pubs as the glue
of local communities became prevalent in the political debate (p.37) (Gilmore 2005).

**Coordination between Societal Actors and Policy Change (CPO7 and CPO8)**

Many commentators in the media were puzzled by the announcement of the smoking ban,
because Michael Martin and Fianna Fail went openly against one of the most influential actors in
Irish politics, namely publicans (p.18; p.24) (Doyle 2003; Reid 2003). The influential role of
publicans in Irish politics, especially among Fianna Fail ranks, was due to several factors. First,
Fianna Fail used to recruit candidates, especially for local elections, from the pub and drink
industry (p.18) (Reid 2003). Second, the role of rural pubs in shaping local communities (p.5)
(Cabras and Mount 2014) often led to a strong influence on local politics. Third, publicans
enjoyed unprecedented access to prominent political figures, also those directly involved in the
introduction of the smoking ban, such as Michael Martin, his predecessor Cowen and the
Taoiseach Ahern.

The influence of publicans on Irish politics, and especially on Fianna Fail, became clear on
several occasions. For instance, during the 1990s some disadvantageous reforms, such as the
liberalization of pub licenses, were delayed (p.18) (Reid 2003). Publicans were also accused by
the media to be behind the strong pressure exerted on Minister Martin by Fianna Fail
backbenchers (p.14) (Hennessy 2003b) and local politicians, along with the late endorsement by
the Taoiseach Ahern (p.24) (Doyle 2003), who was accused by the media to wear “beer
goggles”. Furthermore, in the parliamentary debate prior to the announcement of the ban some
Fine Gael members of the lower house accused Minister Martin to avoid the issue of smoking in

The support the Irish ban received from Fianna Fail politicians in 2003 was perceived as something extraordinary. As featured in an article reporting on the Fianna Fail ardfheis in August 2003 (p.18) (Reid 2003): “that support for the ban may also mark a major watershed for Irish politics - the demise of the vintners as the most influential political lobby in the country […] While they might disagree, publicans have until now formed one of the most powerful political lobbies seen in Ireland”.

In environmental tobacco smoke regulation a well-coordinated and established policy network between the Department of Health, vintners associations, trade unions and non-governmental organizations was in place since the 1990s (p.1692) (Written Answers. - Smoking in the Workplace 2000). Until 2003, especially thanks to the prominent role of the two main employers’ organization, namely the Vintners Federation Ireland (VFI) and the Licensed Vintners Association (LVA), publicans were highly organized in their action and coherent in terms of the message they sent. As featured in the media on the occasion of their annual meeting, publicans were united under the umbrella of the VFI in addressing indoor air quality, by investing on the best ventilation techniques available on the market (p.9) (O'Sullivan 2000). Until 2003 the VFI and the LVA used to speak with a unanimous voice, representing 95 per cent of licensed premises in Ireland (p.7) (O'Halloran 2003b). Indeed, VFI and Mr. O'Sullivan, its chief executive, was until the summer of 2003 the most prominent actors of the anti-ban campaign in the media (p.156) (Gilmore 2005). Furthermore, the support for the management of those organizations was as extremely high among their members.
In the summer 2003 publicans’ organizational strength started to decrease. A clear division between the management of VFI and LVA and its members occurred. As reported in the media, the decision of the VFI’s national executive to implement the ban was criticized by many members, which would have preferred a national boycott (p. 6) (O’Brien 2003b): “leaders of one of the largest groups representing publicans have voted to implement the smoking ban despite calls from its members that they oppose it through measures such as withholding VAT and ignoring the new restrictions”.

The relationship between the national executives and members escalated in late 2003 when, as a result of the Mr. O’Sullivan and Mr. Joe Browne’s trip to Australia in one of the most heated moments of the campaign, several members called for a no confidence vote (p.3) (O’Brien 2003c). Furthermore, on several occasions VFI’s national management warned its members about disclosing information to the media, suggesting the lack of a common communication strategy. The lack of coordination in the message sent to the media was the main issue discussed in a special meeting called in early 2004 (p.4) (Lally 2004). It should be noted that the lack of a coherent message is listed as one of the main reasons for the failure of the anti-ban campaign by several commentators (p.239) (Clancy 2007).

Another consequence of the unprecedented level which the discussion reached in 2003 was the emergence of a new actor: the Irish Hospitality Industry Association (IHIA). The latter was established in June 2003, by those publicans unhappy with the two main associations (p.18) (Reid 2003). The organization and the strategy of this new actor exemplarily fit the new policy image with which the ban was discussed since 2003. Since its very beginning, this single issue organization invested significant resources in a public campaign to gain public support (online)
The difference in approach became clear at the beginning of the summer of 2003, when the VFI and LVA still focused on a possible compromise with the Minister, based on ventilation, whereas the IHIA was already strongly against any compromise (p.18) (Reid 2003). In 2003 the IHIA took away from VFI and LVA a good share of media attention (p.156) (Gilmore 2005) and the legitimacy to speak on behalf of publicans (p.7) (O'Brien 2003a): “the alliance, which says its members are drawn from pubs, restaurants, hotels and guesthouses, is quickly emerging as the official voice of the hospitality industry”.

The high attention the IHIA was receiving made the campaign based on the proposal titled Customer Choice and Common Sense, promoted by the VFI and LVA, a complete failure (p.86;89) (Gilmore 2005). As a result, as the implementation of the ban was approaching, those two organizations adopted the same strategy of the IHIA. The fact that the VFI and LVA started focusing on a public campaign marked a significant difference from the past (p.18) (Reid 2003): “as some observers have pointed out, however, the fact that the VFI has had to resort to a public campaign is evidence enough that the heyday of the vintners' lobby is well and truly over”.

Not only did the diffusion of costs and benefits undermine the coordination among publicans but it also deteriorated their relationship with the other main actors in the field, such as the rest of the hospitality sector and trade unions. Although restaurants’ owners took a proactive role in the policy network regulating environmental tobacco smoke in place in the 1990s, when the smoking ban was announced, they took a different approach from publicans. Despite publicans’ attempts to include restaurant owners in the public campaign (p.3) (na 2003a), restaurants’ owners were not categorically against the ban. Rather, several representatives stated their support for the ban

\[66\] As in the words of Mr. O’Sullivan himself “they are a fairly loose alliance with a one-item agenda, so they don't have a formal structure” (p.7) (O'Brien 2003a).
in the media (p.9) (na 2003c). Moreover, the Restaurants' Association of Ireland and more generally the Irish Business and Employers Confederation kept a very low profile throughout 2003 and 2004. The role the perceived diffusion of costs played in the position taken by restaurants’ owner is exemplified by an interview to the chief executive of the Restaurants' Association of Ireland, Mr. Henry O'Neill. The latter stated that, if applied consistently, the ban would have not borne specific costs for restaurants, emphasizing the diffusion of costs between pubs and restaurants: “If it's applied in a level way we would not have a problem with it. But we'd be afraid it won't be enforced properly, particularly in pubs” (p.9) (Humphreys 2003).

The position of trade unions was affected as well by the perceived diffusion of costs and benefits. If the discussion of the ban had been focused on the concentrated costs and benefits for public premises’ managers and employees, trade unions would not have had the incentives or the capabilities to push for strong legislation. This is what happened in the 1990s, as suggested below. Yet, as soon as the ban started to be discussed in terms of costs and benefits for the society as a whole, the public started to be more receptive to this issue and hence employees could count on the support of large segments of society. The main trade unions involved, Mandate (the retail, bar and administrative workers’ union) and Impact (which represents workers in education, health, local government and the civil service), stated their unconditional support for the ban on several occasions (p.7) (O'Halloran 2003b). Their support was central in the parliamentary debates surrounding the introduction of the ban (p.1812; p. 271) (Written Answers. - Smoking Ban 2003c; Written Answers - Smoking Ban 2004) and many commentators list this support among the main motivations for the success of the ban (p.239; p.157; p.337) (Clancy 2007; Gilmore 2005; McNicholas 2004). The important role played by trade unions is even more remarkable given that the representativeness of Mandate, the most
active trade union in the campaign, was rather low and its organizational strength not was even comparable to the vintners’ association’ one, as noted in the parliamentary debate (p. 1301) (Tobacco and Alcohol Consumption: Motion. 2003).

The low coordination between stakeholders prevented self-regulation, as the main approach in the area, thus arguably facilitating the enactment of strong legislation. Despite some criticisms, the 1994 voluntary code represented the result of extensive coordination supported by the government and sponsored by the hospitality sector, with the support of several other actors. The Customer Choice and Common Sense compromise proposal put forward by the VFI and LVA in 2003 was rather different. This compromise aimed to create separate smoking areas in public premises (p.7) (O’Halloran 2003b). Yet, the factors discussed above prevented it from getting into the agenda. The deep division between management and membership in the VFI and LVA, the high attention enjoyed by the IHIA (which was against any compromise) and the lack of support from business peak associations and other stakeholders made the launch of this proposal a complete failure. The lack of a strong opposition and a feasible alternative arguably facilitated the introduction of the smoking ban.

In conclusion, in this section evidence suggests that how a policy is discussed and more specifically the inclusiveness of its policy image determines the perceived diffusion of costs and benefits. Furthermore, I show that diffuse costs and benefits arguably hinder the ability of societal actors to collaborate among each other and with policy-makers. Accordingly, policy-makers enjoy more freedom to act. In the case under analysis in this section, the lack of coordination within the publicans’ associations and between them and other main stakeholders and the emergence of new and competitive actors arguably led to the incapacity to maintain self-
regulation as the main approach to environmental tobacco smoke. These dynamics in turn facilitated the swift introduction of a strict and comprehensive smoking ban.

Admittedly, the application of process tracing to the processes discussed in this section has some limitations. Although the evidence for the process linking diffuse costs and benefits and the lack of coordination between societal actors is rather convincing, the evidence for the process linking the inclusiveness of the policy image and the allocation of diffuse costs and benefits is rather weak. Measuring the effects of the prioritization of a policy in terms of how the society perceives its costs and benefits with process tracing is difficult. That is why the evidence in this chapter needs to be complemented with the evidence provided in Chapter 8, where with statistical analysis I test whether the prioritization of a policy with an inclusive policy image triggers attitudinal changes in policy target groups.

THE 1994 IRISH VOLUNTARY CODE

Above I provide evidence suggesting that the inclusive policy image with which environmental tobacco smoke was prioritized in mid-2000s led to the introduction of a total smoking ban in public places, namely a drastic policy change (what I label a second order policy change). The introduction of this ban broke with the established tradition of self-regulation in public smoking, based on a strong collaboration between the Health Minister and business interests, which from that moment onwards were excluded from the decision-making process. The new policy arrangements in place, supported by a new coalition of actors, such as health non-governmental organizations and physicians’ associations, have proved to be stable and resilient. This section compares the dynamics surrounding the introduction of the 2004 smoking ban with those surrounding the 1994 voluntary agreement, in order to demonstrate that how an issue is discussed in the political arena affect how the policy evolves.
The first wave of medical evidence on the negative health effects of passive smoking spread across European countries in mid-1990s. That medical evidence brought the issue of passive smoking into the Irish political agenda. In this section I seek to show that environmental tobacco smoke was discussed mainly in terms of the negative effects of passive smoking on the employees in the hospitality sector: the issue was discussed only in terms of the safety of the working environment. Not only did this exclusive frame not raise public support, arguably disincentivising decision-makers to put forward strong legislation on environmental tobacco smoke, but it also allocated perceived concentrated costs and benefits. Environmental tobacco smoke was mainly perceived in terms of benefits for workers and in terms of costs for managers in public premises. The concentration of costs and benefits created strong incentives for stakeholders to coalesce among each other and regulate themselves. Below I seek to show that these dynamics led to the formalization of self-regulation practices into the 1994 voluntary agreement: an incremental change (what I label a first order change).

Policy Image, Public Support and Policy Change (P3)

As seen in Chapter 4, the process investigated in this section (P3) is that the political debate on environmental tobacco smoke based on the protection of the workers did not trigger public support for political action disincentivising policy-makers to act. In this vein, I expect to find the following causal process observations: the issue of environmental tobacco smoke was discussed in terms of the protection of the workers (CPO9); public opinion remained indifferent to this debate (CPO10); electoral considerations were not central in the political debate (CPO11); a voluntary code was enacted transposing regulation already in place (CPO12).

Before mid-1990s the debate on tobacco control was focused on children education and advertisement. The then Minister Brendan Howlin launched the anti-smoking campaign directed
to children called I’m One Less in the early 1990s (p.1) (TMA 1993), which turned out to be relatively successful. Medical evidence from the US, mainly in the form of two reports, the 1992 report by the US Environmental Protection Agency and a later one by the US Occupational Safety and Health Administration titled Indoor Air Quality, and the news about litigation cases in various US states brought the issue of environmental tobacco smoke into the Irish political agenda (p.60) (Sheridan 2000).67

A change in policy priorities and in the means to achieve these priorities occurred: the attention shifted from children education and advertisement to environmental tobacco smoke and the necessity to regulate the latter came predominantly to the fore, with the enactment of legislation as an option. Supported by a strong cross-party coalition in the parliament, in 1993 the Minister of Health constituted the Consultative Committee on Smoking in the Workplace, composed of legislators and stakeholders, in order to “reduce the exposure of employees to environmental tobacco smoke” (Joint Committee on Health and Children 1999 p.12). A year later a sub-committee redrafted an existing booklet titled Clean Air at Work, setting out a new voluntary code, which was published as a code of practice in late 1994 (p.74-75) (Joint Committee on Health and Children 1999). The new booklet containing the voluntary code was distributed in 5000 public premises and state institutions, to support a consensual approach to environmental tobacco smoke between staff and management (p.936) (Written Answers. - Anti-Smoking Campaign. 1999b). It should be noted that codes of conduct were already present in several firms, especially in branches of American multinationals located in Dublin. A voluntary code was also present in several state departments and agencies, where smoking was forbidden in certain areas (p.747) (Written

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67 At the beginning of the 1990s litigation cases against the tobacco industry spread across most US states.
Answers. - Smoking Control Policies 1999). As such, the 1994 code was the result of the formalization of rules and practices already in place.

The mission of the committee is exemplar of the exclusive policy image with which environmental tobacco smoke was discussed at the beginning of 1990s. In fact, the mission was a compromise which safeguarded workers without imposing burdensome costs to owners: the need to balance the interests of staff and management was central in the parliamentary debate (p.1692; p.936) (Written Answers. - Anti-Smoking Campaign. 1999b; Written Answers. - Smoking in the Workplace 2000). The specific focus of the voluntary agreement is also clear from the contribution of Trevor Sargent (Green Party) in the upper house, where he critically questioned the Minister about the effectiveness of the voluntary code in protecting the public in general, well beyond the scope of that code (p.136) (Written Answers. - Cigarette Smoking 1997). The quantitative text analysis carried out above supports this claim. As can be seen in Figure 1, Topic 9, which refers to the economic considerations on the effects of tobacco control on business, is one of the most relevant topic at the end of the 1990s.68

Unsuprisingly, this policy image did not receive any attention from the media. Attention was also scattered among politicians. As mentioned above, the code received relatively high media and political attention in mid-2000s, in relation to the introduction of the smoking ban. The public was not involved in the debate and hence no incentives were present for decision-makers to put forward legislation on environmental tobacco smoke in mid-1990s. In fact, the Committee rejected the option of a smoking ban on the basis that the “climate was not right” (JointCommitteeonHealthandChildren 1999 p.74).

68 A topic modelling analysis of newspaper articles, as used above for the 2004 smoking ban, cannot be performed in this case given the low media attention to this issue.
Policy Image, Costs and Benefits and Policy Change (P4)

In this section I seek to show that not only did the exclusive policy image prevent any form of public support for potential legislation, hence disincentivizing policy-makers to take action, but by allocating perceived concentrated costs and benefits it also strongly incentivised stakeholders to coalesce among each other and provide strong opposition. The process under investigation (P4) is that the political debate on environmental tobacco smoke based on the protection of the workers bore concentrated costs and benefits for specific segments of society enhancing coordination between societal actors thus making drastic policy change more difficult. The causal process observations I expect to find are: the issue of environmental tobacco smoke was discussed in terms of the protection of the workers (CPO13); public premises’ managers and employees faced concentrated costs and benefits (CPO14); coordination between public premises’ managers and employees increased (CPO15); the pressure exerted by public premises’ managers and employees on decision-makers proved to be effective and self-regulation among societal actors became a feasible solution (CPO16). Since evidence for CPO13 is already provided above this section focuses on the remaining causal process observations.

The code mentioned above was developed in close coordination between the Health Promotion Unit of the Department of Health and Children, the Irish Congress of Trade Unions, the Irish Business and Employers Confederation, the Irish Cancer Society, the Irish Heart Foundation and the Health and Safety Authority (p.39) (Connolly et al. 1998). The consensual basis of this code was praised in the newspaper article in the Irish Times announcing the launch of the code (p.23) (Magee 1994).

The perceived concentration of costs and benefits arguably led to completely different dynamics than the ones illustrated above for the smoking ban. The hospitality sector was highly
coordinated under the umbrella of the main Irish business association and trade unions took an active role in drafting the code. The Irish journalist Kathy Sheridan exposed that in a confidential communication the tobacco industry claimed that “O'Mahony [who used to work in the Irish Tobacco Manufacturers Advisory Committee] had succeeded in establishing an effective coalition between employers and trade unions in Ireland, which had averted legislation at the workplace” (p.60) (Sheridan 2000). The shadow of the tobacco industry looming over the voluntary code is also clear from the 1999 report by the Joint Committee (p.75) (JointCommitteeonHealthandChildren 1999).

When the 1998 Joint Committee started its working, that voluntary code was still taken as an example on how to regulate smoking in the workplace: coordination between stakeholders in the form of self-regulation was still considered as the only feasible option. Two years later the code was mentioned by Minister Cowen when questioned about anti-smoking strategy in the lower house (p.936-936) (Written Answers. - Anti-Smoking Campaign. 1999a). Michael Martin himself in 2000 and 2001 mentioned the need for consultation with stakeholders (p.1212) (Written Answers. - Anti-Smoking Measures 2001), bringing that code as an example of good practice: “the code is designed to facilitate employers and employees through consultation to develop smoke free policies in the workplace” (p.1692) (Written Answers. - Smoking in the Workplace 2000). Until 2003 Martin’s statements on environmental tobacco smoke in the hospitality sector were focused on the necessity for cooperation in the hospitality sector, in order to address issues such as the prohibition on smoking only during meal times (p.11) (Bailie 2002) or smoke free areas (p. 1213; p. 1097) (Written Answers. - Anti-Smoking Measures 2001; Written Answers. - Smoking Prohibition 2002). In conclusion, the focus was still on self-
regulation and several invitations to cooperate were sent by the publicans to the Minister and other actors, such as the tobacco industry (p.9; p.2) (O'Sullivan 2000; Timmins 1999).

As noted in Chapter 4, when applied to complex theoretical models with different processes each of which requires to be empirically observed, such as the punctuated gradualism theory proposed in this work, process tracing may suffer from lack of evidence. This is the case for some of the processes in the case of the Irish voluntary agreement discussed in this section. In fact, the very little media and political attention to the voluntary agreement at the time of its introduction makes the application of process tracing problematic. The evidence supporting the processes in the case of the smoking ban is admittedly stronger than the evidence in the voluntary agreement. Findings from this chapter need to be taken keeping this in mind. Nonetheless, the evidence provided in this section can be complemented with the evidence drawn in the case of the smoking ban above, as the processes under analysis concern the same variables. Moreover, as already mentioned above, the statistical analyses in Chapter 7 and Chapter 8 provide additional evidence.

**POLICY PRIORITIZATION AND POLICY DYNAMICS**

This final section discusses how the different policy images in the two cases under analysis underpinned different forms of policy prioritization, which in turn were associated with different forms of policy dynamics. In the case of the smoking ban majoritarian prioritization, which is underpinned by an inclusive policy image, was associated with punctuated equilibrium. The latter is defined in this work as a type of policy dynamics in which drastic policy change (what I define second order policy change) disrupts the previous policy arrangements and replaces them with strong and resilient ones: short periods of high instability are followed by long periods of
stability. In this case both positive and negative feedback effects, related respectively to the destruction of previous policy arrangements and creation of new ones, are rather strong.

The introduction of the Irish smoking ban represented a strong break with the past, both in terms of the way in which environmental tobacco smoke started to be regulated and the configuration of societal actors at play. That ban went against the tradition of self-regulation in environmental tobacco smoke in place in Ireland until mid-2000s and it also marginalized one of the most powerful actors in Irish politics, namely publicans, which had previously played a central role in this policy area. Strong positive feedback effects were followed by strong negative feedback effects. Indeed, the new policy arrangements emerged in mid-2000s have proven to be highly stable and resilient. The 2004 Irish ban is still one of the most comprehensive and strictest bans in the world (Joossens 2004; Joossens and Raw 2006; Joossens and Raw 2007; Joossens and Raw 2011). After its implementation very little discussion on environmental tobacco smoke has taken place in Ireland. Furthermore, the new policy network which emerged, composed of the Department of Health, physicians and health non-governmental organizations, is nowadays still central in tobacco policy-making, with business interests, such as the tobacco industry but also vintners, left out.

In the case of the voluntary code the lack of involvement of the public opinion and hence incentives for policy-makers to act and the strong coordination among stakeholders led to incremental policy change (what I label a first order policy change). As seen above, in punctuated gradualism first order changes modify previous policy arrangements, without disrupting them. In this case more common periods of mild instability are associated with shorter periods of stability. Punctuated gradualism is characterised by weak feedback effects: previous policy arrangements are not replaced with strong and enduring ones, but simply amended. The
1994 voluntary agreement represented the formalization of practices already in place in many companies as well as government departments and offices. Furthermore, the policy network which emerged was more of an extension of the old one in place, with the addition of trade unions. Weak positive feedback effects were also associated with weak positive feedback effects. Indeed, the 1994 voluntary agreement was subject to a continuous process of impact assessment. In 1996 a survey was issued to a sample of employers. As stated by the Joint Committee on Health and Children (1999, p. 74): “The Consultative Committee had originally recommended that if two years after the code was published it had not proved effective consideration should be given to introducing legislation”. The code proved to be implemented in a satisfactory way, but it remained a live issue for a few years after its introduction. Furthermore, the policy subsystem which emerged from the 1994 voluntary code proved its lack of coordination only a few years later, with trade unions showing signs of dissatisfaction with the voluntary agreement already at the end of the 1990s.

CONCLUSION

In Ireland tobacco control had been mainly focused on the protection of children and workers in the public premises until 2003. Then, a shift in how the issue was discussed took place and smoking in public places started to be discussed in terms of broad public health. The attempts to regulate smoking in public places started to be strongly supported by the public and this arguably empowered Minister Martin to push forward one of the most comprehensive pieces of legislation in the world. In fact, given the level of public scrutiny a retreat or a compromise would have meant a defeat in electoral terms. The high role of public opinion meant also that several powerful actors in Irish politics, such as publicans, saw the unprecedented access to politicians they had previously enjoyed slowly disappearing. Public health scored an important victory
against many powerful actors, such as publicans and the tobacco industry. Completely different dynamics were in place in mid-1990s. The focus on the necessity to protect workers and the need to safeguard the hospitality sector’s interests did not receive public attention, thus disincentivising decision-makers to legislate on environmental tobacco smoke. Instead, that focus strengthened the collaboration between stakeholders, which had the capabilities to organize themselves and delay legislation.

In more formal words, this chapter provided convincing evidence for the causal process observations hypothesized above. An inclusive policy image triggers public support for the policy under discussion, hence incentivising policy-makers to act in order to turn that support for the policy into political support. Furthermore, an inclusive policy image allocates diffuse costs and benefits on the society as a whole, thus eroding the coordination among societal actors. These two sets of dynamics facilitate drastic policy change. Conversely, an exclusive policy image does not trigger any reaction in the public opinion, thus not incentivising policy-makers to act. Rather, it strengthens societal actors by allocating concentrated costs and benefits. The result is incremental policy change.

Above I also suggested that not only do the policy image and the intervening role of the public opinion affect policy change, but also policy dynamics more generally. A drastic policy change is associated with what I label punctuated equilibrium, where long periods of inertia are punctuated by short periods of drastic change. In this case both negative and positive feedback effects are strong. Policy change triggers the disruption of the policy subsystem in place and the replacement with a new one, as much stable and resilient. Conversely, incremental policy change characterizes what I label punctuated gradualism, where short periods of inertia are punctuated by long periods of incremental change. In this case feedback effects are mild: the policy
subsystem in place is subject to continuous minor adjustments. As emphasised above, the application of process tracing in this chapter has some limitations, such as the lack of robust evidence for some processes, and findings should be complemented with those in the next chapters.

By relying on statistical analysis, the next chapters provide the findings above with further support. Chapter 6 tests the punctuations hypothesis in tobacco control. Indeed, although the punctuated gradualism theory argues that policies evolve differently accordingly to the public reactions to different policy images, it shares the same theoretical assumption on policy change as the original punctuated equilibrium theory: periods of (more or less strong) instability punctuates periods of (more or less long) stability. By taking a more quantitative approach, it also clarifies the terms used in this chapter to describe policy change and policy dynamics, such as incremental and drastic change as well as punctuated gradualism and punctuated equilibrium. Chapter 7 and Chapter 8 provide inferential leverage to the analysis above, by employing statistical analysis to test the relationship between the policy image and public opinion.
CHAPTER 6: PUNCTUATIONS IN TOBACCO CONTROL

INTRODUCTION

By building on the insights of the policy responsiveness and policy feedback strands, in Chapter 3 I proposed a new variant of the punctuated equilibrium theory, which I called punctuated gradualism theory. This theory focuses on a specific aspect of the original punctuated equilibrium theory so far overlooked, namely the role of public opinion in mediating the effects of the policy image on policy change. As seen in Chapter 3, the punctuated gradualism theory shares the same assumption on policy change of the punctuated equilibrium theory. Also the punctuated gradualism theory conceives policies as evolving through a combination of positive and negative feedback effects, which are respectively related to periods of instability and stability. This chapter explores the empirically observable implication of this theoretical assumption, by testing the punctuation hypothesis in the case studied in this work: tobacco control. Findings show that punctuations characterize policy change in tobacco control. The quantitative analysis of how tobacco control evolves allows for a better definition of the series of terms used above to describe policy change and policy dynamics, such as incremental and drastic change as well as punctuated equilibrium and punctuated gradualism.

Not only is proving that policy dynamics in tobacco control are characterised by punctuations essential to test the theoretical assumption on which the punctuated gradualism theory lies, but it also provides validation for the original punctuated equilibrium theory itself, which is put to the test in a new set of valid cases. The punctuation law is a core tenet of the punctuated equilibrium theory and it has been at the basis of its new developments, as seen in Chapter 2. Nonetheless, little work has put this law to the test outside its original scope of application, namely budgetary expenses. Tobacco taxation has similar characteristics to budgetary expenses, which allow for
comparability across time and countries. As such, it is a valid case where to test the premises of the punctuated equilibrium theory outside its main scope of application.

Finally, this chapter suggests that tobacco control is not a special issue. The common perception is that tobacco control is a valence issue, where only one side of the debate is considered legitimate. According to the punctuated equilibrium theory, valence issues are characterised only by positive feedback effects. In this chapter I demonstrate that this is not the case for tobacco control, which behaves like many other policies. Tobacco control is characterised by drastic policy changes, related to positive feedback effects, but also incremental changes, suggesting the presence negative feedback effects. As such, there are good reasons to believe that the dynamics studied in this work are not limited to tobacco control and might apply also to other policies, even though to a limited extent.

The chapter develops as follows. I commence by showing how the public policy literature revised above conceives policy dynamics, by using frequency distributions of policy change. In so doing, I define the terms used in the chapters above with respect to policy change and dynamics, such as drastic and incremental change, as well as punctuated equilibrium and punctuated gradualism. In the ensuing section, by plotting the frequency distributions of the annual percentage change in tobacco taxation and regulation across countries and over time, I confirm the punctuation hypothesis. This chapter proceeds to discussing the implications of this finding for the original punctuated equilibrium theory and for tobacco control.

**PUNCTUATIONS IN PUBLIC POLICY**

This section discusses how the public policy theories canvassed in Chapter 2 conceive policy dynamics in more detail. In so doing, I use the method introduced by the new developments of
the punctuated equilibrium theory, discussed in Chapter 4, namely frequency distributions of annual percentage change (p.415; p.130) (John and Margetts 2003; Jones and Baumgartner 2005). By using this method, in the next section I define the concepts of policy change and policy dynamics, as well as the terms associated with them.

As seen in Chapter 2, the public policy literature can be divided into foundational and synthetic approaches, each of which conceives policy dynamics in a different way. Foundational approaches focus on the diffusion of ideas and practices and how societal actors interact among each other and affect policy-making. Ideational approaches, namely those focused on the diffusion of ideas and how decision-makers receive these ideas, suggest that policies evolve through periods of drastic changes, because ideas spread fast across countries and decision-makers can only focus on a few things at a time (p.104) (Baumgartner and Jones 1993). Studies of agenda setting point to the cognitive limitations of decision-makers as the main explanation for how policies evolve. Several cognitive phenomena, such as the so-called bottleneck attention effect (p.302) (Simon 1985), explain why rationally bounded individuals’ attention is limited and selective, namely why individuals pay attention only to a few issues at a time and for short periods. Such cognitive dynamics are replicated at macro level (p.25) (Baumgartner and Jones 2009): political systems process information like rationally bounded individuals do. The result is that policies evolve through short periods of drastic positive change, in occasion of increases in political attention, followed by short periods of drastic negative change, in occasion of decreases in political attention.

Conversely, the other foundational approaches discussed above, namely the policy network ones, elicit different implications for policy dynamics. Policies are conceived as evolving through long periods of incremental change, mainly due to the action of societal actors in the form of policy
subsystems. Indeed, only a few actors usually care about an issue over time and they tend to monopolise decision-making (p.47, p.154 and 174) (Heclo 1977). Also the regulation strand of the public policy literature focuses on incrementalism as the result of the way in which decision-makers muddle through, by balancing out different perspectives from different interests in the society (p.174; p.521) (Lindblom 1959, 1979). In conclusion, these foundational approaches conceive policies as evolving through long periods of incremental change.

For illustration purposes, I take the extreme version of the scenario suggested by the ideational approaches, what I call schizophrenic policy-making. The result is a distribution skewed both positively and negatively, characterised by several outliers. In this case recurrent drastic (far from the mean/median or zero, in this case) positive and negative changes will follow each other. Moreover, I take the extreme version of the scenario suggested by the foundational approaches focused on policy network, what I label monomaniac policy-making, which assumes that policy inertia is the main type of policy dynamics. The distribution of policy change will assume the shape of a distorted version of the normal distribution, with high frequency of mean/median values (or zero values, in a percentage change distribution), namely periods of policy inertia, and very low frequency of outliers, namely drastic changes. Figure 2 plots a simulation of what the frequency distributions of policy change would look like respectively for monomaniac and schizophrenic decision-making.
The logic underlying these two different policy dynamics is the following. Negative feedback effects, which in turn trigger policy inertia and incremental change, can be explained by policy network dynamics. A few societal actors have a stake in the same issue over time and tend to monopolise decision-making in that issue, by creating strong links with decision-makers. Incremental policy change can be explained by decision-makers simply balancing different interest groups’ preferences out. The results are small adjustments from the status quo or policy inertia. The frequency distribution of incremental policy change will assume a shape similar to the one in the left quadrant of Figure 2, where most of the observations, namely policy changes, have value zero.
Positive feedback effects can be explained by the cognitive characteristics of decision-makers. Assume an individual who takes decision by balancing out different sources of information. In so doing, he/she combines different indicators into an index, taking decisions based on that index (p.155) (Jones and Baumgartner 2005). If I observe this process for long enough, I will see that the distribution of changes assumes a bell shape. The reason is that by combining different indicators, in turn based on different social and political processes, the idiosyncratic processes behind each one of these processes should cancel each other out (p.155) (Jones and Baumgartner 2005). Yet, decision-makers do not balance different information sources out, but focus only on some sources, because they do not have time and resources, because some sources are more in line with their priors and so on (p.155-156) (Jones and Baumgartner 2005). For illustration purposes, if I take the extreme scenario where decision-makers focus exclusively on a single information source/process at a time (not always the same one), the policy will evolve following the random fluctuations of these processes. The result will be policy commitment jumping almost randomly from an issue to another, resulting in a combination of strong positive changes followed by strong negative ones. In this case the frequency distribution of policy change will assume a shape similar to the one in the right quadrant of Figure 2, where most of the observations, namely policy changes, have either large positive or negative values.

The punctuated equilibrium theory is the synthetic approach which best combines the foundational approaches discussed above. By building on earlier work on budget decision-making (Padgett 1980), this theory suggests that policies evolve like most natural phenomena,

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69 This holds true regardless of the distribution of the single processes, if and only if these distributions are independent from one another. Yet, this assumption can be relaxed in this study, as discussed in Chapter 4.

70 Different mechanisms are at the basis of the policy dynamics discussed in this section. The politics of attention strand of the punctuated equilibrium theory focuses exclusively on the cognitive mechanisms which drive information processing and hence decision-making. Yet, in this chapter I incorporate the insights from the different public policy approaches reviewed in Chapter 2, more in line with the original punctuated equilibrium theory, granting thus a role also to policy network dynamics which drive negative feedback effects in this case.
subject to stochastic events (p.1070-1071) (Breunig 2006). Long periods of policy inertia, due to negative feedback effects, are punctuated by short periods of drastic change, due to positive feedback effects. In normal conditions policy subsystems, supported by policy networks of key societal actors, monopolize policy-making and oppose any substantial change: what the literature calls negative policy feedback. In this case the policy does not evolve or it does so incrementally. Yet, sometimes the diffusion of policies and ideas from other systems brings an issue to the political agenda and cognitively bounded individuals suddenly shift their attention to this issue. In these rare occasions the policy is subject to short periods of drastic change. In conclusion, policy dynamics are conceived as composed of long periods of inertia punctuated by short periods of drastic change, namely what this approach labels punctuations (p.10 and p.83) (Baumgartner and Jones 1993).

If policy change follows the punctuation law, as suggested by the punctuated equilibrium theory, the frequency distribution of policy change will be a Pareto or power distribution, which assumes a leptokurtic shape. Leptokurtic distributions are different from normal distributions, where most of the changes are close to zero and similar to each other in intensity, while very few are quantitatively different (p.194-195) (Cairney 2011). Leptokurtic distributions are characterized by heavy tails, suggesting the presence of a few outliers (more than in the normal distribution), which represent rare episodes of drastic policy change, and high frequency of median values, which represent recurrent episodes of policy inertia. Moreover, as seen in Chapter 4, when plotted on a log-log graph, Pareto or power distributions (which in turn is a derivation of an exponential distribution) appear as straight lines, because the logarithmic function is the inverse function of the exponential function (p.422-423) (John and Margetts 2003).
Findings show that budget expenditures in the US (Figure 4.14 p.138) (Jones and Baumgartner 2005) and other countries, such as Denmark (Figure 2 p.941) (Mortensen 2005) and the UK (Figure 2 p.421) (John and Margetts 2003), are characterised by punctuations. Findings are robust also in large-N studies including more countries (Baumgartner et al. 2009; Jones et al. 2009) and when several types of policy commitment, other than budget outputs, are analysed (Baumgartner et al. 2009). In conclusion, the public policy literature provides robust evidence that punctuations are an intrinsic characteristic of policy dynamics.

**DEFINING POLICY CHANGE AND POLICY DYNAMICS**

In the chapters above I used a series of terms such as policy change, policy dynamics, drastic, and incremental. By relying on the formal measurement of policy change provided by the new developments of the punctuated equilibrium theory canvassed above, in this section I define these terms. Policy change is conceived as a change in policy commitment, such as an increase in the public budget allocated to a specific policy area or the introduction of a piece of legislation. Policy dynamics, instead, involve a wider temporal horizon and, as defined in this study, they consist of periods of stability and periods of (different types of) change. By looking at the frequency distribution plots above, policy change may be defined as a single observation, whereas policy dynamics refer to the whole distribution.

In this section I also define the series of terms used in the chapters above with reference to policy change, such as drastic and incremental. By looking at a frequency distribution of policy change, policy inertia may be defined as the mean or median values (in the case of percentage changes, the zero values). Incremental (first order) changes and drastic (second order) changes refer respectively to those observations relatively close to and far from the mean or median values of
the distribution. In a normal distribution, for instance, they may be defined as those observations respectively within and outside two standard deviations from the mean.

Finally, I define in formal terms also the two types of policy dynamics introduced by the theory proposed in this study. Punctuated equilibrium conceives policy dynamics as composed of long periods of inertia punctuated by rare and short periods of second order policy changes (drastic changes) which disrupt the previous policy arrangements. Conversely, in what I label punctuated gradualism policies evolve through short periods of inertia punctuated by recurrent first order policy changes (incremental changes). As seen above, the distribution of policy change in punctuated equilibrium takes the form of a leptokurtic curve, with high frequency of mean or median values (zero values in this case), which represent long periods of policy inertia, and with the presence of a few outliers (observations distant from the mean or median), namely short and rare periods of drastic change. Conversely, the distribution of policy change in punctuated gradualism takes the form of a less skewed leptokurtic curve, closer to a normal distribution, with lower frequency of median values, which represent shorter periods of inertia, higher frequency of observations close to the mean or median values, namely recurrent incremental changes, and with very few outliers, namely drastic changes.

**PUNCTUATIONS IN TOBACCO TAXATION AND REGULATION**

Although tobacco control has been one of the policy areas most studied from a punctuated equilibrium theory perspective (Cairney, Studlar, and Mamudu 2012; Studlar 2002; Studlar and Cairney 2014; Worsham 2006), little has been done to test the punctuation hypothesis there. Not only is whether tobacco control is characterised by punctuations relevant for the theory proposed in this work and in order to demonstrate that it is not a special policy, as discussed in detail below, but this bears also interesting implications for the public policy literature more in general.
In fact, the punctuated equilibrium theory has so far studied punctuations in public policy mainly by pooling distributions of percentage in changes in public expenditures from different policy areas. Accordingly, one might argue that punctuations are more a consequence of some mechanisms inherent to budget allocation, rather than cognitive dynamics typical of decision-making in general, as the punctuated equilibrium theory literature claims. As shown in Chapter 4, tobacco taxation is a valid case where to study punctuations in public policy. Provided that certain factors, such as the influence of European Union legislation and the differences across taxation regimes, are taken into consideration, change in tobacco taxation is comparable across time and countries.

Figure 3 shows the distribution of the percentage in annual change in ad valorem excise duties on manufactured cigarettes pooled across the European Union 12 old Member States and over time, from 1992 to 2013. As can be seen, this distribution does not take the shape of a normal distribution but a leptokurtic distribution characterised by heavy tails, suggesting the presence of a few outliers, which represent rare episodes of drastic policy change, and high frequency of median values, which represent recurrent episodes of policy inertia. Accordingly, policy change assumes a power distribution, suggesting that it is characterized by long periods of inertia disrupted by sudden drastic changes. The distribution in Figure 3 is very similar to the distribution of the percentage in annual change in budget expenditures across policy areas in the US (Figure 4.14 p.138) (Jones and Baumgartner 2005) and in other countries, such as the UK (Figure 2 p.421) (John and Margetts 2003).
Figure 3 Distribution of the Percentage in Annual Change in Ad Valorem Excise on Cigarettes Pooled across Countries and Years

Figure 4 shows the log-log plot of the same distribution of the previous figure, but it disaggregates this distribution into two sub-distributions: blue dots, which represent the right tail, and red triangles, which represent the left tail, respectively the increases and the decreases in excise. It should be noted that differently from the figure above, Figure 4 plots the logarithmic values on both axes, with the cumulative frequencies on the vertical axis. Increases in excise duties behave similarly to a Pareto distribution (which in turn is derived from an exponential distribution), as the blue dots in the log-log plot are located on a straight line. As explained in Chapter 4, when plotted on a log-log graph Pareto distributions appear as straight lines, because the logarithmic function is the inverse function of the exponential function. Conversely,
decreases do not lie on a straight line: this means that they assume a distribution more similar to a normal one. In conclusion, the degree of punctuations is higher in the increases in cigarette taxes than in the decreases, in line with the expectations from the public policy literature.

*Figure 4 Log-Log Plot of the Distribution of the Percentage in Annual Increases and Decreases in Ad Valorem Excise on Cigarettes Pooled across Countries and Years*

The public policy literature uses the kurtosis of a distribution to measure its skewness, thus comparing this distribution with the normal distribution, which has kurtosis of 3 (and L-moments kurtosis of about 0.123). The most commonly used tests for normality, namely Skewness/Kurtosis, Shapiro-Wilk W and the Shapiro-Francia W', show that the pooled distribution and the two sub-distributions for the positive and negative changes are significantly different from a normal distribution (with p<0.01). These distributions have kurtosis and L-
moments kurtosis of respectively: 30.14 and 0.727 for the pooled distribution; 13.92 and 0.351 for the positive change distribution; 8.83 and 0.313 for the negative change distribution. These results also demonstrate that the distribution of negative changes is still leptokurtic, but closer to a normal distribution than the others.

By relying on tobacco taxation as a measure of policy commitment to tobacco control, I demonstrate that tobacco control behaves exactly as the public policy literature would expect. When the percentages in annual change are pulled together the result is a leptokurtic distribution, which suggests that tobacco control evolves through recurrent periods of inertia punctuated by rare periods of drastic change. Furthermore, by dividing this distribution into two sub-distributions representing positive and negative changes, I find that the former is more punctuated than the latter. In other words, positive changes, in this case increases in tobacco taxation, are more characterised by positive feedback effects, whereas negative changes are more characterised by negative feedback effects. Again, this is in line with the expectations from the public policy literature.

As seen in Chapter 2, the new developments of the punctuated equilibrium theory, labelled the friction theory, push the research agenda further, by expanding the scope of analysis to other types of policy commitment, such as questions and interpellations in parliaments, laws and so on. The proponents of the friction theory argue that the punctuation law applies also to these other types of policy commitment. By relying on a large dataset containing information on tobacco control measures in four broad policy categories (advertising and sales restriction, education and environmental tobacco smoke regulation), adopted in 24 countries in the post-WWII period, I test whether the punctuation law applies equally to different types of policy commitment.
Figure 5 shows the distribution of the percentage in change in tobacco control regulation pooled across countries, years and policy areas. Differently from above, I do not use the annual percentage change, but the percentage change between those years in which at least one piece of legislation was enacted, as done in Baumgartner et al. (2009) (p.610). Similarly to tobacco taxation, this distribution does not take a bell shape and all the tests for normality mentioned above show that this distribution is significantly different from a normal distribution (with p<0.01). Accordingly, I conclude that the punctuation law applies to most types of policy commitments, also in tobacco control.

71 The distribution of the percentage in change in tobacco control regulation has kurtosis and L-moments kurtosis values respectively of 5.81 and 0.226, which are much lower than the values for the distribution of change in tobacco taxation and almost close to those of a normal distribution. These findings provide some evidence for the claim put forward by the friction theory, according to which the degree of punctuation increases by moving downward along the policy cycle, because the role of frictions is stronger for outputs (p.615) (Baumgartner et al. 2009), as seen in Chapter 2. Indeed, tobacco taxation is the result of a decision-making process similar to the one in place for budgetary expenditures. Conversely, tobacco regulation in Figure 5 comprises laws and administrative decrees which are in turn more similar to policy processes, where the role of frictions is lower and punctuations are fewer. Nonetheless, as the aim of this chapter is only to show support for the punctuation hypothesis in tobacco control, I do not investigate further variation in punctuations due to institutional frictions.
Figure 5 Distribution of the Percentage in Change in Tobacco Control Regulation Pooled across Countries, Years and Policy Areas

TOBACCO CONTROL AS A NON-SPECIAL POLICY

This chapter showed that tobacco control abides to what are considered by the public policy literature, more specifically by the punctuated equilibrium theory research programme, general empirical laws. Both tobacco taxation and other types of policy commitment, such as advertisement and smoking regulation, are characterised by punctuations. Confirming the punctuation hypothesis is a way to empirically test the implication of one of the theoretical assumptions of the punctuated gradualism theory, namely that policy dynamics are cyclical events, due to the interaction of policy and negative feedback effects. Confirming the
punctuation hypothesis is also important for the punctuated equilibrium theory itself, as this chapter validates this theory in a new set of cases, thus showing its general applicability.

Finally, the findings drawn above elicit important considerations on the nature of tobacco policy. Today, the common perception is that tobacco control is a special issue: citizens and decision-makers agree on the hazard posed by smoking and hence agree that action needs to be taken to prevent people from starting smoking or help people give up. This view is shared also in academia, where it is common to conceive tobacco control as transcending traditional politics: Albæk (2004) (p.38) suggests that tobacco control is a valence issue.

The concept of valence issue is common in the public policy literature, more specifically in the punctuated equilibrium theory. According to the public policy literature in valence issues citizens and politicians agree on the definition of the problem, namely only one side of the debate is considered legitimate, and the discussion focuses on policy solutions. Policy dynamics in valence issues behave differently than in other issues, as they are not characterised by negative feedback effects, but only by positive ones (p.151-152) (Baumgartner and Jones 1993).72 The decision-making process is not monopolised by a group of societal actors with stakes in the issue and policy change takes place through waves of euphoria, when a new solution to the problem gets political attention. Examples of valence issues discussed in the punctuated equilibrium theory are child abuse and drug and alcohol consumption (Chapter 8) (Baumgartner and Jones 1993).

The punctuated equilibrium theory demonstrates that tobacco control is not a special issue. In Chapter 5 Baumgartner and Jones (1993) show that the dynamics underlying policy change in tobacco control are similar to those in place in other policies, such as nuclear policy. They

72 The comparative literature (Stokes 1963) focuses more on what determines the party preferences in valence issues, where, differently from positional issues, voters generally agree on the overall objectives and thus assess politicians according to political attributes/capabilities or performance/efforts (p.5) (Ansolabehere 2008).
demonstrate that the shift occurred at the end of the 1990s from a positive to a negative tone with which tobacco was discussed triggered positive feedback effects and the introduction of strict legislation across US states. In a more recent study, Worsham (2006) observes the presence of positive and negative feedback effects in US tobacco policy, by looking at how attention on the issue shifted in the Congress. Moreover, Studlar (2009) (Figure 4.1 p.79) demonstrates that the adoption of the various tobacco control instruments across countries follows an S curve, which is common to other policies, as emphasised also in the literature on state government innovation and policy diffusion. Finally, Marshall (2016) (p.171) shows that the link between public opinion and public policy in tobacco control is characterised by dynamics which can be reconciled with those identified by the punctuated equilibrium theory.

In this chapter I provided the final piece of evidence for the claim that tobacco control is not a special issue. By looking at the distribution of policy change in tobacco control, I observed that punctuations characterise the evolution of this policy. Punctuations are considered by the public policy literature, more specifically by the punctuated equilibrium theory research programme, as the result of a series of dynamics typical of regular public policies, namely the combination of positive feedback effects, in turn related to cognitive limitations of decision-makers and policy diffusion, and negative feedback effects, due to policy network dynamics. Since evidence suggests that tobacco control abides to the general law of punctuations, I conclude that it is not a special issue. As such, although whether the dynamics identified in this study are generally applicable requires further research, as discussed in Chapter 9, in this chapter I provided good reasons to believe that it might be the case.
CONCLUSION

In this chapter I demonstrated that tobacco control follows what is considered by the public policy literature a general empirical law, namely the punctuation law. Policy change in tobacco taxation and in other areas, such smoking and advertisement regulation, is characterised by punctuations. These findings provide empirical support for the theoretical premises of the punctuated gradualism theory, shared with the punctuated equilibrium theory, that policy change is determined by the interaction of positive and negative feedback effects and as such policies are characterised by periods of incremental change or inertia punctuated by periods of drastic change. These findings are also relevant for the original punctuated equilibrium theory itself, as this chapter provides evidence for its main theoretical premises outside its main scope of application. Finally, the findings drawn above elicit important considerations on the nature of tobacco policy. Above I show that tobacco control is not a special issue and as such, it is reasonable to believe the theory proposed in this work might be applicable to public policy in general, even though to a limited extent.

After finding evidence for the assumption on policy change underpinned by the theory in this work, the next chapters test the empirically observable implications of the punctuated gradualism theory, which derive from the two other bodies of literature on which this theory builds (along with the punctuated equilibrium theory), namely the policy responsiveness and policy feedback literature. In so doing, Chapter 7 and Chapter 8 narrow the focus down to the effects of the policy image on public opinion. As such, by using statistical analysis in combination with cross-case comparison, I test respectively whether the image of a policy triggers political support for the politicians who put that policy into place and whether the image of a policy triggers attitudinal changes among the target groups of that policy. In so doing, I provide indirect
evidence respectively that decision-makers act on the basis of expected political returns and that these returns depend on the policy image and that the policy image affects the allocation of interests in the society.
CHAPTER 7: POLICY IMAGE, PUBLIC OPINION AND POLITICAL SUPPORT IN THE IRISH AND ITALIAN SMOKING BANS

INTRODUCTION

The punctuated gradualism theory posits that policies evolve through punctuations, but that variation in policy dynamics is present. How public opinion reacts to the prioritization of a policy determines the ease with which that policy goes through the political agenda, the strength of societal actors and eventually how that policy evolves. Public reactions in turn depend on the policy image. An inclusive policy image triggers public support for the policy under discussion, thus incentivising decision-makers to act, and it allocates diffuse costs and benefits, thus preventing societal actors from exerting strong opposition. The result is a drastic evolution of the policy. Conversely, an exclusive policy image does not trigger public support for the policy at stake thus disincentivising policy-makers to act and by allocating concentrated costs and benefits it leads to the creation of strong interests. The result is the opposite, namely an incremental evolution of the policy.

Chapter 5 sought to provide evidence for the processes of the punctuated gradualism theory with process tracing. Findings are complemented by the statistical analysis in the previous chapter, which tested the empirically observable implication of the assumption which the punctuated gradualism theory borrows from the punctuated equilibrium theory, namely punctuations. This chapter and the next one provide further supporting evidence, by testing the empirically observable implications of the two other theories on which the punctuated gradualism theory builds (along with the punctuated equilibrium theory), respectively the policy responsiveness and policy feedback theories.
In this chapter I use interrupted time series analysis combined with a cross-case comparison to test whether the introduction of a smoking ban supported by an inclusive policy image triggers political support for the party in government. The policy responsiveness literature, on which the punctuated gradualism theory builds, assumes that decision-makers act on the basis of expected political returns. When they sense that a policy enjoys public support, thanks in turn to the inclusive policy image with which the issue is discussed, they act in order to turn that support for the policy into political support for them. By showing that actual political support for a policy depends on how that policy is framed, I find indirect evidence that the expected political returns on the basis of which decision-makers act depend on the policy image, as theorised by the policy responsiveness literature on which the punctuated gradualism theory builds. As such, decision-makers will be more incentivised to legislate on an issue, when that issue is framed in a particular way.

This chapter commences by discussing the theoretical premise of the punctuated gradualism theory which I borrow from the policy responsiveness literature and its empirically observable implication. Then, I proceed to briefly reviewing the research design, which was discussed in detail in Chapter 4. I apply the method of difference by comparing the political support politicians in power receive for the implementation of smoking bans supported by different policy images: the Irish and the Italian smoking bans. The analysis of policy images relies on quantitative text analysis applied to newspaper articles. In order to measure the change in political support as a result of the introduction of these bans, I use interrupted time series analysis. I conclude by discussing findings and how they indirectly support the empirical expectations of the punctuated gradualism theory.
THE PUNCTUATED GRADUALISM THEORY, POLICY IMAGE AND POLITICAL SUPPORT

As seen in Chapter 3, by relying on the literature on policy feedback, the punctuated gradualism theory posits that policy prioritization affects public opinion through the signals sent through the policy image. How an issue is discussed determines public support. An issue framed as bringing benefits on the society as a whole will receive more support. The public support for a policy in turn incentivises decision-makers to act, following electoral incentives, according to the literature on policy responsiveness. The underlying logic is that when support for an issue is present decision-makers will act in order to capitalize on that support and turn it into political support for them and their parties. As such, a two-way signalling process is in place between policy-makers and public opinion. Not only do policy-makers send signals on the character of the policy to the public through the policy image, but also the public sends signals on potential political support to decision-makers. The latter in turn act following this potential support.

In Chapter 5 I suggest that in Ireland the announcement of the smoking ban triggered high public support and hence electoral considerations were central in the political debate: politicians arguably acted in order to capitalize that support for the policy and turn it into political support for themselves. This chapter investigates whether they managed to do so. In so doing, I provide the analysis of the punctuated gradualism theory with further inferential leverage, by looking at one of its empirically observable implications. Decision-makers act according to electoral considerations based on the public support a policy receives for being prioritized with a specific policy image. As such, I should observe an empirical association between the actual political support policy-makers receive for introducing a policy and the policy image with which that policy is discussed. More specifically, I expect an increase in political support for the party in
government as a consequence of the introduction of a smoking ban prioritized through an inclusive policy image. Conversely, I should observe no increase in political support for a smoking ban discussed with an exclusive policy image.

More specifically, this chapter tests the following expectations. In the Irish smoking ban, where an inclusive policy image triggered high support for political action and hence a drastic policy change occurred, I expect to detect high political support for the party in government, as a consequence of the introduction of the ban. Conversely, in Italy, where the exclusive policy image did not trigger any public support for the policy and hence a less drastic policy change took place, I expect to observe no increase in political support for the party in government, as a consequence of the introduction of the ban.

In comparing two countries with similar governments, such as Italy and Ireland in mid-2000s, I control for the role of political institutions, especially the electoral system and party control over government, and partisanship, which are considered to affect the link between public opinion and public policy according to the literature. Furthermore, by choosing the regulation of environmental tobacco smoke as the policy area to study, I partially control for the role played by formal institutions. As already discussed in Chapter 4, smoking bans are usually enacted through administrative acts and hence they rarely go through the formal decision-making process: they are what the friction theory calls processes, for which the role of institutions is less prominent (Baumgartner et al. 2009; Jones et al. 2009).

The measurement of the policy image relies on the manual content analysis of selected newspaper articles and parliamentary debates. As in Chapter 5, this is supported by the use of topic modelling, applied to a large sample of newspaper articles. The change in political support
as a result of the implementation of the ban is measured with interrupted time series analysis. The effects of smoking bans have already been extensively analysed in the literature with similar research designs (Abadie, Diamond, and Hainmueller 2010; Adda and Cornaglia 2006, 2010; Fong et al. 2006; Odermatt and Stutzer 2013; Pacheco 2013). Interrupted time series designs estimate the equivalent of a treatment effect in a non-randomized experimental setting, where the equivalent of a treatment assignment is determined by whether the value of an observed covariate is above or below a known threshold, which in this case is the time of the introduction of the smoking bans (Calonico, Cattaneo, and Titiunik 2013; Lee 2008; Lee and Lemieux 2010).

THE ITALIAN SMOKING BAN

In Chapter 5 I showed how the Irish smoking ban was introduced in the political agenda with an inclusive policy image, focused on the positive effects of tobacco control measures on the society as a whole. This inclusive policy image arguably triggered high public support for the policy under discussion. This support incentivised decision-makers to act in an attempt to capitalize on that support and turn it into political support for them and their party. As such, I expect an increase in political support for the party in government in Ireland as a result of the introduction of the ban. As the policy image of the Irish smoking ban and its effects on the public opinion and in turn on policy change are discussed in Chapter 5, this chapter discusses how the issue was prioritized in Italy in mid-2000s and how the policy image differed from the Irish case. As done for the Irish case in Chapter 5, I use topic modelling to detect policy topics in the debate on the Italian smoking in the media. In the next section I use interrupted time series to measure the change (or lack thereof) in political support for the main parties in government in Ireland and Italy, as a result of the introduction of the bans.
Differently from the Irish case, the policy image with which the Italian ban was put forward did not trigger public support. Indeed, the smoking ban was perceived as the result of the efforts of a single individual: the Health Minister Girolamo Sirchia, a physician who took a very personal approach to the issue. Some newspaper articles even talked about Minister Sirchia as a crusader (p.18) (Sarzanini 2003). The systematic review of the first Italian newspaper in terms of diffusion, namely Il Corriere della Sera, shows that the media and the public associated the ban with the Minister himself. Those articles criticising the ban were mainly based on personal attacks to the Minister and his prohibitionist approach (p.37; p.49; p.45) (Pinketts 2005a, 2005b; Russo 2005). Also those articles praising the ban were focused on the Minister’s “stubbornness” (p.1) (Iossa 2006). The same applies to a series of articles published in occasion of the anniversary of the law, which focused exclusively on the Minister himself (online; online; online) (Corbi 2013; Dell’Orto 2015; Ficocelli 2015). In an interview published in 2005 Valentino Parlato, well known radical left-wing intellectual and journalist, explicitly stated that smoking and tobacco control cannot be seen as right or left issues and that only Sirchia’s prohibitionism should be blamed (online) (Conti 2005).

Also the debate in the lower house of the parliament suggests that the ban was associated with the Minister on a personal level, to the point that several MPs in his own party tried to distance themselves from the ban. A review of the parliamentary debates on the enactment of the act, which took place in December 2002, shows strong criticisms on the smoking ban from several MPs, but the strongest opposition came from MPs from Alleanza Nazionale and Lega, which were in the Popolo della Libertà coalition party together with the Health Minister (p.1-23; p.71-85) (Seduta N. 237 2002; Seduta N. 238 2002). In several occasions Alleanza Nazionale MPs made reference to the “personal crusade” and “blitz” carried out by the Minister (p.76) (Seduta
Two of them went further, by explicitly stating that the ban mined the basis on which the government coalition/party was created (p.17; p.74) (Seduta N. 237 2002; Seduta N. 238 2002).

The debate surrounding the introduction of the ban was based on a strong division between smokers and non-smokers, triggered by an exclusive policy image based on the libertarian and moral aspects of smoking. Several media articles highlighted the conflict between smokers’ and non-smokers’ liberties (online; p.45) (Barbiellini Amidei 2005; Invernizzi 2005). This debate created a strong division between smokers and non-smokers. A series of newspaper articles featured key intellectual and political figures describing the strong feeling of seclusion among smokers (online; p.37; p.49) (Conti 2005; Pinketts 2005a, 2005b). Further evidence for this division between smokers and non-smokers is provided by the strong focus on smokers’ liberties found in the parliamentary debate (p.71-72) (Seduta N. 237 2002). As in the words of Cesare Rizzi, MP from Lega Nord: “Accordingly, I repeat, I will vote against this article, because there is freedom for those who do not smoke, but also freedom for those who smoke” [author’s translation] (p.76) (Seduta N. 237 2002). The differences in how the Italian ban was discussed both in the media and in the parliament with respect to the Irish case, illustrated above, are striking. The exclusive policy image of the ban had strong effects also within the cabinet itself. The clear division between smokers and non-smokers in the attitude towards the smoking ban was present also within the cabinet. Several fellow ministers expressed their opposition to the ban, as noticed by the Italian media in several occasions (p. 20; p.18; online) (Cremonese, 2002, Sarzanini, 2003, Dell'Orto, 2015). Minister Sirchia mentioned a particular anecdote during an interview: when the cabinet met to discuss the introduction of the ban, some fellow ministers lit a
cigarette as an act of protest (p. 20; online) (Cremonese 2002; Dell'Orto 2015). Internal disputes between cabinet members and between members of the ruling party were also present in the Irish case, but were not based on the division between smokers and non-smokers.

The result was the slow enactment of a smoking ban less comprehensive and strict than the Irish one. The entry into force of the ban, which initially was supposed to take place on 20 January 2003, was postponed to 20 January 2005, because of the strong opposition within the Parliament and the cabinet. Furthermore, the ban was substantially watered down with respect to the initial proposal: several exceptions were included, especially for bars, restaurants and hotels (p.22; p.18; p.12) (Latella 2006; Lazzaro 2004; Muscau 2005). The main difference with the Irish ban is the possibility of smoking in separated and ventilated areas in bars and restaurants. The difference between these two smoking bans is reflected in the Tobacco Control Scale (Joossens 2004; Joossens and Raw 2006; Joossens and Raw 2007; Joossens and Raw 2011), which ranks Italy well below Ireland, in terms of the restriction of smoking in public places.

The Policy Image of the Italian Smoking Ban

Before moving to the analysis of the change (or lack thereof) in political support for the parties in government in Italy and Ireland as a result of the introduction of the ban, in this section I use quantitative text analysis, more specifically topic modelling, to investigate how the issue of environmental tobacco smoke and the smoking ban were discussed in the Italian media, as done above with the Irish case. The use of quantitative text analysis allows for a more valid and reliable comparison of the policy image with which the two smoking bans were discussed. Table 4 and Figure 6 show respectively the top 10 words associated with the most frequent topics in the

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73 Another example of the internal division of the cabinet on the ban was discussed by the media (p. 20) (Cremonese 2002), when Paolo Crosignani (member of one of the major Italian medical research centres on tumors) noted that Antonio Martino (the then Defence Minister) wrote a preface to a pro-smoking book published in the same days Sirchia was promoting the ban.
Italian media and the frequencies of newspaper articles containing these topics throughout the period under analysis. Appendix Table 4 in the Appendix provides the words in the original language. First of all, it should be noted that the claim put forward above, namely that the ban was perceived as the result of the efforts of the Minister and not the party as a whole, finds empirical support. No mention of Popolo della Libertà, the main party in government at that time, is present and the only mention to the government is in Topic 7 and Topic 8, which are not among the most frequent topics. Furthermore, it should be noted that Topic 7 contains also references to Lega Nord, one of the parties in power during the period under analysis and one of the fiercest opponent of the ban, and Topic 8 refers also to Brussels and the Commission, probably in relation to the discussion of tobacco control in the European Union.

The policy topics in Table 4 provide also evidence in support of the claim that environmental tobacco smoke and the smoking ban were discussed with an exclusive policy image in Italy in mid-2000s. First, the references to public health are less frequent than in the Irish case, whereas the references to smokers are more prevalent. The word smoker appears in Topic 5 and Topic 6, the two most frequent topics in 2004 and 2005, as can be seen in Figure 6. These topics refer respectively to the smoking ban with special reference to public places and bars and the Minister and the piece of legislation enacting the ban. These results provide indirect evidence for the centrality of the division between smokers and non-smokers in the discussion on passive smoking in Italy during the period under analysis.
<table>
<thead>
<tr>
<th>Topic 1</th>
<th>Topic 2</th>
<th>Topic 3</th>
<th>Topic 4</th>
<th>Topic 5</th>
<th>Topic 6</th>
<th>Topic 7</th>
<th>Topic 8</th>
<th>Topic 9</th>
<th>Topic 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>subparagraph</td>
<td>house</td>
<td>smoking</td>
<td>cigarette</td>
<td>smoking</td>
<td>smoking</td>
<td>government</td>
<td>rome</td>
<td>job</td>
<td>ban</td>
</tr>
<tr>
<td>law</td>
<td>turin</td>
<td>ban</td>
<td>euro</td>
<td>ban</td>
<td>smoker</td>
<td>rome</td>
<td>president</td>
<td>workers</td>
<td>law</td>
</tr>
<tr>
<td>euro</td>
<td>life</td>
<td>trains</td>
<td>millions</td>
<td>places</td>
<td>sirchia</td>
<td>berlusconi</td>
<td>minister</td>
<td>smoking</td>
<td>smoking</td>
</tr>
<tr>
<td>bodies</td>
<td>world</td>
<td>public health</td>
<td>respect</td>
<td>smoker</td>
<td>law</td>
<td>milan</td>
<td>visit</td>
<td>end</td>
<td>decree</td>
</tr>
<tr>
<td>decree</td>
<td>case</td>
<td>tobacco</td>
<td>smoking</td>
<td>law</td>
<td>cigarette</td>
<td>lega</td>
<td>conference</td>
<td>employer</td>
<td>subjects</td>
</tr>
<tr>
<td>millions</td>
<td>outside</td>
<td>between</td>
<td>thousands</td>
<td>public</td>
<td>minister</td>
<td>tomorrow</td>
<td>politics</td>
<td>decree</td>
<td>violation</td>
</tr>
<tr>
<td>personnel</td>
<td>under</td>
<td>health</td>
<td>drop</td>
<td>restaurants</td>
<td>smokes</td>
<td>towards</td>
<td>trial</td>
<td>safety</td>
<td>infringement</td>
</tr>
<tr>
<td>regions</td>
<td>florence</td>
<td>cigarette</td>
<td>tobacco</td>
<td>places</td>
<td>says</td>
<td>president</td>
<td>meeting</td>
<td>ban</td>
<td>surveillance</td>
</tr>
<tr>
<td>provisions</td>
<td>cigars</td>
<td>service</td>
<td>about</td>
<td>health</td>
<td>many</td>
<td>iraq</td>
<td>bruxelles</td>
<td>rules</td>
<td>places</td>
</tr>
<tr>
<td>expenditure</td>
<td>society</td>
<td>day</td>
<td>data</td>
<td>bar</td>
<td>health</td>
<td>bush</td>
<td>commission</td>
<td>pia</td>
<td>private</td>
</tr>
</tbody>
</table>
In conclusion, the Irish and the Italian bans were discussed in different ways. As seen in the previous chapter, the former was mainly discussed in terms of the positive effects on the society as a whole, whereas the latter was discussed in moral terms, which triggered a strong division between smokers and non-smokers. This difference elicited important implications for policy change. Indeed, in the Irish case politicians saw the public support the smoking ban was gaining
in large sections of the society and this incentivised them to act in order to turn that support for the policy into political support for them. Conversely, in the Italian case the strongly divisive policy image did not lead to public support for the ban, thus disincentivising politicians to act. If these claims are true, I will find that the introduction of the Irish ban triggered high political support for the party in government and the introduction of the Italian ban did not.

THE EFFECTS OF THE INTRODUCTION OF THE SMOKING BANS ON POLITICAL SUPPORT

This section uses interrupted time series analysis to measure the change (or lack thereof) in political support for the parties in government in Italy and Ireland, as a result of the introduction of the ban. As discussed above, the choice of the time should take into consideration several aspects: enough observations which allow for a valid statistical analysis; only observations from the period when the party which introduced the ban was in government; only observations close enough to the treatment. In the Irish case the ban entered into force on 29 March 2004 and the period under analysis is between June 2002 and March 2009. The Italian smoking ban was introduced on 10 January 2005 and the period considered is from January 2002 to May 2006. Finally, I measure political support by using monthly polls for vote intention for Fianna Fail and Popolo della Libertà, respectively for Ireland and Italy.

As discussed in Chapter 4, the regression model used in this work is the following:

\[ Y_t = \beta_0 + \beta_1 \text{(Time)} + \beta_2 \text{(Intro Ban)} + \beta_3 \text{(Post Intro Ban)} + u_t \]

\( Y_t \) represents the political support for the party in government, Fianna Fail and Popolo della Libertà respectively for Ireland and Italy, at time \( t \). \( \beta_0 \) represents the intercept and \( \text{Intro Ban} \) is a dummy variable assuming the value 0 before the introduction of the ban and value 1 after the
introduction of the ban. $\beta_2$ and $\beta_1$ represent respectively the effect of the introduction of the smoking ban (the change in the intercept) and the effect of time on political support. I am not interested in the substantive meaning of $\beta_1$ per se, but including this term is necessary to control for the time effect. Lastly, $\beta_3$ represents the effect of time on government support after the introduction of the ban (the change in the slope) and $u_t$ represents the error term. The full model includes also a dummy variable for the year in which the general elections took place, as it is common practice in work using the same method (Marsh and Mikhaylov 2012).

A remark is needed. $\beta_2$ and $\beta_3$ represent respectively the change in the intercept and the change in slope, as a result of the introduction of the smoking ban. The former can be seen as the short-term effects of the introduction of the ban whereas the latter as the long-term effects. In other words, a statistically significant and positive $\beta_2$ means a jump in political support for the party in government coinciding with the introduction of the smoking ban, whereas a statistically significant and positive $\beta_3$ means an increase in the monthly trend in political support after the introduction of the ban. I expect the effects of smoking bans to be higher in the short-run than in the long-run. Indeed, despite the relevance of tobacco control for citizens, it is unlikely that the introduction of a smoking ban affects long-term vote intentions. Yet, this does not necessarily mean that a one-off jump in political support cannot influence elections, even when the latter take place months after this jump. This will be discussed in detail below.

Figure 7 shows the trend in monthly political support for Fianna Fail between 2002 and 2009. As can be seen from the change in the intercept coinciding with the introduction of the smoking ban, political support increased drastically in the month subsequent to the introduction of the ban. Empirical evidence for the effects of the introduction of the smoking ban on the support for Fianna Fail is found in the results of the interrupted time series analysis shown in Table 5. The
coefficient of the variable *Intro Ban* in Table 5, namely $\beta_2$, is statistically significant and takes value 11.13. In other words, the introduction of the ban increased the political support for Fianna Fail of more than 11 points per cent (when controlling for the effects of the 2007 elections). The coefficient of the variable *Post Intro Ban*, which refers to the rate of change in government support after the introduction of the smoking ban ($\beta_3$ in the formula above), is not significant. Accordingly, the introduction of the ban changes the intercept of the line representing political support over time, but not its slope. Lastly, the coefficient of the variable *Time* ($\beta_1$ in the formula above) is not statistically significant either, meaning that no clear time trend is present in the political support for Fianna Fail. In other words, the slope of that line remains almost horizontal but it is translated upwards by more than 11 points as a consequence of the introduction of the ban.

As a conclusion, the introduction of the smoking ban had strong short-run effects on the political support for Fianna Fail, but not long-run effects. As expected, the introduction of the smoking ban did not change long-term vote intentions among the Irish population. Yet, as may be seen in the figure, the jump of the intercept of the slope is such that political support at the time of the general elections, held in May 2007, is higher than it would have been had the ban not been introduced. As such, Fianna Fail might have benefited from the introduction of the ban at the elections in 2007. Nonetheless, caution is needed when drawing conclusions from values too distant from the equivalent of the treatment in an interrupted time series analysis.
Figure 7 Interrupted Time Series: The Effects of the Irish Smoking Ban on Fianna Fail Political Support
Table 5 Interrupted Time Series: The Effects of the Irish Smoking Ban on Fianna Fail Political Support

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Fianna Fail Political Support</th>
<th>Fianna Fail Political Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>-0.0923 (0.119)</td>
<td>-0.0923 (0.119)</td>
</tr>
<tr>
<td>Intro Ban</td>
<td>9.780*** (2.009)</td>
<td>11.13*** (2.185)</td>
</tr>
<tr>
<td>Post Intro Ban</td>
<td>-0.0110 (0.125)</td>
<td>-0.103 (0.135)</td>
</tr>
<tr>
<td>2007 Elections</td>
<td>3.956* (2.013)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>79.22 (61.50)</td>
<td>79.22 (61.89)</td>
</tr>
<tr>
<td>Observations</td>
<td>82</td>
<td>82</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.338</td>
<td>0.370</td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The functional form can seriously affect the estimations, as suggested by Lee and Lemieux (2010). It is always advisable to test different models in a series of robustness checks. In this vein, the same analysis is carried out with a local polynomial regression, after replacing time with a forcing variable which assumes value zero at the first point in time and value N at the last point in time. This method is used to localize the regression to a window close to the equivalent of the treatment point: localization is achieved by weighing observations. In other words, more weight is given to those observations within specific bandwidths around the introduction of the ban, in this case (p.206) (Hahn, Todd, and Van der Klaauw 2001). In fact, the inclusion of observations far from the treatment in an OLS regression can jeopardize the local randomization assumption in interrupted time series. In this vein, I run the analysis with the *rdrobust* package in Stata (Calonico, Cattaneo, and Titiunik 2013). The latter provides a series of commands for data driven non-parametric inference procedures, namely procedures which make no assumption on

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74 In the Irish case the analysis covers 82 months and hence this forcing variable goes from zero to 82.
the distribution of the data under analysis and rather, derive parameters directly from the data. In other words, they automatically correct for the bias created by choosing large bandwidths.\footnote{For a more detailed discussion of how this method automatically chooses bandwidths see Calonico, Cattaneo, and Titiunik (2013) and Calonico, Cattaneo, and Titiunik (2014).}

Figure 8 plots the political support for the Irish government over time, similarly to Figure 7. Yet, it should be noted that the curve, which represents a fourth order polynomial, fits data better than the linear one in Figure 7. As such, it is necessary to test for the robustness of the results drawn above. Table 6 shows the results of the data driven interrupted time series model. Although the total number of observation remains 82, the analysis is localized on a time period spanning from 10 months before the introduction of the smoking ban to 11 months after the introduction of the ban. Results suggest that the introduction of the smoking ban in Ireland triggered an increase of 10 points per cent in political support for Fianna Fail (even though statistical significance is borderline): almost the same estimate obtained with the linear model used above. Accordingly, results seem robust and I conclude that the introduction of the Irish smoking ban triggered an increase in political support for Fianna Fail.
Figure 8 Interrupted Time Series: The Effects of the Irish Smoking Ban on Fianna Fail Political Support, Polynomial Analysis
Table 6 Interrupted Time Series: The Effects of the Irish Smoking Ban on Fianna Fail Political Support, Polynomial Analysis

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Fianna Fail Political Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro Ban</td>
<td>10.09</td>
</tr>
<tr>
<td>Robust 95% CI</td>
<td>[-1.36 ; 21.74]</td>
</tr>
<tr>
<td>Observations</td>
<td>21</td>
</tr>
<tr>
<td>Conventional Std. Err.</td>
<td>5.107</td>
</tr>
<tr>
<td>Conventional p-value</td>
<td>0.048</td>
</tr>
<tr>
<td>Robust p-value</td>
<td>0.084</td>
</tr>
</tbody>
</table>

Figure 9 and Table 7 show the results for the linear interrupted time series analysis for the political support for Popolo della Libertà, controlling for the 2006 elections. As can be seen from the figure, the introduction of the smoking ban did not increase the political support for the majority party in government. No change in the intercept takes place coincidentally with the introduction of the ban, suggesting that no change in the political support for the party in government was triggered by the introduction of that ban. Nonetheless, Figure 9 shows a change in the slope coincidentally with the introduction of the ban: a change in the slope means that the introduction of the ban might have changed the effect of time on political support, suggesting some long-term effects. The results of the interrupted time series analysis in Table 7 show that the coefficient of the variable Intro Ban ($\beta_2$ in the formula above) is not statistically significant: this confirms what Figure 9 shows, namely that no increase in political support for Popolo della Libertà was triggered by the introduction of the ban. Furthermore, the coefficient of the variable Time ($\beta_1$ in the formula above) is statistically significant and negative, meaning that the political support for Popolo della Libertà decreased in the period under analysis. Finally, in the first model of Table 7 the coefficient of the variable Post Intro Ban ($\beta_3$ in the formula above) is

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76 PDL stands for Popolo della Libertà.
statistically significant and positive, suggesting that the introduction of the ban might have triggered a positive change in the monthly decrease in political support of 0.2 points per cent. As it can be seen from the figure and the results in the table, the political support for Popolo della Libertà was decreasing monthly by 0.24 points per cent. The introduction of the ban might have triggered a change in that trend of almost the same intensity, making the increase in political support flat in the period after the introduction of the ban. As such, the Italian smoking ban might have triggered a long-term change in the political support for Popolo della Libertà. Yet, when controlling for the 2006 elections this effect disappears. Again, this points to the necessity of combining this type of analysis with in-depth knowledge of the case under study. The lack of effect of the introduction of the Italian smoking ban is confirmed by the polynomial analysis in Figure 10 and Table 8. Despite its strong hold over the government, the party which put the Italian smoking ban in place did not receive any political support for introducing this ban.
Figure 9 Interrupted Time Series: The Effects of the Italian Smoking Ban on PDL Political Support
Table 7 Interrupted Time Series: The Effects of the Italian Smoking Ban on PDL Political Support

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>PDL Political Support</th>
<th>PDL Political Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>-0.239***</td>
<td>-0.239***</td>
</tr>
<tr>
<td></td>
<td>(0.0408)</td>
<td>(0.0413)</td>
</tr>
<tr>
<td>Intro Ban</td>
<td>-0.366</td>
<td>0.379</td>
</tr>
<tr>
<td></td>
<td>(1.228)</td>
<td>(1.184)</td>
</tr>
<tr>
<td>Post Intro Ban</td>
<td>0.220**</td>
<td>0.0917</td>
</tr>
<tr>
<td></td>
<td>(0.105)</td>
<td>(0.115)</td>
</tr>
<tr>
<td>2006 Elections</td>
<td></td>
<td>3.493**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.355)</td>
</tr>
<tr>
<td>Constant</td>
<td>161.9***</td>
<td>161.9***</td>
</tr>
<tr>
<td></td>
<td>(21.49)</td>
<td>(21.72)</td>
</tr>
<tr>
<td>Observations</td>
<td>53</td>
<td>53</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.565</td>
<td>0.583</td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Figure 10 Interrupted Time Series: The Effects of the Italian Smoking Ban on PDL Political Support, Polynomial Analysis

![Graph showing interrupted time series analysis]

Table 8 Interrupted Time Series: The Effects of the Italian Smoking Ban on PDL Political Support, Polynomial Analysis

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>PDL Political Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro Ban</td>
<td>1.059</td>
</tr>
<tr>
<td>Robust 95% CI</td>
<td>[-.83 ; 2.83]</td>
</tr>
<tr>
<td>Observations</td>
<td>11</td>
</tr>
<tr>
<td>Conventional Std. Err.</td>
<td>0.763</td>
</tr>
<tr>
<td>Conventional p-value</td>
<td>0.165</td>
</tr>
<tr>
<td>Robust p-value</td>
<td>0.284</td>
</tr>
</tbody>
</table>
In conclusion, I demonstrate that the introduction of the Irish smoking ban triggered an increase in political support for the party in government, whereas the Italian one did not. This finding provides further empirical support for the punctuated gradualism theory, which, by building on the policy responsiveness literature, hinges on the electoral considerations according to which decision-makers act. The punctuated gradualism theory suggests that drastic policy change is a consequence of politicians trying to turn the public support for a policy under discussion, in turn dependent on the policy image with which that policy is discussed, into political support for themselves and their party. This chapter demonstrates that a link between the policy image and the actual political support is in place, providing indirect evidence for the punctuated equilibrium theory.

This final section discusses the validity of the results. As seen in Chapter 4, the application of interrupted time series depends on the assumption that the introduction of the smoking ban is the only variable discontinuously related to vote intention in the same interval of time. In order to meet this assumption, smoking bans are assumed to have discontinuous effects on political support and time is measured at monthly interval. Moreover, results need to be taken with the caveat that although the prioritization of a policy affects public reactions in terms of support for this specific policy, as theorised by the punctuated gradualism theory, it is the introduction of the policy that mainly affects public reactions in terms of political support for the party in government. Finally, I assume that it is very unlikely that political support for the party in government affects the introduction of a policy and that public support for a specific policy is associated with political support for the party in government before the introduction of the policy.
This final paragraph discusses whether the policy image is a necessary or sufficient condition for the political support for the party in government and the implications for the theory proposed in this study. Does the introduction of a policy discussed with an inclusive policy image always trigger political support for the party in place? The answer is not necessarily, but this does not diminish the importance of the findings for the theory proposed in this work. Indeed, the aim of this chapter is not to demonstrate that policies discussed with an inclusive policy image always trigger political support for the party in government, but that an inclusive policy image is needed to trigger that effect. More specifically, the analysis above reveals that an inclusive policy image is a necessary, but not sufficient, condition of political support. The method of difference used above is, indeed, functional to observe the necessary conditions for a phenomenon to occur (p.133) (Ragin 2010).

This finding is enough to provide the punctuated gradualism theory with indirect empirical evidence. The punctuated gradualism theory hypothesises that decision-makers act according to electoral incentives, which are in turn created by the inclusive policy image with which an issue is discussed. In other words, decision-makers act in an attempt to capitalize on the support for the policy created by the inclusive policy image. This chapter tests one of the empirically observable implications derived from the punctuated gradualism theory, by looking at the necessary conditions for decision-makers to capitalize on the political support for a policy, namely the necessary conditions for decision-makers to gain from implementing a policy. Findings show that one of these necessary conditions is the inclusiveness of the policy image. The fact that in some instances decision-makers do not manage to capitalize on that support for other reasons does not provide contrasting evidence for the theory proposed in this work and falls outside its scope.
CONCLUSION

This chapter suggested that how a policy is discussed affects the political support for the party in government as a result of the introduction of that policy. If a policy is framed in a way which speaks to the public in general, as in the case of the Irish smoking ban, public opinion will be more receptive and will show more support for the politicians in power. If, instead, the frame is divisive, as in the case of the Italian ban, the policy will not have any effects on the public and no political support will be triggered. These findings provide the punctuated gradualism theory with indirect empirical support. Indeed, the relationship between the policy image and public opinion is central to this theory and demonstrating that this relationship is in place in the circumstances identified by the theory itself provides support for the theory.

The next chapter investigates another empirically observable implication of the punctuated gradualism theory. By relying on statistical analysis, namely a difference in difference in difference analysis, combined with comparative case study research, I test whether tobacco control measures prioritized with a frame addressing particular target groups trigger attitudinal changes among members of those groups. Again, this is functional to test the one of the core tenets of the theory proposed in this study, namely the relationship between the policy image and public opinion.
CHAPTER 8: POLICY IMAGE, PUBLIC OPINION AND THE ALLOCATION OF
INTERESTS IN THE FRENCH AND ITALIAN ADVERTISEMENT BANS

INTRODUCTION

The punctuated gradualism theory provides an answer to the research question what explains policy change in tobacco control, by suggesting that policies can evolve in a punctuated equilibrium or punctuated gradualism manner, depending on public reactions. Indeed, how public opinion reacts to the policy image with which an issue is discussed affects how the issue goes through the political agenda and how societal actors coalesce and act.

Chapter 5 sought to trace these processes in a comparative case study and these last three chapters bring further empirical support by testing the empirically observable implications of the theory with statistical analysis. In Chapter 6 I showed that tobacco control evolves through punctuations, which is the main empirically observable implication of the theoretical assumption of the punctuated equilibrium theory, on which the theory proposed in this study builds. In Chapter 7 I suggested that the introduction of a smoking ban supported by an inclusive policy image triggers political support for the party in government. In so doing, I provide indirect evidence for the link between decision-makers’ incentives and the policy image, central to the policy responsiveness literature and to the punctuated gradualism theory.

This chapter looks at another empirically observable implication of the theory. By building on the policy feedback literature, the punctuated gradualism theory posits that the policy image affects the allocation of interests in the society and this in turn determines how the policy evolves. An exclusive policy image brings concentrated costs and benefits, thus triggering the emergence of concentrated interests and hence policy dynamics are different than in the scenario where the policy image bears diffuse effects on the society as a whole. I expect to find that a
policy discussed with an exclusive frame, such as based on a strong division between smokers and non-smokers, triggers attitudinal changes among the members of those groups. The underlying logic is that changes in attitudes are arguably a prerequisite for changes in behaviour and hence at the basis of interest allocation. Findings support these expectations thus providing further indirect support for the punctuated gradualism theory.

This chapter commences by summarizing the insights from the policy feedback literature on which the punctuated gradualism theory builds and discussing the two case studies analysed in this chapter. In so doing, I explain how, by comparing two advertisement bans which are almost identical in terms of content and levels of implementation and enforcement, but which differ in terms of the policy image, I expect to find different changes in attitudes among smokers and non-smokers. I proceed to review the method used to measure these attitudinal changes, namely a difference-in-difference-in-difference analysis, where I compare the attitudes towards tobacco control among smokers and non-smokers before and after the prioritization of tobacco control measures, in countries which have introduced them and in those which have not. The last section concludes by summarizing the findings and discussing the limitations of the analysis.

**THE PUNCTUATED GRADUALISM THEORY, POLICY IMAGE AND THE ALLOCATION OF INTERESTS**

As seen above, by relying on the insights of the policy feedback and policy responsiveness theories, the punctuated gradualism theory posits that how certain policy images trigger public support for a policy, how decision-makers respond to that support and also how different policy images allocate different interests in the society affect policy change and policy dynamics more in general. In this chapter I focus on the theoretical assumption of the policy feedback part of the
punctuated gradualism theory, namely that the policy image affects interest allocation in the society.

As seen above, the punctuated gradualism theory builds on the policy feedback literature with respect to how certain policy images shift the allocation of interests, thus creating different types of politics, which in turn make policy change easier or more difficult. An inclusive policy image allocates diffuse costs and benefits, as the effects of the policy are not perceived as proximate by the population as a whole, and hence triggers the creation of diffuse interests. Conversely, an exclusive policy image allocates concentrated costs and benefits, as its effects are perceived as proximate by specific segments of society, and hence triggers the creation of concentrated interests. The allocation of interests in turn makes policy change easier or more difficult and determines how the policy evolves.

By comparing the Irish voluntary agreement on smoking in public places of the 1990s and the smoking ban of the 2000s, in Chapter 5 I suggest that where tobacco control was discussed as bearing costs and benefits exclusively on employers and managers in the hospitality sector, these actors had strong incentives to coalesce among each other and act to oppose legislation on smoking in public places. This contributed to the introduction of the voluntary agreement supported by the industry and its employees. Conversely, when ten years later smoking in public places started to be discussed in terms of benefits for the society as a whole, collaboration among publicans became increasingly difficult, lacking the capacity to mobilize and act against legislation. This in turn contributed to the introduction of the total smoking ban in public places.

The effects of a policy as perceived by the society are central in the policy feedback literature, on which the punctuated gradualism theory builds. A policy perceived as bearing proximate effects
on specific groups, such as smokers and non-smokers, will bring costs and benefits only for those particular groups. Hence this policy will trigger the creation of concentrated interests. This in turn will affect the type of politics in place. Nonetheless, testing whether a policy framed in a certain way triggers the creation of interests is admittedly difficult. Quite a conceptual and empirical leap is present between an individual receiving a signal concerning a specific policy through the policy image and the individual starting to perceive a stake in a specific issue, let alone mobilizing in favour or against that policy. I need to rely on the insights of the behavioural literature to understand the effects of framing and measure them in a valid manner.

As seen in Chapter 2, the behavioural literature suggests that a complex chain of mechanisms is in place between an external stimulus and behaviours (de Vries, Dijkstra, and Kuhlman 1988; Rains and Turner 2007; Tykocinski, Higgins, and Chaiken 1994). The public health communication (Gallagher and Updegraff 2012; Toll et al. 2007; Toll et al. 2014) and the welfare economics strands (Bernheim and Rangel 2004; Gruber and Kőszegi 2004; O'Donoghue and Rabin 1999; Odermatt and Stutzer 2013) study the mechanisms linking external stimuli, such as differently framed health warnings or public health policies, and behavioural change. Framing triggers an increase in attention in the individual, who will react to the stimulus by changing his/her attitudes. This reaction eventually leads to a change in intentions and behaviours. In conclusion, this literature suggests that framing affects first and foremost attitudes and then (eventually) intentions and behaviours.

Attitudinal changes represent the first step of the process which links the external stimulus, in this case the message conveyed through the policy image, and behavioural changes and are ultimately at the basis of interest allocation. As such, this chapter investigates whether different policy images trigger different attitudinal changes, as a prerequisite for behavioural changes.
More specifically, if an exclusive policy image bears proximate effects for specific target groups allocating thus concentrated costs and benefits and triggering the emergence of concentrated interests, as the punctuated gradualism theory theorizes, I expect to observe attitudinal changes among the members of those target groups. Conversely, where a policy bears effects for the society as a whole, I do not expect to observe any change in the attitudes of the members of those target groups.

The analysis focuses on the tobacco advertisement bans introduced in Italy and France respectively on 22 January 1992 and 30 January 1993. The rationale for this comparison is the method of difference (p.203-204; p.153-156; p.183) (Della Porta 2008; George and Bennett 2005; Mill 1888; Skocpol and Somers 1980), as detailed in Chapter 4. The Italian and French bans did not differ greatly in terms of their content, as well as their implementation and enforcement. Furthermore, these two countries are rather similar in terms of their broad approach to tobacco control (Table 4.3 p.80) (Cairney, Studlar, and Mamudu 2012). Nonetheless, strong differences in how these advertisement bans were discussed, namely their policy images, are present. As such, I expect to observe attitudinal changes among the members of the target groups of the policy, namely smokers and non-smokers, in France, where the advertisement ban was prioritized with an exclusive policy image. Conversely, I expect to observe no change in those target groups in Italy. As also discussed in Chapter 4, I trace the differences between how these two bans were discussed by reviewing primary sources, such as newspaper articles and former confidential documents contained in the tobacco industry’s repositories. Moreover, I measure

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77 As discussed already in Chapter 4, although when compared with one another the French and the Italian ban are rather similar, they represent different types of policy change: the former may be conceived as an incremental change, whereas the latter as a drastic change. Indeed, the French ban was little more than the transposition of rules already in place, whereas the Italian ban represented the first attempt to legislate on tobacco advertisement in that country.
attitudinal changes with a difference-in-difference-in-difference analysis, applied to a series of cross-sectional surveys.

**THE FRENCH AND THE ITALIAN ADVERTISEMENT BANS**

The French advertisement ban was the result of the collaboration between a small group of physicians and policy-makers. As such, the political debate was focused on a highly moral frame, strongly based on the division between smokers and non-smokers. Conversely, in the Italian case the advertisement ban was the result of the attempt to limit investment in private TV advertisement. No single policy image was present, as several factors influenced the prioritization of the ban: economic considerations, related to private TV advertisement and the privatization of the state monopoly in tobacco manufacturing; the education of children, as the main focus of the campaign supported by the European Economic Community; the education of smokers, with the debate on health warning labels and the regulation of tar yields; broad public health considerations, related to the debate on the regulation of smoking in public places, both at national and local level. In conclusion, in Italy no defined target group was present in how the policy was prioritized. By controlling for the similarities in the content and in their levels of implementation and enforcement of these bans, I seek to test whether the differences in the policy images triggered attitudinal changes smokers and non-smokers.

The French and the Italian advertisement bans were very similar in terms of content, as well as implementation and enforcement. They both prohibited direct and indirect advertisement of tobacco products in main media outlets, as well as the sponsorship of cultural and sport events. The Tobacco Control Scale, a systematic scoring system based on survey experts and Eurobarometer surveys, which allows for comparing tobacco control regulation across European countries, rank Italy and France almost equally (Joossens 2004; Joossens and Raw 2006;
Joossens and Raw 2007; Joossens and Raw 2011). Furthermore, by relying on a more comprehensive scoring system, comprising also the timing of regulation and not only its strength, Cairney, Studlar, and Mamudu (2012) (Table 4.3 p.80) show that France and Italy differ very little in terms of tobacco control. The main difference was in how the two measures were discussed, namely in their policy image.

The French Advertisement Ban

The Evin loi was enacted as part of a broader programme on public health, which included also alcohol consumption regulation, led by the French medical community. A team of physicians published a report in 1987 on the fight against smoking. The idea was to revive the 1977 Veil loi, which attempted to address both smoking in certain public places and tobacco advertisement, but which had been poorly enforced. In its original formulation, the Evin law was a rather strong attempt to regulate tobacco advertisement and sponsorship, due to the influence the team of physicians who proposed the initial report exerted on the Minister, the discretionary power of the latter on tobacco control and his personal involvement (p.53; p.150) (Kagan, Vogel, and Galvan 1991; Nathanson 2004).78 This project was the result of the close collaboration between physicians and bureaucrats: Kagan, Vogel, and Galvan (1991) (p.56) call it elite-bargaining politics, whereas Nathanson (2004) (p.147) refers to it as insider lobbying. The distance between the public opinion and this piece of legislation became immediately clear to several commentators, both in the media (online) (Ibrahim 1990) and in the parliament (p.15) (INFOTAB 1993). As the New York Times put it: “a growing lobby of French academics and Government officials, including President Francois Mitterrand, stands behind the effort, which

78 The strong role played by the Minister Evin was acknowledged in many sources. As stated in the Le Monde in 1991 (online) (Nouchi and Normand 1991): “Mr Evin’s main accomplishment will probably remain his law against smoking and alcoholism” [author’s translation].
remains to be accepted by the public” (online) (Ibrahim 1990). The article carries on by stating (online) (Ibrahim 1990) that “unlike in the United States, where the antismoking movement was a grass-roots movement that caught up with legislators, the Government here was today pleading with members of the Parliament, and with the public, to accept new laws”.

The Evin loi was voted in the cabinet on 6 June 1990 and enacted by the parliament a few months later (online; online; p.150) (AP 1990; Foltz 1990; Nathanson 2004). Despite the personal endorsement of the Minister and the support of the Socialist party (p.48) (Nathanson 2004), the enactment of the ban faced several obstacles both inside and outside the parliament, such as cabinet reshuffles and a fierce opposition by trade unions, supported by several cabinet members (online) (Bourcier 1991) and MPs (p.15; p.7) (INFOTAB 1993; na 1992a).79 The result was the watering down of some of its provisions, such as the exemption of the Grand Prix from the ban on tobacco industry sponsorship (online; p.12; p.3) (Delcayre 2014; Gavi 1993; na 1995).

More importantly for this chapter, the debate was focused on a strong division between smokers and non-smokers (online) (Gavi 1993). As emphasised by Nathanson (2004) (p.158), “it [the Evin loi] aimed to transform smoking from a basis of inclusion to one of exclusion”, in strong opposition with the principle of solidarity, against which public policy is usually assessed in France (p.158) (Nathanson 2004). The government was accused of paternalism in several occasions in the parliament (p.15) (INFOTAB 1993) and these concerns were echoed by the

79 The reason for this opposition was the strong link between the tobacco industry and key politicians as well as trade unions. Several sources in the media and in confidential documents internal to the tobacco industry mention the close relationship between the tobacco industry and the hospitality sector, media outlets and advertising agencies in the 1980s (p.5; online; p.294; online; p.22) (na 1995; PF 1991; PM 1981; Riding 1990; RuderFinn 1991) and their direct access to politicians (PM 1981) (p.295): “PMF's [Philip Morris' France] past strategy with the Communists has always been to avoid the traditional antagonism and they consequently perceive us in a favorable light”. The access of the tobacco industry to the Socialist government was emphasised also with respect to the negotiations for a joint-venture with Seña, the state owned tobacco company (p.296) (PM 1981).
media (online) (Riding 1990). Kagan, Vogel, and Galvan (1991) (p.56) mention as an example of the strong division between smokers and non-smokers triggered by the discussion on the ban a series of articles published by popular French cartoonists, portraying smokers as sinners to be protected from themselves and non-smokers as intolerant puritans. The strong division between smokers and non-smokers was also exemplified by the provocative campaign carried out in December 1992 by Libération and Le Figaro against the ban (online) (GM 1992). Two weeks before the ban was introduced these two newspapers organized a campaign against the ban. For a few days, copies of the newspapers were printed with differently colored front-pages, provocatively addressed to smokers and non-smokers, in order to emphasise the strong focus of the ban on division between smokers and non-smokers. Minister Evin himself emphasised the strong focus on smokers and non-smokers: “above all, we're dealing with an ethical problem” (online) (Riding 1990). As mentioned in the same article featured in the New York Times: “Mr. Evin says the beneficiaries will be those who give up smoking” (Riding 1990).

The Italian Advertisement Ban

Differently from the French case, little if no tobacco advertisement regulation was in place until the 1990s in Italy (p.276; p.160; p.101) (PM 1981, 1984, 1985). As in the words of the Philip Morris’ business plan for Italy: “advertising restrictions remain ambiguous” (p.101) (PM 1985). This pushed the industry to increasingly invest into marketing and to maintain the same strategy in place in the 1970s (PM 1981) (p.273; p. 280): “total direct marketing expenditure will be that increased from $ 26.5 million in 1981 to $ 39.7 million in 1986”; “TV and radio stations, either private or located outside of Italy, will still be used”. This attitude was due to the lack of strong legislation (p.160; p.101) (PM 1984, 1985) and the perceived unwillingness of decision-makers to enact new one (PM 1981) (p.280): “no radical change is expected in the existing legislation
regarding restrictions on advertising and promotion in Italy”. The lack of stringent regulation was partly due to the efforts undertaken by the tobacco industry, as acknowledged in the introduction of a document by the Philip Morris Italian office, which discusses advertising regulation in the 1980s (PM 1992a) (p.46): “industry lobby succeeds in stalling general decisions”.

At the end of 1980s and the very beginning of 1990s the situation changed drastically, due to a series of events: the increasing discussion on health warning labels and the regulation of tar yields (online; online; online; online; online) (na 1988, 1989, 1991; Papitto 1991a, 1991b); the strong nation-wide education campaign against smoking (online) (Cianciullo 1987); the strikes against the privatization of the state monopoly in tobacco manufacturing and their consequences on cigarette supplies (online; online) (GS 1992; na 1992b); the attempts to regulate smoking in public places, both at national (online; online) (Mastrogiacomo 1988; OLR 1988) and local level (online) (De Luca 1992). All these events led to the “intensification of anti-smoking campaigns on all medias” (PM, 1992b) (p. 16). In its SWOT analysis (Strategy, Weaknesses, Opportunities and Threats) the Philip Morris Italian office identified as the main weakness for its business strategies the high media attention tobacco advertisement regulation was receiving (p.17) (PM 1992a). As a consequence, at the beginning of the 1990s a shift in the public mood in favour of tobacco control took place, as emphasised by the Philip Morris corporate affairs office responsible for the Italian market (p.47-48; p. 17) (PM 1992a, 1992b).

Strong of this public support, the Italian advertisement ban was enacted through an administrative act (decree 30 November 1991, n. 425), based on article 17 Law n. 400/1988. This decree, called Vizzini I (named after the then Minister of Posts and Telecommunications), prohibited the direct and indirect advertisement of tobacco products on all the main media
outlets. Another decree, called Vizzini II, was also enacted. This second decree banned the promotion of diversified products through commercials intended to advertise tobacco products, namely it banned sponsorship of cultural and sport events. It should be noted that these two decrees were strongly tied to Mammi law (Law 6 August 1990, n. 223), which limited investment in private TV advertisement.

A systematic review of how the advertisement ban was discussed in the media shows that although a mild focus on smokers’ health was present (less marked than in the French case though), the main policy image was centered on public health as broadly conceived, focused mainly on the positive effects of (early) education on children. That policy image was transposed from the discussions surrounding the European Economic Community directive on tobacco advertisement (online; online; online) (na 1991; Papitto 1991a, 1991b). Key newspaper articles featured the comments from the discussions in Brussels, mentioning the then Commissioner Papandreu discussing the importance of addressing advertisement in order to prevent young people from starting smoking (online) (Papitto 1991a). Indeed, the ban had a strong pedagogical connotation (online) (AL 1991). The focus on children and education was supported by several environmental non-governmental organizations and consumer groups, which took part in a large anti-smoking campaign around that time (online; online) (Cianciullo 1987; De Luca 1990). In the media the more tolerant Italian approach was often compared with the more extremist American one (online) (Mastrogiacomo 1988). How the ban was portrayed in the media represents a striking difference with the French case, where the opponents of the ban accused the French Minister of transposing the American approach to public health, as seen above.

It should be noted that the discussion on the advertisement ban was not exhausted by its pedagogical connotation. As seen above, several factors contributed to the discussion of tobacco
control in Italy at the end of the 1980s and the very beginning of the 1990s: the ongoing debate on other aspects of tobacco control, such as the introduction of warning labels and some mild attempts to regulate smoking in public places, and the economic consequences of the privatization of the state monopoly. As a result, the Italian ban was discussed in much broader terms than the French one and no particular target group was consistently addressed in the media.

In conclusion, the French and the Italian advertisement bans were very similar in comparative terms. They, indeed, covered the direct and indirect advertisement of tobacco products in the main media outlets, they were introduced roughly in the same period and they were both strongly implemented and enforced. The main difference lies in how those measures were framed, namely in their policy images. The French ban was the result of the efforts of a group of physicians, who worked in close collaboration with the Health Minister. The ban mainly addressed smokers and non-smokers, with strong paternalistic connotations: the policy had clear target groups. Conversely, several factors contributed to the introduction of the Italian advertisement ban and its policy image. The debate was more on the public health in broader sense, with strong emphasis on early education and children protection, among other aspects: no clear target group was present.

THE EFFECTS OF THE PRIORITIZATION OF THE ADVERTISEMENT BANS ON ATTITUDES

The policy feedback literature suggests that an exclusive policy image with proximate effects on specific target groups elicits concentrated costs and benefits on the members of those groups and hence it triggers the creation of concentrated interests. According to the punctuated gradualism theory this in turn affects how a policy evolves. As seen above, in order to provide indirect empirical support for these claims, in this work I focus on attitudinal changes, as prerequisite for
behavioural changes. In other words, I argue that by imposing concentrated costs and benefits, an exclusive policy image with proximate effects on specific target groups will trigger attitudinal changes among the members of those groups. Attitudinal changes among the members of policy target groups are taken as prerequisite for the creation of concentrated interests. Conversely, a policy conceived as bearing costs and benefits for the society as a whole will not trigger any change in the attitudes towards that issue among potential target groups. I take this as a proxy for the creation of diffuse interests. As such, given the differences between the policy images with which the two advertisement bans were discussed, I expect that the prioritization of the French advertisement ban triggered attitudinal changes among smokers and non-smokers, whereas the prioritization of the Italian ban did not.

As detailed in Chapter 4, the effects of the advertisement bans on individual attitudes are investigated with a difference-in-difference-in-difference analysis applied to a series of cross-sectional surveys with more than 10000 respondents across 12 European countries for the years 1991, 1992, 1994 and 1995. This type of analysis is common practice both in the public health and policy feedback strands (Fong et al. 2006; Odermatt and Stutzer 2013; Pacheco 2013; Svallfors 2010). The difference-in-difference-in-difference research design allows for testing for the effects of public policy on target groups, such as smokers and non-smokers, by analyzing the effects of the interaction between three dummy variables (p.2-3) (Imbens and Wooldridge 2007). These variables are: the country variable, which takes value 1 for the country where the policy is introduced and value 0 for those where it is not; the time variable, which assumes value 1 for the years after the introduction of the ban and value 0 for those before the introduction; the target group variable, which in this case measures whether the individual is a smoker or not. This triple interaction starts with the time changes in averages for the smokers in the country where the
policy is introduced and then nets out the change in means for smokers in the other countries and the change in means for the non-smokers in the same country. Furthermore, in the full model I include fixed effects for country, year and country-year, I cluster standard errors on country and I use weights. I also control for a series of individual demographic characteristics. These devices allow for reducing unobserved heterogeneity at individual, country, year and country-year level.

Table 9 shows the results for the difference-in-difference-in-difference analysis.\textsuperscript{80} \textsuperscript{81} Model 1 and Model 2 show respectively the baseline and full model. Although both models include fixed effects, weights and clustered standard errors, the full model includes also a series of individual demographic characteristics, which may affect the likelihood of being in favour of tobacco (advertisement) control. In both models the coefficient of the triple interaction between the variables France, 1994 and Smoker is statistically significant, respectively at p<0.05 in Model 1 and p<0.01 in Model 2. These results suggest that the prioritization of the French ban triggered a significant change in the difference of the likelihood of being in favour of tobacco advertisement control between smokers and non-smokers. Conversely, no change is observed for the Italian case. In Model 1 the coefficient of the triple interaction between the variables Italy, 1992 and Smoker is not statistically significant and in Model 2 it becomes statistically significant with the inclusion of the individual demographic characteristics, but only at p<0.1. Accordingly, I

\textsuperscript{80} For reasons of space, the coefficients for the fixed effects for country, year and country-year are not shown in the table.

\textsuperscript{81} Appendix Table 5 shows the Variance Inflation Factor (VIF) for the variables in Model 2. The Variance Inflation Factor measures how much variance of the coefficient of a variable is due to the fact that the variable is linearly related to the other variables in the model (online) (Allison 2012). A high Variance Inflation Factor usually suggests the presence of multicollinearity. One of the effects of multicollinearity is to produce great standard errors and hence non-significant coefficients. As such, whether multicollinearity may be present in the regression model and whether its presence represents a problem need to be discussed in more detail. The VIFs in Appendix Table 5 are well below the value 10 and hence I can exclude high levels of multicollinearity. Nonetheless, there are relatively high values which might suggest the presence of mild multicollinearity. Yet, even if mild collinearity was present it would not bias the results in the regression model, as high values of Variance Inflation Factor are associated with interaction terms and multicollinearity does not affect the p value of interaction terms (online) (Allison 2012). Moreover, the lack of the effects of collinearity is suggested by the results in the regression table. First, several coefficients are statistically significant. This would not be the case if multicollinearity affected results as one of the effects of multicollinearity is to produce low p values. Second, results do not drastically change (especially the sign of coefficients) when more variables are added to the model and when a sub-sample is analysed. If multicollinearity was present different model specifications and different samples would be characterised by drastically different results for the same variables.
conclude that the prioritization of the Italian advertisement ban did not trigger any attitudinal changes among smokers or non-smokers. These two findings are in line with the expectations set out above: an exclusive policy image, which entails proximate effects on specific segments of society, as in the case of the French ban, triggers attitudinal changes among their members. By imposing concentrated costs and benefits, an exclusive policy image triggers in turn the allocation of concentrated interests. Conversely, an inclusive policy image, such as the policy image of the Italian ban, which elicits broad effects on the society as a whole, does not trigger attitudinal changes on specific target groups. Inclusive policy images, indeed, impose diffuse costs and benefits and hence allocate diffuse interests.

Table 9 Difference-in-Difference-in-Difference: The Effects of the Italian and French Advertisement Bans on the Attitudes of Smokers and non-Smokers

<table>
<thead>
<tr>
<th>Public Attitudes towards Tobacco Ad Ban</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>0.116***</td>
<td>0.306***</td>
</tr>
<tr>
<td></td>
<td>(0.0262)</td>
<td>(0.0352)</td>
</tr>
<tr>
<td>1992</td>
<td>0.110***</td>
<td>0.114***</td>
</tr>
<tr>
<td></td>
<td>(0.0139)</td>
<td>(0.0142)</td>
</tr>
<tr>
<td>Italy#1992</td>
<td>-0.217***</td>
<td>-0.382***</td>
</tr>
<tr>
<td></td>
<td>(0.0167)</td>
<td>(0.0184)</td>
</tr>
<tr>
<td>Smoker</td>
<td>-0.364***</td>
<td>-0.363***</td>
</tr>
<tr>
<td></td>
<td>(0.0795)</td>
<td>(0.0958)</td>
</tr>
<tr>
<td>Italy#Smoker</td>
<td>-0.0941</td>
<td>-0.225**</td>
</tr>
<tr>
<td></td>
<td>(0.0795)</td>
<td>(0.0970)</td>
</tr>
<tr>
<td>1992#Smoker</td>
<td>-0.143***</td>
<td>-0.148***</td>
</tr>
<tr>
<td></td>
<td>(0.0306)</td>
<td>(0.0308)</td>
</tr>
<tr>
<td>Italy#1992#Smoker</td>
<td>0.0815</td>
<td>0.0826*</td>
</tr>
<tr>
<td></td>
<td>(0.0520)</td>
<td>(0.0451)</td>
</tr>
<tr>
<td>France</td>
<td>-0.649***</td>
<td>-0.645***</td>
</tr>
<tr>
<td></td>
<td>(0.0267)</td>
<td>(0.0325)</td>
</tr>
<tr>
<td>1994</td>
<td>-0.610***</td>
<td>-0.542***</td>
</tr>
<tr>
<td></td>
<td>(0.0223)</td>
<td>(0.0172)</td>
</tr>
<tr>
<td>France#1994</td>
<td>-0.206***</td>
<td>-0.284***</td>
</tr>
<tr>
<td></td>
<td>(0.0207)</td>
<td>(0.0187)</td>
</tr>
<tr>
<td>France#Smoker</td>
<td>-0.137*</td>
<td>-0.180**</td>
</tr>
<tr>
<td>Variable</td>
<td>Coefficient 1</td>
<td>Coefficient 2</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>1994#Smoker</td>
<td>0.145**</td>
<td>0.130***</td>
</tr>
<tr>
<td>(0.0637)</td>
<td>(0.0458)</td>
<td></td>
</tr>
<tr>
<td>France#1994#Smoker</td>
<td>0.150**</td>
<td>0.194***</td>
</tr>
<tr>
<td>(0.0626)</td>
<td>(0.0479)</td>
<td></td>
</tr>
<tr>
<td>Center</td>
<td>-0.0396*</td>
<td>-0.124***</td>
</tr>
<tr>
<td>(0.0239)</td>
<td>(0.0374)</td>
<td></td>
</tr>
<tr>
<td>Right</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Income</td>
<td>0.0704***</td>
<td></td>
</tr>
<tr>
<td>(0.0221)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Income</td>
<td>0.0341</td>
<td></td>
</tr>
<tr>
<td>(0.0234)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest Income</td>
<td>0.0490</td>
<td></td>
</tr>
<tr>
<td>(0.0343)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>0.127***</td>
<td></td>
</tr>
<tr>
<td>(0.0263)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children</td>
<td>0.110***</td>
<td></td>
</tr>
<tr>
<td>(0.0202)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex-smoker</td>
<td>-0.141***</td>
<td></td>
</tr>
<tr>
<td>(0.0180)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Status</td>
<td>0.0455</td>
<td></td>
</tr>
<tr>
<td>(0.0337)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.00346***</td>
<td></td>
</tr>
<tr>
<td>(0.000749)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-19 Years of Study</td>
<td>0.00264</td>
<td></td>
</tr>
<tr>
<td>(0.0295)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 Years and More of Study</td>
<td>0.0938***</td>
<td></td>
</tr>
<tr>
<td>(0.0360)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Still Studying</td>
<td>0.00157</td>
<td></td>
</tr>
<tr>
<td>(0.0532)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>0.00819</td>
<td></td>
</tr>
<tr>
<td>(0.0180)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Employed</td>
<td>-0.0761**</td>
<td></td>
</tr>
<tr>
<td>(0.0310)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>1.418***</td>
<td>0.960***</td>
</tr>
<tr>
<td>(0.0262)</td>
<td>(0.0990)</td>
<td></td>
</tr>
</tbody>
</table>

Observations: 47,858 27,043

Notes: Probit estimations. State and year fixed effects along with country-specific time trends are included, but not shown for reasons of space. Weights are used to account for the complex survey design. Standard errors are clustered on the country level. Significance levels: *** p<0.01, ** p<0.05, * p<0.1
I illustrate these findings graphically by using predictive margins, a statistic calculated from predictions from a model for different levels of a covariate. More specifically, I use contrasts (also called difference in effects), which are differences in levels of margins for different levels of covariates. Figure 11 shows how the difference in the propensity of being in favour of tobacco advertisement control between smokers and non-smokers changed as a result of the prioritization of the bans. This figure shows time on the horizontal axis and the difference in predictive margins (also called difference in effects) on the vertical axis, with separate quadrants for France and Italy. First of all, it should be noted that the difference in the propensity of being in favour of tobacco advertisement control between smokers and non-smokers is always negative, which means that non-smokers are always more likely to be in favour of tobacco advertisement control: this is hardly surprising. Yet, this difference diminishes in France from -0.22 to -0.11, while remaining almost the same in the control group. In Italy the prioritization of the advertisement ban did not change the difference in the propensity of being in favour of tobacco advertisement control between smokers and non-smokers and no change is observed in the control group. This plot provides a visual explanation of the findings above, by showing that in France a significant change in the difference in how smokers and non-smokers perceive tobacco advertisement control occurred as a result of the prioritization of the ban.
By comparing the attitudes towards tobacco control among smokers and non-smokers before and after the prioritization of tobacco control measures both in countries which introduced them and in those which did not, the difference-in-difference-in-difference analysis shows that the prioritization of the French advertisement ban is associated with a statistically significant change in the difference of the propensity of being in favour of tobacco advertisement control between smokers and non-smokers. In other words, the prioritization of the French advertisement ban made one of these target groups more or less in favour of tobacco control and let the other one indifferent. In conclusion, this ban had different effects for smokers and non-smokers. This
finding is sufficient to suggest that the prioritization of a policy supported by an exclusive policy image brings concentrated costs and benefits, triggering the allocation of concentrated interests.

This final part looks more into the results of the analysis, to observe the absolute effects of the prioritization of the bans on smokers and non-smokers. Figure 12 disaggregates the results shown in Figure 11 into the effects on smokers and non-smokers. More specifically, Figure 12 compares the effects of the prioritization of the bans in France and in Italy (respectively, on the left and right quadrant) on the propensity of being in favour of tobacco advertisement control, between those countries which introduced the ban and those which did not and between smokers and non-smokers. Figure 12 shows that the differential effects of the prioritization of the French ban observed above are driven by the effects on non-smokers. In other words, the prioritization of the French advertisement ban made non-smokers less in favour of tobacco control and did not trigger any significant effect on smokers, when these effects are compared to the control group.
These findings call for further research in future. The dynamics which underlie the process whereby individuals react to the allocation of costs and benefits brought by a policy are complex. It might be that French non-smokers reacted negatively to the prioritization of the advertisement ban as a policy which would have benefited smokers at their costs. As the division between smokers and non-smokers was strongly emphasised in the political discussion on the ban, it is reasonable to suggest that non-smokers might have felt that they bore the costs of regulation. Future research should look more into the dynamics which explain how individuals react to the allocation of costs and benefits. Nonetheless, this falls outside the scope of this work. Showing
that bans prioritized with different policy images have different effects for smokers and non-smokers is sufficient to provide indirect empirical support for the punctuated gradualism theory.

As discussed in Chapter 4, the results shown above need to be taken with three caveats. First, although a difference-in-difference-in-difference analysis performs well in controlling for unobserved heterogeneity and the application of this method above seeks to further address this problem, results need to be taken with the caveat that policy prioritization has almost immediate effects on individual attitudes and that these effects remain in place over a relatively long period of time. Indeed, the different timing of the surveys measuring the dependent variable with respect to the prioritization of the advertisement bans between France and Italy might introduce unobserved heterogeneity, which the analysis cannot control for. Second, this analysis takes as independent variable the prioritization and not the introduction of the advertisement bans, but it uses the introduction as reference point to choose the surveys from which the dependent variable is measured. As such, results depend on the assumption that the prioritization of these bans did not occur too far from their introduction. Finally, results need to be taken with the caveat that the prioritization of a policy with a specific policy image, and not the introduction of that policy, affects public support for that policy and not the other way round. It is reasonable to assume that citizens start to show support for a specific policy when that policy starts to be discussed in the political arena in a certain way and not when the policy enters into force. Furthermore, although it might be that a policy is prioritized following the public mood, it is unlikely that public support, the dependent variable in the analysis above, affects the policy image with which that policy is prioritized, the independent variable.
CONCLUSION

This chapter found that where a policy is framed with an exclusive policy image bearing proximate effects on specific target groups, such as smokers and non-smokers in the French advertisement ban, I observe attitudinal changes in such groups. Conversely, where a policy is framed as bearing effects on the society as a whole, such as the Italian ban, I observe no attitudinal changes in potential target groups. By taking attitudinal changes in policy target groups as a proxy for interest allocation, in this chapter I found indirect evidence for the policy feedback part of the punctuated gradualism theory proposed in this work. In fact, by building on the policy feedback literature, the punctuated gradualism theory posits that the policy image affects the allocation of interests in the society and this in turn determines how the policy evolves. More specifically, a policy discussed as bearing proximate effects on a small part of the society will bring concentrated costs and benefits, thus triggering the emergence of concentrated interests and hence this policy will evolve differently than in the scenario where a policy bears diffuse effects on the society as a whole.

Findings in this chapter need to be taken in combination with those drawn in the previous ones. This chapter and the previous ones tested the main empirically observable implications of the punctuated gradualism theory. In Chapter 6 I tested the empirically observable implication of main theoretical assumption on policy change of the punctuated gradualism theory, namely punctuations. In Chapter 7 I tested whether the implementation of a smoking ban supported by an inclusive policy image triggers political support for the party in government. This test provided indirect support for the theoretical assumption of the policy responsiveness literature, on which the punctuated gradualism builds, namely that decision-makers act on the basis of expected political returns and that the latter depend on the policy image. These three last chapters
provided empirical support for the analysis of the processes of the punctuated gradualism theory with process tracing in Chapter 5.
CHAPTER 9: CONCLUSION

INTRODUCTION

This work sought to answer the question: what explains policy change in tobacco control? In recent years, the study of policy change has undergone major developments and today, it can rely on a well-equipped theoretical toolbox. Until the 1990s, public policy approaches focused on single sets of processes to explain policy change. Some studies relied on the diffusion of ideas and practices across countries (Berry and Berry 1990; Hall 1989; Hall 1993) and others on the cognitive limitations of policy-makers (Davis, Dempster, and Wildavsky 1966; Simon 1985; Wildavsky 1964). Others again concentrated on the role of societal actors in monopolizing the decision-making (Heclo 1977; Maass 1951). It was not until the 1990s that complex public policy approaches (synthetic approaches) emerged (Baumgartner and Jones 1993, 2009; Kingdon 1995; Kingdon and Thurber 2011; Sabatier 1988; Sabatier and Jenkins-Smith 1993).

These approaches, such as the punctuated equilibrium theory (Baumgartner and Jones 1993, 2009), studied policy change by incorporating different sets of processes and taking clear stances on how these processes interact between each other. Although these complex approaches attach different explanatory power to different sets of processes, they all study policy change by looking at how new ideas spread across countries, how policy-makers use these new ideas and how entrenched interests oppose these ideas. The last decades have witnessed the emergence of a wide array of accounts of policy change.

Nonetheless, these synthetic public policy approaches to policy change overlook an increasingly relevant factor in public policy, particularly in tobacco control (p. 90-92; p.6) (Cairney, Studlar, and Mamudu 2012; Marshall 2016): public opinion. No matter how certain ideas and policy practices are supported by hard evidence and considered legitimate by experts and practitioners
and no matter how institutional rules facilitate decision-making, no policy can be introduced if it lacks public support and if it faces the opposition of strong and organized interests in society. By overlooking public opinion, the synthetic approaches cannot explain some important variation in policy dynamics.

Several bodies of the public policy literature already acknowledge the importance of public opinion. Some work investigates whether and to what extent public policy (and framing) affects the allocation of interests in society and in turn how this influences decision-making (Gilens 1999; Gusmano, Schlesinger, and Thomas 2002; Lowi 1964; Soss and Schram 2007; Wilson 1980). Other looks at whether and to what extent policy-makers are responsive to public opinion (Page and Shapiro 1983; Soroka and Wlezien 2005; Wlezien and Soroka 2012). Yet, no consistent attempt to incorporate the role of public opinion into a complex public policy approach, which takes into consideration other sets of processes, is present. Indeed, the effects of public opinion on policy change cannot be disentangled from the dynamics whereby ideas spread and are received in a society and the dynamics whereby interests are formed.

In order to answer the research question, I incorporated the role of public opinion into a complex theory on policy change, which takes into consideration the other dynamics at play, such as ideas and policy networks. I started from the punctuated equilibrium theory, which grants particular attention to how the frame of an issue affects policy change. By building on the policy responsiveness and policy feedback strands of scholarship, the theory presented in this study, called punctuated gradualism theory, refined the punctuated equilibrium theory. In so doing, the punctuated gradualism theory focuses on the role of public opinion in mediating the effects of the policy image on policy change. How an issue is discussed affects public reactions and this in turn affects the ease with which that issue goes through the political agenda and how societal
actors interact between each other, thus determining how the policy evolves. More specifically, I sought to explain why issues framed as concerning only certain segments of the society evolve differently than those framed as concerning the society as a whole.

The argument I put forward is that exclusive frames, namely those frames addressing only certain segments of the society, do not trigger public support for public policy, hence disincentivising policy-makers to take strong action. Furthermore, exclusive frames allocate concentrated interests in the society, which can strongly oppose policy change. Conversely, inclusive frames, namely those addressing the society as a whole, trigger public support for public policy, incentivising policy-makers to legislate on the issue, and allocate diffuse interests in society, thus limiting the opposition of societal actors. As a result, an inclusive policy image leads to a more drastic evolution of the policy, whereas an exclusive frame leads to an incremental evolution: framing determines policy change through the mediating role of public opinion. By incorporating public opinion into a complex theory of policy change this study sought to account for variation in policy dynamics which the current literature cannot explain.

The main contributions of this work are the inclusion of public opinion in a complex public policy approach to policy change, thus bridging the gap between the punctuated equilibrium theory and the policy responsiveness and policy feedback strands of literature, and the study of variation in policy dynamics which the current literature cannot explain.

**FINDINGS**

In this study I answered the research question by introducing the punctuated gradualism theory, which relies on four main findings. By using a combination of process tracing and cross-case comparison, in Chapter 5, I observed the causal processes which link the policy image to policy
change and the mediating role of public opinion in a before and after comparison. More specifically, I compared how public smoking regulation evolved in Ireland in two instances: the introduction of the smoking ban in 2004 and the introduction of the 1994 voluntary code. In so doing, I showed that public smoking in mid-2000s was discussed with a strong focus on the protection of the public as a whole. This inclusive policy image triggered wide public support for the ban, hence incentivising politicians to act and preventing powerful interests from mobilizing effectively. As a result, the world’s first smoking ban at national level was introduced. Conversely, in mid-1990s public smoking was discussed in relation to working environment safety. The public was not receptive to this exclusive policy image and hence politicians were not incentivised to act. Moreover, by allocating concentrated costs and benefits this exclusive policy image maintained the influence of powerful interests unaltered. As a result, the 1994 voluntary agreement was the transposition of self-regulatory practices already in place, namely an incremental change. By comparing these two instances I showed how within the same political system the same issue evolved differently, depending on how it was discussed in the political arena, namely the policy image, and I observed the role of public opinion in mediating the effects of the policy image on policy change.

In Chapter 6 I demonstrated that tobacco control follows what is considered by the public policy literature a general empirical law, namely the punctuation law. By looking at the distribution of policy change in tobacco taxation and in other policy areas, such as public smoking and advertisement regulation, I observed the presence of punctuations. In other words, I found that tobacco control evolves through periods of more or less pronounced change and periods of stability. This test provided empirical support for one of the theoretical premises of the punctuated gradualism theory, shared with the punctuated equilibrium theory, that policy change
is determined by the interaction of positive and negative feedback effects and as such policies are characterised by periods of stability punctuated by periods of change.

Chapter 7 and Chapter 8 showed that the policy image determines the political support policy-makers receive for introducing a policy and interest allocation in society. Respectively, Chapter 7 demonstrated that how a policy is framed determines whether the introduction of this policy triggers political support for the party in government and Chapter 8 showed that framing influences attitudes in the policy target groups. These two chapters tested the empirically observable implications of the two theories on which the punctuated gradualism theory builds (along with the punctuated equilibrium theory), respectively the policy responsiveness and policy feedback theories.

In Chapter 7 I combined statistical analysis, more specifically interrupted time series analysis, and cross-case comparison. In so doing, I compared the effects on political support for the party in government of the introduction of a smoking ban supported by an inclusive policy image, namely the Irish smoking ban introduced in 2004, with those of the introduction of a ban supported by an exclusive policy image, namely the Italian smoking ban introduced in 2005. The policy responsiveness literature, on which the punctuated gradualism theory builds, assumes that decision-makers act on the basis of expected political returns. When they sense that a policy enjoys public support, thanks to the inclusive policy image with which the issue is discussed, they act in order to turn that support for the policy into political support for them. Finding that, subject to certain conditions, the introduction of a policy discussed with an inclusive policy image triggers political support for the decision-makers in power provided the punctuated gradualism theory with indirect empirical support.
Chapter 8 tested the empirically observable implication of the other theory on which the punctuated gradualism theory builds, namely policy feedback. This theory assumes that the policy image affects the allocation of interests in society. By using a difference-in-difference-in-difference analysis, combined with a cross-case comparison, I tested whether the policy image affects the attitudinal changes among the members of the target groups of a policy. More specifically, I observed that the prioritization of the French advertisement ban in mid-1990s, supported by an exclusive policy image, triggered attitudinal changes between smokers and non-smokers. Conversely, the prioritization of the Italian advertisement ban, supported by a more inclusive policy image, did not trigger any change in the attitudes of those potential target groups. By taking attitudinal changes as a proxy for interest creation, this chapter demonstrated that differently framed policies trigger different allocations of interests in the society, as theorised by the policy feedback part of the punctuated gradualism theory.

Due to the complex interaction between the policy-makers and public opinion assumed by the theoretical model and the limitations of the empirical analysis, these findings need to be taken with a few caveats, discussed in detail in Chapter 3 and Chapter 4 as well as in each empirical chapter.

In summary, the chapters above answered the research question by looking at policy change from different angles. I started by tracing at the actual processes which link framing and policy change and how public opinion mediates these processes. The focus on the mediating role of public opinion is, indeed, the main contribution of the punctuated gradualism theory and as such needs to be empirically traced with an in-depth case study analysis. Then, I investigated how tobacco control evolves in order to observe the effects of different dynamics on policy change. Indeed, the theory posits the presence of positive feedback effects, ultimately related to new
ideas entering the political agenda, which give rise to periods of instability and the presence of negative feedback effects, ultimately related to societal actors contrasting change, which give rise to periods of stability. I concluded by looking at how the policy image affects public opinion in order to observe the empirically observable implications of the two other theoretical assumptions of the theory, which suggest that the policy image affects political support and interest allocation in society.

**SCOPE CONDITIONS**

Although the theory proposed in this work and the findings drawn above provide a valid answer to the research question what explains policy change in tobacco control, whether they are applicable to other policies is still an open question. As mentioned above, the generalizability of findings beyond tobacco control is still to be proven. In this section, I introduce the scope conditions under which the theory proposed in this work holds. In order to do so, I first need to define tobacco control from a public policy perspective, by drawing on the chapters above. In the chapters above, I managed to observe the entire evolution of tobacco control, through periods of policy inertia and change, and the dynamics behind this evolution, namely negative and positive feedback effects, thanks to the fact that the regulation of tobacco and smoking has been a live issue almost since the beginning of the 20th century. As such, it might be the case that the theoretical expectations put forward above are not applicable to relatively young issues, which have not undergone different stages of evolution.

Second, throughout its history, tobacco control has been characterised by different loci of power (p16) (Cairney, Studlar, and Mamudu 2012). As seen above, in the 1980s self-regulation between stakeholders, supported by economic and treasury ministries, was common practice in several areas, such as smoking in public places and tobacco advertisement. By the mid-2000s
authority had shifted in the hands of health departments, which started to heavily regulate tobacco and smoking, by relying on the expertise provided by medical organizations and health non-governmental organizations. This implicitly suggests that the theoretical framework derived above might not be applicable to very specific and technical issues, which do not have the potential to attract attention from different policy-making venues.

This relates to the other characteristic of tobacco control as a policy. Indeed, tobacco control is characterised by strong power dynamics, reinforced by different narratives and beliefs. As discussed in length above, throughout the decades, powerful societal and political actors have confronted each other, in order to impose their own beliefs. In the 1980s, the tobacco industry exercised almost a monopoly on the decision-making on tobacco, which was then considered as a source of income and employment. Today, this role is played by health non-governmental organizations and the medical community, which unilaterally determine the political agenda, by imposing their views on smoking, conceived as something harmful for the public. As such, the theory above might not be suitable for issues which are not characterised by the interplay of different positions, supported by different and often contrasting interests, like valence issues, as discussed in detail in Chapter 6.

In conclusion, tobacco control is a policy characterised by a long-term evolution, during which different decision-making venues and different interests, supported by different narratives, have played a central role. While waiting for future research, these factors can provide guidance on the scope conditions of the theory presented in this study and the findings drawn above. It should be noted that, as acknowledged by Baumgartner and Jones (1993) (p57), these characteristics are common to different issues, from health related and environmental questions, to highly partisan and non-partisan issues: the subject matter of the policy is not relevant in this respect.
BROADER IMPLICATIONS

The findings drawn above elicit broader implications for political science in general. The first implication concerns the interaction between public policy and public opinion. The findings above showed that the link between public policy and public opinion does not only depend on political institutions, such as the electoral system, but also on framing. Whether politicians (should) listen to the public is a central topic in normative (Arrow 1963; Dahl 1971) and empirical (Downs 1957; Schattschneider 1975) theories of democracy. The comparative literature points to the institutional conditions for this interaction (Boix 1999; Lijphart 1984; Lipset and Rokkan 1967; Powell 2000). In a similar vein, the public policy literature, most notably the policy responsiveness (Hobolt, Tilley, and Banducci 2013; Soroka and Wlezien 2005) and economic voting strands (Anderson 2000; Nadeau, Niemi, and Yoshinaka 2002; Powell 2000; Powell and Whitten 1993; Royed, Leyden, and Borrelli 2000), identifies the electoral system and more specifically, party control over government as the main explanatory factor. It has been recently suggested that also in tobacco control decision-makers are responsive to public opinion when a single party controls the government (p.171) (Marshall 2016). The literature agrees that high party control over government is a condition for the interaction between public policy and public opinion, since it increases the clarity of responsibility, namely voters know who did what (p.170-171) (Hobolt, Tilley, and Banducci 2013).

Yet, the findings in Chapter 7 showed that the institutional structure supporting the clarity of responsibility is a necessary but not sufficient condition for the link between public opinion and public policy. In other words, there are instances where, although the institutional rules allow for the identification of who did what, voters might not be receptive to the what. In Chapter 7 I suggested that how an issue is discussed in the political arena signals information about the
policy to citizens and this in turn affect public reactions. A policy perceived as specifically affecting only certain members of society does not mobilize public opinion, regardless of the institutional environment. In conclusion, looking at the exchange of information between policymakers and public opinion allows for going beyond the role of formal institutions in the interaction between public policy and public opinion. The comparative politics and the public policy strands of literature can benefit from this insight.

Second, this study elicits also important considerations for another important topic, namely agenda setting and interest representation. By building on the pluralist classics of the 1950s (Truman 1959), the public policy literature, notably the politics of regulation approach, has since then studied how public policy creates interests (Lowi 1964; Wilson 1980). In the 1990s the punctuated equilibrium theory shifted the attention to framing (Baumgartner and Jones 1993, 2009). The proponents of this theory suggest that the allocation of interests depends on how the policy is framed. Nonetheless, the actual mechanisms whereby framing affects interest creation are often overlooked. Quite a conceptual and empirical leap is present between an individual receiving a signal concerning a specific policy, through framing, and that individual starting to perceive a stake in that policy, let alone mobilizing in favour or against the policy.

In Chapter 8 I suggested that the study of interest creation can benefit from the insights of some strands of the behavioural literature. The latter focuses on the mechanisms linking an external stimulus (framing, in this case) and attitudes. Two strands of the behavioural literature were discussed in Chapter 8. Public health communication (Gallagher and Updegraff 2012; Rothman and Salovey 1997; Rothman et al. 1993; Toll et al. 2007; Toll et al. 2014; Van ’t Riet et al. 2014) studies the effects of health messages on the public and suggests that the effects of framing take place first and foremost on attitudes and eventually, on behaviours. As such, I argued that the
study of the effects of framing on interest creation should take attitudinal changes as dependent variable. Furthermore, behavioural welfare economics studies the effects of health policies on the public and uncovers the mechanisms leading to attitudinal change (p.8) (Odermatt and Stutzer 2013). By relying on statistical analysis, Chapter 8 demonstrated that the prioritization of the tobacco advertisement ban in France, discussed by emphasizing the strong division between smokers and non-smokers, triggered negative attitudinal changes among non-smokers, suggesting the allocation of concentrated costs. The literature on agenda setting and interest creation can benefit theoretically and empirically from a more careful study of the processes which underlie interest creation.

**PRACTICAL IMPLICATIONS**

The findings in this study suggest practical implications for practitioners and policy-makers. Today, the debate on tobacco control in the Western world revolves around plain packaging. The latter refers to the removal of branding from tobacco packaging and it represents the last frontier in the fight against smoking. Australia was the first country to introduce this measure in 2012, followed by others, such as the UK and Ireland. Yet, several countries are currently struggling to pass such legislation and those that have already done it already are facing delays in the implementation stage. These obstacles are often the result of the pressure exerted by the tobacco industry on policy-makers. For instance, in the UK the main tobacco companies were very active before and after the enactment of the bill, by funding research providing evidence against plain packaging (p.3-5) (Ulucanlar et al. 2014) and threatening legal action (online) (Ram 2015). Other countries are currently facing the same obstacles. The findings drawn in this study suggest looking at public opinion as the main weapon in the hands of policy-makers. Many important
battles in tobacco control, such as the one on the ban on smoking in public places, have been won thanks to the support of the majority of citizens.

Finally, this study can also inform the current attempts to address other non-communicable diseases, such as those caused by obesity, which have so far lagged behind the regulation of smoking (online) (Alter 2014). Obesity is the second cause of preventable death and disease, right after smoking (online) (Stephens 2014). Several attempts to regulate nutrition have been made so far, following the steps taken in the regulation of smoking. For instance, education campaigns on healthy nutrition are regularly organized around the world, legislation regulating the advertisement of unhealthy food directed to children is under review in some countries and taxation on sugary drinks is already in place almost everywhere (online) (WHO 2014). Yet, more effort needs to be made to address this problem. The study of tobacco control above showed that what ultimately made the difference was the shift in the discussion of smoking, from something harmful only to (conscious) smokers to something harmful also to (unconscious) third parties, such as children and bystanders. This shift in the debate triggered an increase in public support for tobacco control, thus opening the way to strict legislation. These insights can provide a partial solution to the obstacles policy-makers face today in trying to regulate unhealthy food. Indeed, a shift in the debate from grown-ups who consciously consume unhealthy food to vulnerable individuals, such as children, who do not have a say in what they consume, or people from low social status, who arguably tend to consume unhealthy food out of necessity because of its low price, can provide policy-makers with the support from the public opinion and help them put through tough legislation.
LIMITATIONS AND OPPORTUNITIES FOR FUTURE RESEARCH

This chapter concludes by discussing the extent to which the theory proposed in this study and the findings supporting this theory provide a valid answer to the research question. As discussed above, although some caveats are needed (see Chapter 3 and Chapter 4), this study provides a theoretically powerful explanation of how policies change and why, which builds on the classics of the public policy literature, and an empirically accurate test, which relies both on qualitative and quantitative methods. By looking at public reactions to how a policy is discussed, the punctuated gradualism theory explains some important variation in policy dynamics, which the literature cannot fully explain. As such, the punctuated gradualism represents an original contribution to the study of policy change.

Nonetheless, the findings drawn in this study suffer from two main limitations, which call for future research. First, the theoretical model proposed in this study assumes a complex interaction between policy-makers and public opinion, which are deemed by the public policy literature to influence each other, particularly in tobacco control (p.8-9) (Marshall 2016). As such, the theoretical model and the results might be affected by endogeneity. Second, although this study looked at a wide array of policy instruments, such as taxation, advertisement and smoking regulation, across countries and time, it focused on a single policy: tobacco control. No matter how significant this policy is, the extent of the generalization of the findings above is limited.

The punctuated gradualism theory incorporates the insights of the policy responsiveness and policy feedback strands into the punctuated equilibrium theory. As such, this theory posits that policy prioritization affects public opinion and in turn public reactions affect policy change. Indeed, depending on how a policy is framed, public opinion will be more or less supportive of a policy. Policy-makers in turn will try to capitalize on the public support for the policy by trying
to create political support for themselves and their parties. Furthermore, a policy framed in a certain way will allocate different interests in the society. The capacity of interests to mobilize and oppose legislation in turn influences policy change. The complex interaction between policy-makers and public opinion assumed by the punctuated gradualism theory might introduce endogeneity into the model. This problem was discussed from a theoretical level in Chapter 3, where I argued that a clear formulation of the processes underlying this complex interaction can mitigate this issue. Furthermore, the endogeneity problem was also addressed in each empirical analysis in the respective chapter. Yet, more discussion is needed on whether the overall research design used in this study addressed this issue properly, by looking at both sides of the interaction between policy-makers and public opinion.

In Chapter 5 I divided the theory into processes and I sought to trace these processes in a comparative case study. Yet, the statistical test of the theory focused more on the influence of framing on public opinion. In Chapter 7 and Chapter 8 I tested respectively whether public policy, supported by a determined policy image, triggers political support for the party in government and attitudinal changes among members of the policy target groups. As such, the empirical analysis looked at how framing affects public opinion from a qualitative and quantitative perspective, but looked at how public opinion affects policy change only from a qualitative perspective. Future research should look more into the dynamics whereby public opinion affects public policy and the role played by framing, from a statistical perspective.

Nonetheless, this is easier said than done. The statistical test of how public opinion affects public policy has rarely gone beyond asserting congruence between these two variables.\textsuperscript{82} The literature

\begin{footnote}{\textsuperscript{82} It should be noted that by employing sophisticated methods, some work in the policy responsiveness literature has sought to test whether changes in public opinion occur before changes in public policy within a single country over time (Page and}
on policy diffusion, discussed in Chapter 2, might be a good starting point to investigate how public opinion affects public policy and the role played by framing in the context of tobacco control. This body of research has recently looked at how public opinion mediates the diffusion of policies across countries. The so-called social contagion model posits that the introduction of a policy in State A affects public opinion in State B and that policy-makers in the latter will follow public opinion and adopt the policy (Pacheco 2012). The empirical test relies on a two-stage strategy. First, the author demonstrates that the adoption of a policy in State A affects the likelihood of being in favour of that policy among individuals in State B. Then, she shows that the number of individuals in favour of the policy in State B affects policy adoption there. Future research should build on the social contagion model to test the theory proposed in this study in a large-N analysis of how public opinion affects public policy, more specifically the diffusion of policies, and the role played by framing.

In this final part, I put forward some tentative hypotheses in this direction. By building on the insights of the punctuated gradualism theory, I would expect that the contagion of the public opinion from State A to State B takes place depending on the policy image with which the policy is discussed in State A. In other words, some policy images, such as smoking bans as policy measures to safeguard public health, accelerate this contagion and others, such as smoking bans as restricting individual freedom, slow it down. By relying on topic modelling, as used in Chapter 7 above, recent research has provided evidence of the diffusion of policy frames regarding tobacco control measures across US states (Gilardi, Shipan, and Wueest 2016). Future research should incorporate the diffusion of frames into the social contagion model in order to

Shapiro 1983; Stimson, MacKuen, and Erikson 1995). This is done by relying on aggregate data on the public mood on various political issues over a long time period.
study the effects of framing on the diffusion of policies. The result would be a large-N analysis on how public opinion affects the introduction of policies and the role played by framing.

The tentative hypotheses suggested above and the hypotheses from the punctuated gradualism theory already tested in this study should be investigated by using data from different policy areas in future. This in turn will provide further support for the generalizability of the claims in this work. Several studies (Baumgartner and Jones 1993, 2009; Studlar 2009) suggest that tobacco control is characterised by dynamics which can be found also in other policies. Moreover, in Chapter 6 I found further support for this claim, by demonstrating that tobacco control is subject to the punctuation law. As such, there are good reasons to think that the findings in this study are generalizable, even though to a limited extent. Furthermore, tobacco control represents a valid case to develop a public policy theory, given the high variation in policy outcomes across countries and time and the unparalleled access to primary sources. Nonetheless, future research should include other policies in the analysis, in order to provide convincing evidence that the findings in this study are fully generalizable.

CONCLUDING REMARKS

This work started by addressing the research question: what explains policy change in tobacco control? In order to find an answer, the chapters above canvassed the public policy literature and by drawing on the most powerful approaches, introduced a theory which explains policy change by looking at the role of public opinion. Despite some limitations, the empirical analysis provided support for this theory. This study contributes to the study of public policy, both theoretically and empirically. The theoretical contribution of this work is the incorporation of public opinion into a complex approach to policy change. The study of policy change can benefit from looking at public opinion and how it interacts with ideas and networks of societal actors.
Ideas and policy practices spread across countries and they are internalized by policy-makers, which have to face the opposition of strong interests in society when putting these ideas into practice. All this takes place in political systems with institutional rules which make policy-making more or less straightforward. These dynamics explain how and why policies change, but only to a certain extent. In fact, no matter how diffuse those new ideas are among policy-makers and how powerful policy-makers are, against opposing political actors and also societal interests, policy-makers will always need to convince citizens that they are acting in their interests. Framing a policy as appealing to the majority of the public will create a series of positive incentives for policy-makers to act and will also dwarf the power of entrenched interests in society.

On the empirical level, this theory contributes to the study of public policy by accounting for some variation in policy dynamics which the current literature cannot explain. Looking at how policy-makers address the public and in turn how the latter reacts helps explain why at certain times in history public interests have managed to win important battles against great odds. At the end of the 1990s publicans dominated Irish local and national politics, with unparalleled access to key politicians. Moreover, the tradition of self-regulation in the hospitality sector was well rooted in society since the mid-1990s. At the beginning of the 2000s the idea of a total smoking ban in public places entered the political agenda of some politicians and practitioners. Total smoking bans were an entirely new approach to public smoking in Europe: at that time smoking bans were in place only in a few US states and cities. It was the Irish Health Minister, supported by a small circle of like-minded politicians and practitioners, who pushed the smoking ban forward. The pro-ban alliance had to face the fierce opposition of the most powerful interests in Irish society and the indifference of prominent political figures, including the prime minister.
Yet, the pro-ban alliance managed to win and Ireland introduced the world’s first smoking ban in public places. Michael Martin and his allies won this important political battle by addressing the public in the political debate, thus managing to mobilize the silent majority. Once the public got on board, the pro-ban alliance became so strong in numbers to defeat any political opponent and entrenched interest.
## APPENDIX

**Appendix Table 1 Process Tracing**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Causal Processes</th>
<th>Causal Process Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: An inclusive policy image triggers drastic policy change</td>
<td>P1: The political debate on environmental tobacco smoke based on the protection of the public as a whole triggered public support for the smoking ban hence creating incentives for policy-makers to act</td>
<td>CPO1: The issue of environmental tobacco smoke started to be discussed in terms of the protection of the public as a whole</td>
</tr>
<tr>
<td></td>
<td>P2: The political debate on environmental tobacco smoke was strongly focused on the role of the public and</td>
<td>CPO2: Public opinion reacted positively to this new policy image starting to be in support of the ban</td>
</tr>
<tr>
<td></td>
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<td>CPO3: Electoral considerations were central in the political debate</td>
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<td></td>
<td></td>
<td>CPO4: The smoking ban was enacted without major amendments and in a timely manner</td>
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<tr>
<td></td>
<td></td>
<td>CPO5: The issue of environmental tobacco smoke started to be discussed in terms of the protection of</td>
</tr>
</tbody>
</table>
| H2: An exclusive policy image triggers incremental policy change | this bore diffuse costs and benefits for large segments of the society and hence hindered coordination between societal actors thus making drastic policy change possible | the public as a whole  
CPO6: The public started to perceive the costs and benefits of the smoking ban as diffuse throughout society  
CPO7: Coordination between public premises’ managers and employees became more difficult  
CPO8: The pressure exerted by stakeholders on decision-makers proved to be ineffective and self-regulation among societal actors became an unfeasible solution |  
| P3: The political debate on environmental tobacco smoke based on the protection of the workers did not trigger public support for political action disincentivising policy- |  
| CPO9: The issue of environmental tobacco smoke was discussed in terms of the protection of the workers  
CPO10: Public opinion remained indifferent to this |
<table>
<thead>
<tr>
<th>makers to act</th>
<th>debate</th>
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</thead>
<tbody>
<tr>
<td>CP11: Electoral considerations were not central in the political debate</td>
<td></td>
</tr>
<tr>
<td>CPO12: A voluntary code was enacted transposing regulation already in place</td>
<td></td>
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</tbody>
</table>

| P4: The political debate on environmental tobacco smoke based on the protection of the workers bore concentrated costs and benefits for small segments of the society enhancing coordination between societal actors thus making drastic policy change more difficult | CPO13: The issue of environmental tobacco smoke was discussed in terms of the protection of the workers |
| CPO14: Public premises’ managers and employees faced concentrated costs and benefits | |
| CPO15: Coordination between public premises’ managers and employees increased | |
| CPO16: The pressure exerted by public premises’ managers and employees on | |

| decision-makers proved to be effective and self-regulation among societal actors became a feasible solution |
## Appendix Table 2: Survey Questions, Variables and Coding

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<tbody>
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<td><strong>Attitudes Towards Tobacco Advertisement Ban</strong></td>
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</tr>
<tr>
<td>Q62: Several countries have adopted or are about to adopt a law which bans all forms of direct or indirect advertising of tobacco products. Are you, personally, for or against such a ban?</td>
<td>0 NA</td>
<td>1 For - very much</td>
<td>0 NA</td>
<td>1 For - very much</td>
</tr>
<tr>
<td>Q103: Several countries have adopted or are about to adopt a law which bans all forms of direct or indirect advertising of tobacco products. Are you, personally, for or against such a ban?</td>
<td>0 NA</td>
<td>1 Tend to agree</td>
<td>0 NA</td>
<td>1 Tend to agree</td>
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<tr>
<td>Q71_3: Advertising for cigarettes and tobacco should not be regulated in any way. Could you please indicate whether you tend to agree or tend to disagree?</td>
<td>0 NA</td>
<td>1 Tend to agree</td>
<td>0 NA</td>
<td>1 Tend to agree</td>
</tr>
<tr>
<td>Q26: Are you personally for or against a law banning any form of direct or indirect advertising for cigarettes or tobacco?</td>
<td>0 NA</td>
<td>1 For - very much</td>
<td>0 NA</td>
<td>1 For - very much</td>
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<table>
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<td>1 For - to some extent</td>
<td>2 Tend to disagree</td>
<td>1 Tend to agree</td>
</tr>
<tr>
<td>1 For - to some extent</td>
<td>2 For - to some extent</td>
<td>2 Tend to disagree</td>
<td>2 Tend to disagree</td>
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<td>2 Against - to some extent</td>
<td>3 Against - to some extent</td>
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<td>3 DK</td>
</tr>
<tr>
<td>3 Against - very much</td>
<td>4 Against - very much</td>
<td>3 DK</td>
<td>3 DK</td>
<td>3 DK</td>
</tr>
<tr>
<td>4 Against - very much</td>
<td>5 DK</td>
<td>4 Against - very much</td>
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<td>2 = 1 FOR</td>
<td>1 2 = 1 FOR</td>
<td>1 2 = 1 FOR</td>
</tr>
<tr>
<td>4 3 = 0</td>
<td>4 3 = 0</td>
<td>1 = 0 AGAINST</td>
<td>4 3 = 0</td>
<td>1 = 0 AGAINST</td>
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<tr>
<td>D1: In political matters people talk of &quot;the left&quot; and &quot;the right&quot;. How would you place your views on this scale?</td>
<td>D1: In political matters people talk of &quot;the left&quot; and &quot;the right&quot;. How would you place your views on this scale?</td>
<td>D1A: When people talk about politics, the terms &quot;left&quot; and &quot;right&quot; are always used. We would very much like to ask you, where you put yourself as rather &quot;left&quot; or rather &quot;right&quot;?</td>
<td>D1: In political matters people talk of &quot;the left&quot; and &quot;the right&quot;. How would you place your views on this scale?</td>
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<tr>
<td>D1: In political matters people talk of &quot;the left&quot; and &quot;the right&quot;. How would you place your views on this scale?</td>
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<td>D1A: When people talk about politics, the terms &quot;left&quot; and &quot;right&quot; are always used. We would very much like to ask you, where you put yourself as rather &quot;left&quot; or rather &quot;right&quot;?</td>
<td>D1: In political matters people talk of &quot;the left&quot; and &quot;the right&quot;. How would you place your views on this scale?</td>
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</tr>
<tr>
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<td>1 Left</td>
<td>2 Centre</td>
<td>3 Right</td>
<td>4 DK/Refusal</td>
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<td>2 = 1 CENTRE</td>
<td>3 = 2 RIGHT</td>
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<td>Smoker Questions</td>
<td>Q59_1 Which of the following things applies to yourself? You smoke manufactured cigarettes</td>
<td>Q83_1 Which of the following things applies to yourself? You smoke manufactured cigarettes</td>
<td>Q67_1 Which of the following things applies to yourself? You smoke manufactured cigarettes</td>
<td>Q12_1 Which of the following things applies to yourself? You smoke manufactured cigarettes</td>
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<td>income - approximate quartiles</td>
<td>income - approximate quartiles</td>
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<tr>
<td><strong>Original coding</strong></td>
<td>1 + + Highest 2 + 3 – 4 - - Lowest 5 DK/Refusal</td>
<td>1 - - Lowest income quartile 2 - Next to lowest income quartile 3 + Next to highest income quartile 4 + + Highest income quartile 5 DK/refusal</td>
<td>1 + + Highest income quartile 2 + Next to highest income quartile 3 - Next to lowest income quartile 4 - - Lowest income quartile 5 DK/refusal 9 INAP</td>
<td>1 - - Lowest income quartile 2 - Next to lowest income quartile 3 + Next to highest income quartile 4 + + Highest income quartile 5 DK/refusal</td>
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<td>4 = 3 + + HIGHEST 3 = 2 + 2 = 1 – 1 = 0 - - LOWEST 5 = .</td>
<td>4 = 3 + + HIGHEST 3 = 2 + 2 = 1 – 1 = 0 - - LOWEST 5 = .</td>
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**Age**

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<tr>
<th>Questions</th>
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<th>New coding</th>
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<td>D13: How old are you?</td>
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<tr>
<td>D11: How old are you?</td>
<td>D11: How old are you?</td>
<td></td>
</tr>
</tbody>
</table>

**Sex**

<table>
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<th>New coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>D12: Sex</td>
<td>1 Male 2 Female</td>
<td>1 = 0 MALE 2 = 1 FEMALE</td>
</tr>
<tr>
<td>D10: Sex</td>
<td>1 Male 2 Female</td>
<td>1 = 0 MALE 2 = 1 FEMALE</td>
</tr>
</tbody>
</table>

**Education**

<table>
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<th>New coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>D11: How old were you when you finished your full-time education?</td>
<td>0 NA 1 up to 14 years 2 15 years 3 16 years 4 17 years 5 18 years 6 19 years 7 20 years</td>
<td>0 NA 1 up to 14 years 2 15 years 3 16 years 4 17 years 5 18 years 6 19 years 7 20 years</td>
</tr>
<tr>
<td>D8: How old were you when you stopped full-time education?</td>
<td>D8: How old were you when you stopped full-time education?</td>
<td>D8: How old were you when you stopped full-time education?</td>
</tr>
<tr>
<td>0 NA 998 Still studying 999 INAP 997 Illiterate or never studied (Portugal only)</td>
<td>1 Up to 15 years 2 16-19 years 3 20 years and older 4 Still studying</td>
<td></td>
</tr>
<tr>
<td>New coding</td>
<td>8 21 years</td>
<td>9 22 years and older</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Original coding</td>
<td>0 None/No child</td>
<td>1 one</td>
</tr>
<tr>
<td>New coding</td>
<td>0 = 0 NO CHILDREN</td>
<td>1 2 3 4 5 6 7 8 9 = 1 YES CHILDREN 98=</td>
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<tr>
<td>Marital status</td>
<td>Questions</td>
<td>D10: Are you...?</td>
</tr>
<tr>
<td>Original coding</td>
<td>0 NA</td>
<td>1 Single</td>
</tr>
<tr>
<td>New coding</td>
<td>6 Widowed</td>
<td>6 Widowed</td>
</tr>
<tr>
<td>------------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>1 4 5 6 = 0 NOT MARRIED 2 3 = 1 MARRIED 0=.</td>
<td>1 4 5 6 = 0 NOT MARRIED 2 3 = 1 MARRIED 0=.</td>
<td>1 4 5 6 = 0 NOT MARRIED 2 3 = 1 MARRIED 0 9=.</td>
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**Job Questions**

|-----------|-----------------------------|--------------------------------------|--------------------------------------|----------------------------|

**Original coding**

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<tr>
<th>SELF-EMPLOYED</th>
<th>NON-ACTIVE</th>
<th>NON-ACTIVE</th>
<th>0 NA</th>
<th>1 Self employed</th>
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<tbody>
<tr>
<td>1 Farmer</td>
<td>1 Responsible for ordinary shopping and looking after the home, or without any current occupation, not working</td>
<td>1 Responsible for ordinary shopping and looking after the home, or without any current occupation, not working</td>
<td>1 Self employed</td>
<td>2 Employed</td>
</tr>
<tr>
<td>2 Fisherman</td>
<td>2 Student</td>
<td>2 Student</td>
<td>2 Employed</td>
<td>3 Not working</td>
</tr>
<tr>
<td>3 Professional (lawyer, medical practitioner, accountant, etc....)</td>
<td>3 Unemployed or temporarily not working</td>
<td>3 Unemployed or temporarily not working</td>
<td>3 Not working</td>
<td>4 Retired or unable to work through illness SELF</td>
</tr>
<tr>
<td>4 Owners of shops or companies, craftsmen, business proprietors</td>
<td>4 Retired or unable to work through illness SELF</td>
<td>4 Retired or unable to work through illness SELF</td>
<td>SELF</td>
<td>5 Employed</td>
</tr>
<tr>
<td>EMPLOYED</td>
<td>EMPLOYED</td>
<td>EMPLOYED</td>
<td>EMPLOYED</td>
<td>EMPLOYED</td>
</tr>
<tr>
<td>5 Employed professional (employed lawyer, medical practitioner, accountant)</td>
<td>5 Farmer</td>
<td>5 Farmer</td>
<td>5 Farmer</td>
<td>6 Fisherman</td>
</tr>
<tr>
<td>6 General management</td>
<td>6 Fisherman</td>
<td>6 Fisherman</td>
<td>6 Fisherman</td>
<td>7 Professional (lawyer, medical practitioner, accountant, architect, ...)</td>
</tr>
<tr>
<td>7 Middle management</td>
<td>7 Professional (lawyer, medical practitioner, accountant, architect, ...)</td>
<td>7 Professional (lawyer, medical practitioner, accountant, architect, ...)</td>
<td>7 Professional (lawyer, medical practitioner, accountant, architect, ...)</td>
<td>8 Owner of a shop, craftsmen, other self employed person</td>
</tr>
<tr>
<td>8 Other office employees</td>
<td>8 Owner of a shop, craftsmen, other self employed person</td>
<td>8 Owner of a shop, craftsmen, other self employed person</td>
<td>8 Owner of a shop, craftsmen, other self employed person</td>
<td>9 Business proprietors, owner (full or partner) of a company</td>
</tr>
<tr>
<td>9 Non-office employees, non manual workers (shop assistants, etc....)</td>
<td>9 Business proprietors, owner (full or partner) of a company</td>
<td>9 Business proprietors, owner (full or partner) of a company</td>
<td>9 Business proprietors, owner (full or partner) of a company</td>
<td>10 Employed professional (employed doctor, lawyer, accountant,</td>
</tr>
<tr>
<td>10 Supervisors</td>
<td>10 Employed</td>
<td>10 Employed</td>
<td>10 Employed</td>
<td></td>
</tr>
<tr>
<td>New coding</td>
<td>1 2 3 4 = 2 SELF</td>
<td>5 6 7 8 9 = 2</td>
<td>5 6 7 8 9 = 2 SELF</td>
<td>1 = 2 SELF</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------</td>
<td>---------------</td>
<td>-------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>manual worker WITHOUT PAID WORK</td>
<td>professional (employed doctor, lawyer, accountant, architect)</td>
<td>architect</td>
<td>11 General management, director or top management (managing directors, director general, other director)</td>
<td>12 Middle management, other management (department head, junior manager, teacher, technician)</td>
</tr>
<tr>
<td>13 Retired</td>
<td>11 General management, director or top management (managing directors, director general, other director)</td>
<td>13 Employed position, working mainly at a desk</td>
<td>14 Employed position, not at a desk but travelling (salesmen, driver, ...)</td>
<td>15 Employed position, not at a desk, but in a service job (hospital, restaurant, police, fireman, ...)</td>
</tr>
<tr>
<td>14 Housewife not otherwise employed</td>
<td>13 Employed position, working mainly at a desk</td>
<td>14 Employed position, not at a desk but travelling (salesmen, driver, ...)</td>
<td>15 Employed position, not at a desk, but in a service job (hospital, restaurant, police, fireman, ...)</td>
<td>16 Supervisor</td>
</tr>
<tr>
<td>15 Student</td>
<td>14 Employed position, not at a desk but travelling (salesmen, driver, ...)</td>
<td>15 Employed position, not at a desk, but in a service job (hospital, restaurant, police, fireman, ...)</td>
<td>16 Supervisor</td>
<td>17 Skilled manual worker</td>
</tr>
<tr>
<td>16 Military service</td>
<td>15 Employed position, not at a desk, but in a service job (hospital, restaurant, police, fireman, ...)</td>
<td>16 Supervisor</td>
<td>17 Skilled manual worker</td>
<td>18 Other (unskilled) manual worker, servant</td>
</tr>
<tr>
<td>17 Temporarily not working, unemployed</td>
<td>16 Supervisor</td>
<td>17 Skilled manual worker</td>
<td>18 Other (unskilled) manual worker, servant</td>
<td>0 NA</td>
</tr>
<tr>
<td>0 NA</td>
<td>16 Supervisor</td>
<td>17 Skilled manual worker</td>
<td>18 Other (unskilled) manual worker, servant</td>
<td>0 NA</td>
</tr>
<tr>
<td>99 INAP</td>
<td>16 Supervisor</td>
<td>17 Skilled manual worker</td>
<td>18 Other (unskilled) manual worker, servant</td>
<td>0 NA</td>
</tr>
<tr>
<td>EMPLOYED</td>
<td>SELF</td>
<td>EMPLOYED</td>
<td>EMPLOYED</td>
<td></td>
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<td>------</td>
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<td>5 6 7 8 9 10 11 12</td>
<td>1 2 3 4 0</td>
<td>10 11 12 13 14 15</td>
<td>10 11 12 13 14 15</td>
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<tr>
<td>= 1 EMPLOYED</td>
<td>= 0 WITHOUT PAID WORK</td>
<td>= 1 EMPLOYED</td>
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<td>13 14 15 16 17 = 0 WITHOUT PAID WORK</td>
<td>= 0 WITHOUT PAID WORK</td>
<td>16 17 18 = 1</td>
<td>16 17 18 = 1</td>
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<td>EMPLOYED</td>
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</tr>
<tr>
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<td></td>
<td>1 2 3 4 = 0</td>
<td>1 2 3 4 = 0</td>
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<tr>
<td></td>
<td></td>
<td>WITHOUT PAID WORK</td>
<td>WITHOUT PAID WORK</td>
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<tr>
<th>Ex-smoker</th>
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<tr>
<td>Questions</td>
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<tr>
<td>Q59_4: You used to smoke but you have stopped</td>
</tr>
<tr>
<td>Q83_4: You used to smoke but you have stopped</td>
</tr>
<tr>
<td>Q67_4: You used to smoke but you have stopped</td>
</tr>
<tr>
<td>Q12_5: You used to smoke but you have stopped</td>
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<table>
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<td>0 Not mentioned 1 Mentioned 8 NA</td>
</tr>
<tr>
<td>0 Not mentioned 1 Mentioned 9 NA</td>
</tr>
<tr>
<td>0 Not mentioned 1 Mentioned 8 NA</td>
</tr>
<tr>
<td>0 Not mentioned 1 Mentioned 9 NA</td>
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</table>

<table>
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<tr>
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<tbody>
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<td>0 = 0 NON EX SMOKER 1 = EX SMOKER 8=</td>
</tr>
<tr>
<td>0 = 0 NON EX SMOKER 1 = EX SMOKER 9=</td>
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<tr>
<td>0 = 0 NON EX SMOKER 1 = EX SMOKER 8=</td>
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<tr>
<td>0 = 0 NON EX SMOKER 1 = EX SMOKER 9=</td>
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<table>
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</tr>
<tr>
<td>V5: Nation of interview</td>
</tr>
<tr>
<td>V5: Nation of interview</td>
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<tr>
<td>V5: Nation of interview</td>
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</table>

<table>
<thead>
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<tbody>
<tr>
<td>1 France 2 Belgium 3 Netherlands 4 West Germany 5 Italy 6 Luxembourg 7 Denmark 8 Ireland 9 United Kingdom 10 Greece 11 Spain 12 Portugal 13 East Germany 14 Norway</td>
</tr>
<tr>
<td>1 France 2 Belgium 3 Netherlands 4 West Germany 5 Italy 6 Luxembourg 7 Denmark 8 Ireland 9 United Kingdom 10 Greece 11 Spain 12 Portugal 13 East Germany 14 Norway</td>
</tr>
<tr>
<td>1 France 2 Belgium 3 Netherlands 4 West Germany 5 Italy 6 Luxembourg 7 Denmark 8 Ireland 9 United Kingdom 10 Greece 11 Spain 12 Portugal 13 East Germany 14 Norway 15 Finland</td>
</tr>
<tr>
<td>1 France 2 Belgium 3 Netherlands 4 West Germany 5 Italy 6 Luxembourg 7 Denmark 8 Ireland 9 United Kingdom 10 Greece 11 Spain 12 Portugal 13 East Germany 14 Norway 15 Finland</td>
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</table>

<table>
<thead>
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<tr>
<td>1 = 1 FRANCE 2 = 2 BELGIUM 3 = 3 NETHERLAND S 4 13 = 4</td>
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<tr>
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<td>1 = 1 FRANCE 2 = 2 BELGIUM 3 = 3 NETHERLAND S 4 13 = 4</td>
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<td>--------</td>
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<td>GERMANY 5 = 5</td>
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### Appendix Table 3 Summary of Methods

<table>
<thead>
<tr>
<th>Chapter</th>
<th>What?</th>
<th>How?</th>
<th>Why?</th>
</tr>
</thead>
</table>
| Chapter 5 | Trace the effects of the policy image on policy change and the mediating role played by public opinion | - Process tracing to observe causal process observations  
- Cross-case comparison to allow for variation in IV and DV as well as to control for other factors | Assess causal mechanisms between variables and the role of intervening factors as theorised by the punctuated gradualism theory |
| Chapter 6 | Observe how tobacco control evolves | - Descriptive statistics to test the presence of punctuations | Find indirect evidence for the presence of positive and negative feedback effects, as theorised by the punctuated equilibrium theory on which the punctuated gradualism theory builds |
| Chapter 7 | Test whether the policy image affects the political support the party in government | - ITS to measure the effects of the introduction of a policy on the political support for the party in government  
- Topic modelling to observe the policy image  
- Cross-case comparison to allow for variation in IV and DV as | Find indirect evidence that decision-makers act on the basis of expected political returns and that these returns depend on the policy image, as theorised by the policy responsiveness literature on which the punctuated gradualism theory builds |
| Chapter 8 | Test whether the policy image affects attitudinal changes among members of the target groups of a policy | - DDD to measure the effects of the prioritization of a policy on the attitudes of members of target groups  
- Cross-case comparison to allow for variation in IV and DV as well as to control for other factors | Find indirect evidence that the policy image affects the allocation of interests in the society, as theorised by the policy feedback literature on which the punctuated gradualism theory builds |
## Appendix Table 4 Top Words Associated with Topics in Italian Media

<table>
<thead>
<tr>
<th>Topic 1</th>
<th>Topic 2</th>
<th>Topic 3</th>
<th>Topic 4</th>
<th>Topic 5</th>
<th>Topic 6</th>
<th>Topic 7</th>
<th>Topic 8</th>
<th>Topic 9</th>
<th>Topic 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>comma</td>
<td>casa</td>
<td>fumo</td>
<td>sigaretta</td>
<td>fumo</td>
<td>fumo</td>
<td>governo</td>
<td>roma</td>
<td>lavoro</td>
<td>divieto</td>
</tr>
<tr>
<td>legge</td>
<td>torino</td>
<td>divieto</td>
<td>euro</td>
<td>divieto</td>
<td>fumatore</td>
<td>roma</td>
<td>presidente</td>
<td>lavoratori</td>
<td>legge</td>
</tr>
<tr>
<td>euro</td>
<td>vita</td>
<td>treni</td>
<td>milioni</td>
<td>locali</td>
<td>sirchia</td>
<td>berlusconi</td>
<td>ministro</td>
<td>fumo</td>
<td>fumo</td>
</tr>
<tr>
<td>enti</td>
<td>mondo</td>
<td>sanita</td>
<td>rispetto</td>
<td>fumatore</td>
<td>legge</td>
<td>Milano</td>
<td>visita</td>
<td>termine</td>
<td>circolare</td>
</tr>
<tr>
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<td>caso</td>
<td>tabacco</td>
<td>fumo</td>
<td>legge</td>
<td>sigaretta</td>
<td>lega</td>
<td>conferenza</td>
<td>datore</td>
<td>soggetti</td>
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<td>fuori</td>
<td>fra</td>
<td>mila</td>
<td>pubblici</td>
<td>ministero</td>
<td>domani</td>
<td>politica</td>
<td>decreto</td>
<td>violazione</td>
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<td>sotto</td>
<td>salute</td>
<td>calo</td>
<td>ristoranti</td>
<td>fuma</td>
<td>verso</td>
<td>processo</td>
<td>sicurezza</td>
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<td>firenze</td>
<td>sigaretta</td>
<td>tabacco</td>
<td>luoghi</td>
<td>dice</td>
<td>presidente</td>
<td>riunione</td>
<td>divieto</td>
<td>vigilanza</td>
</tr>
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<td>disposizioni</td>
<td>sigari</td>
<td>servizio</td>
<td>circa</td>
<td>salute</td>
<td>molti</td>
<td>iraq</td>
<td>bruxelles</td>
<td>norme</td>
<td>locali</td>
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<tr>
<td>spesa</td>
<td>societa</td>
<td>giorno</td>
<td>dati</td>
<td>bar</td>
<td>salute</td>
<td>bush</td>
<td>commissione</td>
<td>pia</td>
<td>privati</td>
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**Appendix Table 5 Collinearity Tests**

<table>
<thead>
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<td>Italy</td>
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</tr>
<tr>
<td>1992</td>
<td>2.34</td>
</tr>
<tr>
<td>Italy#1992</td>
<td>5.41</td>
</tr>
<tr>
<td>Smoker</td>
<td>4.22</td>
</tr>
<tr>
<td>Italy#Smoker</td>
<td>5.64</td>
</tr>
<tr>
<td>1992#Smoker</td>
<td>6.03</td>
</tr>
<tr>
<td>Italy#1992#Smoker</td>
<td>5.70</td>
</tr>
<tr>
<td>France</td>
<td>2.98</td>
</tr>
<tr>
<td>1994</td>
<td>2.36</td>
</tr>
<tr>
<td>France#1994</td>
<td>3.11</td>
</tr>
<tr>
<td>France#Smoker</td>
<td>3.14</td>
</tr>
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<td>1994#Smoker</td>
<td>3.45</td>
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<td>France#1994#Smoker</td>
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<td>Left-right</td>
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<tr>
<td>Sex</td>
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<tr>
<td>Children</td>
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<td>Marital Status</td>
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<td>Education</td>
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<td>Metric</td>
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<td>------------</td>
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<tr>
<td>Mean VIF</td>
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