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TRINITY COLLEGE DUBLIN

Food Risk Governance in Ireland: regulation, communication and biosecurity

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A thesis submitted to the Discipline of Geography, Trinity College, Dublin, in
fulfilment of the requirements for the degree of Doctor of Philosophy
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Thesis 10121

Declaration

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Thesis Summary

Issues of biosecurity (commonly defined as “*making life safe*”) are relevant to the arena of food risk governance. Certainly, the complex and varied food safety controls that exist today can be described as attempting to ‘make life safe’. This includes the monitoring, enforcement and surveillance activities of food safety authorities (FSAs) worldwide – institutions of security recently established in response to continuing food crises in Europe and related low levels of public trust. Despite these significant shifts in governing arrangements, little work has been conducted regarding how stakeholders and publics respond, resist and/or engage with these new systems outside of the specific conditions created by major food scares such as BSE. This thesis addresses this gap by exploring the geographies of food risk governance in Ireland ten years on from the formation of Ireland’s FSA (FSAI) during food ‘peace-time’ (no major indigenous food risk events). A multi-method approach was utilised to achieve an in-depth understanding of the nature, determinants and methods of food risk governance and communication in Ireland, which constitutes the first country in Europe to establish a national FSA. The first empirical phase involved documentary, website and media analyses to establish the FSAI rhetoric. Thereafter, thirty semi-structured interviews with stakeholders from across the Irish food industry (including public, private, civil society and FSAI representatives) were conducted, followed by eight consumer focus groups. Obtaining perceptions, opinions and lived experiences from both ‘experts’ and the ‘lay public’, this methodological approach ensured a balanced critique of food risk governing practices in Ireland.

The findings of the research point to a dynamic coexistence of both neoliberal strategies (attempting to govern life by economic logics and thus preoccupied with issues of free trade, market competitiveness and the economic protection of the Irish food industry) and biosecurity logics (concerned with managing risk to life and health) in the Irish food risk governance context. Manifesting as a fluctuating interplay in the work of the FSAI, different security logics appear to dominate at different times, influenced by external political and crisis conditions and internal governance contexts. Representing a novel approach to understanding national FSAs, tensions and compatibilities between these two operating logics were evident in the ambivalent stakeholder responses obtained regarding the FSAI. In particular, tensions emerged regarding the perceived power, performance and impact of the FSAI since its inception with concepts of efficiency under the neoliberal logic (that call for unfettered food trade, private sector self-regulation and more streamlined governing structures) conflicting with ideas of effectiveness desired under the biosecurity regime (that call for more policing structures

in the interest of protecting publics from risk and disease). Meanwhile, some compatibilities were obvious in FSAI communications that seek to simultaneously protect public health and maintain Ireland's food industry reputation.

Regarding the reception of such security logics and communications, while most public sector and FSAI interviewees subjectively deem the Authority to have considerable influence in food business arenas, many private sector interviewees demonstrated a significant level of fearlessness of FSAI consequences. Meanwhile, despite most consumers assuming food in Ireland to be safe, they do not necessarily attribute this to successful risk governing regimes or the work of the FSAI. Relying on subjective emotions and 'gut instincts' of food safety, awareness of and contact with the FSAI was indeed limited across consumer groupings. Instead, demonstrating characteristics of a partial food risk society, consumer responses indicated significant differences between reported food risk concerns and actions taken in reality. Arising out of a muted food risk consciousness in non-crisis contexts and allowing existing food routines to be maintained, consumers appear to adopt strategies of denial regarding the presence of food risk in everyday life. Noteworthy themes relating to the 'paradox of a crisis' also emerged amongst publics and stakeholders who demonstrated respect for food risk governing bodies (including the FSAI) based upon their crisis management activities.

Concerning FSAI performance specifically, the research also revealed a lack of accurate and objective measures of FSA evaluation, with attempts made to establish a basis for such regulatory performance measurement. These efforts are crucial to ascertain flaws in current governing systems and identify avenues for improving future food risk regulatory regimes worldwide. Such endeavours are essential to ensure both public (health) and state (economic) biosecurity. Thus, overall, revealing interesting relationships and perceptual differences between the regulator (FSAI), the regulated (industry stakeholders) and the beneficiaries of regulation (consumers), this research successfully interrogates the governance, communication and biosecurity of food risk in Ireland through the institutional lens of the FSAI. Promoting a multiperspectival approach to understanding FSAs, subsequent findings also raise questions about how food risk is governed, surveyed and communicated in Ireland, challenging existing practices of the FSAI and food governing mechanisms in the Republic.

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LIST OF ABBREVIATIONS AND ACRONYMS

AC	-	Autonomous Communities
BSE	-	Bovine Spongiform Encephalopathy
CEO	-	Chief Executive Officer
DAFF	-	Department of Agriculture, Fisheries and Food
DoH	-	Department of Health
EFSA	-	European Food Safety Authority
EPA	-	Environmental Protection Agency (Ireland)
ERN	-	European Regulatory Network
EU	-	European Union
FAO	-	Food and Agriculture Organisation of the United Nations
FBO	-	Food Business Operator
FSA	-	Food Safety Authority
FSAI	-	Food Safety Authority of Ireland
FSANZ	-	Food Standards Australia and New Zealand agency
FSA UK	-	Food Standards Agency, the United Kingdom
FSCC	-	Food Safety Consultative Council
GM	-	Genetically Modified
GMO	-	Genetically Modified Organism
HACCP	-	Hazard Analysis and Critical Control Point
HPSC	-	Health Protection Surveillance Centre
ICA	-	Irish Countrywomen's Association
IMF	-	International Monetary Fund
IRAs	-	Independent Regulatory Authorities
RASFF	-	Rapid Alert System for Food and Feed
SMEs	-	Small and Medium Sized Enterprises
UK	-	United Kingdom
WTO	-	World Trade Organisation

"For human beings, food is a critical contributor to physical well being, a major source of pleasure, worry and stress, a major occupant of waking time and, across the world, the single greatest category of expenditures"

(Rozin et al., 1999, p193)

Chapter 1 Introduction

1.1 Food glorious food: chemicals, toxins and microbes

The importance of safe food spans biological, social, cultural and emotional boundaries. It is not only essential for basic survival and health but incorporates aspects of emotional security, identity, social connection and well-being (Rozin et al., 1999; Berg et al., 2005). In Ireland, as in many other countries, food also holds considerable economic value, with significant dependence on agriculture for tourism, revenue and employment evident throughout Irish history (Wall, 1999; Tovey and Share, 2003; Tovey, 2007). Indeed, despite the agricultural sector declining in relative importance during the economic boom in Ireland, in recession, prospects for agriculture have risen again with potential to increase national gross domestic product (Teagasc, 2010), create employment (Phelan and O'Connell, 2011) and support livelihoods (Sheehan, 2012). The importance of safe food in Ireland thus incorporates both human and economic dimensions.

As a result, the need for effective and efficient food risk governance in Ireland is apparent. This is particularly true as food production continues to intensify, producing new and increasing risks to human health and food industry reputation. Modern desire to consume fast, cheap and exotic food has resulted in the increased intensification, industrialisation, globalisation and circulation of the food supply. New ways of producing, processing and transporting food have emerged, bringing benefits to food safety, availability and preservation (for example, through pasteurisation, refrigeration and increased shelf-life). However, reflecting the typically double-edged sword of modernity (Beck, 1992), these processes have also created insecurity and risk. Chemical, microbiological, technological and physical food risks, both real and perceived, are now commonplace, with the increasingly global nature of the food supply resulting in an increasingly global distribution of food risk (Domingues, 2006; Varzakas et al., 2006; Dreyer et al., 2010).

Moreover, food risks can intensify to produce wider food scares, crises and product withdrawals, with incidences of BSE, foot and mouth disease, avian influenza, dioxin contaminations and e-coli outbreaks punctuating food chain histories worldwide. Ireland has been no exception to this, experiencing, for example, BSE scares throughout the 1990s, a significant outbreak of foot and mouth disease in 2001 and, most recently, the pork dioxin crisis in 2008. Food poisoning has also become part of

everyday life, with one person in every three in industrialised countries estimated to be affected by food-borne illness annually (WHO, 2011). Consequently, threatening public health, consumer trust, food industry reputation and economic stability, the occurrence of multiple food scares across Europe (and in particular BSE) has sparked a number of food safety governance reforms in recent decades (Hellebo Rykkja, 2004; Berg et al., 2005; Domingues, 2006; Holm and Halkier, 2009; Dreyer et al., 2010). The European Commission's *'White Paper on Food Safety'* provided initial guidance for these reforms (EC, 2000), while the adoption of the General Food Law in 2002 (Regulation (EC) 178/2002) marked significant changes in food safety governance. Reflecting broader shifts in regulation from governmental state control to new forms of governance involving a myriad of public, private, semi-state and civil society actors (Smouts, 1998; Stoker, 1998; Haas, 2004), this included shifts in food safety responsibility from the regulator to the private sector and the establishment of food safety authorities (FSAs) worldwide. In 1999, Ireland became the first country to establish such an FSA - the Food Safety Authority of Ireland (FSAI).

This chapter establishes the rationale behind the research undertaken concerning Irish food risk governance and the FSAI. This is achieved through an exploration of the gaps evident in the literature in Section 1.2, particularly relating to national food risk management contexts, non-crisis focuses, institutional dimensions and FSA performance. Specific research questions are also identified here. The structure of the thesis is then explained in Section 1.3, while Section 1.4 concludes the chapter by summarising the research relevance.

1.2 Research Rationale

Despite recent food safety governance reforms, European consumers are reported to express little confidence in the safety of their food supply and remain sceptical of the food governing structures currently in place (Cnudde, 2005; Wentholt et al., 2009). Indeed, public perceptions of food risk are reported to have intensified in recent years (Slovic, 1999; Knight et al., 2007). A mismatch thus appears to exist between food risk governing practices implemented (including established FSAs) and consumer perceptions of their performance, abilities, worth and success. Such food, risk and management perceptions are also reported to vary internationally (for example, see Rozin et al. (1999) regarding varying international food stresses; Berg (2004) on irregular food trust patterns across Belgium, the UK and Norway; and Houghton et al. (2008) regarding fluctuating food risk management perceptions across Europe). Such

differences have resulted in calls for further food risk and governance perception research at the national scale. In particular, Houghton et al. (2008, p23) asserts a need for more nationally-based food risk management research that incorporates both expert and public opinion to determine “*what constitutes effective FRM [food risk management], and how changes can be made regarding existing practices in order to develop and maintain consumer confidence in regulatory activities*”.

Further necessitating food risk governance research at the national scale, significant cultural variations have also been reported regarding the impact of food risk communications across Europe. For example, van Dijk et al. (2008) note differences in cultural preferences and reactions to the communication of scientific uncertainty in food risk communications across four European countries. The authors link this tentatively with differences in national food crisis experiences. Similarly, Cope et al. (2010) attest to differences in consumer reactions to food risk management communications according to different socio-historical contexts and regulatory experiences. Creating implications for pan-European standardised risk communication efforts for van Dijk et al. (2008), desires for the development of nationally, or even regionally, based food risk communication strategies are thus emphasised by Cope et al. (2010). However, while significant and important work has been undertaken regarding food risk governance reform, perceptions and communications across Europe, a specific Irish dimension appears to have been excluded. This omission is unexpected given the importance of agriculture to Ireland and its status as establishing the first national FSA. Nevertheless, Houghton et al. (2006), for example, investigate perceptions of food risk management practices across the United Kingdom (UK), Denmark, Germany, Greece and Slovenia, while van Dijk et al. (2008) similarly focus on four European countries (Germany, Greece, Norway and the UK) in their analysis of European food risk communication practices. Some research has been undertaken regarding genetically modified (GM) food risk, food risk communications and food label awareness in Ireland (see, for example, Irish Council for Bioethics (2005), McCarthy and Brennan (2009) and FSAI (2009)). However, these analyses have focused on public perceptions of the risk issues rather than assessing broader governing frameworks. Tendencies towards quantitative surveys have also featured in such research, with focuses often on either expert or lay opinion. This creates a need for a balanced and qualitative assessment of Irish food risk governance.

Meanwhile, much food risk literature to date also tends to focus on moments of food crisis or scare. Analyses of foot and mouth disease (Tovey, 2002; Donaldson, 2008), avian influenza (Hinchliffe and Bingham, 2008; Nerlich et al., 2009; Bunn et al.,

2011), bovine tuberculosis (Enticott, 2008, 2008a), BSE (Hinchliffe, 2000; Wynne and Dressel, 2001; Frewer and Salter, 2002; Wales et al., 2006) and dioxin contaminations (Casey et al. 2010; Jacob et al., 2010a; Casey and Lawless, 2011) are thus commonplace throughout the literature. Indeed, perhaps reflective of the increased availability of material regarding crises, wider geographic research also tends to be seduced by moments of chaos and/or extreme events (for example, natural disasters such as tsunamis (Greenhough et al., 2005), earthquakes (Crowley and Elliott, 2012) and hurricanes (Curtis et al., 2007)). As such, reflecting recent calls within securitisation theory to look beyond the extraordinary, spectacular and dramatic to study ordinary and banal scenarios (Dodds, 2012), this research explores the governance of food risk in everyday, non-crisis contexts. It achieves this by focusing on the day-to-day regulatory, communication and security practices exercised in Ireland, including by the FSAI.

Furthermore, while the General Food Law established the institutional design of a central European Food Safety Authority (EFSA), it did not provide any guidelines for the development of national FSAs. Questions can therefore be raised regarding the comparative structure, roles, motivations, power and impact of such authorities at national scales. Indeed, Holm and Halkier (2009) and Abels and Kobusch (2010) highlight significant differences in the implementation of food safety governance reform and FSA structure across national European contexts. In addition, given that concerns remain in society regarding the safety of the food supply (Dreyer et al., 2010), and questions have been raised over the transparency, independence and intentions of some FSAs (for example, see Hellebo Rykkja (2004) and Byrne (2011)), it is worth exploring more accurately the impact of FSAs on food risk governance landscapes. Academic work has been undertaken on FSAs in Spain (Garcia and Jukes, 2004; Todt et al., 2007) Greece (Varzakas et al., 2006), Portugal (Domingues, 2006) and Croatia (Antunovic et al., 2008). However, these analyses have tended to focus on the inception and evolution of these authorities rather than reflecting on their impact to date.

George Taylor similarly explored food regulatory reform in the Irish context, including commentary on the establishment of the FSAI. However, this work also focuses on the inception, political reactions and legal structure of the FSAI, rather than assessing its impact and performance (Taylor, 2003; Taylor and Millar, 2004). Restricted in timescale, this is understandable given the relatively recent establishment of the FSAI at the time of analysis. However, given that the FSAI celebrated its ten year anniversary in 2009, it can now be considered an apposite time to reflect on its impact to date. Indeed, at a time when other countries are reported to be turning to Ireland for food

safety and national FSA advice (FSAI, 2008), the importance and relevance of such research is increasingly apparent.

Addressing and combining the research gaps identified regarding national food risk contexts, non-crisis focuses, institutional dimensions and FSA performance, this PhD thesis thus aims to critically examine how food risk is governed and communicated in Ireland. Utilising a case study approach involving the FSAI, and advancing current food risk governance literature beyond a focus on FSA establishment, this includes an evaluation of FSAI performance and impact within this wider non-crisis context. As such, drawing on these dimensions, specific aims and objectives of the research are outlined in Table 1 below:

Aims and Objectives	
1	To develop an in-depth understanding of the nature, determinants and methods of food risk governance and communication in Ireland.
2	To examine the role, actions, strategies and perceptions of one key Irish food governing agent, the Food Safety Authority of Ireland (FSAI).
3	To progress theoretical and empirical dimensions of environmental risk research by evaluating the governance of food risk in Ireland.
4	To feed into recent academic and policy developments regarding the links between food production, regulation, communication and biosecurity.
5	To conduct a critical analysis of the regulatory frameworks, implementation practices and communication strategies that have been employed to address food risk issues in Ireland, especially those of the FSAI.

Table 1 Research Aims and Objectives

To achieve these aims and objectives, three research questions were established which position the FSAI within a broader framework of food risk regulation, communication and biosecurity (the need to “*make life safe*” (Bingham et al., 2008, p1528). These are outlined in Table 2 below:

Research Questions	
1	In terms of regulation, what has been the role, and impact, of the FSAI on the landscape of food risk regulation in Ireland since its inception in 1999?
2	Regarding communication, what impact have the strategies of the FSAI had in terms of communicating food risk securitising activities to foster compliance, trust and awareness in external agents?
3	Concerning biosecurity, how have the logics and strategies of biosecurity infiltrated and performed within food risk governing practices in Ireland?

Table 2 Research Questions

With a focus on processes, impacts, practices and perceptions, qualitative research methods that permit the investigation of attitudes, experiences and opinions were adopted to address these research questions. In short, the answer to question 1 is uncovered through a detailed literature review phase, a documentary analysis of FSAI publications and interviews with key stakeholders. Question 2, by comparison, is examined through the analysis of FSAI communication strategies (gleaned from website and documentary analysis phases), stakeholder interviews (to gain elite industry opinions of, and behaviours resulting from, FSAI communications) and consumer focus groups (to uncover the opinions, levels of trust and degree of FSAI awareness amongst the Irish public). Finally, question 3 is answered by combining both stakeholder (expert) and consumer (lay) results to determine how food biosecurity strategies have been experienced, received and perform in the Irish context. A detailed methodological discussion is provided in Chapter 4 of the thesis.

1.3 Thesis Structure

Mapping the evolution of the research from theoretical and political standpoints through more detailed methodological and empirical phases, the remainder of the thesis is divided into seven chapters. The next chapter, Chapter 2, provides a conceptual lens through which the research may be viewed, examining literature pertinent to governance, risk and institutional power in particular. Chapter 3 explores the political and legislative back-drop to the research, providing more detail on the European food safety governance reforms and food safety authorities established worldwide. Thereafter, Chapter 4 outlines the methodological approach adopted in the research, including discussion on methods commonly utilised throughout other food, risk and governance research and an account of the research experience.

Principal empirical results are thereafter presented in two separate but interlinked chapters. Chapter 5 outlines the main findings relating to the consumer focus group phase, while Chapter 6 discusses key results from the stakeholder interviews. The results are divided in this way for two reasons. First, the sheer volume of data collected between the two empirical phases (involving 30 interviews and 8 focus groups), if combined, would have resulted in a complex, cumbersome and unwieldy chapter. Secondly, the nature of the two empirical phases (one assessing consumer perceptions through the 'natural' focus group method and the other compiling stakeholder opinion utilising semi-structured interviews) are too diverse to make

meaningful and direct comparisons. Dividing the research results thus signifies their separateness. Nonetheless, drawing research analysis threads together, Chapter 7 combines research findings (including additional website and documentary phases) to explore the most significant themes to emerge from the empirical work. The eighth, and final, chapter summarises the contribution of the research to wider academic and policy spheres.

1.4 Conclusion

The need to securitise against food risk is essential for both health and economic reasons, while the academic exploration of these areas remains pertinent and relevant to assist wider food policy making and governance processes. While interesting, informative and important work has been conducted regarding food risk governance and communication across Europe, these studies have tended to be restricted in terms of scope (typically engaging either experts or consumers, concentrating on select national contexts and/or focusing on crisis scenarios) and methodology (including tendencies towards quantitative research methods and failing to assess food risk governance performance). Such limitations have resulted in a lack of in-depth, rich and qualitative analysis that incorporates emotions, lived experiences, attitudes and feelings to assess how food risk governance operates, performs and impacts in everyday scenarios. Equally, Ireland has also been largely excluded from comparative analyses of European food risk governance, despite its food and agricultural reputation and status as establishing the first national FSA. Thus, given its unique non-crisis, Irish and qualitative context, coupled with a novel institutional focus on the FSAI and its performance, this research makes a new contribution to knowledge and progresses food risk governance literature and policy alike.

Chapter 2 Literature Review

2.1 Introduction

To provide a conceptual background for the analysis chapters that follow, this chapter explores perspectives on biosecurity, governance, regulation, communication and trust alongside theoretical frameworks concerning risk, power and surveillance. First, issues of biosecurity and biopolitics are explored to provide the general context for the research. This is followed by an overview of current thought on environmental governance in Section 2.3 to set the specific context within which the research fits. A specific analysis of food risk governance literature is also included here. Thereafter, regulation is viewed as a specific mode of governance, while the need to examine food risk management as coordinated through governance (rather than government alone) is also discussed. Developing the applied context of this research, this section establishes the arena of food risk governance as one that is constantly evolving, dynamic and worthy of further research.

Next, given the proliferation of man-made food risks and the scientific institutional response through the establishments of FSAs worldwide, Section 2.4 considers Beck's (1992) 'Risk Society' thesis as a framework to understand risk management. A comprehensive overview of current conceptualisations of risk is also provided here including relating to risk approaches, perceptions, communication and trust. This section is essential to understand how and why the public relate to food risk and its management as they do. Case study detail from European food risk governance research is also outlined here to provide a wider context within which to understand the Irish context. Thereafter, Section 2.5 explores some broader theoretical and conceptual frameworks relating to power, surveillance and governmentality, including their application to food risk governance studies. Finally, a conclusion is provided which summarises existing gaps in current knowledge bases and the contributions this research will make to fill these academic voids.

2.2 Biosecurity

As mooted in Chapter 1, the need to securitise against food risk as part of wider environmental biosecurity processes is essential for both health and economic reasons. Issues of 'biosecurity' (a term first utilised by the New Zealand government in the 1990s

(Barker, 2009) and defined by Bingham et al. (2008, p1528) as “*making life safe*”) are relevant to the arena of food risk governance, particularly when set within a broader framework of Foucauldian biopolitics (Foucault 1978; 2008). Biopolitical strategies exercise power over life in the interest of the optimisation and survival of populations (Foucault, 1978; Dillon, 2007; Dillon and Lobo-Guerrero, 2008; Lemke, 2011), while biosecurity practices aim to regulate, monitor and/or halt the movement of various life forms (including animals, plants and microbes) to prevent and manage risk to life and health (FAO, 2007; Bingham et al., 2008). Thus, the complex and varied systems of food safety controls that exist today can be described as attempting to ‘make life safe’ through their continuous efforts to ensure a risk-free food supply for populations.

To achieve this biopolitical protection, biosecurity practices vary from seemingly mundane activities (such as the use of disinfectant mats to halt agricultural disease) to incorporating cutting edge science and technology (for example, the use of complex surveillance technology at border controls) (Bingham et al., 2008; Donaldson, 2008; Nerlich et al., 2009). Meanwhile, for Barker (2009, p166), biosecurity increasingly relates to “*the control of threats emanating from human behaviour*”. Feeding into recent developments in geographic literature concerning the links between nature and society (for example, see Hinchliffe (2007)), this approach to biosecurity can be extended to the food safety arena. Food is a product of the natural environment (Roberts, 2011) and increasing human involvement in its supply has interfered with its safety. Further, for Hinchliffe et al. (2012), three broad biosecurity approaches exist that attempt to govern life and make it safe: sanitation, surveillance and drives towards organisational integration. Such techniques are common within food risk governance and related FSA arenas to date.

Nevertheless, biosecurity should not be considered a new or novel practice or concern. A long history of health care, hygiene practices and safety regulation exists; all of which can be grouped under the umbrella of ‘biosecurity’. Indeed, Hinchliffe et al. (2012) report on the established tradition of governing wayward life, attributing recent increased attention to the four T’s of disease spread; travel, trade, transportation and tourism. Indeed, in the food risk arena, a fifth ‘T’ could be added to explain further increased attention to food biosecurity; that of technology (for example, the proliferation of both real and perceived risks resulting from the increased mechanisation of food production and the development of GM and irradiation techniques). Therefore, what is new and, in particular, why biosecurity can be considered to have risen to prominence of late (as emphasised by Bingham et al. (2008), Hinchliffe and Bingham (2008) and Gaudioso et al. (2009) in political, social, agricultural and laboratory contexts), is the

way in which the term has gained discursive power and is now being utilised and communicated at a global scale. Biosecurity literature to date has included detail on the increased prominence of the term in policy and practice today (Atlas, 2005; Bingham et al., 2008; Hinchliffe and Bingham, 2008) and discussion around bioterrorism and the purposeful spreading of biological agents (Henderson, 1999; Kurth, 2004; Gaudioso et al., 2009). The application of biosecurity in the arena of human health has also been considered (Diprose et al., 2008; Fearnley, 2008; Major, 2008) along with national biosecurity measures (Jay et al., 2003; Lentzos and Rose, 2009; Nerlich et al., 2009) and sustainable ways for biosecurity to progress in the future (Hinchliffe and Bingham, 2008; Rhodes, 2008).

Furthermore, some research has taken place regarding environmental and food biosecurity in particular. Thus far this has focused on the role of biosecurity in preventing and containing agricultural diseases (including foot and mouth disease (Donaldson, 2008), avian influenza (Nerlich et al., 2009), bovine tuberculosis (Enticott, 2008, 2008a) and swine fever (Mather and Marshall, 2010)); wildlife biosecurity (including the management of invasive species) (Barker, 2008, 2009; Buller 2008); and the potential for a bioterrorist attack on the food chain (Bruemmer, 2003). Issues of biosecurity can also be applied to food safety arenas, although limited research has taken place in this context. For example, the FSAI is attempting to 'make life safe' by monitoring and controlling the Irish food supply. It disseminates food safety information while also carrying out monitoring, enforcement and surveillance activities. As such, it can be viewed as an avid and continuous promoter of food biosecurity across the Republic of Ireland.

However, while 'biosecurity' as a discourse has risen in prominence in many locations and contexts, it has not been understood or implemented in the same way worldwide. No 'one size fits all' answer exists to issues of risk and biosecurity, therefore this research seeks to uncover how biosecurity practices have developed in Irish food risk challenges. Linking with recent security preoccupations post 9/11 (Ingram and Dodds, 2009; Hinchliffe et al., 2012; Philo, 2012), the importance of safe food for survival, identity and well-being (Berg et al., 2005) and the relationships between geography, food safety, biosecurity and global health (Brown and Moon, 2012), the geographical study of the FSAI highlights a key site of food safety (bio)securitisation. The FSAI represents a body that makes securitising claims, promotes a discourse of biosecurity through its actions and impacts on the landscape of food risk governance at both state and non-territorial human scales. Analysis will thus include examining what logics underpin the implementation of biosecurity in this context today.

2.3 Governance

2.3.1 From government to governance?

Throughout the past century, a new global identity is deemed to have emerged centring on a belief that some issues, particularly environmental, need to be governed at the global scale (Beck, 1992). A need to move beyond traditional nation state boundaries to establish transnational and global solutions to problems is thus emphasised, with contemporary hazards perceived to often originate in one country yet have effects in another (including for example, air pollution (Hajer and Versteeg, 2005; Roberts, 2011) and food risk (Wynne and Dressel, 2001)). Indeed, many environmental risks fail to adhere to human constructions of administrative territories and boundaries, limiting their control across space (Renn and Klinke, 2001; Crabbé and Leroy, 2008). Others are believed to produce long term effects, additionally hampering their control across temporal borders (for example, genetic engineering, nuclear explosions and chemical pollution) (Beck, 1992). In an attempt to govern such intricate issues, a complex, and often conflicting, set of actors has thus emerged operating at different scales, all competing to provide solutions and influence policy.

As a result, a common feature of recent policy making incorporates a movement beyond the sole control of the government, with non-state actors increasingly influencing decision making processes (Weiss, 2000; Haas, 2004; Strange, 2004; Chasek et al., 2006; Duffy, 2006a). What were once primarily governmental and state responsibilities in some cases are now being delegated to a wide range of economic and social actors at global, supranational and local levels (including in European social, environmental, employment and education regulatory arenas (Heritier, 2001; Jordana and Levi-Faur, 2004; Knill and Lenschow, 2004; Papadopoulos, 2007)). The term 'governance' has emerged as an organising framework to understand these regulatory relationships, new and old, with marked emphasis on a "*policy-making style dominated by cooperation among government levels and between public and non-public actors*" (Papadopoulos, 2007, p469). As Roberts (2011, p155) puts it:

"In recent decades there has been an opening up of the policy process with a simultaneous dispersion of authority and power to interested parties. The shift is from a clear focus for decision making ('government') to a much broader and more complex set of policy-making processes ('governance')"

While Roberts' (2011, p155) generalisation cannot be applied to all sectors (for example, recent terrorist attacks have signalled a concentration and closing down rather than an "*opening up*" of policy processes), Haugaard and Ryan (2007, p194) note similar shifts in governing power in Ireland from government ("*generally understood as a centralised executive power*") to governance ("*a process which has the potential to empower citizens*" through participation and consultation processes). Governance for Haugaard and Ryan (2007) thus represents a disciplinary process where power operates as a fluid, relational matter rather than as an entity possessed by the powerful and exercised over the powerless. Implementing policy in a decentralised fashion (Roberts, 2011), government in the governance model is therefore seen to work with civil society and industry actors; albeit not always in equal partnership. Processes of bargaining, deliberation, negotiation, inter-mediation and compromise-seeking are thus believed to dominate such governing relationships (Papadopoulos, 2007; Roberts, 2011).

The academic literature on governance is nonetheless highly disjointed, with evident differences in opinion existing over the roots of the phenomenon (Stoker, 1998) and diverse sectoral foci also obvious. In general, it is agreed that governance involves the guiding, steering and directing of society, incorporating a plethora of actors and agencies over a variety of scales, all of whom vie for influence in the governance process (Smouts, 1998; Stoker, 1998; Weiss, 2000; Betsill and Bulkeley, 2004; Davies, 2008; Fox and Ward, 2008). Moving beyond a state-centred approach, governance therefore represents the way in which authority is exercised, giving consideration to the multiplicity of actors and institutions involved in addressing global issues (Betsill and Bulkeley, 2004). However, although governance is conceived to operate at a much larger scale than government, the outcomes of the two entities are not that dissimilar: both are concerned with creating conditions for collective action and ordered rule in society (Smouts, 1998; Stoker, 1998; Murphy and Yanacopulos, 2005). Rather, for Stoker (1998), it is in the process of achieving outcomes that creates the difference between government and governance. For example, Murphy and Yanacopulos (2005) contentiously argue that government rules by coercion whereas governance can exert power in the form of influence. Citizens typically comply with government out of fear of disciplinary action, whereas governance is normatively deemed to only be effective if the majority accept it as a system of rule.

Similarly, for Holliday (2000, p168), governance is "*about managing networks*" as opposed to the more authoritative exercise of power that characterises government. Power in governance systems is conceived to flow upwards, sideways and downwards

towards supranational scales and a multitude of subsidiary bodies across public, private and civil society spheres (Holliday, 2000). Thus, noting a retreat of state power in recent decades, Strange (1996) contends that heads of national governments have been losing authority over national societies and economies in recent times. Similarly, Rhodes (1994) perceives a 'hollowing out' of the British state to have occurred of late. Reorganising national and local governments, governing responsibilities are reported to have been transferred from central ministries to autonomous agencies, leaving the core government to focus on policy making rather than implementation (Rhodes, 1994). As part of this, a 'Europeanisation' process is conceived to be occurring, shifting power relations from national governments to the European Commission and local authorities. As such, national sovereignty is believed to be eroding and the principle of subsidiarity is conceived to dominate (Rhodes, 1994).

A model not without contention, new service delivery systems and complex policy networks are deemed to have emerged in the British context according to Rhodes (1994), producing several unintended outcomes. This primarily relates to a perceived increasing fragmentation of governing institutions (creating gaps, overlaps and inefficiencies in responsibilities), diminished institutional accountability (partly arising from sheer institutional complexity obscuring accountability lines) and a difficulty associated with the central steering of the new networks. As with all areas of academia however, some contestations of Rhodes' (1994) thesis as being over-simplified and lacking in evidence exist. For example, Davies (2008) attests a need to establish convergence between multiple governing theories (not just those of Rhodes) to understand waste governance, while Holliday (2000, p175) maintains difficulty in finding evidence for the "*breaking up*" of the British core. Indeed, Holliday (2000) notes a series of "*countervailing trends*" to the hollowing out of the state, including a strengthening of the British core (regarding resources, employment and capacity to secure policy outcomes) in the last thirty years. Similarly, Taylor (2000) argues that the state is not hollowing-out but rather being 'filled in' through the emergence of additional taskforces and governing institutions. As with Holliday (2000), Taylor (2000, p80) views government as becoming increasingly complex, but emphasises that "*complexity does not inevitably lead to hollowing out*". Suggesting a transformation of governance processes, taskforces are thus conceived to represent a change in the instrument of policy making rather than in the politics of control (Taylor, 2000).

Meanwhile, similar to processes of Europeanisation discussed by Rhodes (1994), for Coen and Thatcher (2008, p50), "*double delegation*" processes represent a significant part of recent governance shifts in Europe. Here, power is perceived to have

been delegated by national governments both to the EU and newly established autonomous agencies. However, due to continued pressure to harmonise European single market issues throughout the 1990s, a further round of power delegations is believed to have occurred. Termed European Regulatory Networks (ERNs), “*hybrid bodies*” that straddle national and supranational scales are reported to have emerged that comprise of national independent regulatory authorities (IRAs) and the European Commission (Coen and Thatcher, 2008, p52). Delegated a wide range of ambitious tasks (including the coordination of diverse national IRAs and the consistent implementation of EU law across Europe) but lacking necessary power and resources to fulfil these responsibilities, ERNs are deemed to have failed to resolve EU member state problems of coordination, harmonisation and implementation by Coen and Thatcher (2008). This is seen to be true in a variety of financial and telecommunications regulatory sectors by the authors but is also increasingly obvious in European food risk governance according to Halkier and Holm (2006).

2.3.2 Food Risk Governance

It is generally accepted that European food is among the safest in the world. Paradoxically, however, much literature to date reports that European consumers have little confidence in the safety of their food supply and remain sceptical of the institutions and procedures currently in place (Cnudde, 2005; Wentholt et al., 2009). This distrust has escalated in recent times and, as a result of consumer demand, numerous food safety reforms have taken place in the last two decades (Bernauer and Caduff, 2006; Halkier and Holm, 2006; Garcia Martinez et al., 2007; Houghton et al., 2008; Dreyer and Renn, 2009; Millstone, 2009; Wentholt et al., 2009). Redefining food safety responsibilities, this included the implementation of new food risk governance frameworks, coordinated food safety legislation and private sector mechanisms for governing food safety as well as the establishment of FSAs Europe-wide (Halkier and Holm, 2006).

However, despite these attempts, public confidence in European food safety governing structures has not been established. Indeed, many claim that Europe has actually experienced a “*paradox of progress*” in terms of governing food risk (Wentholt et al., 2009, p540). Despite increasingly strict standards and sophisticated food regulatory mechanisms, Europe has at the same time experienced an increasing number of food safety incidents and crises as food production continues to intensify. This paradox is highlighted across food perception studies (Grunert, 2002), trust in food

safety analyses (Berg, 2004), supranational food safety governance contexts (Cnudde, 2005; Bernauer and Caduff, 2006; Garcia Martinez et al., 2007; Houghton et al., 2008; Wentholt et al., 2009) and communication scenarios (McGloin et al., 2008). Examples include outbreaks of e-coli in meat, incidences of salmonella in poultry and eggs, the presence of dioxins in animal feed and the BSE crisis – with the latter incident cited by many as the leading factor for recent food safety reforms across national and supranational contexts¹. Such incidents, coupled with concerns over emerging food technologies (for example, the genetic modification of crops), have further contributed to a lack of public confidence in food risk analysis practices and governing structures (Houghton et al., 2008; Wentholt et al., 2009). Indeed, an “*age of anxiety*” has emerged in the UK in relation to food and its management according to Jackson (2010, p147).

Challenging these widespread beliefs that correlate crisis occurrences with a drop in consumer confidence, Bernauer and Caduff (2006) state that European consumers were already sceptical of governments’ management of food safety prior to the occurrence of the food scandals of the 1990s. Instead, they point to the application of multilevel governance mechanisms in the food safety arena and the subsidiarity principle focus of Europe in policy-making as causing the confidence crisis. Such occurrences are believed to have increased the fragmentation of responsibility, lessened the impact of authority and allowed decision-making to take place at the lowest (and perhaps unsuitable) administrative level. Moreover, the import dependent and fragmented nature of the European food market, coupled with efforts to create a common single market, are also conceived to have caused decreases in consumer trust for Bernauer and Caduff (2006). Similarly, Halkier and Holm (2006) state that the move towards a single European market (particularly the need to harmonise food safety standards across member states), is littered with problems of uniformity as some member states lack the material and organisational resources to conform to such standards. This has led to the uneven adoption of food safety regulations across the EU which, in turn, has created consumer confusion and mistrust according to the authors.

The current framework for governing food risk in Europe lies in a three-fold risk analysis process of interrelated, yet distinctly separate, activities: food risk assessment, management and communication (Codex Alimentarius, 2003; Houghton et al., 2008; Wentholt et al., 2009; König, 2010).² According to Houghton et al. (2008) however, no

¹ This includes across the UK (Hinchliffe and Woodward, 2000), Ireland (Wall, 1999; Taylor, 2003), Germany (Lenz, 2004) and Portugal (Domingues, 2006) as well as broader European contexts (Grunert, 2002; Bergeaud-Blackler, 2004; Hellebo Rykkja, 2004; Cnudde, 2005; Halkier and Holm, 2006; Houghton et al., 2008; Dreyer and Renn, 2009; Millstone, 2009; Wentholt et al., 2009; Dreyer et al., 2010).

² Further details of how this framework operates in practice are provided in Chapter 3 of this thesis.

singular answer exists regarding the quality of this current framework with regulators, consumers, experts, industry and the media all possessing conflicting and often biased opinions on the quality of current practices. For this reason, Houghton et al. (2008) feel it is difficult to assert with confidence whether or not food risk management at present is poor in Europe. Nonetheless, the wave of regulatory reforms following the BSE crisis suggests that previous regulatory mechanisms were indeed sub-optimal in performance. However, given the reported uneven implementation of food safety governance reforms across Europe (Halkier and Holm, 2006), questions can still be raised regarding the uniform quality, practicality, effectiveness and reliability of current practices, along with the success of recent reforms (Houghton et al., 2008).

As a result, several ideas have been proposed within academia to properly achieve original reform aims and ensure better food regulation. This has included considering opportunities associated with creating a more centralised food risk governance structure (Bernauer and Caduff, 2006), pursuing public-private co-regulation strategies (Garcia Martinez et al., 2007) and incorporating a social impact assessment component in food risk analysis processes (Dreyer et al., 2010). However, the most recent framework proposed improvements to European food risk governance via an interdisciplinary approach, incorporating stakeholder involvement, benefit communication and public participation at appropriate stages in the risk analysis process (see König (2010) and SAFE FOODs (2010)). Additionally, this model endeavours to include the assessment of other impacts outside of human health (for example, social, environmental, ethical and economic impacts), with reports also being made available to the public at every stage of the process to increase food risk governance transparency (Wentholt et al., 2009).

Nevertheless, uncertainties remain regarding how this framework could be implemented in practice (for example, how stakeholders could be involved and what methodological approaches would be used to assess and weigh food hazard risks and benefits) (Wentholt et al., 2009). Moreover, challenges associated with cost, cultural diversity, clashes with existing legal structures and the appropriateness of the new framework in the time of food crisis also exist according to Houghton et al. (2008), Wentholt et al. (2009) and König (2010). The future of this new framework is thus uncertain, particularly under current economic conditions. Further complicating the implementation of this framework is the potential conflict that could arise if both experts and publics are included in the risk analysis process (for example, for fear of publics slowing food risk decision-making in crisis scenarios (Houghton et al., 2008)). This is particularly likely given reported differences in risk rationalities and understandings

between the two groups (Garvin, 2001). Such differences may also create difficulties for food risk communicators involved, as explored in Section 2.4.

As evidenced in this chapter thus far, many forms of governing through governance exist with multiple meanings, contested definitions and perceptions of its manifestation in the landscape obvious. One mode of governance of particular significance to food risk governance arenas however is that of regulation; explored in more detail in the following section.

2.3.3 Regulation

According to Jordana and Levi-Faur (2004), scholarly interest in regulation as a mode of governance has risen substantially as a result of the global wave of regulatory reforms that occurred from the mid-1980s onwards. Regulation is defined by the OECD (2012) as the:

“Imposition of rules by government, backed by the use of penalties that are intended specifically to modify the economic behaviour of individuals and firms in the private sector”

Expanding this definition, Knill and Lenschow (2004) claim that various forms of regulation exist from enforceable rules to more lenient incentives, from self-responsibility mechanisms to a focus on participation. Reflecting the overall trend in all governance arenas, processes of regulation have also become increasingly decentralised in recent decades with the politics of regulation now operating across a variety of scales. Consequently, numerous independent regulatory authorities (IRAs) have also been established to deal with these new settings at national and supranational scales. Representing *“public organizations with regulatory powers that are neither directly elected by the people, nor directly managed by elected officials”*, IRAs for Gilardi (2004, p67) represent one of the distinctive features of the new regulatory state that has evolved to replace the once dominant welfare state. Furthermore, Jordana and Levi-Faur (2004) contend that IRAs open up new spaces for more effective governance to prosper, with governments now reportedly dependant on IRAs to govern various aspects of life (including food safety) (Gilardi, 2004; Jordana and Levi-Faur, 2004).

Various perspectives exist as to why IRAs developed, with some attributing their existence to governmental attempts to counteract political uncertainty and loss of

credibility (Gilardi, 2004). Meanwhile, others link their establishment with institutional isomorphism or homogenisation concepts. Echoing DiMaggio and Powell (1983), Jordana and Levi-Faur (2004), for example, view coercive isomorphism (where agencies are forced into creation through persuasion and/or government mandate) and mimetic isomorphism (the copying of a model seen elsewhere, usually under conditions of uncertainty) as best explaining why IRAs diffused across Europe in the 1990s. In other words, IRAs were seen as the institution of choice to exercise regulatory activities. Elsewhere, low public trust in government is seen as central to understanding the establishment of IRAs worldwide, including in the food risk context (Bernauer and Caduff, 2006; Halkier and Holm, 2006; Garcia Martinez et al., 2007). Attributing the outbreak of public scandals, catastrophes and crises as causing high levels of public mistrust in existing government structures, this resulted in pressure for new regulators (such as IRAs) to gain regulatory control according to these authors.

More recently, pushes towards 'better regulation' have since come to dominate regulatory and political spheres, with Irish regulatory processes no exception to this. Indeed, the Department of the Taoiseach commissioned specific reports to better understand the regulatory environment in Ireland and thus better regulate in the future (Department of the Taoiseach, 2004; 2007). Nevertheless, despite aims set in the 2004 report to improve Irish regulatory regimes by reducing the number of bodies involved, "*the number and complexity of regulatory bodies...continues to grow*" (Department of the Taoiseach, 2007, p8). Denoted a "*nanny state*" by the media (Irish Independent, 2008), Ireland has become (and continues to be) one of the most intensely regulated countries in the world despite governmental commitments to merge and consolidate regulatory agencies in the name of better regulation.

Similarly, the Economist Intelligence Unit (EIU) reviewed regulatory structures in Ireland for their appropriateness, accountability, effectiveness, value for money and potential for restructuring. Assessing regulatory performance in transport, telecommunications, financial services, health and safety and energy arenas, the EIU (2009) reports a distinct lack of coherence in the Irish regulatory environment. In particular, the ad-hoc nature of agency establishment is believed to have resulted in different structures, appeals mechanisms and financial structures emerging, creating inconsistencies and overlaps in responsibilities and ill-defined accountability lines. No clear vision regarding regulator roles is reported to exist at Irish government level across the variety of sectors, with many agencies believed to be implemented merely due to EU legislative requirements. Other agencies demonstrate a mismatch of responsibilities resulting from "*mission creep*" processes (EIU, 2009, p162) whereby an

agency is established to fulfil one purpose, only to assume responsibilities outside of their core remit in later years. The EIU (2009) also criticises the tendency of Irish governmental departments to think vertically rather than horizontally in terms of agency set up in other contexts: preferring to establish new agencies without first considering how roles could be assigned to existing ones. As a result of these fragmented, differentiated and ad-hoc processes, the EIU (2009, p32) concludes on the “*need to examine existing regulatory structures*” in Ireland. As such, before assessing Irish food risk governance, it is important to consider what has been normatively (and often subjectively) demarcated as constituting effective and ‘good’ governance in a world that is striving to make it ‘better’.

2.3.4 Effectiveness, limitations and approaches to governance

Similar to the definition and types of governance, opinions on what constitutes ‘good’ governance also vary considerably. Often, ‘good governance principles’ are utilised to determine if governance is being exercised effectively and efficiently. Although variations in such principles exist across academic disciplines and political spheres, in general, concern for governance accountability, transparency, efficiency, inclusion, fairness and responsiveness dominate these discussions. Although very few institutions have come close to achieving some ideal type of ‘good governance’ in its totality (UNESCAP, 2008), such principles provide benchmarks of comparison and targets to strive towards to make such institutional governing ideals a reality (Crabbé and Leroy, 2008). Table 3 below summarises these principles:

Good Governance Principle	Objective
Accountability	To impose a disciplinary effect, governing actors must be answerable to publics and institutional stakeholders (and/or those affected by their activities) for decisions made and actions taken. Actors should have an obligation to explain and justify their conduct and be able to face questions, judgment and consequences imposed by an external forum. Issues surrounding the legitimacy of unelected bodies often arise here.
Transparency	The structure of the governing organisation and processes involved in decision-making and action-taking must be accessible and assessable by the public. The information must be easily understandable and made freely available to those affected by organisational decisions.

Effectiveness/ Efficiency	This checker refers to the way in which governing actors and institutions operate. Results must be produced that meet the needs of society in a way that also makes the best use of institutional resources and does not harm the environment.
Inclusion/ Participation	Equitable participation of men, women and vulnerable groups must be allowed in an informed and organised manner. Any mechanisms for the inclusion of different actors in governance and decision making processes form part of this governance principle.
Fairness	Rules, standards and common law must be followed and an even and just distribution of power, resources and outcomes must exist for governance to be considered 'good'.
Responsiveness	Institutions and processes must respond to stakeholder communications within reasonable time frames

Table 3 Good Governance Principles

(Weiss, 2000; EGN, 2001; Graham et al., 2003; Woods, 2004; Lodge, 2004; Papadopoulos, 2007; UNESCAP, 2008)

Meanwhile, for Papadopoulos (2007), governance performance is primarily concerned with notions of democracy, legitimacy and accountability; notions that are believed to be particularly lacking in multilevel governance (MLG) spheres (such as that which governs food risk as detailed in Section 2.3.2 and highlighted by Bernauer and Caduff (2006)). For the author, this is primarily due to a lack of visibility regarding decisional procedures and shared responsibility in MLG systems (allowing blame avoidance and scapegoating to ensue), the uncoupling of networks from official representative bodies (hampering oversight and answerability) and the composition of networks (with high influence emerging from bureaucrats, scientists and non-public (not elected) actors operating with strategic goals). Varying capabilities and resources at different scales, multiple accountability lines and increasing orientation towards 'peer' accountability (checking and balancing one another) and self-governing further complicate the MLG arena for Papadopoulos (2007).

Additional concerns have emerged regarding the perceived hijacking of good governance definitions by neo-liberal agendas and modern institutions such as the World Bank, the International Monetary Fund (IMF) and other development organisations (as highlighted in the context of neoliberal markets in Asia (Robinson, 2005; Robinson and Hewison, 2005) governance mechanisms in South Africa (ANSA, 2007) and environmental governance arenas (Davies, 2008)). It is argued that such institutions are imposing their version of 'good' governance on developing countries in

an attempt to achieve political, governmental and market reform; opinions that are often based on the democratic societies and markets of the Western world. Indeed, good governance principles are utilised by the World Bank and IMF to assess national governments and determine their credit worthiness, with good governance thus now “a basic requirement for a country to be admitted to the international community” (Crabbé and Leroy (2008, p27). Arguing against this tendency, ANSA (2007) stress that policies created and new governance systems introduced to developing countries must be informed by the cultural realities of the society they intend to serve. Contradicting earlier assumptions of universal principles that make governance ‘good’, proponents of global neoliberal agendas must recognise the local in their strategies according to ANSA (2007).

Similarly, for Weiss (2000), good governance varies according to scale. At the national level good governance is conflated with concepts of a ‘good’ government (in his opinion, one that is efficient, accountable, transparent, representative and lawful). However, no such equivalent actor exists at the global scale. There is no world government with jurisdiction over the entire planet and, without one, good global governance will never be achieved according to Weiss (2000). Indeed, while institutions such as the United Nations exist at the global scale, its authority is mostly limited to an advisory capacity; promoting cooperation rather than exercising authority over national governments. Meanwhile, for Strange (1996) for global governance to be effective, respected and democratically accountable, some form of opposition to it must exist. This does not necessarily have to manifest as a designated body/party wishing to displace another (as common at national government scales) but rather a combination of forces to check that power is being exercised at least in part for the common good (Strange, 1996). Additional challenges such as the prevalence of cultural variations, differences in legal, institutional and political systems and an uneven distribution of power and resources among actors further hinder the practice of effective global governance (Fox and Ward, 2008).

Furthermore, reflecting issues of fragmentation associated with the contested ‘hollowed out’ state thesis of Rhodes (1994) and MLG spheres by Papadopoulos (2007), Stoker (1998) outlines how the blurring of boundaries and sharing of responsibilities between public and private actors can lead to a lack of coordination, blame avoidance and/or scapegoating amongst stakeholders. Elsewhere, Smouts (1998, p88) warns that global governance ideals can also conceal “*the most devious type of economic liberalism*” – the influence of the market. The market often acts as the sole regulator at the global level and without a central monitoring organisation, the

market will continue to rule according to Smouts (1998). Moreover, Stoker (1998) warns how governance actions can also fail. While institutions and actors can shape policy outcomes, they cannot determine them. Tensions between groups exist, social conflict can prevail, inadequacies in organisations can override intentions and leadership can be misinterpreted. All of these aspects provide seeds for governance failure for Stoker (1998).

In an academic context, many theoretical perspectives have developed as a result of recent preoccupations with the term 'governance'. For example, Davies (2008) outlines governance approaches that exist in environmental contexts. Some of these perspectives emphasise the limitations of the nation state in governing environmental issues, preferring to focus on the role of networks (Fagan, 2004) and/or institutions (Parto, 2005). Elsewhere, Bulkeley et al. (2005), as with Fox and Ward (2008), draw on Foucauldian theories of governmentality to instead focus on how regimes are governed through policies and infrastructure. Meanwhile, in less developed countries, Myers (2005) feels it more appropriate to adopt a political ecology approach to understanding governance, highlighting the power inequalities that shape decision making in such contexts. According to Davies (2008) however, these approaches differ more in emphasis than in substance and therefore need not be mutually exclusive. In particular, regarding environmental governance (and waste governance specifically), she highlights a need to look at the networks, institutions and actors involved while also paying attention to the mechanisms of governing (including technologies, policies and infrastructures used) and the outcomes that result. A combined state-society approach could also be adopted when analysing environmental governance according to Davies (2008), one that acknowledges the state as an important site of activity while simultaneously acknowledging the role of non-state actors in the governance process.

Elsewhere, according to Fox and Ward (2008), none of these traditional approaches truly capture the flexibility and mutability of modern governance. Assessing online web pharmacy governance, they propose the 'governance in action model' and emphasise the importance of achieving broad consent across all scales of actors. In addition, this perspective points to the necessity of formal regulation systems and legislation in governance. Therefore, contradicting much research to date (including concepts of the 'hollowed out state' by Rhodes (1994)), Fox and Ward (2008) argue that 'governance without government' cannot exist. In addition, it could be argued that government cannot also operate in isolation. A long history of outside interests attempting to influence government exists (for example, through agricultural lobby

groups and environmental NGOs). Government without governance is thus also equally unlikely.

In conclusion, the need for governance mechanisms is increasing as globalisation, population explosion, technological development and social change are increasing risk, both real and perceived, in the present day (Fox and Ward, 2008). Thus, despite debates and conflicts over what governance is, what and who it involves and what makes it 'good', it remains worthwhile exploring issues of governance in both theoretical and practical contexts. Governance analyses enable discussion on the role of government in coping with public issues while also acknowledging the possibility of non-state groups (including private actors and civil society) having influence in managing such issues (Graham et al., 2003). Studies of governance can also provide insight into how issues ranging from broad social, economic and political spheres to more specific issues, such as individual and collective safety, are managed at multiple scales (Weiss, 2000; Fox and Ward, 2008). Therefore, governance can be seen as both a necessary and desirable topic to study. Drawing on the literature explored in this section, it is obvious that issues of participation, power, scale and limitations all need to be considered when analysing this topic, with a need for governance to also be understood as a force that evolves through time and changes in different settings.

Governance frameworks have long been utilised in analysing many spheres of environmental activity (including the management of waste, water, pollution and climate change), given that control of these issues does not often lie with state governments alone. A plethora of public and private actors are involved in managing environmental issues and, for this reason, it can also be deemed appropriate to apply governance frameworks to understand the management of food risk. Overseeing the production, processing, and supply of food is an array of governmental and non-governmental structures including public monitoring authorities, private sector controls, consumer organisations, state governments, supranational bodies and global legislation. For these reasons, it is appropriate that food risk management is analysed and understood as being coordinated through governance rather than government alone.

2.4 Risk Theories

Similar to conceptualisations of governance, there is no one agreed understanding of risk, with multiple definitions and meanings of the term evident throughout academic and policy circles (Beck, 1992). In general however, a divide can be drawn between 'realist' perspectives that emphasise the actuarial, quantitative and statistical properties of risk (including measuring the likelihood of a risk event occurring (probability)) and 'constructivist' approaches that maintain that risk is socially created and influenced by cultural dimensions, perceptions, imaginations and knowledge bases (Ekberg, 2007; Rasborg, 2012). More broadly, Giddens (1999, p22) defines risk as a modern phenomenon that is often caused by human interference in nature and is "*actively assessed in relation to future possibilities*". Luhmann (1990) (in Rasborg (2012)) similarly sees risk as inextricably related to observations of social systems and decisions taken with respect to a contingent future. Regularly shrouded in uncertainty when calculating risk consequences and probabilities, issues of power, democracy and trust also underlie risk discourses for Giddens (1999). Ekberg (2007) similarly associates risk with concepts of power and knowledge, deeming risk definitions to be open to competing interests and political values, culminating in different risk definitions and understandings worldwide. Elsewhere, for Ewald (1991) risk depends on how one analyses an event. In other words, similar to Giddens (1999), risk is a way of observing phenomena (and damages), often incorporating an insurance perspective (for example, providing compensation to those affected) (Ewald, 1991).

Meanwhile, combining alternate risk approaches, Beck (1999) perceives risk understandings to straddle both realist and constructivist dimensions. Highlighting a form of reflexive realism, risk is reported to be both real and objective *and* constituted by social construction, awareness and perceptions (Beck, 1999). Fluctuating between "*objective and value dimensions*" (Beck, 1992, p176), risk definitions thus appear to depend on what aspects of risk need to be emphasised (see also Rasborg (2012)). Regardless, Beck (1992) reports recent broad shifts in risk understandings, culminating in the emergence of a whole new type of society, the 'Risk Society'. Preoccupying much social theory of late, the risk society thesis marks significant shifts in risk profiles, understandings, awareness and experiences as society is perceived to have progressed from an era of classic, capitalist and industrial modernity into a new reflexive, second modernity. The consequences of industrial, scientific and technological developments of the past have emerged to disrupt societal actions and

everyday life in this second modernity, risk society. As Rasborg (2012, p4) (in discussion of Beck's thesis) puts it:

"The forces of production have turned into forces of destruction and progress has become negative"

For example, for Beck (1992), this includes the proliferation of low-probability but high-consequence and large-scale hazards that traverse geopolitical, geospatial and generational boundaries (for instance, global warming and environmental pollution). Representing a series of man-made risks (as opposed to the predominantly natural risks reported to dominate the industrial era (for example, earthquakes, floods and hurricanes)), these new risks require unique understandings and management approaches (Beck, 1992). Beck's (1992) risk society thesis is thus appropriate in understanding food risk governance practices, where the increased industrialisation and intensification of food production can be seen to have resulted in the proliferation of man-made food risks that traverse geographical and temporal boundaries. Impacting on populations worldwide and across generations, examples include food crises such as BSE and slow-burning chemical risks associated with increased pesticide use in food production. Further, reflecting calls by Beck (1999) for the transformation of social and political institutions to manage such emergent risk issues in the risk society, the development of complex food safety controls and FSAs represent one such response in this context.

Alternative approaches to understanding food risk governance could include a focus on Habermas' (1984; 1996) deliberative democracy and communicative rationality theories. Here, Habermas highlights the idealistic involvement of multiple stakeholders participating on an equal footing in policy making arenas, with aims of achieving consensus through communicative action and reasoning. Such concepts could nonetheless be considered premature in the food risk arena, with the development of stakeholder and public participation fora only in their infancy in food risk governing arenas (for example, see Wentholt et al. (2009)). Food risk governance remains primarily elite driven at present, with potential for Habermas' (1984; 1996) communicative rationality approaches to perhaps become more useful as FSAs become further embedded and established and equal participation is more achievable. Beck's (1992) risk society concepts are thus explored in more depth below, representing a more suitable framework for understanding current food risk governing practices.

2.4.1 *The Risk Society Context*

According to Beck (1992, p21), risk is directly bound to reflexive modernisation with many new risks being *"induced and introduced by modernization itself"* (that is, resulting from the industrialised processes of modern society). Highlighting a *"darker dimension"* of modernisation (Lash and Wynne, 2011, p2), new risks have been created that produce hazardous consequences for society and, as a result of globalisation, the world as a whole. Indeed, in the environmental arena, Roberts (2011, p36) similarly notes how industrialisation has brought about *"new environmental hazards to be faced"* while, in an Irish context, Kelly (2007, p211) argues that *"modern industrial societies are characterised by a level of humanly created environmental risks unknown in previous societies"*.

As society thus moved past industrial modernity phases, Beck (1992) contends that concerns and awareness around risk have also increased. Moreover, as a result of recent technological developments, various uncertainties have emerged, including regarding calculating the consequences of new technologies (Beck, 1992). Although many rely on science to provide such answers, it must be acknowledged that limitations in this field exist. For example, Hinchliffe and Woodward (2000) warn that laboratory experiments cannot determine outcomes that will occur outside of the laboratory environment. Further, although science has increased human understanding of the natural and physical world, Roberts (2011) contends that it can only reveal partial truths given the socially-constructed nature of scientific research that is framed by the interests and bias of scientists (and their funding bodies). Kelly (2007, p214) similarly argues that scientists play a central but ambivalent role in risk understanding, supplying factual information but not a *"definitive 'right answer' regarding...culturally acceptable levels of risk"*. Elsewhere, De Marchi (2001) and Heriard-Dubreuil (2001) also acknowledge that science cannot explain complex events of our time. Uncertainties and human influence exist; aspects that science can neither predict nor explain. The emergence of new risks has also challenged trust in and responsibilities of existing regulatory institutions (Beck, 1992; Hanlon, 2010). Indeed, such mistrust is reported to exist across food (Hinchliffe and Woodward, 2000; Wynne and Dressel, 2001) waste (Benn et al., 2009) and environmental contexts (Roberts, 2011). Normally, institutions are allowed time to adapt and develop effective responses to issues. However, on emergence of these new crises that affect entire populations across time and space, regulatory institutions are forced to act quicker, often with detrimental results (Wynne and Dressel, 2001).

Incorporating all of these dimensions, a 'risk society' has emerged according to Beck (1992) where society is conceived to be more aware of its conditions and thus better able to deliberate on futures and consequences. Within the risk society, a complex set of actors operate to manage the hazards and uncertainties produced by new world practices (Beck, 1992; Wynne and Dressel, 2001), with populations also believed to perceive and respond to risk differently compared to previous societies. To further explain this, Table 4 below divides Beck's risk society thesis into four central themes based upon the literature of Beck (1992, 1994, 2000), Hinchliffe and Woodward (2000), Benn et al. (2009), Hanlon, (2010), Lash and Wynne (2011) and Roberts (2011):

Theme	Description
<p>Instrumental Rationality and the Generation of Risk</p>	<p>According to Beck (1992), late modernity is characterised by the proliferation of man-made risks and the failure of social and traditional institutions to manage them. Preoccupations with and perceptions of risk have altered also. In pre-modernity, risks were accepted as unavoidable natural hazards, whereas in the risk society, risks are conceived as consequences of individual actions and wider social and industrial forces. A full recognition now exists that science and technology create unknown risks and uncertainties.</p>
<p>Reflexivity and Late Modernity – the emergence of sub-political decision making</p>	<p>Beck also notes an increased reflexivity or responsiveness of the population in late modernity, whereby society begins to question the type of society that has been created and how its consequences are going to be managed. Preoccupied with the consequences of industrialisation, this reflexivity primarily manifests itself in the form of a societal critique of modernisation processes and the science that drives it. Power relations among stakeholders (particularly concerning the allocation of risks) have also altered leading to the emergence of sub-political forms of decision making. Temporary, decentralised, flexible and multiple stakeholder arrangements and networks thus begin to dominate decision making and risk discourses.</p>
<p>Growing Individualisation</p>	<p>An increased sense of individualisation has also emerged in the era of reflexive modernisation and the risk society. The inadequacy of current structures to govern risk is increasingly recognised, resulting in a significant impact on the role of the individual in risk discourses. This has included</p>

	increased individual access to knowledge about risks and a heightened sense of choice regarding risk. This, in turn, has led to individuals adopting the responsibility to understand risk, make decisions, challenge experts and develop their own (new) certainties outside of those previously imposed by the industrial society (for example, relating to traditional marriage, the nuclear family, gendered divisions of labour etc).
The Role of Science	Finally, in the risk society, scientists are seen to both contribute to risk creation (through the development of new industrial technologies) while also attempting to analyse and lessen them. There is thus an increasing dependence on scientific expertise to measure and determine risks, while at the same time, levels of public mistrust in these sources have also increased.

Table 4 Summary of Beck's "Risk Society" thesis

Although some aspects of the 'risk society' have been reported to develop in real world cases (for example, in relation to BSE in Britain (Hinchliffe and Woodward, 2000), Foot and Mouth disease management in Ireland (Tovey, 2002) and toxic waste management in Australia (Benn et al., 2009)), some challenges to Beck's theory also exist. For example, according to Benn et al. (2009, p1661), some of Beck's assumptions are "*overly optimistic*", with evidence from a local community in Botany, Australia demonstrating a lack of empowerment by the risk society structures as Beck had envisaged. Rather, this risk community became overly concerned with the immediate, local effects of toxic waste disposal, rather than reflexively challenging the broad ranging effects of industrialisation. Allowing the community to be branded as NIMBYist ('not in my back yard') in action, this led to a loss of power in their discursive struggle. Therefore, Benn et al. (2009) argue that a localism aspect is crucial in any risk society study: a concept missing from Beck's thesis.

Similarly, Tovey (2002, p28) notes how the response to the Foot and Mouth crisis in Ireland was firmly grounded in the scientific advice, leadership and rational "*of technical bodies of knowledge*", reflecting the dependence on scientific expertise in the risk society. Nevertheless, Tovey (2002) also observes a lack of a reflexive responsiveness induced by the crisis, in that no reflexive questioning occurred regarding the impact of the profit-driven food industry on food safety and animal

welfare. In a broader Irish context, utilising this example and other risk contexts, Kelly (2007, p214) thus concludes that:

“Irish society and polity show more of the characteristics of one form of eco-modernisation than of risk society”

Although too generalising in its characterisation of all Irish society and polity as such, the self-questioning, reflexive characteristics of the risk society were not overly apparent in Ireland for Kelly (2007). Rather, an interest in further economic growth is reportedly prioritised above environmental concerns. Acknowledging an economics of capitalism dimension ignored by Beck (1992), Kelly (2007) thus contends that industry drive for profits has diverted attention away from the environmental and human costs (risks) induced by these processes.

Additional critique of Beck (1992) includes questions from Rose (2000) regarding the global application of Beck's thesis (a thesis that was developed based upon a strong German economy with collective security) and Latour (2003) who criticises Beck for his lack of emphasis on social and material complexity (also contending that being more aware of risks does not necessarily make society more in control of them). Further, Hanlon (2010) echoes Lash (1993, 2000) by suggesting that Beck is too individualistic in his thinking, ignoring the impact of group behaviour on risk perceptions. The possible impact of legitimate lay public perceptions on experts is also ignored according to Hanlon (2010). Similarly, Hunt (2002) argues that ethnicity has a significant impact on risk opinions, another aspect that Beck ignores. Echoing these concepts, Benn et al. (2009) further outline how many academics argue for more evidence for Beck's theories, stating that the German sociologist paid little attention to finding real world case studies to demonstrate his ideas.

Meanwhile, drawing on concerns of Rose (1999), Ekberg (2007) discusses the persistence of traditional risks of the industrial society (including natural disasters) in contemporary society, concluding that the reported shift from natural to technological risk by Beck is exaggerated. Conceptual and theoretical inconsistencies in Beck's thesis are also probed by Ekberg (2007), including concerning a lack of clarity whether risk exposure is egalitarian (that is, everyone is at risk and a collective risk identity exists) or hierarchical (that the wealthy can escape it). Similarly, utilising Irwin (2001), Ekberg (2007) considers if Beck is overly critical of technological and scientific progress, with beliefs emerging that he has largely ignored the benefits of technological advancement. This links with Adams (1995) and Giddens (1998) where the need to take risks to

secure benefits is emphasised (for example, in financial arenas). Elsewhere, discussing the dual pursuit of realist and constructivist approaches to risk in Beck's thesis (that is, that risk is both real *and* only formed when society becomes aware of it), Rasborg (2012, p11) claims that:

"The theory of the risk society thus seems to be burdened by a basic inconsistency with respect to the epistemological and ontological status of risk"

In addition, drawing on Dean (1999), Rasborg (2012) questions totalising assumptions within Beck's thesis (that is, that risk is a new and inescapable phenomenon produced by industrial modernisation), and his assumptions of uniformity (that risks can be systematically categorised and associated with specific historical periods). Instead, both authors call for more differentiated theoretical models for understanding risk in society, with Dean (1999) resorting to Foucauldian principles of governmentality to understand contemporary risk management and Rasborg (2012, p19) concluding that an approach incorporating the emergence of "*risk logics*" rather than a totalising risk society is more appropriate (more on this later).

Nevertheless, despite these challenges to Beck's risk society thesis, his theories are still central to multiple academic discussions on risk. Therefore, rather than dismissing his ideas entirely, they should be applied with caution and an open mind that alternatives or indeed only partial risk society features may exist. Moreover, thought must be given to other findings of risk research when analysing any area of risk governance. Principally, this includes exploring reported differences between expert and lay risk perceptions, analysing how best to communicate risk effectively and examining issues of trust in risk management contexts. This is essential to understand stakeholder and consumer responses, reactions, experiences and perceptions of Irish food risk governance and the FSAI.

2.4.2 Risk Perceptions

Important contributions to current understandings of risk have come from a diverse range of disciplines including geography, sociology, anthropology, political science and psychology (Slovic, 1987). Across these disciplines, it is widely assumed that public perceptions of risk differ from those of experts, particularly regarding how

each group judges, prioritises and responds when faced with risk³. Traditionally, reflecting a realist approach to risk, it has been argued that experts ground their risk perceptions predominantly in technical information produced from quantitative, scientific risk assessment processes and annual fatality rates (Slovic et al., 1979, 1981; Fischhoff et al., 1978; Slovic, 1987). Meanwhile, reflecting constructivist approaches, public risk perceptions are believed to be more multidimensional in nature, being influenced by a variety of social, cultural, political, scientific and personal factors (Fischhoff et al., 1978; Slovic et al., 1979, 1981; Slovic, 1987; Sandman, 1987).

As a result of reported perceptual differences, risk communicators in the past have focused on educating and persuading the public to think about risks as experts do (Frewer, 2004). The public were perceived to be ignorant, irrational and lacking in knowledge with regard to certain technologies, science and risk and therefore needed to be educated (Sandman, 1987; Hansen et al., 2003; Frewer, 2004). Known as the 'knowledge deficit model' of risk communication and persisting throughout the 1970s, this approach involves the one way transfer of educative risk information from an authoritative expert source to the lay public (Hilgartner, 1990; Hansen et al., 2003; Frewer, 2004). However, despite its aims, the public remained sceptical of the motives of scientists, regulators and industrialists involved in risk analysis processes and an expert-lay discrepancy remained (Frewer, 2004). Meanwhile, beliefs that societal concerns were being disregarded in the pursuit of scientific and economic advancements emerged, resulting in sharp declines in public confidence in risk management practices (Sandman, 1987; Frewer, 2004). This drop in confidence produced a shift in risk communication approaches from attempts to align public risk opinions with those of experts to aims of restoring public trust in risk management processes. Attempts to increase the transparency of risk management through increased public consultation and participation were at the forefront of such efforts (Frewer, 2004).

Nevertheless, despite the establishment of risk assessment and management practices, many citizens report feeling that they face more risk today than in the past (Slovic, 1987; Beck, 1992). In an attempt to understand these perceptions, several risk perception models were developed, most notably the "*psychometric paradigm*" by Slovic and his colleagues (Fischhoff et al., 1978; Slovic et al. 1979, 1981; Slovic, 1987). This paradigm proposes that every hazard has a distinct pattern of psychologically and

³ Such differences were initially reported by Slovic et al. (1979, 1981), Sandman (1987) and Slovic (1987) and have since been applied across environmental (Wakefield and Elliott, 2003), communication (Frewer, 2004; Hampel, 2006) and food (Hansen et al., 2003; McCarthy et al., 2006; McCarthy and Brennan, 2009) risk contexts.

socially determined characteristics that form the basis of public risk concern. Through the utilisation of factor analysis techniques, three higher order characteristics were determined: dread risk, unknown risk and extent (Slovic et al., 1981). Here, 'dread' refers to the level of control over and voluntariness of the risk, the threat of disastrous consequences, the distribution of risk and the likely effect on future generations. The 'unknown' factor relates to characteristics of the risk as unobservable, unknown to those exposed, new or unknown to science and/or producing delayed effects. The third factor, 'extent', refers to the number of people exposed to the risk (Slovic et al. 1981; Slovic, 1987). Correlating these three factors, Slovic et al. (1981) constructed cognitive maps that can be utilised to understand and predict public response to risk. For example, on this map, DNA research and food irradiation rank as highly unknown, dreaded hazards, and thus are perceived as very risky by the public compared to lowly dreaded, well-known hazards such as the use of home appliances or bicycles. Following the traditional expert-lay divide, Slovic et al. (1981) conclude that expert risk perceptions are much less closely related to these factor spaces that define public perceptions.

Contradicting this research however, Sjöberg (2002) argues that the psychometric paradigm has been too easily accepted by all. Admitting that while it is likely that experts view risks within the confines of their field of expertise (and thus, as smaller than publics do), he argues that this does not mean that their risk perceptions are driven by different factors. Indeed, Sjöberg (2002) argues that many issues have been ignored by Slovic and his colleagues; issues that could help explain the expert-lay divide. These include differing definitions of risk (experts pay more attention to probability whereas the public focus on consequences), the socialisation of values and risk perceptions through educational and professional training (where conformity pressures and vested career interests may play a role), and the perceived control of and familiarity with the risk (experts may be more habituated to risks through their work). Similarly, van Kleef et al. (2006), in an analysis of food risk management perceptions, found that opinions of experts did not wholly differ from those of consumers, further challenging the traditional expert-lay divide. For example, both groups deemed effective food risk management to be closely related to whether or not governing authorities communicated with the public about their performance. Nevertheless, van Kleef et al. (2006) stress that some differences remain, with experts, for example, more negative about media influences compared to lay consumers.

Other areas of contention in risk research include the effect imposed by the type of risk presented and problems associated with defining an 'expert'. For example, Wright et al. (2000) found that differences in public and expert risk perceptions

regarding less extreme hazards are likely to be much less than reported elsewhere. Elsewhere, Marris et al. (1997) question why Slovic and his colleagues (at least initially) did not attempt to distinguish between groups, except for the distinction of 'experts' and 'lay people'. This point is exemplified by later research (including by Redmond and Griffith (2005) in a food safety context), that cites differences in risk perceptions based upon dimensions of sex and social class.

Overall, the implications of such challenges to traditional conceptualisations of the expert-lay divide are hugely significant for risk communicators according to McCarthy and Brennan (2009, p550), particularly given that communicators "*act as conduits between the expert and lay communities*". Indeed, an accurate understanding of lay risk perceptions is essential for effective risk communication according to many academics across risk (Slovic, 1987; Slovic et al., 1981; Marris et al., 1997; Frewer, 2004) and food risk spheres (Griffith et al., 1998; van Dijk et al., 2008; McCarthy and Brennan, 2009).

2.4.3 Risk Communication

Risk communication represents a vital process that aids public understanding of hazards and expert understanding of how best to manage them. Issues around improving risk communication have thus received significant attention in both academic and policy circles, including regarding what information should be communicated, what medium should be utilised and how to ensure that the right audience receives the message. For instance, Marra (1998) emphasises the need to consider broader organisational culture (be it open, honest, proactive and efficient) and PR team autonomy when developing effective crisis communications, Frewer (2004) spoke of the need to incorporate public concerns in risk communication strategies and Leiss (2004) stresses the need to effectively translate science and address uncertainty in every risk message. Meanwhile, Coombs (2007) and McCarthy and Brennan (2009) underscore the importance of tailored risk messaging (according to past crisis experiences, crisis type and audience characteristics), while Schultz et al. (2010) and Liu et al. (2011) discuss the value of online and social media communication channels. Combining these elements, McGloin et al. (2008) discuss message, source, audience targeting and communication channel factors in a nutritional and food risk context.

Further, most communication researchers insist that public risk perceptions be understood and respected by experts, given that these perceptions reflect real concerns

(Slovic, 1987; Slovic et al., 1981; Marris et al., 1997; Griffith et al., 1998; Frewer, 2004; McCarthy and Brennan, 2009). However, it must also be acknowledged that the layperson can lack knowledge about certain hazards, therefore, they in turn must listen to and respect expert opinion in risk analysis processes. It is thus considered essential by many that risk communication and management be structured as two-way processes, recognising that both the expert and the layperson have something valid to contribute (Slovic, 1987; Griffith et al., 1998; Frewer, 2004; Hampel, 2006; Hanlon, 2010). More specifically, Frewer (2004) and Leiss (2004) emphasise the need for risk communicators to express the probabilities, variabilities and uncertainties associated with risk estimates. Risk messages also need to be understandable, include wider social concerns and state their applicability for policy (Frewer, 2004; McCarthy and Brennan, 2009). Otherwise, it is feared that the public will become cynical and distrustful of the institutions that govern risk (Frewer and Salter, 2002; Frewer, 2004, van Dijk et al., 2008). After all, speaking of effective communication in a variety of crisis scenarios (including nuclear disasters, oil spills and product tampering), Marra (1998, p461) states that:

“Communication is an important element in almost all successful crisis management efforts. Organizations or individuals that communicate poorly during crises often make bad situations worse”

It has been suggested therefore that strategies must be adopted to ensure prompt and effective communication that avoids any unnecessary financial, perceptual, reputational or emotional damage during crisis (Marra, 1998). Furthermore, it is argued that risk communicators take into account that public concerns are often specific to particular hazards. For example, consumers are conceived to evaluate naturally-occurring risks as less threatening than risks of technological origin (Fischhoff et al., 1978; Slovic, 1987; van Dijk et al., 2008). Indeed, Miles and Frewer (2001) found that consumers also have specific concerns regarding different food hazards. Animal welfare, for example, was of upmost concern in BSE contexts whereas GM food risk raised concern about the unintended effects on human health and the environment. As such, Redmond and Griffith (2005) and McCarthy and Brennan (2009) see improvements for future food safety communication lying in the increased education of the lay population to eradicate underlying misconceptions about food hazards. However, some limitations also exist in this context. For example, recent research has found that if consumers feel their food safety knowledge is sufficient, they may disregard information provided by educational campaigns (Redmond and Griffith, 2005).

Moreover, van Kleef et al. (2006) outline how many European consumers report suffering from information 'overload' regarding food risk information, with increased information provision thus deemed counterproductive when such a saturation point is reached.

Moreover, regarding the Irish food safety context in particular, McCarthy and Brennan (2009) contend that an 'implementation deficit' exists rather than a traditional 'knowledge deficit' requiring education. In other words, simply possessing food safety knowledge does not necessarily result in appropriate action being taken in Irish domestic spheres. Instead, a number of personal barriers (including consumer habits, past experiences and interest levels), infrastructural barriers (including a lack of coordination between governing institutions) and message-related barriers (including the existence of conflicting, overly technical or complicated messages) are perceived to prevent effective knowledge implementation (McCarthy and Brennan, 2009). Some short and long term policies to address these barriers are suggested by the authors that emphasise the heterogeneity of Irish society, resulting in a need for different risk messages to target different audiences and high-risk groups.

Adopting an alternative approach, van Dijk et al. (2008) focus on food risk management communications, arguing that communicating about what food risk managers are doing could increase public trust in risk regulation and shape risk reactions. In particular, they argue that consumers should be informed about the enforcement of food safety laws, especially when the scientific uncertainties associated with food risks are communicated. However, van Dijk et al. (2008) also note that significant cultural variations exist regarding the impact of risk communication strategies across Europe; something that has obvious implications for pan-European standardised risk communications (including those of the EFSA). For example, the communication of uncertainty was found to have a negative effect in the UK and Norway, and a positive impact in Germany. Van Dijk et al. (2008) attribute these cultural variations to historical differences in national experiences of food safety incidents. Somewhat contradicting this intuitive conclusion, Terragni (2006) highlights that Norway never experienced a BSE crisis and as such, problems in the Norwegian food safety governance system remained unresolved (as no push for reform emerged). This in turn, affects patterns of consumer trust in food with surprisingly low trust in meat safety evident as a result of this persisting problematic governance system. By comparison, according to van Kleef et al. (2006), cultural variations are not as obvious when analysing expert food risk management perceptions.

One final link in the risk communication chain lies in the role of the media in communicating risk. The media has long been acknowledged as a key communicator of environmental issues and, more recently, of environmental and food risks (Tovey and Share, 2003; Wakefield and Elliott, 2003; van Kleef et al., 2006; McCarthy et al., 2008). Indeed, O'Sullivan (2007, p6) marks the media as a "*key institution for creating and circulating information about [Irish] society*" more broadly, while McCullagh (2007) similarly notes the shaping influence of the media on public perceptions in Ireland. Fulfilling a dual purpose, the media has the potential to create public alarm and panic during crises, but can also communicate the actions undertaken to solve the problem to calm the situation (Houghton et al., 2008). Moreover, it has been argued that the media has a major influence on individual risk assessments, attitudes and perceptions in a variety of risk (Slovic, 1987), crisis (Coombs, 2004), environmental (Wakefield and Elliott, 2003) and food contexts (McCarthy et al., 2006; van Kleef et al., 2006; McCarthy and Brennan, 2009). Indeed, most people's experience with hazards comes from exposure to news media that reports on various accidents and threats worldwide (Slovic, 1987). This exposure can significantly alter public risk perceptions. For example, McCarthy et al. (2006) outline how the large number of media reports relating to food poisoning occurring outside of the home (241) compared to the small number reporting food poisoning cases within the home (36) has led to perceptions amongst Irish consumers that they are in control of food risk in domestic situations. Van Kleef et al. (2006) further report that decreased media attention following a food risk event can also lead to consumers believing that food risk issues are no longer pertinent. This creates problems for governmental bodies attempting to communicate food risk information outside of crisis scenarios.

Meanwhile, mass media campaigns represent a popular risk communication channel that has long been utilised to promote positive patterns of behavioural change in society (Wakefield and Elliott, 2003; McCarthy and Brennan, 2009). However, despite aims of reaching wider audiences, such campaigns have proven unsuccessful in encouraging behavioural change in the Irish food safety context. For McCarthy and Brennan (2009), this is unsurprising given the heterogeneity of the Irish population, with the 'one voice/one message' tactic employed in such campaigns inevitably not suiting or reaching all target groups. Some additional characteristics of the media can also prevent effective (risk) communication from occurring. This includes the power of the media in deciding what is worthy of reporting (items that may not be based on direct fact), the reporters' own interests and access to expertise and the lack of control experts have over the end media message (McCarthy et al., 2008; McCarthy and Brennan, 2009). Indeed, when communicating environmental issues, Roberts (2011,

p150) contends that media sources often possess specific political agendas that play a crucial role in deciding what stories run, how much prominence they are given and how sides are represented. Similarly, McCullagh (2007, p142) claims that media ownership (deemed to be usually profit-seeking men with a particular worldview), sourcing (the fact that journalists often do not witness the events they report on), advertising (the need to sell advertisement space and not allow content to detract from this) and journalistic professionalism (commitment to professionalism as giving autonomy from powerful interests) represent "*important factors shaping media output*" in Ireland specifically. The increasing role played by tabloids and celebrity journalists is also altering the Irish media landscape and agenda for McCullagh (2007).

Similarly, Wakefield and Elliot (2003) outline how media coverage of risk is often based upon the rarity, exceptional nature and/or recency of the risk rather than its significance to public health. This can lead to misrepresentations of risk being conveyed and public confusion regarding the severity and likelihood of the risk involved. Characteristics of the receiver can also hamper the effectiveness of media risk communications. For example, Wakefield and Elliott (2003) argue that face-to-face communication with friends, neighbours and officials is perceived as more credible than media sources by the public. McCullagh (2007, p150) similarly notes a "*significant decline in the level of public trust in media output*" in Ireland as a result of increasingly restricted media ownership, contested power relations and the continuing rise of celebrity journalists. These findings have substantial implications for environmental and food risk communications, given the regular use of the media to channel risk information to the public.

Finally, new avenues for risk communication are opening up, particularly given the recent rise of the internet. For example, Krinsky (2007) contends that the internet creates significant opportunities for citizen learning while also providing new opportunities for stakeholders to influence the risk message. Moreover, the internet is conceived to provide a space where publics can voice their responses to risk, as evident in the rise of internet chat rooms, online petitions and personalised blogging of late. The internet thus allows for an increased reflexivity to develop among citizens given the opportunities to easily acquire risk information, weigh up conflicts of interest and question authority. However, for Krinsky (2007, p163) it is "*too early to tell*" if it will have any effects on the expert-lay divide between technical and cultural understandings of risk.

Meanwhile, for Liu et al. (2011), the internet (and social media tools such as Facebook and Twitter in particular) generates unique information, timely communications and interactive conversations, thus making it a particularly relevant and popular medium for crisis communications. Nevertheless, the authors report that organisations remain sceptical of social media source credibility, while others still lack the skills necessary to use it. Contradicting Wakefield and Elliott (2003) and McCullagh (2007) regarding a lack of trust in newspaper sources, Liu et al. (2011) found that preferences remain for traditional media sources amongst communicating organisations and publics (particularly in early crisis stages when facts are required). It is nonetheless noted that social media preferences appear more relevant in later stages of crisis communication when more emotional support/venting space is perhaps required. Similarly, Schultz et al. (2011), although acknowledging the benefits of newspaper articles, note the power and effects of Twitter in terms of secondary crisis communications, reactions and the sharing of information. Meanwhile, the need for non-profit organisations to utilise Facebook more effectively is highlighted by Waters et al. (2009), particularly regarding use of its' interactive features to improve information dissemination (organisational news and successes) and stakeholder involvement (to encourage supporters to contact the organisation) (Waters et al., 2009).

Overall, research on risk perceptions has been ongoing for over four decades which has proven that factors such as voluntariness, control and fairness determine public definitions and judgments about risk. Therefore, as Sandman observed in 1987, and especially now with a further two decades of research carried out, when risk managers and regulators continue to ignore this evidence and be surprised by public responses to risk and new technologies, "*it is worth asking just whose behaviour is irrational*" (Sandman, 1987, p22). This has important implications for organisations such as the FSAI who still rely on scientific risk assessments to judge and communicate food risk. In particular, it may significantly impact on levels of trust in these organisations and their respective communications.

2.4.4 Trust

Central to conceptualisations relating to risk perceptions, communication and management is the concept of trust. Indeed, as Ekberg (2007, p356) contends:

"Social theories of risk are inseparable from theories of trust, and when risk and trust combine they invariably relate inversely"

What constitutes trust, how to create and maintain it, how to recover it when it has been lost and how it influences public opinion and action are thus issues that are preoccupying politicians, academics and regulators alike. Personalised levels of trust in food can take various forms: from a naive, blind type of trust that only becomes real when one feels distrust, to a trust based upon a conscious and reflexive praxis where precautions are taken to feel secure (Berg, 2004; De Jonge et al., 2008). Whatever its make-up, it is essential to recognise the importance of trust as the basis for social life as a whole. For example, Elster (1989) views trust as a social lubricant; without it society would come to a standstill. For Berg (2004), trust is also extremely important at the individual level for personal satisfaction, quality of life and well-being.

Understanding trust has also become vital in any analysis of food risk governance, particularly given reported low levels of public confidence in European food governing structures (Cnudde, 2005; Wentholt et al., 2009). Roberts (2011) similarly reports a decreasing faith in institutions (including government and the church), science and democracy in postmodern times, while Frewer et al. (2002) particularly note a declining level of trust in science, scientific institutions and food risk regulatory bodies since the 1950s. This reached a “*floor effect*” by the start of the 21st century according to Frewer et al. (2002, p709), with institutional trust perceived unable to decline any further. A decreasing level of trust is similarly explored by O’Sullivan (2007) and McCullagh (2007) specifically regarding trust in Irish institutions and the media. For O’Sullivan (2007), the occurrence of numerous tribunals of inquiry investigating corruption in Irish society has contributed to this low level of trust in public institutions, although the author is keen to stress that this trend is also evident elsewhere.

In the food risk governance arena specifically, an important link is believed to exist between confidence in general food safety and perceptions of governing institutional performance (for example, see Grunert (2002), Brunel and Pichon (2004), Berg (2004), Berg et al. (2005), Van Kleef et al. (2007) and De Jonge et al. (2008) for evidence across varying European national contexts). In general, a high level of trust in food chain actors is related to a high level of confidence in the food chain and food safety. This link is also clearly demonstrated by Siegrist (1999, 2000) who developed a causal model of trust to explain public acceptance of gene technology. He found that trust in institutions that use gene technology has a negative influence on perceived risk of the technology and a positive impact on perceived benefit. To explain this, Siegrist (2000) believes that if the institution’s values mirror those of the public, that institution will be perceived as more trustworthy. Therefore, Siegrist (2000) suggests that if GM

technology can be framed to reflect the public's salient values, trust in that technology will increase.

By comparison, Kasperon et al. (1992) view perceptions of competence, commitment, care and predictability as playing essential roles in determining institutional trust. Slovic (1999) and McGloin et al. (2008) similarly outline four sets of trust determining factors including care and empathy, competence and expertise, dedication and commitment and honesty and openness. In a food risk governance context, De Jonge et al. (2008) simplify this to three factors of openness, care and competence. Indeed, utilising this framework, De Jonge et al. (2008) found that food manufacturers represent the most influential actors determining consumer confidence in the food chain, with a high level of trust in manufacturers corresponding with a heightened trust in food safety. Unlike Siegrist (2000), and similar to Berg (2004), De Jonge et al. (2008) thus conceive trust to be a multi-dimensional concept, although they also argue that care represents the most important trust dimension. Exerting the most significant influence on consumer confidence, food safety actors should thus strive to communicate that public health and well-being are top priorities if they wish to increase public trust levels. However, De Jonge et al. (2008) also state that different actors interact differently with such trust dimensions, with each specific interaction having a unique impact on consumer confidence. For example, the competence of government sources was not found to have a positive relationship with trust but openness was considered very important. By comparison, competence of manufacturers is more important to consumers than their openness. As such, De Jonge et al. (2008) conclude that food chain actors need to pay attention to the trust dimension that is most relevant to them to improve future food risk communications and consumer confidence.

Elsewhere, utilising case studies of Belgium, Britain and Norway, Berg (2004) explores the extent to which food scandals affect consumer confidence in food safety. These countries were chosen given their unique food crisis experiences – dioxin scares dominate Belgium's history, the BSE crisis had devastating impacts in Britain while Norway largely remains a spectator to such major food risk events. Overall, the greatest differences in trust levels were unexpectedly found to exist between Norway and Britain on the one hand and Belgium on the other (Berg, 2004). Intuitively, Britain and Belgium were expected to demonstrate more similar trusting attitudes (having both experienced crises) with Norway remaining distinct (as it experienced no major food scandals). However, Berg (2004) explains this result though the introduction of temporal considerations. The dioxin scandal had only just occurred in Belgium at the time of research, therefore the incident was evidently very fresh in people's memories. By

comparison, the BSE crisis occurred a couple of years previously in Britain. Therefore, Berg (2004, p31) hypothesises that, just after a crisis, a “*risk-reducing mechanism*” operates whereby national food scandals lead to increased levels of cautious food safety behaviour and, in turn, a greater proportion of sceptical, mistrusting consumers. However, being sceptical requires effort, therefore as time progresses a “*complexity-reducing mechanism*” operates whereby consumers view the food system as too complex for their consideration and input and so tend to trust food chain actors again (Berg, 2004, p31).

In some later work, Berg et al. (2005) examine the impact of differing levels of trust in food governing institutions on public confidence in food safety in Norway, Denmark and St. Petersburg, Russia. Russians were found to have the lowest level of food safety confidence, Norwegians the highest with Danish consumers expressing levels in between. These results correspond with the varying institutional settings of each country. For example, the Russian food safety system is reported to be dominated by a disjointed and uncoordinated group of government bodies, compared to the more efficient, transparent and coordinated food governance systems present in the other two EU countries. Moreover, the occurrence of major national food scandals, the presentation of these scandals in the media, national distribution of income and the economic orientation of respective food industries are also considered by Berg et al. (2005) to impact on consumer trust levels. For example, Norway has not experienced any major domestic food crises compared to Denmark where Salmonella scares dominated the 1990s and Russia where media attention regarding harmful ingredients, stale food and infringement of sanitary requirements is ongoing. Therefore, overall, Berg et al. (2005, p124) conclude that “*system trust*” (trust in the market and the state) and “*relational trust*” (trust in direct personal contacts) are important in understanding variances in consumer confidence between countries. This points to a need to thus explore institutional conditions (market and state structures) when analysing consumer trust in food safety at national scales.

Public trust in risk communicators represents another area of interest for many academics including Frewer (2004), Hampel (2006), McGloin et al. (2008), Dean and Shepherd (2007) and Liu et al. (2011). Without trust in the risk communicator, risk communication is doomed to fail according to Hampel (2006). Indeed, for Liu et al. (2011) the source of a crisis response significantly moderates public acceptance of the message, regardless of the communications medium utilised. On this, Frewer (2004) and Dean and Shepherd (2007) argue that if information is provided by a distrusted source that appears to be promoting its own vested interest (usually a perception

associated with industry officials and government bodies), it will be disregarded by the public. Thus, as with Griffith et al. (1998), Dean and Shepherd (2007) stress that the background of the risk communicator is important in determining the trust and effectiveness of a risk message (particularly regarding GM foods). As a potential solution to this, Dean and Shepherd (2007) suggest the collaboration of government agencies with other more trusted stakeholders (including environmental and consumer organisations) to heighten trust in governmental risk communications.

Overall, as highlighted throughout this section, an understanding of current conceptualisations of risk is of upmost importance in any analysis of risk governance. In particular, the arena of food risk governance demands that risk perceptions and communications are explored given the significant impact these areas have on food risk management processes and public trust in the food chain. To further understand food risk governance in Ireland, other conceptual frameworks are now considered. As suggested in Section 2.4.1 above, this includes consideration of more differentiated theoretical models outside of Beck's (1992) risk society thesis to understand risk and its management in society. This includes, for example, exploring institutional power relations given the significant influence competing interests can have on risk definitions and governance strategies (Giddens, 1999; Ekberg, 2007) and drawing on Foucauldian principles of governmentality, following Dean's (1999) contention regarding the impact of assemblages of governing practices on risk understandings. Section 2.5 fulfils this need.

2.5 Conceptual Frameworks

Craib (1992, p11), warns of the danger of falling into the "*crossword puzzle trap*" when applying social theory to any context. This involves the forceful, and sometimes unjustified, attempts to fit real life into an abstract theoretical framework. Warning how such an approach reduces the complexity of social life, this can allow accusations of a reductionist approach to be made. Therefore, to avoid this, this literature review explores possibilities for the application of a number of abstract concepts and theories to understand food risk governance in Ireland. Most notably, this involves an analysis of the risk society thesis (as explored in section 2.4.1), conceptualisations of power and governmentality.

2.5.1 Theories of power and influence

Similar to shifts in the management of other environmental arenas (outlined in Section 2.3), it has been argued that food risk management has recently witnessed a dispersal of governing power and a reorganisation of responsibilities amongst government, industry and civil society bodies across a variety of scales (Ansell and Vogel, 2006; Holm and Halkier, 2009). However, despite these significant shifts in governing arrangements, little work has been conducted assessing the power relations that have emerged within and between these new structures. This research seeks to achieve this in the context of the FSAI and broader food risk governance frameworks in Ireland.

According to Haugaard and Ryan (2007, p194) "*power is not one single entity with a specific essence*", but rather has multiple manifestations in social life. A need thus exists to examine the different types of power that exist to govern life. According to Lukes (2005, p69) and Haugaard and Ryan (2007), power can be viewed as a consensual matter and desirable phenomenon (empowering people to accomplish certain tasks; 'power to'), but also as a matter that creates conflict (particularly when power is exercised 'over' others and questions of legitimacy, domination and resistance arise). Thus, while authority based upon legitimacy and consent represents the most effective source of power, forms of "*coercive power*" (Haugaard and Ryan, 2007, p196) also exist to enable authority to be exercised. Predicated "*upon the threat of deprivation or punishment*" (including fines and imprisonment) (Haugaard and Ryan, 2007, p196), constraint and compliance represent characteristic features of this latter form of power (Lukes, 2005).

According to Lukes (2005), 'power over' can be exercised in numerous ways including through methods of domination, subordination, control, subjugation, acquiescence, conformism and docility. Nevertheless, exercising 'power over' can also maximise the 'power to' of actors, in terms of achieving specific tasks. Thus, according to Lukes (2005), not all forms of 'power over' represent forms of domination working against the interests of the subject. The contested example of seatbelt wearing enforced by paternalism is drawn upon to illustrate this point, seen to potentially be against a child's interests but averts harm in the long-term (albeit also depending on the severity of the risk involved). By comparison, Haugaard and Ryan (2007) contend that such beneficent power can only exist if subjects comply, further arguing that actors should accept 'power over' if they gain 'power to'. Nevertheless, the legitimacy of power can be called into question in such contexts. For example, drawing on state

attempts to 'settle' the travelling community in Ireland, Haugaard and Ryan (2007, p196) outline how this type of power brings resistance from the travelling community who deem it illegitimate on the basis of "cultural genocide". Meanwhile, people in the settled community may perceive such policies as a benevolent gesture in terms of nation-building and granting full citizenship to Travellers. Thus, the legitimacy of power can vary at different scales, with Haugaard and Ryan (2007) believing that some actors will always resist it.

As a result, when assessing power, Lukes (2005, p73) stresses that it must be viewed and measured as a "capacity" to bring about a certain outcome. In an attempt to simplify power assessments, Lukes (2005, p79) created the following table (reproduced as Table 5). Here, the "issue-scope of power" (the number of issues an agency can determine the outcome over) and "the contextual range of power" (the conditions under which an agency can exercise power including regarding time, resources, place and context) are considered (Lukes, 2005, p74-75). Further, the "relations between power and intention" (p76) (the ability to produce intended effects and be trusted to bring about desired consequences) and the level of power activity (whereby it is acknowledged that failure to act can also bring about powerful effects⁴) form additional assessment considerations.

Issue Scope	Contextual Range	Intentionality	Activity
Single-issue	Context-bound	Intended consequences	Active exercise
Multi-issue	Context-transcending	Unintended consequences	Inactive enjoyment

Table 5 Assessing Power (Lukes, 2005, p79)

Referring to the measurements outlined in Table 5, Lukes (2005, p79) thus playfully questions:

"Is my power not increased to the extent that I can do so over a variety of issues, in a range of different circumstances, generating significant unintended consequences and without having to lift a finger?"

⁴ Forms of inactive power are also recognised by Beck (2008) when considering the power of multinational corporations in the global age, whereby the threat of not investing exerts significant consequences, influence and power over nation states.

For an actor to be powerful, they must be therefore able to achieve everything in the top row of Table 5, with power increasing if they can accomplish tasks of the second row. Utilising this framework, agents power can be compared (Lukes, 2005). For example, they may be working on the same range of issues but one actor may be able to exert influence under broader circumstances, bring about more unintended consequences and/or involve less cost. However, this task becomes more complicated according to Lukes (2005) when comparing power over different issues. Here, the “*significance of outcomes*” the agency is capable of bringing about need to be compared (Lukes, 2005, p80). Such significance can be measured subjectively by determining what is more important in people’s lives. Overt preferences (for example, identified through voting patterns or market behaviour) and covert, less obvious preferences (observed through people’s choice behaviour or inferred from what they say) can be measured as part of this (Lukes, 2005). Linkages to well-being and human welfare can also determine what people need to satisfactorily live their lives (for example, health, shelter, nourishment and personal security), with conditions that damage health, for example, inferred to be against interests. Nevertheless, value judgments inevitably come into play in several of these assessment contexts, hampering the objectivity of such measurements of power.

Understanding power is essential to understanding the food risk governance arena. A complex web of governance exists to manage food risk, with power relations inevitably playing a central and significant role in determining food safety policy outcomes and FSA performance and impact. Furthering this understanding of power, the works of Michel Foucault are discussed in the following section. Representing an extremely influential writer concerning the links between power and knowledge in particular, Foucault’s preoccupations with the institutions, structural relationships, techniques and strategies of power are especially relevant to understanding food risk governance. This is in keeping with Dean (1999) who proposes a differentiated theoretical model that analyses risk with respect to modern forms of Foucauldian governmentality (that is, connected with the assemblage of governing technologies and practices that seek to make risk calculable and therefore, manageable). As such, Foucault’s analysis of disciplinary forms and panoptic structures of power may be useful to understand the potential shaping influence of expert FSAs that seek to define risk and influence a plethora of public and private individuals (subjects and populations) in the food risk landscape.

2.5.2 Governmentality and the works of Michel Foucault

A French philosopher, historian and social theorist, it is generally accepted that two key ideas form the core of Foucault's work: the archaeology of knowledge and the genealogy of power (Ritzer and Goodman, 2003). Linking with a focus on discourse (a popular unit of analysis within the environmental field according to Hajer and Versteeg (2005)), the former is preoccupied with searching for a general system of rules for the formation of statements. This includes analyses of the spoken and written word. Seeking to divide and describe discourse, this type of analysis does not seek to fully understand or explain discourse origins but rather establish patterns and distinguish what is most important (Ritzer and Goodman, 2003). By comparison, Foucault's genealogy of power focuses on the inextricable links between power and knowledge. Concerned with how people govern themselves and others through the production of knowledge, Foucault was specifically preoccupied with how knowledge gives birth to technologies that exert power.

Of particular interest to Foucault (1977), was the development and structure of the panopticon. Designed by eighteenth century English philosopher Jeremy Bentham, this watchtower-like structure in prison systems enables officer observation of inmates without them necessarily knowing if they are being watched. Constituting a tremendous source of power, the mere presence of this looming structure is thus believed to have the potential to constrain inmates' behaviour for fear that they may be seen by officials. In this way, panoptic power is ideally inactive (Lukes, 2005; Beck, 2008), perfected when its actual exercise is unnecessary (Foucault, 1977). Emphasising that the panopticon represents "*a mechanism of power reduced to its ideal form*", Foucault (1977, p205) nonetheless extends this concept beyond prison walls, arguing that the panopticon could eventually form the basis for a new type of society – "*a disciplinary society*" (p216). Here, all aspects of society could become part of a field of perception and thus an object of discipline. However, Foucault (1977) also argues that this type of surveillance will not apply to all aspects of society uniformly. Rather, it will 'swarm' through society affecting major institutions and aspects of life at different times. Evidence of this disciplinary society has started to materialise in certain contexts. For example, marking the increased surveillance of individuals through life, Friedman and Hechter (1988, p202) state that:

"The modal individual will find his or her actions checked from birth to death by familial and school rules; laws and ordinances; firm policies; churches, synagogues and mosques; and hospitals and funeral parlors"

Speaking of the socialisation and disciplinary effect of schools, Haugaard and Ryan (2007) similarly explore how behaviours and norms can be instilled in students until they become automatic and no longer need to be enforced by means of coercion. Echoing Foucault (1977), Haugaard and Ryan (2007) characterise the school as both a building and mode of inspection through which individual and group behaviour is shaped through processes of examination, observation and ranking. "*Departures from the norm*" (Haugaard and Ryan, 2007, p198) are criticised, disciplined and punished in this context, including crimes of time (lateness, absence), activity (negligence, lack of zeal), behaviour (disobedience) and/or speech (chatting) (Foucault, 1977).

Elsewhere, much scholarly work has been conducted outlining the computer as a modern day panopticon. Providing officials with virtually unlimited surveillance capacity over subordinates, the computer allows the invisible monitoring of personal details to take place, including for example, through government databases (Lyon, 1993). Other aspects of the panopticon have also expanded beyond the walls of institutions, which serve to monitor society, including CCTV cameras and electronic tagging (Lyon, 1993). Meanwhile, Timmons (2003, p143) argues that the call centre serves as a good example of a modern day panopticon where:

"Almost every aspect of the working lives of the employees is made 'visible' via new technology, and can be monitored and 'corrected'"

However, anything beyond these specific examples, as in the form of a whole societal panopticon, is unrealistic for many academics including Giddens (1985), Bogard (1991), Lyon (1993) and Timmons (2003). For example, Giddens (1985) warns that this would be taking Foucault's ideas a step too far, while Bogard (1991) argues that while these ideas of disciplinary power were visible in 19th century structures, they may not be applicable in subsequent centuries. Thus, following Foucault's (1977) prediction of the disciplinary society as 'swarming' through society and contention that the panopticon represents an idealised form of disciplinary practice, it should be acknowledged that while panoptic power is extensive in the modern world, it is not (as of yet) all-pervasive (Timmons, 2003). For this reason, Lukes (2005) criticises Foucault for what he deems to be exaggerated idealistic portrayals, contending that, although influential, Foucault has failed to analyse how modern forms of power actually succeed (or fail in) securing compliance. Rather, for Lukes (2005) other more subtle forms of securing compliance of the willing are explored more accurately through the work of Bartky (1990) and Donzelot (1997). For example, the former examines the presence of "*an inspecting gaze*" (citing Foucault (1980, p155)) influencing the appearance of some

women, reducing them to inmates of a panopticon that ensures they self-police their make-up, clothing and weight. Creating a politics of appearance and utilised to understand eating disorders, no need for violence exists to induce this state; a gaze will merely suffice (in Lukes (2005)). Meanwhile, Donzelot (1997) explores the policing or regulation of families, viewing this entity as one that is both governed and governing. It is governed from the outside, for example, by common law and the economy, and is governing from within as parents seek to socialise children and mothers civilise fathers (in Lukes (2005)). Through these examples, Lukes (2005) highlights how individuals can act as their own over-seers, being enlisted in wider patterns of normative control.

Finally, it is argued that Foucault's most well-renowned concept, governmentality, has been hugely influential in re-theorising the links between power, resistance, domination and regulation. Here, Foucault's primary concerns centre on the way in which bodies are regulated, the self is formed and conduct is governed with a focus on all practices and actors that regulate conduct, not just government or state rule (Ritzer and Goodman, 2003). Combining "*techniques of power/domination (by which regimes of power shape and control people's actions) and techniques of the self (by which people constitute themselves as subjects)*" (Ristovski-Slijepcevic et al., 2010, p468), governmentality takes as its starting point that political power can define the extent to which one man can determine another's conduct. Here, techniques of government are conceived to operate, including an ensemble of centralised and decentralised institutions, tactics and procedures that exercise power over society and regulate conduct (Foucault, 2007). Underpinning the formation of the modern state, governmentality thus has:

"population as its target, political economy as its major form of knowledge, and apparatuses of security as its essential technical instrument."

(Foucault, 2007, p108)

For Hajer and Versteeg (2005, p180) governmentality concepts are especially relevant in understanding discourse and power in environmental politics given that this area deals "*with issues of security, techniques to control the population and new forms of knowledge*". According to the authors, such concepts aid in understanding the "*modern deployment of power*" in environmental fields, linking with the creation of new governmental agencies to manage the environment, "*the emergence of new instrumental knowledge and the diffusion of power effects over society as a whole*" (p180). Further, demonstrating the inextricable intertwining of power and knowledge, Hajer and Versteeg (2005) outline the recent empowering of citizens to make individual

choices based on risk information provided by the state in crisis scenarios. Specifically referring to food health and risk, Hajer and Versteeg (2005) outline the utilisation of labelling and web-based information services in this context, marking the increased individualisation of food risk and reflecting elements of Beck's (1992) risk society.

Similarly, Coveney (1998) reports on the importance of Foucauldian governmentality concepts in understanding the promotion of healthy eating and nutrition amongst populations. Here, dietary health promotion is conceived to produce and choose subjects who then become responsible for self-regulating their own food attitudes, desires and conduct. For Coveney (1998), this is also in keeping with Foucauldian assertions that power can be transformative and positive. More recently, Ristovski-Slijepcevic et al. (2010) also applies governmentality concepts to understand the governing of family eating practices that have emerged in Canada to conform to standardised nutritional advice. Echoing Lemke (2001), governing in this sense is deemed to have been accomplished through the development of rationalities based on the knowledge of 'experts' that then "*disperse in capillary or net-like form*" to guide dietary conduct (Ristovski-Slijepcevic et al., 2010, p468). Leading to the construction of a 'good mother' image at the familial scale, a variety of mothers are reported to assume responsibility to guide family eating practices through processes of normalisation, control and surveillance.

Thus, overall, for Foucault (1977) disciplinary power represents both a repressing and producing force that serves to simultaneously produce subjects and normalise them. Further defining Foucauldian discipline as the imposition of "*a form of conduct on a multiplicity of particular individuals*" (Bogard, 1991, p9), such governmentality perspectives may also be useful in understanding contemporary food risk governance. Indeed, FSAs have the potential to impact on food industry stakeholders and publics alike, instilling good food safety behaviour, normalising food handling actions and (re)producing safe food providers to enable individuals to flourish as productive economic units in society. After all, as Ristovski-Slijepcevic et al. (2010, p468) contend in a dietary governmentality context (echoing Coveney (1998) and Lemke (2001)):

"Through political and administrative structures of the State, rationalities are developed, promoted and used to normalize certain practices through which people can constitute themselves as responsible subjects who themselves act against possible risks, fulfil their duties as citizens to sustain the economy and thus alleviate the responsibility of the State"

Further, similar to the socialisation effect of schools explored by Foucault (1977) and Haugaard and Ryan (2007), the FSAI may act as a panoptic watchtower operating in the food industry landscape, searching for and acting upon crimes of time (for example, business negligence of food safety records), behaviour (disobeying food legislation) and activity (safety negligence in kitchens). Forms of coercion and punishment are at the disposal of the FSAI (for example, to close non-compliant food businesses), but the overall aim of recent food safety reforms mirrors socialisation effects to instill good food safety behaviour and impart the responsibility for food safety onto food business operators (FBOs). Moreover, data collection and reporting requirements on behalf of FBOs (for example, through HACCP food safety management documents) represent additional forms of surveillance undertaken by the FSAI and related environmental health officers (EHOs). Furthermore, the FSAI claims to conduct random spot-checks of the food chain through its 'food safety surveillance' activities, further legitimising the application of Foucauldian concepts to understanding this governing authority.

After all, following Dean (1999), the emergence of new forms of governmentality are also noted by Rasborg (2012, p18) with contemporary risk management envisaged to create "*morally responsible subjects' that bear the responsibility for their own life-planning and reflexive risk management*". Progressing from preliminary attributions of risk to scientific and technological development by Beck (1992), risk can thus also be connected with the variety of steering practices that exist today to guide individual risk decisions through imparting specialist and expert knowledge (Dean, 1999). Seeking to make areas of social reality calculable (and thus manageable), the FSAI can be viewed as one such 'expert' within contemporary food risk governing assemblages.

However, as with the conceptual frameworks outlined relating to biosecurity, governance, the risk society and power, an awareness of the influence of a specifically Irish dimension disrupting the direct application of such abstract governmentality conceptualisations is ever present. On this, Tovey and Share (2003) for example, warn that despite global sociological theory aiming to provide interpretations of reality that are somewhat objective, the application of such theories should remain relative to the specific cultural, social and/or institutional contexts to which they are applied. As with other nation states, the nature of modernity experienced in Ireland has been culturally, politically, economically and institutionally specific, resulting in sociologists struggling to explain the Irish experience within a largely imported theoretical framework (Tovey and Share, 2003). For this reason, as with other national analyses, specifically Irish dimensions and influences (such as the unusually dominant role of the state and

religion in Ireland's history, the continued influence of the EU and transnational corporations and the still predominantly rural nature of its society) must be considered in any sociological analysis of Ireland according to the authors.

Similarly, for Crabbé and Leroy (2008), while environmental regulatory strategies may be adopted with effectiveness in mind, their choice of instrumentation strategies and resulting impact will inevitably be influenced by domestic institutional conditions (including the role and position of the state and private investors). The strategy thus adopted may not be the most appropriate in terms of its legitimacy, suitability and acceptability according to Crabbé and Leroy (2008, p8), especially if it has *"been inspired by...the pre-existing organization of the policy domain, rather than by considerations related to effectiveness"*. Indeed, Holm and Halkier (2009) also point to regional variations to explain the varying implementation of food safety governance reform across Europe. The shaping influence of a specific Irish context is thus acknowledged when assessing results from the empirical phases of this research.

2.6 Conclusion

Detailing academic literature pertinent to this research, this chapter provides a conceptual lens through which the study can be viewed. As the reading of literature and research progressed, it became apparent that a single theoretical or conceptual framework was not appropriate for understanding the disparate themes surrounding (and emerging regarding) food risk governance in Ireland. As such, a meta-approach to theoretical review appeared ever appropriate in understanding this research arena. This included recognising a need for biosecurity, governance, power and governmentality insights to frame the institutional case study focus of the FSAI, as well as literature that relates to consumer and lay risk governance experiences. In this latter context, an understanding of risk perceptions, risk communication strategies, trust and risk society ideals was necessary.

Clarifying the research aims and objectives established in Chapter 1, this literature review also identified gaps in existing knowledge bases, proving the worth of conducting a critical analysis of the regulatory frameworks, implementation practices and communication strategies that have been employed to address food risk in Ireland. In sum, this includes topical, methodological, conceptual and practical gaps that warrant further investigation. Concerning topic, for example, although important and insightful work has been undertaken on food risk and its management Europe-wide, these

analyses tend to focus on moments of crisis and fail to assess food risk governance performance. Methodologically, Ireland has also been largely excluded from such research. Indeed, Irish food risk studies to date have tended to focus on public perceptions of specific food risks rather than analysing broader governing frameworks. As a result, this empirical research examines how governance has evolved, performed and been perceived to manage food risk in Ireland. As highlighted in this chapter, the governance of food risk across the EU is in a constant state of flux and dynamism. Numerous opportunities for research and reform thus exist, particularly regarding perceptions of current food risk management practices (Houghton et al., 2008). Indeed, it is imperative that such research is undertaken to fully understand the reported lack of confidence in current food risk governing structures and ensure effective future reform.

Conceptually, gaps also exist in the current literature to further probe the evolution and operational tendencies of alternate risk logics in food risk governance arenas. Drawing on Rasborg (2012, p19) who highlights the importance of exploring the emergence of “*risk logics*” rather than a totalising risk society (Beck, 1992), potential to probe such developments in food risk arenas remains. This includes, for example, assessing the potential development of partial risk society characteristics in Ireland (paying attention to how the FSAI has constructed its scientific identity, levels of stakeholder and public trust in this scientific institution and consumer individualisation of food risk) as well as the prevalence of more flexible and differentiated risk logics (including for example, dimensions of biosecurity and/or governmentality). After all, as highlighted in this chapter, different approaches to defining and understanding risk exist, thus naturally paving the way for alternate risk management approaches also. Compatibilities and conflicts between such alternate risk governance approaches are therefore possible, with potential to explore what logics predominate FSAI actions and broader food risk governance processes in Ireland.

Finally, in terms of practice, increasing political and academic concern with issues of trust in risk management and broader governing structures signals a need to conduct empirical work to identify how publics and stakeholders perceive and exercise trusting relationships with food risk governing institutions such as the FSAI. Given the reported lack of trust in such institutions to date (Cnudde, 2005; Wentholt et al., 2009), this thesis thus aims to extend this line of research with potential to offer useful insights to improve these dimensions in the future. Before progressing to discussing such empirical work and results however, the following chapter reviews the legislative backdrop to food risk debates in Ireland.

Chapter 3 Policy Review

3.1 Introduction

Significant variances in food safety priorities exist amongst public, private and civil society actors, with pervasive questions and conflicts consequently arising regarding who should make food policy decisions and on what basis these decisions are made. As such, food safety governance in Europe has been described as contested by Ansell and Vogel (2006). Moreover, European food safety governance has always been extremely fragmented given the number of diverse national markets that make up the European food market, resulting in the persistence of diverse national food regulatory regimes mirroring differing food cultures and priorities (Bernauer and Caduff, 2006; Holm and Halkier, 2009). Indeed, policy discourse in general is never stable and is capable of altering at particular historical junctures through time (Paul, 2010). The occurrence of major food crises (particularly BSE) in the 1990s represented one such juncture that allowed for a discursive opening and necessity for food governance reform to appear (Ansell and Vogel, 2006; Paul, 2010). Galvanising significant public attention and media scrutiny (Ansell and Vogel, 2006), this provided “*impetus*” for change in food risk management approaches (Houghton et al., 2008, p15). It was obvious that a more coherent and coordinated food safety approach was needed to secure a higher level of consumer protection and effective functioning of the internal EU market. Significant changes to food policy discourse therefore ensued, transforming food safety governance structures, responsibilities, actors and mechanisms within the EU (Holm and Halkier, 2009; Abels and Kobusch, 2010; Paul, 2010).

This policy review outlines the revised framework for governing food risk in Europe. First, Section 3.2 reviews the history of current supranational and national food safety policies and structures. This includes discussion on the types of food law that exist and a comprehensive overview of FSAs established. The purpose of this section is to establish a broader context within which the Irish food risk governance system can be understood. Thereafter, Section 3.3 provides a more specific analysis of the FSA established in Ireland, including discussion of its inception, functions and organisation. Next, Section 3.4 focuses on one biosecuring activity of the FSAI in particular, its food safety surveillance activities. Conducted in non-crisis contexts, chemical, GM foods and labelling surveillance receive particular attention here given the levels of diversity they express regarding everyday food risk in Ireland. Finally, Section 3.5 sums up the ideas

presented in the policy review, clarifying the three doctoral research questions in light of this information.

3.2 Food Safety Policy in European and National Contexts

According to Crabbé and Leroy (2008) there has been significant growth in environmental policies implemented from the global to local scale from the 1970s onwards. Involving joint efforts by government bodies, the private sector, market agencies, civil society and NGOs, three key policy instruments utilised (and often combined) to induce behaviour change include the use of laws and regulations (sticks), economic instruments (carrots) and persuasion/voluntary action (from information provision to propaganda) (Roberts, 2011). Similar instruments are evident in the food safety arena including the existence of legally binding food safety legislation, the threat of closure in cases of non-compliance and ongoing food safety education, media campaigns and information packages. Further, in an environmental planning context, Davies (1999, p311) notes tendencies for policy decisions to be:

“Made by a complex cocktail of administrative rationality (expert judgement), democratic pragmatism (popular participation) and economic rationalism (the market imperative)”

Similarly, food safety policy remains primarily reliant on the *“administrative rationality (expert judgement)”* of a select number of bodies conducting risk assessments, although potential for political and economic influences also remain. Reflective of multilevel governance literature explored in Chapter 2 (Coen and Thatcher, 2008), this includes actors operating from local to international scales, including national governments, the EFSA, the European Commission and the Codex Alimentarius Commission. With aims of protecting consumer health and interests while also guaranteeing the effective functioning of the European single market, numerous food control standards have thus been established in areas such as food hygiene, animal health, nutrition and welfare, plant health and food labelling (Europa, 2010). Guided by international documents, legislation has also been developed at supranational scales for the management of particular food risks (for example, genetically modified organisms (GMOs), chemical residues and BSE). In general, this EU food law takes one of a number of forms outlined in Table 6 below:

Type of Law	Implications
EU Regulations	Regulations are directly applicable and binding in all Member States once they are passed at the EU level (either jointly by the European Council and Parliament, or by the Commission alone).
EU Directives	Directives are binding in all Member States as to the objectives to be achieved within a specified time period. However, national authorities are free to decide on the method used to achieve the objectives. Directives are often passed to harmonise legislation across the EU, making them particularly common in matters affecting the European single market.
EU Decisions	EU Decisions relate to specific cases and parties. They are issued by the European Commission and are binding in their entirety (both in terms of end objectives and the methods to achieve them).
EU Recommendations and Opinions	Recommendations and opinions are not directly binding but express the view of the European Council or Commission on the policy of a particular Member State or party. They have political and moral significance and can serve as preliminary requirements to subsequent mandatory rules.
Case Law	Food law can also take the form of EU case law. This can include judgements from the European Court of Justice, for example, in response to referrals and complaints from the Commission, national courts or individuals.

Table 6 Types of Food Law

(Cheftel, 2005; Europa, 2010; FSAI, 2012)

According to FSAI (2012), food law in Ireland dates back to the 1800s. One particularly significant turning point however occurred in 1973 when Ireland became a member of the EU. As a result, most, if not all, of Irish food legislation now derives from policies set at the EU level. This reflects O'Sullivan's (2007, p1) contention that "*Ireland is increasingly governed as much by Brussels as it is by Dublin*" and similar statements by Connaughton (2005) regarding the influence of the EU on environmental policy in Ireland. However, not all autonomy is lost as the negotiation of these laws, along with the responsibility to give legal effect to the decisions made in Brussels, lies with Irish government departments who transpose the laws into Statutory Instruments (FSAI, 2012). Outlining specific rules and enforcement procedures, these often take the form of regulations or orders. This reflects findings by Davies (2005) who warns against underestimating the importance of national governments in developing and shaping

policy in states where weak layers of regional and local government exist (as perceived to be the case concerning waste governance in Ireland). Overall, a vast number of Irish acts, regulations and orders thus exist to govern the food chain in conjunction with a number of EU directives and regulations.

Marking the beginning of the food safety governance reforms, the European Commission issued Green and White Papers on food safety in 1997 and 2000 respectively. These documents identified food safety as a top priority and “*the most important ingredient*” in the food chain. Additionally emphasising the need to establish public confidence in the European food supply, science and controls, these papers put change on the agenda within food producing and governing sectors (Hellebo Rykkja, 2004; Holm and Halkier, 2009). Specifically, the need to trace food and feed ‘from farm to fork’ was introduced while calls for more transparent and effective food risk analysis and policy processes, a clearer defining of food safety responsibilities and pushes for the involvement of consumers in food safety policy making also arose (Holm and Halkier, 2009). These concerns culminated in the adoption of the General Food Law (Regulation (EC) 178/2002) in 2002. This regulation set a framework for the development of a coherent and coordinated approach for food policy making in Europe with aims of protecting human health and ensuring the free movement of food and feed in the EU (Holm and Halkier, 2009).

In addition, as part of the governance reforms, the responsibility for food safety was transferred from the Directorate-General (DG) Agriculture to the newly established DG Health and Consumers (DG Sanco). This shift facilitated the separation of industrial and perceived vested economic interests from consumer interests and health in the arena of food safety governance (Abels and Kobusch, 2010). Regarding defining responsibilities, private food businesses were targeted as the primary holders of responsibility for food safety, with public authorities envisaged to complement and support them in this role. Regulation (EC) 178/2002 also established that any future food risk assessment had to be undertaken by an objective, transparent authority utilising the best available science (Jensen and Sandoe, 2002; Hellebo Rykkja, 2004; Holm and Halkier, 2009). Culminating in the establishment of the EFSA, risk assessment, risk management and risk communication were additionally founded as three interlinked processes that would provide the basis for any food law in the EU (see Table 7). The activities of risk assessment and communication were thereafter assigned to the EFSA, while the European Commission (DG Sanco), Parliament and individual Member States maintain responsibility for food risk management (EFSA, 2010).

<i>Risk Analysis Activity</i>	<i>Detail</i>
Risk Assessment	A scientifically based process consisting of four key steps: hazard identification, hazard characterisation, exposure assessment and risk characterisation. Risk assessment thus determines the presence of a hazard and gathers information on its nature and severity.
Risk Management	Incorporating the weighing of policy alternatives, in consultation with all interested parties, and the selection of appropriate risk prevention and control options (for example, food labelling conditions and post-market monitoring).
Risk Communication	Involving the interactive exchange of risk information and opinions among risk assessors, risk managers, governments, consumers, industry, academics and all other interested parties. Endeavouring to explain risk assessment findings and the basis of risk management decisions, effective risk communication should also include responsive consultation processes.

Table 7 The Risk Analysis Process

(Codex Alimentarius, 2003; Houghton et al., 2008; Wentholt et al., 2009; König, 2010)

In the risk analysis framework, risk assessment is conceived to be an exclusively scientific process followed by the political/administrative process of risk management (Jensen and Sandoe, 2002; Millstone, 2009). Acting as a key source of scientific food advice, risk assessment and communication (Holm and Halkier 2009), the EFSA thus enables the risk managers of the EU to create policy and make effective and timely food risk management decisions. Calls to establish similar national FSAs to coordinate food safety responsibilities at the member state level also emerged within the reforms, particularly given the fragmented nature of national food safety governance at the time (Garcia and Jukes, 2004; Domingues, 2006; Antunovic et al., 2008; Holm and Halkier, 2009). Food safety responsibilities were thus also rearranged at the national scale with several national independent FSA founded. Coordinating these national FSAs, the EFSA promotes communication, cooperation and contact between them through the structure of its 'Advisory Forum'. It is envisaged that this allows national risk assessors and the EFSA to work together to exchange scientific information, pool resources and co-operate on joint projects (FSAI, 2012). Throughout these processes, the EFSA aims to restore public trust and confidence in the European food supply by promising to act in an open and transparent manner when determining and communicating food risk (Jensen and Sandoe, 2002; EFSA, 2012). Such promises

have nonetheless come into contention of late, with questions surrounding the independence of EFSA scientists and board members dominating recent food safety headlines (for example, see Byrne (2011)).

Furthermore, the EFSA coordinates and manages the Rapid Alert System for Food and Feed (RASFF) in the EU. This system allows for the immediate notification of all national FSAs of any food or feed risks to human health, animal health or the environment that have emerged, and measures taken in response (Holm and Halkier, 2009; Alemanna, 2010; Harrington, 2010; EFSA, 2012). Proving to be very successful in the past (for example, in controlling the presence of Chinese melamine contaminated milk powder products in the EU), this system is now being investigated by other nations to be implemented elsewhere (Alemanna, 2010). However, some contestations may arise here in directly applying a democratic EU model to other societies with different political, historical, administrative and value systems. Moreover, other criticisms of the RASFF revolve around the tendency for only certain countries to contribute to it effectively. For example, Petróczi et al. (2010) report that just four countries (Italy, Germany, the UK and Spain) account for almost 60% of all notifications made, raising questions regarding the legitimacy, transparency and accountability of this model.

Nonetheless, at the national level, all member states were encouraged to adopt a similar food control system to that of the EU and establish FSAs similar to the EFSA⁵. However, many variations of national food safety reform resulted. For example, Halkier and Holm (2006) and Abels and Kobusch (2010) observe that while some member states changed the very foundation of their food regulatory systems, others resisted change, preferring to persevere with their established, fragmented food governance structures (or parts thereof). For example, institutional independence from ministerial systems has not been implemented everywhere, while the driving forces and interests behind national food safety reforms also differ (Halkier and Holm, 2006). For instance, the state remains the sole instigator of change in Norway whereas in Italy, market actors predominate (Ferretti and Magaouda, 2004; Terragni, 2006). Thus, despite a common aim of improving food safety governance in Europe, specific changes, and indeed reluctance to change, has been highly dependent upon region-specific material conditions (Halkier and Holm, 2006). Additional variations between national FSAs specifically are discussed in the following section based on an analysis of national FSA websites, establishing legislation and policy documents.

⁵ This influence is reported, for instance across Spain (Garcia and Jukes, 2004; Todt et al., 2007), Portugal (Domingues, 2006), Greece (Varzakas et al., 2006), Croatia (Antunovic et al., 2008) and, most recently, Cyprus (Hadjigeorgiou et al. (2012).

3.2.1 *National Food Safety Authorities: convergence or divergence?*

Representing some typical characteristics of the contested 'hollowed-out' state (Rhodes, 1994; Holiday, 2000; Taylor, 2000), responsibility for the enforcement of food safety legislation has for the most part been transferred from central government ministries to purposively established semi-state agencies (dependent on government for funding but possessing independence of action). This allows the core to focus on policy making rather than implementation. Prior to the establishment of these FSAs, the majority of national food risk governance systems were extremely fragmented with many different actors, institutions, ministries and scales of governance involved. For example, responsibility for food safety in Spain was divided between several government ministries who then delegated tasks to Autonomous Communities (AC) (local level governing structures divided by territory and provinces). Each AC had its own statute with food control then being conducted on the ground by various other bodies (Garcia and Jukes, 2004). This fragmented system of food safety governance reflects the conditions present in most EU countries prior to the food safety reforms of the early twenty-first century.

A need to harmonise the complex network of actors involved in governing food safety was thus essential to rid any gaps or overlaps in food safety responsibilities. It was envisaged that national FSAs would fulfil this task and were therefore established to coordinate and re-administer food safety responsibilities among the existing responsible actors and effectively control national food supplies from 'farm to fork' (as reported across Spain (Garcia and Jukes, 2004), Portugal (Domingues, 2006) Greece (Varzakas et al., 2006), Croatia (Antunovic et al., 2008) and broader European contexts (Holm and Halkier, 2009; Abels and Kobusch, 2010)). However, while the General Food Law established detailed rules for the institutional design of the EFSA, it did not provide any guidelines for the development of these independent national authorities. Reminiscent of the often flexible pathways to achieve legislation and accommodate national differences in EU policy making, different food risk governing structures thus developed in different member states (Abels and Kobusch, 2010). Therefore, while the development of national FSAs has led to some convergence in food safety governance matters, some divergence has also occurred.

Theoretically, these differences can be explained with the aid of Latour's (1996) translation theory. This theory helps explain how international representations of what an authority should represent can be strongly edited at the national and local level, first to fit the national context and then, to fit particular departmental or governmental

interests (Pollitt and Talbot, 2004). For Latour (1996), the term 'translation' describes this travel of ideas that are reshaped, reinvented and modified in different contexts. In this way, successful experiences presented by others (such as the establishment of the EFSA) are interpreted differently in local contexts based upon specific interests and problems. For this reason, the ideal of what a FSA should comprise of has been continually transformed across time and space. Utilising this framework, and as explored below, national FSAs can be seen to differ regarding their reasons for establishment, ties to government, organisational structures, functions and challenges faced.

3.2.1.1 Reasons for Development

Following the adoption of the General Food Law, member states were obliged to harmonise their food control systems and legislation with new European standards (Garcia and Jukes, 2004; Domingues, 2006, Todt et al., 2007). This aspect was of particular importance to countries that were seeking to gain accession to the EU at this time, and thus represents one key motivation behind the establishment of some FSAs in Europe (for example, as Antunovic et al. (2008) outlines in the Croatian context). Elsewhere, food safety governance reform was undertaken as a result of internal social unrest and mistrust in existing governance structures, perhaps due to the plethora of food crises experienced in these countries. For example, the Food Standards Agency in the UK (FSA UK) was established to rebuild consumer confidence in the British food supply following the BSE crisis (Hinchliffe, 2000; Hellebo Rykkja, 2004; Holm and Halkier, 2009). To achieve this, the agency provides extensive reassurance that the public will be involved in food safety control and informed of food risks as early as possible (FSA, 2012).

Finally, economic and trade motivations can also culminate in reform and related establishment of FSAs. For example, the Food Standards Australia and New Zealand agency (FSANZ) was established in 1991 with aims of harmonising food standards between Australia and New Zealand to assist trade, remove regulatory barriers and reduce compliance costs for indigenous industries. Moreover, national economic and vested agricultural interests further led to New Zealand establishing its own FSA in July 2007 (NZFSA, 2010). Desires to protect its 'clean green' image (as similarly mooted by Knight et al. (2007) regarding New Zealand's food and agricultural image and Davies (2008) in a waste management context) may also have contributed to this shift to retain a reputation as a supplier of safe food.

3.2.1.2 *Organisational Differences*

Considering the potential to establish a national FSA in Cyprus, Hadjigeorgiou et al. (2012) outlines an ideal structure for national FSAs based on existing structures across Europe. For the authors, this includes, amongst other requirements, the existence of a management board, a chief executive officer (CEO), an advisory committee, a separate risk assessment office and a variety of multidisciplinary and speciality teams. From an overview of national FSAs currently in existence in Europe, most were indeed found to possess a CEO, management board, an advisory scientific committee and subcommittees, some form of food safety consultative council and separate administrative divisions. What was missing from the majority however was the structure of a separate risk assessment office. This is unsurprising given the tendency for most FSAs to hold responsibility for risk management and communication rather than food risk assessment.

Nonetheless, some variances also exist between national FSAs. For example, the number and areas of expertise of the scientific subcommittees vary across Europe, perhaps reflective of differing national priorities and concerns. For example, the FSAI has five sub-committees, Greece has seven while Croatia has eight (EFET, 2010; FSAI, 2010; HAH, 2010). Meanwhile, the FSA UK had 38 independent committees, working groups and forums advising it on different food issues in 2010 (FSA, 2012). Additional committees are also operational within other authorities assessed. For example, the FSA in Spain possesses a 'Consulting Board' as well as an 'Institutional Commission' in addition to the typical FSA structure (Garcia and Jukes, 2004). Forming what appear to represent additional accountability lines, the 'Consulting Board' assesses decisions and action taken by the management board of the FSA, while the 'Institutional Commission' takes responsibility for coordinating existing public administrations in Spain.

Funding for national FSAs also varies across Europe. For example, the FSAI receives funding from one source only, the Ministry for Health and Children (FSAI, 2012), whereas the Spanish FSA receives funding from a number of sources including the general state budget, community funds, subsidies from public organisations, taxes and other public money (Garcia and Jukes, 2004). Meanwhile, the Croatian Food Agency receives funding and support from the European Commission, the World Bank and the EU 'Community Assistance' programme (FAO, 2006; HAH, 2010). Finally, some FSAs appear to possess more power and control than others. For example, the FSA UK oversees proceedings of FSAs in Wales, Northern Ireland and Scotland as well as smaller regional units in England. In 2010, the agency also held responsibility for the

'Meat Hygiene Service' (a separate agency established in 1995 to ensure that fresh meat premises comply with EU food hygiene standards).

3.2.1.3 *Ties to Government*

National FSAs also differ in terms of their relationship to their respective governments. Most claim that they are independent bodies working at 'arm's length' from government yet, contradictorily, the majority receive funding from governmental sources and are also accountable to government departments and ministries. However, the ministries to which these authorities are accountable to varies, with a distinct divide existing between those answerable to health departments (as is the case for the FSAs of Ireland, the UK and Spain) and those to agriculture (seen in Greece, Croatia and Norway). This division reflects the ongoing debate within food safety governance concerning the separation of economic and industrial interests from public health and consumer concerns (Hellebo Rykkja, 2004). Indeed, Hadjigeorgiou et al. (2012) report that only three European national FSAs are accountable to relevant Ministries of Health (out of a total of 22 that have reformed), suggesting clear preferences for agricultural department accountability. This may raise questions regarding the independence, economic bias, interests and motivations of national FSAs Europe-wide.

Meanwhile, what government party is in power can also threaten the existence of FSAs with some political parties overtly opposed to them. For example, in July 2009, David Cameron promised millions of pounds in savings by reducing the number of, and reorganising, quangos (quasi autonomous non-government organisations) in the UK, including the FSA (The Guardian, 2009). Representing a contested issue at the time, the Labour party believed that the FSA UK should continue in "*its role as architect of diet and nutrition policy*" but that it should also extend its remit to include sustainability considerations (Montague-Jones, 2010). On appointment of David Cameron as Prime Minister and the ascension of Conservatives to power however, the FSA UK was subsequently reorganised along these former lines resulting in a significant redefining of its roles in 2010.

Finally, some FSAs possess a much stronger influence in policymaking and as such, work much closer with government than others. For example, the FSANZ, similar to the EFSA, conducts extensive food risk assessments but with one key difference. The EFSA must pass this information onto the risk management bodies of Europe for policy to be made, whereas the FSANZ has the power to use their results to develop food policy standards of their own, with advice from a Ministerial Council. Therefore,

operating as a supranational body, the FSANZ can be regarded to have much more political power than the majority of FSAs in Europe, including the EFSA.

3.2.1.4 Functional Differences

Variances also exist regarding the functions of national FSAs, particularly in relation to the activities of risk assessment, risk management and risk communication (Abels and Kobusch, 2010). Some FSAs, including in Ireland and the UK, place an emphasis on communicating risk to the public (FSA, 2012; FSAI, 2012), while others, such as the FSA in Greece, do not list risk communication as a function of their establishment (EFET, 2010). Similarly, most play risk management roles, while others (like the Croatian Food Agency), possess no risk management component, having no responsibility for enforcing food law at the local level (HAH, 2010). The exercising of the three risk analysis activities and extent of separation of risk management from risk assessment as recommended by Regulation (EC) 178/2002 thus varies considerably at the national FSA level. Indeed, Abels and Kobusch (2010) outline the persistence of three different FSA models in Europe on this matter. While questions remain regarding how integration is achieved in countries with no established agency (yet featured in their results), these results are summarised in Table 8 below:

Model	Bi-institutional or Separate Model	Structurally More integrated Model	Fragmented (chaotic) Model
Description	Risk assessment and risk management responsibilities are separated between institutions.	Usually functionally-divided risk assessment and risk management responsibilities.	Fragmented, partly integrated and overlapping risk assessment and management responsibilities.
Countries where this model exists	EU, Austria, Denmark, Finland, France, Germany, Hungary (today), Netherlands, Poland, Slovakia	Belgium, Greece, Ireland, Italy, Latvia, Portugal, Romania, Spain, Sweden, UK. Cyprus**, Slovenia*, Czech Republic**, Estonia*, Lithuania*	Bulgaria*, Hungary (until 2007), Malta, Luxembourg

* = first signs of separation; ** = countries with no agency

Table 8 Functional Variances in National Competent Authorities

(Adapted from Abels and Kobusch (2010, p18-19))

Finally, another functional difference between FSAs remains concerning the tools utilised to assess food risk. Most commit to making decisions based on the best scientific advice currently available while others, such as the FSA UK and the FSANZ also acknowledge social factors in decision-making processes. For example, the inclusion of a 'Senior Social Scientist' within the FSANZ structure is envisaged to assist in understanding consumer behaviour and perceptions of food products and management strategies (NZFSA, 2012). Similarly, the FSA UK extended its evidence base to include survey and observation methods to understand consumer attitudes, values and behaviours, particularly in arenas of dietary health. Indeed, the FSA UK established an independent Social Science Research committee to help strengthen the agency's access to social science expertise (FSA, 2012).

3.2.1.5 Challenges

Representing a final element of FSA divergence, different FSAs across Europe are reported to experience different challenges. For example, in Greece and Spain, a lack of resources has created problems in establishing regional offices and funding high quality scientific research. For example, in Greece, it was envisaged that thirteen regional offices would be set up but by 2006, yet only five were established by this date (Varzakas et al, 2006) In 2010, only eight of the planned thirteen offices were in operation (EFET, 2010). Meanwhile, in Spain, Todt et al. (2007) express doubts concerning sufficient resources of the scientific committees to carry out comprehensive risk assessments. Moreover, the fact that Spanish food safety governance reform was induced by European legislative reform (rather than internal societal demand), has led Todt et al. (2007) to believe that Spanish actors are not prepared to assume the roles the new legislation and the Spanish FSA expect of them. This raises additional challenges FSA power, practice and performance.

These examples contrast sharply with the FSA set up in Ireland, where strong government commitment, social demand and plentiful resources are reported to have eased the way for its establishment (Wall, 1999). However, no comprehensive objective review of the FSAI has taken place as of yet, making it difficult to assess whether or not the FSAI has fulfilled its aims unchallenged since its inception. By comparison, in 2005, Baroness Brenda Dean carried out an independent five year review of the FSA UK, considering its consumer awareness, communications, consultation processes and methods of achieving 'openness'. More specific issues such as FSA reactions to EU legislation, food labelling and GM foods were also explored (Dean Review, 2005).

Baroness Dean made 22 recommendations for change in the functioning of the agency, all of which were accepted by the board. These recommendations principally revolved around increasing the openness and transparency of the FSA and improving its communication to increase consumer awareness and trust and improve relationships with stakeholders.

3.2.2 National Food Safety Authorities: additional considerations

Therefore, overall, as evidenced in the previous section, while the establishment of national FSAs brought some harmonisation across member states, evident differences remain between authorities. Questions can thus be raised concerning the comparative structure, roles, motivations, power, performance, impact and induced consumer trust of such authorities at national scales. Indeed, limited research has taken place regarding trust in FSAs specifically, although some assumptions are expressed by academics. For example, Varzakas et al. (2006) argue that Greek people have reacted positively to the establishment of its FSA, rating it as the second most trustworthy public authority in the country. They nonetheless do not purport reasons for this result. Similarly, members of the Croatian Food Agency subjectively report feeling confident that it is becoming the most trusted source of food safety information for Croatian consumers (HAH, 2005). By comparison, public trust in food safety governance in Spain remains relatively low, despite the absence of major food crises in the country of late. Indeed, 75% of Spanish consumers are reported to not be aware of the existence of the European or Spanish FSAs (Todt et al., 2007).

Meanwhile, Hellebo Rykkja (2004) raises concerns over the presence of contradictory aims within the EFSA observing that its first two aims focus on protecting and prioritising public health and consumer interests, whereas its next aim focuses on securing the internal market. For these reasons, Hellebo Rykkja (2004, p137) argues that:

“Here, commercial interests could compromise health aims”

Furthermore, Hellebo Rykkja (2004) perceives absolute independence for EFSA as unattainable given that it has to work closely with national FSAs, the Commission and other EU institutions. This is of particular significance given the emphasis on EFSA independence as key to increasing public trust in its activities. Therefore, overall, Hellebo Rykkja (2004) concludes that in understanding the impact of FSAs, issues of

actual independence, autonomy and neutrality must be explored. For her, the establishment of FSAs worldwide did not necessarily depoliticise and separate risk assessment and risk management. Echoing inevitable value judgements purported to feature in scientific risk assessments by Slovic (1999), decisions about risk are considered inherently subjective, and therefore also political. Further, Hellebo Rykkja (2004) doubts the extent to which FSAs have created stability and credibility in food risk decision making. Therefore, she concludes that perceptions of these food governing institutions, in particular how legitimate, credible and trustworthy they are perceived to be, is a topic worthy of much consideration.

Elsewhere, Frewer and Salter (2002) question the continued insistence on utilising scientific assessments to deal with food risks, particularly given the renowned lack of public trust in this source and the differences that exist between public and expert perceptions and acceptance of risk (highlighted in Chapter 2). Drawing on evidence from the UK BSE crisis, they highlight how the use of scientific advice alone failed to quell public concern. In particular, failure to communicate the uncertainties associated with the scientific data fuelled public negativity towards the regulatory institutions and led to levels of consumer confidence in science plummeting (Frewer and Salter, 2002). The authors therefore call for the inclusion of social scientists in food risk management decisions to ensure that public concerns are acknowledged. In addition, they argue for a move away from elitist forms of governance to more pluralistic forms that involve the inclusion of the public in open debates and political food processes.

Many of these ideas are also echoed by Jensen and Sandoe (2002) who question the EU response of scientific rearmament and the establishment of an 'independent' scientific food authority (the EFSA) to restore consumer confidence in food safety. For them, this response is wholly inadequate given that:

"The present experience is that assurances of the safety of food based on scientific risk assessments often fail to make the public safer"

(Jensen and Sandoe, 2002, p246)

Rather, the authors see a need for the communication of more transparent scientific advice which explicitly acknowledges the normative and factual bases upon which the advice is founded. As with Slovic (1999) and Hellebo Rykkja (2004), the inevitable role played by value judgements also raises concern for Jensen and Sandoe (2002), particularly regarding how scientists decide what represents a risk or an

unwanted consequence, what risks require attention and what methodologies are utilised to assess them. Therefore, to ignore these aspects, to restrain from carrying out ethical reflection on risk assessment processes, to fail to admit uncertainty and to not communicate the values that form the basis of risk assessments, will lead to continued levels of consumer mistrust in food governing structures and institutions according to the authors.

Many of these suggestions for increasing trust in food safety structures are echoed in the new model for improved food risk analysis proposed by the SAFE FOODS research team (for example, including the increased inclusion of the public and stakeholders in risk analysis processed and addition of social considerations in assessments of food risk) (Dreyer et al., 2009; Wentholt et al., 2009; König, 2010). Moreover, wider pushes for the inclusion of social scientists to bridge the gap between science and policy in biosecurity contexts may also encourage a further incorporation of social science in future food risk governance (for example as mooted by Donaldson (2008) and Enticott (2008) regarding the management of farm animal disease). Meanwhile, alternate mechanisms for regulating food safety have also emerged of late, which see the responsibility for food safety and quality being further pushed onto private actors. For example, in the Netherlands, a form of meta-governance has emerged to manage the poultry sector (specifically regarding safeguarding the quality of Dutch eggs). Resulting in the establishment of privately managed governance schemes, public inspections have ceased in some areas (van der Voort, 2010). However, it must be acknowledged that wider research has shown that the public tend to lack trust in private actors (particularly industry) to govern matters of public health. Perceptions of self-interest and economic motivations dominate these concerns (as reported for example by Siegrist (2000), Irish Council for Bioethics (2005) and Dean and Shepherd (2007) in GM contexts and Frewer (2004) in risk communication scenarios). Therefore, doubts may be raised over the effectiveness of this new system of industry self-regulation in wider food chain and national contexts.

In conclusion, national FSAs have rapidly emerged Europe-wide, particularly in the last decade, representing the latest form of food risk governing structure. Some have evolved as a result of societal demand while others have been forced into creation due to wider EU legislative requirements. Aiming to coordinate food safety governance at the national scale, further harmonisation in terms of a pan-European FSA model has not yet materialised. Differences between authorities remain in terms of their

organisational structures, ties to government, the functions they carry out, challenges they face and levels of trust in and awareness of their existence and activities. Thus, all FSAs must work on providing more transparent and publically accessible information to raise awareness and trust. A need also exists for a clearer defining of food safety roles to avoid public confusion and uncertainty and to ensure more effective food risk management.

Therefore, overall it can be argued that while the European food safety reforms represented “*a strong attempt to establish European-wide solutions to the loss of consumer trust in food safety*”, some divergences have also materialised (Holm and Halkier, 2009, p489). Common food legislation is now shared across Europe, however, the exact extent of institutional reform has differed greatly between member states. Drawing on a diverse literature and website base, this perhaps results from differences in specific regional conditions, the degree of internal public unrest, membership status to the EU, different political priorities and varying histories, motivations and resources. Such reasoning is in keeping with literature across national FSA (Wall, 1999; Todt et al., 2007; Antunovic et al., 2008; Holm and Halkier, 2009) and broader food trust contexts (Berg et al., 2005). Further, Hadjigeorgiou et al. (2012) report that 18.5% (5 out of 27) of EU member states have yet to convert and establish national FSAs. Ireland, nonetheless, appeared ahead of the curve in this context, representing the first country to establish a national FSA prior to political pressures from the EU.

3.3 The Food Safety Authority of Ireland (FSAI)

Pre-1999, the governance of food risk in Ireland was fragmented across 48 agencies, with 33 local authorities, 8 health boards and several divisions of government departments having responsibilities for the different sections of the food chain and safety (Wall, 1999). Consequently, like most of Europe, urgent reform was needed regarding the way Ireland managed food risk, particularly given its significant vested economic interest in the success of the food industry for Irish agricultural exports, livelihoods and tourism (Wall, 1999). The FSAI was therefore established under the FSAI Act of 1998 and came into effect on the 1st January 1999. Shifting “*the locus of decision making...to an alternative policy venue*” (Taylor, 2005, p127), its principal function, cited in its establishing legislation and still indicated on its website today, revolves around taking:

“all reasonable steps to ensure that food produced...distributed or marketed in the State, meets the highest standards of food safety and hygiene reasonably available and... complies with food legislation...or where appropriate, with the provisions of generally recognised standards or codes of good practice”

(FSAI, 1998)

From the time of its inception, the Authority aimed to implement an *“imaginative new national policy on food safety”*, one which put consumer health interests first, with multiple references to ‘the interests of public health and consumer protection’ littered throughout its establishing legislation (FSAI, 1998). As such, promoting a discourse and image revolving around ‘protector of the public’, the FSAI was established under the Department of Health (DoH) rather than the Department of Agriculture, Fisheries and Food (DAFF), given the commonly perceived vested industry interests of governmental agricultural departments (Taylor, 1998; Holm and Halkier, 2009). This move made Ireland the first country in Europe to separate the control of food safety from agricultural and trade interests at a national level (Wall, 1999). The FSAI thus represents a semi-state body: it depends on government to issue food safety legislation, receives funding from DoH and is accountable to the Minister for Health but possesses an independence of action in terms of everyday activities, decision-making and communication outputs.

To fulfil its designated consumer protection role and securitisation remit, the principal activity of the FSAI relates to the coordination and enforcement of food safety legislation at national and local scales. This is achieved through the inspection, approval and licensing of FBOs, the sampling and analysis of food and ingredients and the undertaking of legal proceedings against FBOs (serving prohibition, improvement or closure orders as appropriate) (FSAI, 1998). More specific functions of the FSAI, as highlighted on its website, are summarised in Table 9 below. The FSAI also conducts routine surveillance of the Irish food chain in an effort to protect from unpredictable future food risks. Incorporating elements of action, oversight and anticipation, the FSAI thus demonstrates a variety of biosecuring strategies (Bingham and Lavau, 2012; Hinchliffe et al., 2012), operating within the Irish food industry landscape to prevent, identify, trace, control and communicate food risks before and as they occur.

Functions of the FSAI	
1	Prioritising consumer interests in matters of food safety.
2	Providing advice to government ministers, regulators, the food industry and consumers on food safety issues.
3	Ensuring the co-ordinated and flawless delivery of food safety services to an agreed high standard by the various involved state agencies.
4	Setting food standards based on sound science and risk assessments.
5	Working with food industries and businesses to gain their commitment on the production of safe food.
6	Managing food risk with the aid of frontline agencies and the food sector.
7	Communicating food risks to consumers, public health professionals and the food industry.
8	Handling complaints from consumers relating to the Irish food industry.
9	Acting as competent authority for GM and irradiated foods in Ireland, enforcing related regulations and monitoring the Irish market for the presence of such ingredients.
10	Managing the RASFF of the EU on behalf of Ireland and sending out food alerts when necessary.
11	Representing Ireland on matters of food safety in Europe, consulting on and assisting in the development of European food law.
12	Acting as Ireland's 'focal point' for the EFSA, keeping it and its Advisory Forum members informed of Irish risk assessment and scientific developments.

Table 9 Functions of the FSAI

Although possessing a budget of approximately €16.6 million and 77 staff members (Lynch, 2012), the FSAI does not possess its own inspectorate to achieve these functions however, instead utilising the staff of various state agencies through 'service contract' arrangements. As highlighted by Taylor and Millar (2004, p596) service contracts represent the "*regulatory relationships between the FSAI and those charged with inspection duties*" in the Irish food risk governance system. Consequently, the Health Services Executive (and related EHOs), County and City Councils, The Marine Institute, DAFF, The National Standards Authority of Ireland and The Sea Fisheries Protection Authority all remain involved in governing food safety in Ireland. They conduct inspections and enforcement at the local scale, with the FSAI acting as coordinating body among them. Indeed, according to the Food and Agriculture Organisation (FAO), national competent authorities for agriculture, forestry, fisheries, public health and food safety worldwide often contract out "*a range of core biosecurity functions to third parties*" (FAO, 2007, p4). Nonetheless, this structure for Taylor (2003,

p160) has created a “sense of stasis” in the Irish food risk governance context, given that these bodies held these responsibilities previous to the FSAI establishment.

Concerning its internal structure, according to Taylor and Millar (2004), the FSAI possesses a very similar structure to that of the Irish Medicines Board (established in 1995 to restore public confidence in the regulation of medicines following a hepatitis blood scare in Ireland). As such, the FSAI comprises of a ten member board, a chief executive and four administrative divisions (with a fifth division representing Consumer Protection having recently been removed from this structure) (see Figure 1)). Reflecting the definition of a public sector body cited in the Department of the Taoiseach (2007), the FSAI has its board members appointed by the Minister for Health. A Scientific Committee also operates to assist and advise the board on food risk assessments, while five scientific sub-committees exist to inform decisions regarding specific food issues (including, for example, GMOs). In addition, a ‘Food Safety Consultative Council’ (FSCC) operates to act as a “constructive vehicle for consumers and industry to provide input to the agenda of the FSAI” (FSAI, 2012). Causing some controversy and concern at the time of its inception as a result of this formal inclusion of industry interests in the FSAI (Taylor and Millar, 2004), the FSCC persists to the present day. Additional industry fora exist to enable FSAI specific interaction with artisan producers, the food service industry and retailers.

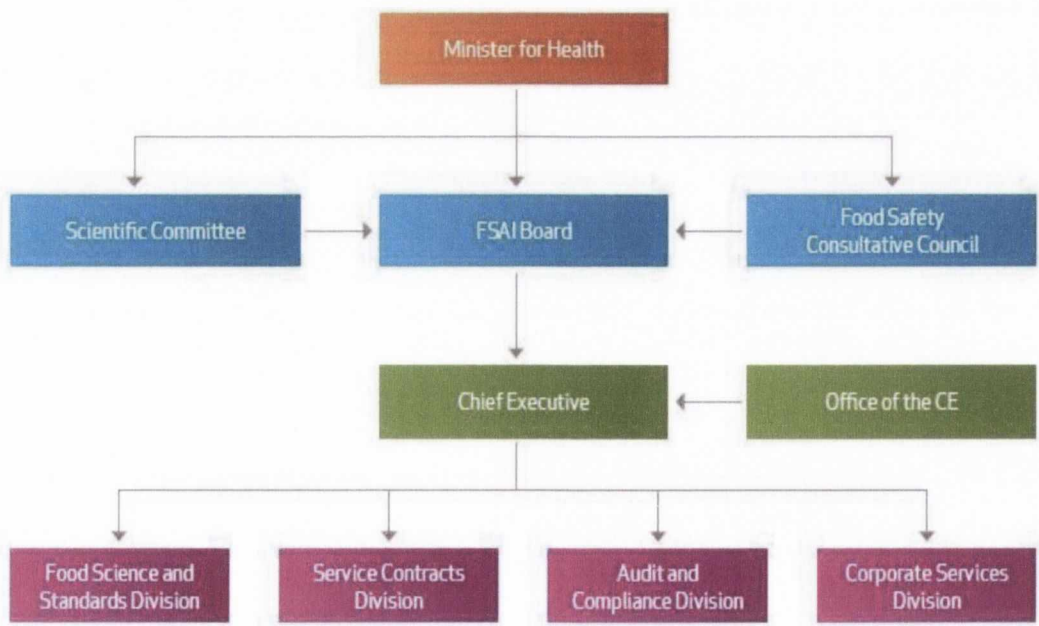


Figure 1 Structure of the FSAI (source: FSAI (2012))

Overall, the FSAI has grown, both in its remit and scale, since its inception in 1999. However, no objective analysis of its activities or impact has been carried out by any third party to date, to the best knowledge of the researcher. For this reason, coupled with the fact that the FSAI has recently celebrated its ten year anniversary, it can be considered an apposite time to assess its impact to date. To further focus the research on a non-crisis context (challenging the tendency of other research to focus on moments of crisis (Dodds, 2012)), and representing a key biosecuring activity of the FSAI, attention will now be paid to its food safety surveillance activities.

3.4 Food Safety Surveillance and the FSAI

According to Hadjigeorgiou et al. (2012) one key role of FSAs established across Europe is to verify the self-control and compliance of FBOs through regular monitoring and surveillance. As such, in an effort to protect public health in Ireland, the FSAI monitors the food supply to ensure that all products produced, marketed and sold in Ireland comply with all relevant food legislation. In keeping with much biosecurity literature to date (for example, see Barker (2009) and Hinchliffe et al. (2012) regarding the strategies employed to control invasive species and disease circulations respectively), various strategies of scientific testing, analysis, data collection and collation form the basis of these monitoring activities coordinated by the FSAI. These activities are carried out in conjunction with the official service contract agencies and their associated laboratories. At the time of empirical research in 2009/2010, food surveillance was reported to be conducted by the FSAI to support food inspection activities, to confirm the authenticity of certain food products and to ensure that food industries comply with the legal limits and restrictions set for contaminants, ingredients and technologies in food production (FSAI, 2010). More recently, mirroring Hadjigeorgiou et al. (2012), FSAI (2012) contends that monitoring by the FSAI enables it to verify that food law requirements are fulfilled by FBOs. A distinction is made between this and surveillance, where an emphasis has been recently placed on the follow-up action possible from surveillance activities:

“Surveillance means conducting a planned sequence of observations or measurements for the purpose of applying appropriate control measures...One of the main objectives of surveillance is to follow-up unsatisfactory results with an investigation and possible enforcement action”
(FSAI, 2012)

In addition, FSAI (2010) contend that the data provided by surveillance activities is utilised in risk assessment and risk management activities, for example, in establishing public health priorities for future control and prevention strategies. Finally, these activities also serve to remove contaminated products from the Irish market and aid in detecting, investigating and preventing potentially hazardous outbreaks (FSAI, 2010).

Predominantly, food safety surveillance by the FSAI consists of the sampling and testing of a variety of food samples (usually taken by EHOs) which are then sent to State-funded food control laboratories for analysis. These samples can be taken at the time of inspection of a food business, to aid in an outbreak investigation, as a result of a food complaint or at random at the retail or wholesale level. The results are communicated back to an enforcement officer (who is reported to be able to take appropriate follow-up action) and the FSAI for use in the construction of a national picture of food control in Ireland that can then be communicated to the European Commission (FSAI, 2010). At the time of research, food safety surveillance was carried out in five key areas as illustrated in Table 10 below:

Surveillance Area	Activities carried out by Irish authorities in conjunction with the FSAI
Microbiological	<ul style="list-style-type: none"> • Includes the microbiological analyses of milk, egg and meat products as well as food of animal origin imported from third countries, bivalve molluscs and shellfish growing waters. • Tests for <i>E-coli</i>, <i>Salmonella</i> and <i>Listeria monocytogenes</i> predominate such analyses.
Chemical	<ul style="list-style-type: none"> • Includes near annual tests for contaminants such as benzene, dioxins, furans and polychlorinated biphenyls (in items such as soft drinks, fishery products, milk and eggs) • Also incorporates sporadic additive testing for artificial colours and sweeteners and investigations examining pesticide residues in foods.
GM Foods	<ul style="list-style-type: none"> • As competent authority for GM food in Ireland, each year the FSAI carries out an assessment of the Irish food supply to ensure that only authorised GM ingredients are on the market and that they are labelled appropriately.
Irradiation	<ul style="list-style-type: none"> • As competent authority for irradiated foods in Ireland, the FSAI also monitors the Irish market to ensure that only foods authorised for irradiation within the EU are on sale and that they are labelled correctly (including regarding herbal supplements, noodles and strawberries in particular).

Labelling	<ul style="list-style-type: none"> • The FSAI also examines the labelling of products to assess their compliance with EU labelling legislation. • Only one such study was detailed on the FSAI website at the time of research (regarding the composition and labelling of chicken breast fillets imported from the Netherlands in 2002). Four studies have since been added dating to 2009, 2010 and 2011 involving the accuracy of nutrition, fish and allergy labelling.
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Table 10 Food Safety Surveillance Activities of the FSAI

(FSAI, 2010; 2012)

Nutrition monitoring and surveillance has since been added to the FSAI list of surveillance activities (as of 2012), and includes two studies relating to trans-fatty acids on the market in 2007 and 2008. Following trends in 2010 however, elements of the empirical research (for example, in focus group question schedules) focused on three of the food safety surveillance activities outlined above: chemicals, GM foods and labelling surveillance. These areas were chosen not only for their relevance to modern Irish society and the increased political, academic and media attention attributed to them, but the diversity they express in terms of histories of regulation, levels of regulation and consumer risk perceptions. For example, a long history of heavy regulation exists regarding chemicals compared to the more recent (but still heavily regulated) GM arena. For purposes of further contrast and comparison the arena of labelling surveillance was chosen, reflective of additional concerns within food arenas regarding effective communications, legal obligations and nutritional concerns (Bernués et al., 2003; Gracia et al., 2007; O'Fallon et al., 2007). Representing a rapidly evolving arena of legislation, multiple trade disputes over what needs to be communicated to consumers (for example, regarding GM) attract more attention to this field. Finally, risk concerns also vary between the case study areas with GM and chemical arenas reportedly dominated by concerns for health and environmental impacts (with the GM arena particularly fuelled by dread and unknown consequences) (Miles and Frewer, 2001) and labelling forming part of recent prioritisations for increased knowledge, transparency, equity and fairness (Cheftel, 2005).

3.4.1 Chemical Surveillance

Chemical contamination of food (deliberately and/or accidentally) has received significant attention in academic and policy circles of late given the threat it poses to

public health (Tent, 1999; Wilcock et al., 2004). Indeed, particular concerns have arisen regarding the existence of undesirable residues including from natural contaminants (for example, mycotoxins that develop naturally in organic foods), agro-chemicals, pesticides, veterinary drugs, growth promoters and/or food packaging (Tent, 1999; Wilcock et al., 2004). Deliberate addition of chemical additives and flavourings has also caused significant controversy largely due to the perceived unnaturalness associated with these components (Tent, 1999). For these reasons, a vast number of policies, directives and regulations have been developed to control, monitor and manage this food risk. For example, food additives are principally governed by Framework Directive 89/107/EEC, which predicates that only authorised additives may be utilised in foodstuffs (FSAI, 2010). Here, a food additive is defined as:

“any substance not normally consumed as a food in itself and not normally used as a characteristic ingredient of food whether or not it has nutritive value”

Prior to authorisation, the EFSA must assess each proposed food additive to confirm its safety. Under Framework Directive 89/107/EEC, a food additive may only be authorised if there is a technological need for its use that cannot be met by any other means, it presents no hazard to consumer health at the level of use proposed and it does not mislead the consumer. A list of approved additives has subsequently been developed which includes certain acids, enzymes, preservatives, firming agents, colours, emulsifiers and sweeteners. In addition, conditions for the use of an additive have been specified which determine the type of foodstuff to which it can be added and the maximum permitted level of use. Most additives may only be used in limited quantities but, where no maximum level is specified, the manufacturer is obliged to use a dose level no higher than is required to have the desired effect (FSAI, 2010).

However, such legislative aspects are not uncontested, with some questions particularly arising in the literature regarding the safety of ‘maximum permitted levels’. For example, for Beck (1992), when scientists determine maximum concentration regulations, he infers this to mean that uncertainty exists over whether the product is safe or not. Indeed, for Beck (1992, p64):

“Acceptable values may indeed prevent the very worst from happening, but they are at the same time ‘blank checks’ to poison nature and mankind a bit”

In this light, Beck (1992) also questions the effect the summation of these 'bits' of toxins could have in their synergy, believing that this issue is largely ignored in political arenas.

In addition to the general legislation for food additives, detailed separate regulations are in place for sweeteners (94/35/EC), colours (94/36/EC) and all other 'miscellaneous' additives (95/2/EC) (FSAI, 2010). Strict purity criteria have been introduced for these three additive areas to ensure that they do not carry any additional chemicals that could prove harmful to consumers. Finally, in terms of the labelling of chemicals, Directive 89/107/EEC and Directive 2001/13/EC state that the presence of additives must be clearly indicated on the product label and must include its category (for example, preservative, colour or acid) and either its name or E number. At the time of empirical work, the European Commission was developing a new framework regulation for additives that integrates the above legislation into one comprehensive regulation. It was envisaged that this would be enforced by December 2010 (FSAI, 2010). As of 2012, this deadline has been pushed to June 2013, raising questions regarding the political commitment to this arena (FSAI, 2012).

In terms of pesticide residues, Regulation (EC) No. 396/2005 sets maximum acceptable limits for the presence of chemical residues (*"including active substances, metabolites and/or breakdown or reaction products of active substances"*) in or on foods. Here, particular attention is paid to residues derived from *"use in plant protection, in veterinary medicine and as a biocide"* (FSAI, 2010). Setting harmonised provisions for the European Community, maximum residue levels are defined as the upper legal level of concentration of a residue, based on good agricultural practice and the lowest exposure necessary to protect vulnerable consumers (FSAI, 2010). Meanwhile, Council Directive 96/23/EC establishes controls for residues found in live animals and animal products. As part of this Directive, each Member State (and any third country exporting products to the EU) is obliged to submit annual residue monitoring plans to the European Commission. Member States are further obliged to partake in a co-ordinated European Community monitoring programme each year to ensure compliance with maximum levels of pesticide residues in cereals, plants, fruits and vegetables. With an objective of collecting data on pesticide dietary exposure, this task is undertaken by DAFF through the Pesticide Control Service in Ireland (FSAI, 2010).

3.4.2 GM Foods Surveillance

In terms of GM foods surveillance, a vast amount of legislation can be seen to have developed in the past two decades to govern this food risk. Such legislation aims to ensure that GMOs and GM food grown, marketed and imported into the EU meet the highest standards of environmental, human and animal health safety, while at the same time harmonising regulations to safeguard the functioning of the internal market (FSAI, 2012). Regarding GMO regulation in Ireland, a fragmented system of governance exists, spanning numerous governing bodies (including the Environmental Protection Agency (EPA), the Department of the Environment, DAFF, DoH and the Irish Medicines Board). Each body holds different responsibilities for GMO regulation including, for example, the development of policy (DoH), the protection of the environment when cultivating or trialling GM crops (EPA) and GM seed regulation (DAFF and EPA).

Corresponding legislation governing GMOs is also very fragmented. Complex checks and approval systems exist for every GMO on (or to be introduced to) the European market, with further complications arising from the power held by each Member State to restrict the presence of GMOs within their own borders (Food and Water Europe, 2008). Thus, significant inconsistencies have arisen between Member States in GM law implementation. Moreover, the political arena of GMOs is constantly evolving, further complicating the governance of this potential food risk. On this, Morris (2010) identifies five phases in the history of EU GM regulation ranging from the non-legislation years prior to 1986 to a period of legislative reorganisation (1998 to date). Huge inconsistencies remain within GM legislative frameworks despite these reforms according to Morris (2010), partly due to the varying definitions of the 'precautionary principle' utilised across EU member states to justify the exclusion of GMOs within their borders (with seventeen alternate versions suggested to exist). In addition, prior to 2001, legislation made it very difficult for any actor to secure the release or importation of GMOs within the EU. In fact, from 1998, a *de facto* moratorium is argued to have existed preventing any new strains of GM from entering the EU, although the exact extent of this moratorium is contested (see, for example, Lieberman and Gray (2006)).

In general, the key directives regulating GMOs centre on the contained use of GMOs (Council Directive 98/81/EC), the deliberate release into the environment of GMOs (Directive 2008/27/EC), GM food and feed (Regulation 1829/2003) and the traceability and labelling of GMOs (Regulation 1830/2003). Ultimately, however, the enforcement and interpretation of GMO law lies with national member state authorities. Many member states have subsequently defeated the European Commission's

attempts to become pro-GM, by upholding national GM bans (including Austria, Hungary, Poland and France) and/or creating GMO-free zones (Food and Water Europe, 2008). Regarding the regulation of GM food in Ireland, it is within the remit of the FSAI to enforce GM food regulations set by DoH (FSAI, 2010). As part of its food safety surveillance activities, the FSAI also monitors the Irish market to ensure that only authorised GM ingredients are present and that they are labelled correctly. Regulation 1829/2003 establishes EU procedures for this authorisation process. For a GM strain to be approved it must thus not have adverse effects on human health, animal health or the environment, it must not be nutritionally disadvantageous compared to the food which it is intended to replace and it must not mislead the consumer (FSAI, 2010).

Regulation 1829/2003 sets further specific guidelines regarding communicating that a food contains or consists of GMOs or ingredients produced from GMOs. However, some loopholes exist. For example, if it can be proven that a GM presence of less than 0.9% of the food's ingredients considered individually or collectively is technically unavoidable, no GM label is required (FSAI, 2010). Similarly, current labelling legislation means that meat, dairy and eggs from animals raised on GM feed do not have to be labelled as such (FoE, 2010). In order to compensate for these loopholes, some member states are introducing voluntary GM-free labels (including, for example, France, Germany, Italy and Austria). In 2009, the Irish government also announced a similar scheme with the proposed label highlighted in Image 1. However, reflecting the significant power still attributed to national governing parties, the fact that the Green Party (those that drove the 2009 suggestion) is no longer in government coalition, it seems unlikely that this label will come to fruition. Indeed, in February 2011, a decision taken by Minister for Agriculture, Brendan Smith to reverse Ireland's stance on abstaining from allowing GM foods into the EU, sparked outrage in media, public and environmental NGO circles (for example, see Environmental Pillar (2011)). More recently, decisions to allow GM potato trials in Ireland have also raised concern amongst these groups (Irish Independent, 2012). Such decisions come in spite of the largely negative public attitudes towards purchasing GM food regularly reported across the EU (for example, see O'Fallon et al. (2007) where 73% of 16,078 participants from 15 member states reported to be less likely to purchase a GM-labelled food product (Eurobarometer, 2010)).



Image 1 Irish voluntary GM-free label (FoE, 2010)

3.4.3 Labelling Surveillance

In Europe, labelling is taken to mean any words, brand names, trademarks, pictures or symbols relating to a foodstuff that is placed on any packaging, document, notice, ring or collar accompanying or referring to a foodstuff (FSAI, 2010). According to Cheftel (2005), the primary role of food labelling is to inform consumers about the product and help sell it. Labels can also add value to products, differentiate products from competitors, increase consumer confidence and improve diet education according to Bernués et al. (2003). Indeed, consumer demands for food labelling are reported to have changed over time from basic needs to be informed about the nature and composition of a product to new forms of the “*consumer’s right to information*” to allow for informed purchasing choices to be made (Cheftel, 2005, p531). For Cheftel (2005), the development of new packaging materials and techniques, the generalisation of food preservation methods and increasing tendencies towards mass industrial food production account for these shifts in labelling demands. Nonetheless, whatever the motive, the need for effective, clear, honest and transparent labelling is reiterated in the literature across meat (Bernués et al., 2003), nutrition (Cheftel, 2005; Gracia et al., 2007) and GM (O’Fallon et al., 2007) labelling contexts.

Regarding EU and national legislation for labelling, Cheftel (2005) nonetheless states that the rules are complex and diverse due to the different aims, objectives, requests and vested interests of different food industry stakeholders (including European and national authorities, scientists, retail groups, agricultural lobbies and consumers). The system is further complicated by differing national legislation and successive amendments made to regulations to match changing demands and technologies. From this, Cheftel (2005) identifies two key forms of EU food labelling legislation. First, horizontal rules that apply to all foods (including communicating about the nature of ingredients, conditions of storage and shelf life) and second, vertical rules that apply to specific products (including defining food names and composition, country of origin, grading quality and support for agricultural producers). Moreover, voluntary label information exists that, although is covered by general legal constraints (such as requirements to not mislead the consumer), is within the discretion of the producer or retail group to include (Cheftel, 2005). This includes communicating the brand of the product, placing seals, logos, images or recipes on a product and stating health claims, quality certificates and/or production or processing information (for example, organic or green recycling symbols).

Nevertheless, despite these variances, Cheftel (2005) also observes increasing drives to harmonise labelling laws across member states to ensure the free circulation of goods and fair trade within the EU. An example of such attempts at harmonisation lies in the general labelling provisions for foodstuffs that apply to all member states, guided by Council Directive 2000/13/EC, Commission Directive 2005/26/EC and Commission Directive 2007/68/EC. These directives outline laws relating to the labelling, presentation and advertising of foodstuffs as well as annexes guiding the listing of ingredients in foodstuffs (FSAI, 2010). General requirements include that the information presented is clearly legible, easy to understand, indelible, unambiguous and not misleading. It must also not claim that a food possesses properties for the prevention, treatment or cure of a human illness (Cheftel, 2005; FSAI, 2010). Food products and imports sold in Ireland must be labelled in English (with optional labelling in Irish) (FSAI, 2010). Nevertheless, hampering levels of public trust in and acknowledgement of labels, in a journalistic piece, Pope (2012) claims that Irish labelling laws “*are so vague that they allow manufacturers to get away with the most outrageous lies*”. This is deemed to be particularly true relating to products that claim to be ‘natural’, ‘traditional’, ‘artisan’ and even ‘wholegrain’. Irish consumers are believed to be misled in these contexts, with such labels deemed meaningless by Pope (2012).

Finally, as demonstrated by the two case studies above (chemicals and GM), specific labelling requirements for particular food ingredients or technologies exist. For example products that contain liquorice, quinine or caffeine at certain concentrations must be labelled as such and accompanied by health warnings under Directive 2008/5/EC and Directive 2002/67/EC. Further, Directive 2007/68/EC sets requirements to ensure that consumers who suffer from food allergies and wish to avoid eating certain ingredients are informed through labelling provisions. For example, if a product contains wheat, glucose, crustaceans, eggs, nuts, peanuts and/or soybeans, and/or any derivatives of these ingredients, it must be labelled as such (FSAI, 2010).

Overall, the importance of effective labelling is highlighted by many academics, although preferences for information to be shown on labels vary considerably depending on the food product and the residence, health and socio-economic ranking of the consumer. This is demonstrated, for instance, by Bernués et al. (2003) in a meat labelling context, Cheftel (2005) and Gracia et al. (2007) concerning nutritional labelling in Europe and O’Fallon et al. (2007) regarding GM labelling preferences. For example, Bernués et al. (2003) found that country-of-origin and the ‘use-by’ date were the most important informational cues desired by European consumers in relation to meat labels, linking these with quality, freshness and safety. Furthermore, beef consumers in

particular (as opposed to chicken consumers) desired additional information regarding the system of production, traceability and quality control of the meat (Bernués et al., 2003). Nevertheless, questions have also been raised regarding the extent to which food labels are read, trusted and/or fully understood by consumers. For example, the FSAI (2009) found that 27% of Irish consumers stated that they 'rarely' or 'never' consult food labels, while 29% only 'sometimes' consult them. On this matter, Cheftel (2005) argues that many consumers do not have sufficient scientific knowledge to interpret the condensed technical information provided on labels. Therefore, he argues that consumers often rely on brand names, country-of-origin labelling, certificates of tradition and quality marks to determine their trust in a product. Supporting this, Cheftel (2005) reports that 89% of French consumers surveyed rate brand name as highly important, with interest for nutrition information much lower at just 22%.

However, when compared to the FSAI (2009) study, a different picture emerges. Here, the FSAI (2009) acknowledge that in previous surveys, the main reason food labels were consulted by Irish consumers was to check the best before/use-by date. By comparison, in 2009 more than six in ten consumers in Ireland reported to be concerned with healthy eating, leading to nutrient information and calorie content now representing the top two reasons for consumers' consultation of food labels. This supports Cheftel's (2005) conclusions that consumer labelling responses vary considerably according to national and temporal contexts. Nevertheless methodological influences (such as the pattern of questions asked) need also be considered here, particularly given that the majority of questions asked in the FSAI (2009) survey related to the nutrient values presented on food labels. Finally, as a result of the limited size of food labels, Cheftel (2005) also observes an increasing importance attributed to other sources of food information (including websites, phone lines, leaflets and community information centres). The world of food labelling is thus constantly evolving, with different informational priorities reigning at different times, in different places and regarding different products.

3.5 Conclusion

Highlighting an increase in food risk concern of late and inherent scalar relations involved in governing this arena, this policy review described the food safety governance reforms that have occurred across the EU in recent decades. Indeed, a

particular focus existed on legislative and institutional changes to emerge at supranational and national geographic scales. Specifically, a detailed overview of recently established FSAs was provided, which included an analysis of the convergences and divergences that have occurred in different settings. This included detail on the variances between authorities regarding their reasons for establishment, ties to government, organisational structures, functions and challenges faced. Contestations surrounding the impact of such FSAs on consumer trust were also explored drawing on recent academic literature. Providing a political backdrop for the research, all of this detail proves useful for comparative purposes with the FSAI.

Next, reflecting the importance of exploring securitisation in real world political contexts emphasised by Ingram and Dodds (2009), the chapter considered securitisation techniques specifically employed in Irish food risk governance and by the FSAI. This included detail on the history and organisation of the Authority and the roles and functions it performs. Finally, the policy review focused on one particular non-crisis biosecuring strategy of the FSAI, its routine food safety surveillance activities. More specifically, attention was paid to three of the five surveillance areas encompassing chemical, GM foods and labelling surveillance. Representing three contemporary yet diverse food risks, these areas display varying risk perceptions and governance histories making them particularly apt focuses for the research presented here.

Through carrying out these detailed literature and policy reviews, gaps in the existing research have been identified which justify the key research questions outlined in Chapter 1. To reiterate, this includes questions relating to food risk regulation, communication and biosecurity in Ireland (Table 11):

Research Questions	
1	In terms of regulation, what has been the role, and impact, of the FSAI on the landscape of food risk regulation in Ireland since its inception in 1999?
2	Regarding communication, what impact have the strategies of the FSAI had in terms of communicating food risk securitising activities to foster compliance, trust and awareness in external agents?
3	Concerning biosecurity, how have the logics and strategies of biosecurity infiltrated and performed within food risk governing practices in Ireland?

Table 11 Research Questions

To uncover answers to these questions, question 1 is examined through a documentary analysis of FSAI publications and interviews with key industry stakeholders. Question 2, by comparison, is explored through the analysis of FSAI communication strategies (gleaned from website and documentary analysis phases), stakeholder interviews (to gain elite industry opinions and experiences) and consumer focus groups (to uncover opinions, trust and awareness amongst the Irish public). Finally, question 3 is examined through stakeholder interviews and public focus groups to determine how food biosecurity strategies have been received and perform in the Irish context. A detailed methodological discussion is provided in the following chapter outlining the multi-faceted approach taken to conduct the research.

Chapter 4 Methodology

Developing a functional and reliable methodology represents a key stage within every research project. This chapter explains the rationale behind the methodology chosen for this research concerning the governance of food risk in Ireland. The first section summarises advantages and disadvantages associated with both quantitative and qualitative methodologies. The second provides a review of methodologies that have been adopted to study governance and food risk to date. In the third section, a justification of the methods utilised within this research is provided, along with an account of the researcher's experience throughout this research process. The fifth and final section sums up these methodological considerations.

4.1 Quantitative and Qualitative Approaches

It is widely argued that two key approaches for conducting social scientific research exist: quantitative and qualitative. However, precise definitions of these two methods and the degree of distinction between them represent highly contested issues (Denzin and Lincoln, 2003; Silverman, 2005; Westerman, 2006; Clissett, 2008; Berg, 2009). In general, quantitative research incorporates numerical, statistical and systematic approaches for obtaining data, with aims of maximising objectivity, generalisability and replicability (Porter and Carter, 2000). The quantitative survey or questionnaire represents a popular data collection method here. Renowned for obtaining a large and diverse sample, the results of questionnaires are deemed to also be easily compared across populations, time and space (Silverman, 2005; Bell, 2006; Cope et al., 2009). By comparison, qualitative approaches explore social experiences, motivations, contexts, meanings, behaviours and perceptions (Porter and Carter, 2000; Clissett, 2008), often in an attempt "*to describe and illuminate the meaningful social world*" (Silverman, 1998, p5). The subjectivity and influence of the researcher in interpreting this meaning is often recognised, with general consensus that a multitude of socially constructed truths exist to be discovered in qualitative research (Lincoln and Guba, 1985). Key forms of qualitative data collection include in-depth interviews, focus groups, observation studies and conversational analysis. Within these research approaches, human speech, narrative accounts and writing represent key forms of data (Denzin and Lincoln, 2000; Clissett, 2008; Berg, 2009). Qualitative researchers are reported to be more willing to sacrifice scope for detail, and thus tend to focus on a relatively small number of cases to better understand the particulars of a situation

(Porter and Carter, 2000; Silverman, 2005). Therefore, although psychological quantitative surveys can be utilised to study opinions and perceptions, given that this research seeks to understand nuanced, in-depth and detailed public and stakeholder food risk governance perceptions and experiences, a qualitative methodological approach was deemed more appropriate.

According to Berg (2009, p15), despite no “*real defect [existing] in the qualitative paradigm*”, quantitative research is however often given more respect than qualitative methods given assumptions of increased precision with quantification (and the related use of science and figures). Silverman (2005) nonetheless insists that neither method is intrinsically superior to the other. Rather, he stresses a need to understand the merits and drawbacks of each approach and recognise that different methods will suit different research contexts. For example, the prevalence of ‘fixed’ questions and methods for answering them often leads to quantitative data collection being branded as inflexible and rigid in its approach. In turn, this raises concerns that additional attitudes, feelings, perceptions and underlying motivations may be left undiscovered (Cope et al., 2009; Subba Rao et al., 2009). By comparison, according to Clissett (2008), some qualitative research has been criticised as being too anecdotal in nature, while others condemn the generally small sample size that can be accessed through time-consuming qualitative methods (Silverman, 2005; Cope et al., 2009). Issues of reliability thus predominate qualitative concerns. The chance that participants will rewrite and describe their lived experiences in an inaccurate way raises further concern within qualitative approaches (although these criticisms could also be levelled at quantitative research). Meanwhile, Cope et al. (2009) and Polit and Beck (2011, p1451) particularly highlight the lack of generalisation associated with qualitative studies, that is, the ability to draw “*broad inferences from particular observations*”.

To overcome some of these limitations, Silverman (2005) sees opportunities for mixing qualitative and quantitative methodologies to access the advantages of both approaches. Contradictions may however arise between the different epistemological approaches underpinning both research regimes (for example, priorities for sample size, scope and generalisation). Elsewhere, Guba and Lincoln (1989) recommend prolonging engagement with research participants, cross-checking emerging findings with participants and/or providing clear links between the results and the data collected (to allow the reader to trace assertions) to improve the quality of qualitative research. Qualitative results should additionally be based on a critical investigation of all data collected and not just a few well chosen examples according to Silverman (2005). Meanwhile, Polit and Beck (2011) call for the integration of evidence from other studies

to support qualitative hypotheses and conclusions. Furthermore, they encourage the inclusion of "*thick descriptions*" (p1453), including detailed information on when the data was collected, in what context, what community was involved and particulars of that community to improve the replicability and generalisability of the results. This echoes Silverman (2005) who argues for the provision of low-inference descriptors (including original transcripts and raw data tables) to allow the reader to trace conclusions and distinguish their wider application.

A review of methods employed in previous governance, food and risk research follows to provide an entry point into the methodological design of this research.

4.2 Related Research Methodologies: governance and food research

Both quantitative and qualitative methods have been utilised to study governance. Particularly relevant to this thesis is a review by Minogue (2005) who stresses how quantitative studies regularly used to study regulation as a mode of governance too often rely on untested assumptions and generally weak data. As such, he attests a distinct need for more qualitative research in this field. However, Minogue (2005) also notes problems in obtaining sound information about, and measuring the effectiveness of, regulatory systems and institutions. This creates difficulties for producing reliable comparative regulatory analyses across sectors and nations, particularly in developing countries where often no reliable records exist. Elsewhere, Lio and Liu (2008) utilise '*Aggregate Governance Indicators*' developed by the World Bank to assess the status of governance in 127 countries. Linking results with agricultural productivity, the authors assess governance infrastructure according to the level of 'respect for the institutional framework' (measuring compliance with and confidence in domestic rule of law and control over corruption) and the 'quality of government action' (measured by government effectiveness to deliver public goods and services and regulatory quality (the tendency to adopt market-unfriendly policies)). In addition, the 'selection of the authority' is explored by examining civil society voice in electing governments and political stability (Lio and Liu, 2008). However, Minogue (2005, p207) questions the use of such indices to study governance claiming that these measures "*are too broad and generalised to be of any value*", failing to make any links between institutions, capacity and performance. Contested definitions of governance and

assumptions regarding what represents the 'best' model of governance further hinder the reliability of such results.

Concerning approaches utilised to analyse food risk governance specifically, governance lenses and societal analysis approaches have featured, for example, in the work of Holm and Halkier (2009) when assessing the EU food safety governance reforms. The adoption of a governance perspective ensures that "*the relations and institutionalisations among all types of societal actors*", not just state ones, are assessed. The incorporation of a 'societal analysis approach' meanwhile acknowledges "*the need to move, analytically, between political, economic and social spheres*" (Holm and Halkier, 2009, p476). Murphy and Yanacopulos (2005) similarly adopted a governance lens when assessing GMO regulation in the US and the EU. Elsewhere, historical framework methodologies have been applied to help understand food safety governance reforms through time (Millstone, 2009).

Qualitative methods have also been applied extensively to examine the social, political and economic dimensions of food, including exploring food identities, consumer perceptions, diet and food purchasing behaviours. For example, Grunert et al. (2001) engaged qualitative interview methods to explore Nordic consumer perceptions of GM foods, Bisogni et al. (2002) utilised qualitative interviews to study food choice identities in America, Hobbs (2005) explored raw food diets through semi-structured interviews and Chambers et al. (2007) considered local food preferences in the UK through focus group techniques. More specifically, qualitative methods have been utilised to explore consumer and stakeholder perceptions of food risks (in Ireland (McCarthy et al., 2006), Europe (Miles and Frewer, 2001) and Brazil (Behrens et al., 2009)) and food risk management practices (in Ireland (McCarthy and Brennan, 2009) and across Europe (Van Kleef et al., 2009)). Qualitative approaches also feature in investigations of food safety knowledge levels in Ireland (McCarthy et al., 2006; Brennan et al., 2007), the UK (Griffith et al., 1998) and India (Sudershan et al., 2008; Subba Rao et al., 2009). Focus groups and semi-structured interviews were particularly abundant in these contexts. This reflects tendencies within other environmental research, with qualitative methods also extensively utilised in the study of environmental planning and management, waste governance, environmental valuations and global environmental change (Davies, 1999; 2008; Kelly 2007a; Crabbé and Leroy, 2008). For example, Kelly (2007a) utilised focus groups to explore environmental concerns and priorities in the Irish context specifically.

Finally, other more diverse methods have also been employed to address food research including structured experiments that provide food risk and benefit information

to participants (utilised by Fischer and Frewer (2009), for instance, in their investigation of consumer familiarity with foods) and observational auditing approaches (employed by Griffith et al. (1998), for example, to assess public food handling practices in Wales). Some quantitative methods have also long been utilised to study food and consumers, particularly the quantitative survey.

4.2.1 Quantitative Surveys

Focusing on a specific area of interest, surveys often collect data through multiple choice and ranking-style questioning (Cope et al. 2009). Most commonly, this incorporates a Likert scale ranking involving rating a level of feeling or agreement from 1 to 5 or 7 (for example with 1 representing 'strongly disagree' and 5 or 7 meaning 'strongly agree'). This has been utilised, for example, by Redmond and Griffith (2004) when assessing domestic food safety perceptions in South Wales and Dean and Shepherd (2007) in examining the effects of GM risk information sources on publics in the UK. However, the reliability of the Likert scale has been questioned, particularly concerning the weighting of intervals between levels of agreement/feeling (Jamieson, 2004). Therefore, as an alternative, particularly in risk perception studies, the psychometric paradigm outlined by Slovic et al. (1981) (see Chapter 2) has been drawn upon to structure quantitative surveys (for example, see Bronfman and Cifuentes (2003) examining personal, social and food risk perceptions in Chile).

Quantitative surveys have also been utilised to analyse food safety attitudes in America (Kennedy et al., 2008), the acceptance of food technologies (Siegrist, 2000; Siegrist et al., 2007), perceptions of food risk management practices (Van Kleef et al., 2007) and levels of trust in food and related actors (Berg et al., 2005; Terragni, 2006; De Jonge et al., 2008). In Ireland, surveys have also been conducted to examine food consumption behaviours (Harrington et al., 2001), perceptions of organic meat (O'Donovan and McCarthy, 2002), consumer food safety knowledge and practices (Kennedy et al., 2005; McCarthy et al., 2007) and GM perceptions (Morris and Adley, 2000). However, sample size, context and question formatting vary dramatically between these studies. For example, Siegrist et al. (2007) discuss the acceptance of food nanotechnology based on 153 survey participants in Switzerland who were presented with information regarding the technology before completing questionnaires on laptops. Morris and Adley (2000) meanwhile issued 257 postal surveys to academic scientists (basing results on 114 respondents) while the North-South Ireland food consumption survey considered data from 1379 adults who completed consumption

surveys and a 7-day diet diary (Harrington et al., 2001). By comparison, Kennedy et al. (2005) supplemented findings from 1,020 face-to-face questionnaires with refrigerator swabs to test for contamination, while Berg et al. (2005) developed conclusions on food trust based on telephone responses from 3000 participants utilising computer-assisted telephone interviewing (CATI) techniques.

Quantitative surveys have also been employed by many third party organisations to understand consumer perceptions and behaviours at both national and international scales. For example, the FSAI conducted surveys to explore consumer food safety attitudes (FSAI, 2003; 2007) and food labelling perceptions (FSAI, 2009); the Irish Council for Bioethics to uncover GM perceptions (Irish Council for Bioethics, 2005); and *Safefood* to assess consumer food safety campaign awareness (Safetrak, 2006). Similarly, the Food Standards Agency of the UK utilised surveys to assess consumer food knowledge and behaviours (FSA, 2010), while DG Sanco execute regular Eurobarometer surveys exploring public opinion (including regarding food risk) across Europe (for example, see Eurobarometer (2010; 2010a)). However, as a result of the limitations associated with quantitative surveys outlined in Section 4.1, many environmental, governance and food risk studies have turned to qualitative methods to uncover more in-depth, detailed, nuanced and descriptive results. Primarily, this has involved the use of semi-structured interviews and focus groups.

4.2.2 *The Semi-Structured Interview*

Semi-structured interviews represent a popular choice of qualitative methodology in food research given the ability of this method to explore participant opinions in-depth and thus elucidate underlying concerns, attitudes and motivations behind food choices, fears and behaviours (Gray, 2004; Silverman, 2005; Bell, 2006). Semi-structured interviews have thus been utilised to examine the national implementation of the recent EU food safety governance reforms (Holm and Halkier, 2009), underlying public attitudes towards food technologies (Frewer et al., 1997, 1998), expert opinions on how the public understand food safety issues (De Boer et al., 2005), Australian consumers trust in food (Meyer et al., 2012) and public perceptions of food risk management quality (Van Kleef et al., 2009). Elsewhere, Cope et al. (2009) utilised semi-structured interviews to explore nutrition, diet and food quality issues, while they have also been employed to assess public food hazard concerns (Miles and Frewer, 2001).

As with the quantitative survey, alternative approaches to interviewing exist, altering their style, function and form across research arenas. For example, 'laddering techniques' were applied by Miles and Frewer (2001), allowing underlying personal values to be drawn out and concerns to be ranked in order of importance. Elsewhere, Van Kleef et al. (2009) adopted a case description approach, providing value-free information to interviewees regarding the management of a past food safety incident (for example, the BSE crisis in the UK and the contamination of yoghurt and honey products in Greece). Finally, Meyer et al. (2012) adopted purposive sampling techniques involving 47 participants across rural and urban areas. Primarily utilising the electronic white pages of Australia (a directory of phone numbers) and snowballing techniques, primary food shopper in households were targeted to discuss and trust in food production and procurement. For Meyer et al. (2012, p635) this "*sampling via relevance*" ensures that participants have sufficient knowledge and experience to participate, thus producing rich research data.

4.2.3 Focus Groups

Meanwhile, qualitative focus groups facilitate a detailed analysis of an identified research area with a large group of participants (Bell, 2006; Cope et al., 2009). According to Bell (2006), focus groups have become increasingly popular in social science and health research of late and can be conducted with groups of strangers or specifically targeted groups. In the food research arena, focus groups have been utilised, for example, to clarify quantitative survey results by Sudershan et al. (2008) in their study of food safety perceptions and practices of mothers in India. Focus groups can also inform later research methods as evidenced in the collaborative work of the SAFE FOODS research team concerning perceptions of food risk management practices in Europe (Cope et al., 2010). Here, the research process began with exploratory public and expert focus groups (see Houghton et al. (2006) and Van Kleef et al. (2006)) with subsequent results forming the basis for later quantitative surveys (Van Kleef et al., 2007), semi-structured interviews (Van Kleef et al., 2009) and structured information experiments (Van Dijk et al., 2008). In this way, focus groups provided a "*useful first glance*" at the societal factors that affect consumer confidence in food risk management practices (Van Kleef et al., 2006, p61).

Moreover, focus groups have been exercised as a standalone research method in other food research. The number of groups conducted and research context varies between studies however. For example, investigating consumer perceptions and

behaviours regarding local, national and imported foods in the UK, Chambers et al. (2007) conducted four focus groups in total. Similarly, Behrens et al. (2009) utilised three focus groups to elicit perceptions of food irradiation in Brazil. By comparison, Subba Rao et al. (2009) conducted 32 focus groups with adolescent females in India to uncover food safety knowledge levels.

Concerning food risk research in Ireland, McCarthy and her colleagues engaged a wide range of quantitative and qualitative approaches to uncover perceptions of food hazards, knowledge of food safety, food safety behaviours and food risk communication strategies (McCarthy and Brennan, 2009). This included a media audit (McCarthy et al., 2008), two quantitative studies (an expert survey (De Boer et al., 2005) and a public knowledge survey (McCarthy et al., 2007)) and two qualitative studies (public focus groups (McCarthy et al., 2006) and workshops with high-risk groups (Brennan et al., 2007)). Providing a suitable framework of methods that are confirmed to work in the Irish food risk context, McCarthy et al. (2006) decided focus groups represented the most appropriate methodology to identify public food hazard perceptions. Similar to Chambers et al. (2007), McCarthy et al. (2006) recruited participants for twelve focus groups based on a preliminary questionnaire to ensure that a broad range of Irish publics were involved (including relating to age, gender, socio-economic background and living environment). Different strategies were utilised within the focus group setting to engage participants including following a semi-structured interview style (providing order and flow to the discussion) and presenting participants with food products to allow them to contextualise their concerns. Content analysis methodologies were utilised to analyse the results with the aid of qualitative software tools.

Overall, after reviewing the most popular methodologies utilised to study governance and food to date, it appeared appropriate to adopt a qualitative multi-method approach for this research. Adopting a governance lens and societal analysis approaches (as with Murphy and Yanacopulos (2005) and Holm and Halkier (2009)), this involved a combination of documentary analysis, semi-structured interviews and focus groups to ensure that a significant depth and breadth of detail was uncovered. Due to the plethora of surveys noted in Section 4.2.1 relating to food risk perceptions, consumer behaviours, consumption habits, labelling, technology acceptance and obesity in Ireland, no need existed to conduct a further survey for this research. Safetrak and Eurobarometer surveys exploring awareness and opinions of food risk communication campaigns and governing bodies negated this survey need in a governance context also. Qualitative stakeholder interviews and consumer focus groups across geographic scales, professional spheres and personal demographics were thus

deemed more suitable in this research. Developing an in-depth insight into the motivations, values and attitudes behind public and stakeholder perceptions of Irish food risk governance and the FSAI, this approach also ensured a balanced representation of food risk governance in Ireland. The following section expands on this methodological framework, further establishing a reasoned justification for its choice.

4.3 The Research Approach and Experience

4.3.1 Case Study Focus

Emerging in the 1980s in response to the once predominant experimentation method (Crabbé and Leroy, 2008), the history of case study use is marked by periods of intense use and disuse (Tellis, 1997). Deemed to enable an intensive investigation of a contemporary phenomenon in its lived context and geographical region (Yin, 2003; Bell, 2006; Baxter and Jack, 2008), the case study approach is particularly applicable to qualitative research where an in-depth understanding of social phenomena, behaviours, perceptions and interactions is sought. Pragmatically, the approach allows for the research to be set within reasonable limits (Yin, 2003), while at the same time gaining *“tremendous insight into a [specific] case”* (Baxter and Jack, 2008, p556). Primarily associated with the social and health sciences (Tellis, 1997; Baxter and Jack, (2008), Crabbé and Leroy (2008) and Newig and Fritsch (2009) also observe that the case study approach is now well established in much environmental governance research:

“Countless single case studies on (participatory) environmental governance have been published, varying greatly in scope and quality.”

(Newig and Fritsch, 2009, p198)

Moreover, Crabbé and Leroy (2008) particularly recommend the use of case studies to evaluate environmental policy and government interventions, including relating to policy making, implementation and effects. Identifying *“bottlenecks”* (p41) in existing policy, the authors contend that this approach can thus contribute to more effective policy making and implementation in the future.

Elsewhere, Bell (2006) recommends the use of a single case study when an ‘instance’ is identified by the researcher, while Crabbé and Leroy (2008, p61) similarly approve its use when *“the evaluation pertains to a pilot project (i.e. no precedent [exists])”*. For Bell (2006, p10), a unique instance could involve *“the introduction of a*

new way of working, the way an organization adapts to a new role, or any innovation or stage of development in an institution". All three aspects are reflected in the case study choice of the FSAI in this research; it emerged as a new way of governing food risk in 1999 (also representing the first FSA established worldwide), it evolved over the last decade adopting and adapting to new roles as new risks arise (both in crisis and non-crisis contexts), and has recently celebrated its ten year anniversary making it an apposite time to reflect on its impact to date. The FSAI was thus chosen as a "nested" case study (Yin, 2003; Crabbé and Leroy, 2008) embedded within a broader food risk governance context for this research. Further, given that issues of food-related biosecurity continue to preoccupy regulators, producers and consumers despite the formation of FSAs worldwide, it seemed appropriate that research be conducted to evaluate the impact of the FSAI on the landscape of food risk governance in Ireland.

Therefore, following the case study approach outlined by Bell (2006), this research aimed to identify the unique features of the FSAI, show how these features affect the implementation of food governing systems in Ireland and unveil how they in turn influence the way the organisation functions. In particular, a critical analysis was undertaken of the regulatory frameworks, implementation practices and communication strategies that have been employed to address food risk by the FSAI. To achieve this in a non-crisis context, the research further focused on the food safety surveillance activities of the FSAI as a specific activity conducted to manage risk in everyday scenarios.

However, as with all research methods, the case study approach has received some criticism. While the dependence on a single case allows for nuanced, descriptive, contextualised and in-depth results to be obtained, Bell (2006) and Crabbé and Leroy (2008) discuss the value of the study of single events and the subsequent difficulties for verifying, validating, generalising and extrapolating the information obtained. For Crabbé and Leroy (2008, p60) this can lead to criticism of this method as not being "*particularly robust*" or reliable. As a result, citing Denscombe (1998), Bell (2006) suggests that this matter be overcome by first analysing the general context within which the case study fits and then demonstrating how the case study fits in this overall picture. Silverman (2005) similarly suggests placing the case study in a wider context and carrying out purposive sampling guided by time and resources rather than convenience. Considerations of researcher reflexivity, "*double coding*" (analysing and coding transcripts twice), data triangulation methods and the maintenance of field notes and peer examination can also increase the trustworthiness of case study research (Baxter and Jack, 2008, p556).

Despite its drawbacks, Tellis (1997) nonetheless contends that the case study approach still satisfies the three principles of qualitative methodologies: it excels at describing, understanding and explaining social phenomena. Further, Bassey (1981) sees the reliability of case study research as much more important than its generalisability. In other words, if the case study has been carried out in a systematic and critical manner, if it is relatable and if findings produce a new contribution to knowledge then it should be considered as valid and worthy research and celebrated for being highly descriptive and evaluative in nature (Bassey, 1981). Similarly, Crabbé and Leroy (2008, p41) contend that:

“A qualitative approach is not necessarily weaker. If chosen carefully, even a small number of cases or a single case can be very revealing of the core issues in a policy field, the critical paths of some implementation processes, etc.”

Utilisation of the FSAI and its surveillance activities as a specific case study thus enabled this qualitative research to be set within reasonable limits and allowed for an in-depth analysis of food risk governance in Ireland in a non-crisis context. Following recommendations by Baxter and Jack (2008, p544), multiple methods were utilised within this case study context, enabling food risk governance to be explored through “a variety of lenses”, thus allowing “multiple facets of the phenomenon to be revealed and understood”. Incorporating documentary analysis, interview and focus group phases, the following sections reflect on this research process, also highlighting the researcher experience moving through such empirical phases.

4.3.2 *Documentary, website and media analyses*

Following a literature and policy review phase, the first stage of empirical work encompassed an analysis of secondary data published by the FSAI. Assessing FSAI outputs and communications, this enabled an in-depth understanding of the establishment, structure, regulatory functions and strategies of the FSAI in governing and communicating food risk in everyday biosecuring contexts. This phase also proved beneficial for the development of later stakeholder and focus group question schedules. Additionally, it further equipped the researcher with information to allow informed discussion and probing of responses relating to the FSAI in interview and focus group sessions. Finally, this phase facilitated an understanding of the FSAI rhetoric, proving

useful for comparison with stakeholder and consumer experiences, expectations and perceptions.

Consisting of three key steps, the documentary analysis phase was broken down into an analysis of the FSAI website, a documentary analysis of FSAI food safety surveillance publications and a media trawl. As this research aimed to explore the impact of FSAI communications (research question 2), the FSAI website represented the main source of documents for this empirical phase given its accessibility (albeit not guaranteed usability) to both industry stakeholders and consumers. The first stage of analysis thus included drawing on a web assessment index developed by González and Palacios (2004) to examine the accessibility, speed, navigability and content of the FSAI website. This was undertaken to establish its quality, efficiency and resource effectiveness for users. Drawing on institutional trust dimensions explored by De Jonge et al. (2008) in a European food safety governance context, the FSAI website was also assessed for the presence of traits believed to enhance the trustworthiness of institutions. This included searching for statements, reassurances and communications emphasising the caring dimensions of the Authority (for example, that 'consumers come first'), competence (for example, detail on its experimental techniques and food risk assessment procedures) and openness (for example, statements emphasising the transparency and accountability of the Authority and relevant contact details). Such website analyses were deemed particularly pertinent given the recent rise of the internet as a popular risk (Krimsky, 2007), and indeed food risk (McGloin et al., 2008; Jacob et al., 2010), communication channel, and the importance attributed to websites for building stakeholder relationships (Waters et al., 2009).

The second step, analysis of FSAI surveillance documents, included an assessment of online publications outlining the results of the FSAI routine food safety surveillance activities. Following the capacity attributed to language by Hajer and Versteeg (2005) in environmental discourse contexts to make politics and shift power balances, the language utilised by the FSAI holds particular importance given its ability to render food events harmless or create crises, scares, conflict and panic. Indeed, Hajer and Versteeg (2005) highlight the capacity for discourse analysis to also answer questions regarding how regimes work, while in a broader documentary analysis sense, Duffy (2006) notes potential in analysing documents that are produced by the everyday workings of an organisation (inadvertent sources). Further, according to McGloin et al. (2008), it is only relatively recently that European and national agencies have become responsible for food risk communication. As such, researchers have only begun to pay

attention to the strategies that they utilise.⁶ Nevertheless, techniques to ensure effective risk communication have long been debated in the literature with aims of achieving the most efficient uptake, understanding and impact of risk and related governance messages.

Thus, following Duffy (2006) who stresses the need for controlled and balanced document selection in documentary analyses, particular attention was paid to FSAI communications relating to the three case study areas of chemicals, GM foods and labelling surveillance. Drawing on communications literature explored in Chapter 2, FSAI documents were then critically assessed against a multitude of checkers for effective communication incorporating message, audience and institutional factors. Regarding message construction, for example, this included assessing FSAI messages for clarity, tone, language utilised, graphics and uncertainties expressed (Bier, 2001; Frewer, 2004; McCarthy et al., 2008; Jacob et al., 2010). Concerning audiences, FSAI efforts to understand public concerns, tailor messages to suit different audiences and target vulnerable or 'high-risk' groups were examined (Slovic, 1987; Frewer, 2004; McCarthy and Brennan, 2009; Dreyer et al., 2010). Lastly, in terms of institutional factors, efforts to build trust in the communicator were especially assessed following reports that the source of the message must be trusted before any awareness raising or behavioural change can be achieved (Slovic, 1999; DeJonge et al., 2008; McCarthy et al., 2008; McGloin et al., 2008). A documentary analysis worksheet was created to aid in this assessment process based upon research guidelines detailed in Social Education (2003), effective risk communication guidelines outlined by OECD (2002) and the academic work of Leiss (2004), Frewer (2004) and Duffy (2006) in particular (see Appendix 9.1).

However, effective website construction and online surveillance communications do not guarantee website visits from stakeholders and publics alike. As such, given the continued influence of traditional media sources (particular newspapers) on public risk perceptions and societal behaviours (Wakefield and Elliot, 2003; McCullagh, 2007; O'Sullivan, 2007; McCarthy et al., 2008) a media trawl of FSAI-related articles was conducted. Utilising the online archives of *The Irish Times* newspaper and a keyword search approach, a 14 year period from 1996 (pre-FSAI establishment) to 2010 (the then most recent FSAI-related articles) was assessed. Completion of this stage allowed for an in-depth understanding of the history, actions, conflicts and successes of the

⁶ For example, see Holm and Halkier (2009) for a documentary analysis of official documents and statistical information from food organisations, market actors and public authorities to understand recent food safety governance reforms in six national contexts (Denmark, Germany, Italy, Norway, Portugal and the UK).

FSAI as well as its portrayal within the media. Uncovering 1190 articles, the positioning of such articles within the newspaper were noted (for example, within economic, health, scientific or consumer sections) along with the content of the articles and key persons mentioned within. A summary of articles from each year was compiled. From this, key stakeholders that have interacted with the FSAI since its establishment were identified, thus also forming the basis for interviewee selection for the semi-structured interview phase. Results of the documentary, website and media analyses are scattered throughout the thesis, but are particularly evident in Chapter 7 on discussion of the communications impact of the FSAI.

4.3.3 *Semi-Structured Interviews*

It is widely accepted that one of the most reliable methods for ascertaining people's opinions, motivations, perceptions and attitudes is to simply ask them. Thus, the qualitative interview, simply defined by Berg (2009, p101), as a "*conversation with a purpose*", is regarded as an important and reliable source of data collection in qualitative research (Yin, 2003; Legard et al., 2003; Bell, 2006; Kvale and Brinkmann, 2009). Interviews offer the opportunity to explore complex, value-laden issues in detail, usually on a one-to-one basis, enabling hidden agendas, political conflicts, perceptions and biases to be exposed (Gray, 2004). Interviews additionally enable a skilful interviewer to follow up ideas, clarify and develop answers, investigate motives and probe responses (Bell, 2006). The way in which the response is made can also be noted (including tone, facial expressions, and hesitations), providing valuable information that a written response could never reveal (Bell, 2006). As such, confirming the suitability of interviews for this research, Kvale and Brinkmann (2009, p116) contend that:

"Interviews are particularly well suited for studying people's understanding of the meanings in their lived world, describing their experiences and self understanding, and clarifying and elaborating their own perspective."

Regarding the execution of an interview, a continuum from structured to unstructured interview formats exists. The former follows a distinct question schedule from which the interviewer does not deviate, while the latter involves deciding on a series of topics to be discussed, progressing through them in a more flexible, natural and conversational manner (Bell, 2006; Berg, 2009). Positioned between these two

extremes is the semi-structured interview. Based around a particular research topic and question schedule, the researcher can however also deviate from this schedule where appropriate within the semi-structured format. This enables the flexible collection of in-depth information, allowing for the complexities of a matter, prime concerns, attitudes, perceptions and motivations to be exposed and confirmed in detail (Bell, 2006; Berg, 2009).

As a result, semi-structured qualitative interviews with key food industry stakeholders were conducted in this research. Contributing practical knowledge and personal experiences, the importance of including stakeholders in environmental regulatory evaluation contexts is emphasised by Crabbé and Leroy (2008). Thirty interviews were thus conducted with stakeholders from across the food chain to investigate underlying motives, attitudes, experiences and perceptions of food risk governance in Ireland. Incorporating public, private, semi-state, FSAI and civil society actors, participant details are provided in Table 12 below:

Sphere	Anonymous Identification	Association
Public	Politician 1 Politician 2 Politician 3 DAFF 1 DAFF 2 DAFF 3 EHO 1	Government TD Government TD Government TD Department of Agriculture Department of Agriculture Department of Agriculture Health Services Executive
Private	Private Sector 1 Private Sector 2 Private Sector 3 Private Sector 4 Private Sector 5 Private Sector 6 Private Sector 7	Independent Consultant Food Processor Food Processor Catering Industry Catering Industry Food Processor Retailer
Semi-State	Semi-State 1 Semi-State 2	Teagasc Bord Bia

FSAI	FSAI (past) 1	Past FSAI Employee
	FSAI (past) 2	Past FSAI Employee
	FSAI (past) 3	Past FSAI Employee
	FSAI (past) 4	Past FSAI Employee
	FSAI (past) 5	Past FSAI Employee
	FSAI (present) 1	Present FSAI Employee
	FSAI (present) 2	Present FSAI Employee
	FSAI (present) 3	Present FSAI Employee
Civil Society	Civil Society 1	Consumers Association of Ireland
	Civil Society 2	Consumers Association of Ireland
	Civil Society 3	Consumer Journalist
	Civil Society 4	GM-Food Campaigner
	Civil Society 5	Environmental NGO
	Civil Society 6	Irish Farmer's Association

Table 12 Interview Participants

Specific participants were chosen primarily based on the media trawl results, although techniques of snowballing (utilising the networks of initial interviewees) and identification through the analysis of food risk policy documents, research papers and organisational websites were also adopted. Rather than being statistically representative of the Irish food industry, these searches highlighted key actors that have interacted with the FSAI from political, professional and voluntary angles, allowing for an in-depth insight into Irish food risk governance to be obtained. Interviewing past and present FSAI employees further provided unique insight into the everyday operations, successes and challenges of the Authority from an invested but experienced perspective.

Concerning the research experience, interviewees were first contacted by email and provided with detail regarding the position of the researcher, the research being undertaken and the reason why they were selected for interview (see Appendix 9.2a). Follow-up and reminder emails and phone calls were executed as appropriate, until a decision was made regarding stakeholder participation in the research. A letter of interview consent (see Appendix 9.3) was attached by email on acceptance and

confirmation of the interview request. This provided more detail regarding the mode of interview and level of anonymity attributed to responses obtained. It was signed by participants on commencing the interview session. Some participants also requested the question schedule (in full or in summary) prior to the interview taking place, although the majority agreed to meet without this. It is hoped that this enabled honest, open and spontaneous responses in the majority of sessions, rather than pre-prepared, perhaps more carefully constructed, answers. Where respondents declined to participate, they were thanked for their time and asked if they could recommend a suitable alternative from their respective field.

Overall, the interviewee selection and recruitment process was rather lengthy and drawn out, partly due to the sheer number of interviewees requested and the reality of having to fit with the busy schedules of stakeholders. In total, between recruiting participants and conducting interviews, the interview period lasted approximately eight months (November 2010-June 2011). Following the seven steps for interviewing outlined by Kvale and Brinkmann (2009), this was also preceded by initial thematising and designing phases that established the purpose of the interview study and planned interview questions. The resulting question schedule was divided into eight key sections and is summarised in Figure 2 below. An example of a detailed schedule is attached in Appendix 9.4.

Stakeholder Interviews – Thematic Areas

- 1) Introduction, Identity and Organisation** – serving as an ice-breaker to put participants at ease, this question section established the affiliation of the interviewee and their key roles in that position.
- 2) Irish Food Risk Governance** – easing participants into the interview, this section began by asking participants about their views on general food risks in Ireland. More specific questions probed detail on the structures in place to deal with these issues, along with perceptions of their effectiveness and necessity to date.
- 3) Role of the FSAI in Irish Food Risk Governance** – with the interview purpose now well established, the third thematic section focused specifically on the FSAI. Questions here revolved around the FSAI's purpose and power, institutional relations and functions (including regarding the service contract structure and scientific focus).
- 4) Discourse of Surveillance** – drawing on the non-crisis focus of the research, this section began by questioning participant's awareness of the food safety surveillance activities of

the FSAI (with an explanation provided by the researcher where clarity was needed). This was followed by questions regarding the surveillance purpose, focus, importance, need for awareness and future.

- 5) **Communication** – the fifth section within the semi-structured interviews focused on the communications of the FSAI including questions regarding the meaning of, and evidence for, communications effectiveness. Related perceptions of public awareness, trust and engagement in the FSAI were also probed here.
- 6) **Performance of the FSAI** – nearing the end of the interview, participants were invited to reflect on the overall performance of the FSAI to date, including reflection on its key achievements and failures (if any).
- 7) **Future** – the final section explored perceptions of the future of the FSAI and Irish food risk governance more broadly, with a focus on potential challenges and opportunities, particularly regarding prospective budgetary cutbacks.
- 8) **Conclusion** – the interview session concluded by inviting participants to discuss any issue of relevance to them and/or ask the researcher a question.

Figure 2 Thematic Areas for Stakeholder Interviews

Similar to Davies (1999), while this pre-set schedule of thematic areas was followed to ensure a degree of commonality between interviews, the semi-structured format provided scope for elaboration, discussion and clarification within responses. A highly subjective process, this included probing participants on topics of interest to the researcher and the research (for example, asking for more detail on specific responses, pushing for examples or following up particularly unique or interesting experiences). A number of pilot interviews were also conducted as part of this research process which helped to refine and revise the question schedule. However, given the validity and richness of the data obtained, the majority of these interviews were also incorporated into final results analysis.

All interviews were digitally recorded using an electronic dictaphone. This allowed eye contact to be maintained within interview sessions; something deemed important to show interest, put the respondent at ease and encourage natural discussion. Following recommendations of Baxter and Jack (2008), detailed field notes were also written immediately after each interview session to record any contextual considerations, discussion interruptions, interview challenges and/or instincts about the

participant, their approach or worldview. Reflecting on these field notes, most interview sessions were conducted in quiet and comfortable settings, with the exception of a few taking place in busy cafés or hotel reception areas. Most interviews were conducted within a setting recommended by the interviewee, often their place of work. It is envisaged that this facilitated a level of relaxation amongst participants making them more comfortable to talk. Thus, while some interviews were interrupted at certain points (for example, by phone calls and/or other colleagues), most participants dedicated between 45 minutes and 1½ hours of their uninterrupted time to discuss matters of food risk governance in Ireland.

Overall, providing rich, perceptual and nuanced data, the semi-structured interview phase proved very successful for gaining detailed and diverse stakeholder perspectives on Irish food risk governance and the FSAI. The role of nuanced, personal stories and past experiences were particularly evident throughout interview settings, with a significant interest also emerging on behalf of the majority of stakeholders to keep in touch with the researcher (both regarding research results and potential future collaborations). However, while the semi-structured interview was appropriate to engage stakeholders who are familiar with policy, the FSAI and private sector environments, the focus group method was utilised to determine public views of food risk governance in Ireland. This group interview format is reported to provide a more natural social environment than that of the individual interview, thus allowing discussion to be generated more easily and a greater number of people to be included in the research (Davies, 1999). Further, following Morgan (1996), the apt combination of interviews and focus groups allowed for great depth of information to be uncovered for this research through the former and increased breadth through the latter.

4.3.4 Focus Groups

As a result of the benefits mooted above, focus groups have emerged as a popular method for qualitative data collection in recent years (Morgan, 1996; Finch and Lewis, 2003; Bell, 2006; Wibeck et al., 2007). This includes across environmental (Davies, 1999; Kelly, 2007) consumer (Holbrook and Jackson, 1996; Chambers et al., 2007) and food risk research arenas (in Ireland (McCarthy et al., 2006), across Europe (Houghton et al., 2006; Van Kleef et al., 2006; Cope et al., 2010) and internationally (Sudershan et al., 2008; Behrens et al., 2009; Subba Rao et al., 2009)). Originally evolving in a market research context (Davies, 1999; Finch and Lewis, 2003), focus

groups can be utilised as a self-contained research method or combined with other quantitative and qualitative approaches.

Relying on group interactions and moderated by a facilitator (Morgan, 1996), focus groups allow researchers to gain insight into participants natural vocabulary on a given topic, providing a forum for participants to share, compare and test their views (Bell, 2006; Wibeck et al., 2007). A 'theme guide' is generally followed to guide the session which has been developed based on a detailed literature review, discussions with other experts and pilot focus group sessions (Chambers et al., 2007; Sudershan et al., 2008). As a result quoting Laws (2003), Bell (2006, p162) concludes that:

"Focus groups are undoubtedly valuable when in-depth information is needed 'about how people think about an issue – their reasoning about why things are as they are, why they hold the views they do'"

Indeed, focus groups are particularly suited to studying complex behaviours such as food choice, given that the discussion element of the method encourages participants to query and explain themselves to each other. Enabling for a range of perceptions and behaviours to be identified, the reasons and values underpinning these preferences can also be explored (Morgan and Krueger, 1993; Morgan, 1996; Chambers et al., 2007). Additionally, the social interaction element involved provides the researcher with additional valuable data regarding the extent of consensus and conflict amongst participants (Morgan and Krueger, 1993; Finch and Lewis, 2003)⁷.

Similar to interviews however, conducting a focus group is not straightforward. Indeed, a common challenge occurs when one or two participants dominate the group discussion, rendering other more reserved members, or those with differing opinions, quiet (Davies, 1999; Finch and Lewis, 2003; Bell, 2006). Further, Subba Rao et al. (2009) warn how focus group discussions may not reveal the most accurate representation of behaviours or perceptions given the possibility of participants to alter their opinions so as to present themselves more favourably to the group. Similar problems of social desirability bias are recognised by Redmond and Griffith (2003) in food safety survey contexts. Problems such as these may however be overcome in the focus group setting by establishing a positive, trusting relationship between the researcher and the researched and through careful group moderation and control techniques (Davies, 1999; Bell, 2006). Finally, as with all qualitative research, the analysis and interpretation of focus group results can be lengthy, complicated and

⁷ See Van Kleef et al. (2006) and Chambers et al. (2007) for similar experiences in food research contexts.

daunting, although use of data management packages such as NVivo can assist in organising this lengthy process (explored in more detail in Section 4.3.5). Therefore, despite these limitations (including also a lack of representativeness, replicability and researcher bias associated with all qualitative research), Davies (1999) contends that the focus group approach can provide rich detail concerning the values and emotions underpinning environmental perceptions that can inform policymaking processes. Similarly, Wibeck et al. (2007) contend that they enable insight into how meaning is constructed by participants, and further co-constructed through interactions in the group setting.

Generally, focus groups consist of six to eight people who have been selected for their homogeneity on a factor deemed important to the research. This may include personal demographics, profession or affiliations (Finch and Lewis, 2003; Sudershan et al. 2008; Subba Rao et al., 2009). Enabling the researcher to better attribute differences in results to participant characteristics, such selection processes can be achieved by conducting preliminary questionnaires to ensure that desirable members are recruited. Alternatively, a more organic approach may be adopted, known as the “*natural*” focus group method (Holbrook and Jackson, 1996, p136). Drawing focus group participants from already pre-existing groups, such as sports or social clubs, this method has been utilised in both environmental and consumer research (for example, see Davies (1999) and Holbrook and Jackson (1996) respectively).

Some purported advantages of adopting the natural focus group method, as opposed to creating focus groups of strangers, include reduced anxiety amongst participants and increased willingness to participate, share and debate with familiar group members (Holbrook and Jackson, 1996). However, there is also a chance that peer pressure can play a greater role in this context as participants inevitably meet again back in their club or social setting (Finch and Lewis, 2003). In addition, problems may arise in determining what category certain ‘natural’ groups represent given that people can be members of several different communities at any one time (Davies, 1999). The inevitable heterogeneity within groups further contributes to this problem of representativeness. For example, member of a parents association may also participate in sports clubs, while also varying significantly in age, social status and education levels. Nevertheless, the process of recruiting members to the natural focus group is often easier than other focus group methods, usually aided by the presence of a gatekeeper who can gather fellow club members together and encourage attendance (for example, the secretary of the social club) (Davies, 1999).

With respect to conducting the natural focus group session, group leaders are often obvious from the offset while other unique group dynamics (including sharing and comparing common experiences and establishing a group identity) also feature (Holbrook and Jackson, 1996). Indeed, Davies (1999) comments how this method can also save time and resources in that no initial session is needed to build a group dynamic. Producing nuanced and detailed descriptions of lived experiences, focus groups are also considered especially appropriate if participants can actively and easily discuss the topic of interest (Davies, 1999). For these reasons, it seemed appropriate that natural focus groups constituted the third empirical phase of this research to explore public perceptions of food risk governance and the FSAI. Although not statistically representative of the entire Irish population, conduction of such focus groups allowed for snapshots of opinion to be obtained from multiple consumers (49 in total) across a variety of demographics known to influence risk and consumer behaviours (including gender, age, education, income and living environment) (see Table 13). Reflecting the diversity of the Irish population, eight focus groups were conducted in total plus one pilot focus group session.

Following Finch and Lewis (2003), each group aimed to consist of between six and eight participants. In reality however, as elements of timing, convenience and chance will always feature in research that depends on public participation, group numbers ranged from three to nine participants. Raising questions regarding the minimum requirements for focus groups, the average participation across groups was nonetheless 6 consumers per group. Geographically, the groups were held across the three provinces of the Republic of Ireland (Leinster, Munster and Connaught) with a focus on the major cities of these regions and surrounding rural areas (Dublin (3), Cork (2) and Galway (3)). This geographic distinction enabled a division to be created between respondents from rural and urban settings, a dimension that is envisaged to be important in public understanding of food production and risk⁸. Following Berg et al. (2005) who highlight age, gender and education as the key social background indicators responsible for creating patterns of difference in consumer research, efforts were made to construct groups based on these characteristics.⁹ Income level was also considered given that the cost of food and ability to pay inevitably influence purchasing

⁸ For example, see McCarthy et al. (2006) and Chambers et al. (2007) for the influence of living environments in food research in Ireland and the UK and Meyer et al. (2012) regarding differences in consumer trust in food production and regulation between metropolitan and rural areas in Australia.

⁹ Such demographics have also been found to influence consumer perceptions regarding local and imported foods (Juric and Worsley, 1998; Chambers et al., 2007), meat safety (Hoffman, 2000), food assurance schemes (Eden et al., 2008), irradiation perceptions (Behrens et al., 2009) and domestic food safety practices (DeBoer et al., 2005; Fischer and Frewer, 2008; McCarthy and Brennan, 2009).

choices and routines (see Table 13). This subsequently resulted in conducting sessions with groups of female students, young male sports players, a mindful parenting group¹⁰, male FÁS¹¹ participants, Irish Countrywomen's Association (ICA)¹² members, community gardeners, a retirement association and a group of office workers.

Following a flexible topic guide divided into six sections (see Appendix 9.5 and summary in Figure 3 below), focus group sessions commenced with informal discussion around the meanings of food and general shopping habits. It is envisaged that this helped to ease participants into the discussion and establish them as the experts in the session. This also served to clarify the tone of the discussion; one that was open, non-judgmental and based on personal experiences and opinion. Following a “*funnel*” approach to interviewing (Silverman, 2005, p234), the focus group session thereafter became “*progressively focused*” on more complex and specific topics including relating to consumer food safety concerns, governance, communication and food risk surveillance. To further engage participants, it was decided to host two activities within each focus group session. Following McCarthy et al. (2006), the first exercise involved presenting participants with three food items to allow them to contextualise their everyday food safety concerns. To elicit concerns from across the food chain this included presenting consumers with a branded meat product, organic apples and a can of non-GM beans (see Appendix 9.6) before discussing any related food safety concerns.

To generate more focused conversation concerning food risk governance, a second activity was organised within focus groups sessions based upon the FSAI's 2011 food safety surveillance activities (now part of its food monitoring and surveillance activities, 2012). Five laminated cards displaying the five food areas under surveillance by the FSAI were distributed to each group while the facilitator provided a brief explanation of each arena (GM foods, irradiation, microbiology, chemicals and food labelling). Participants were asked to rank the activities in order of importance, that is, according to the degree to which they feel each food risk should be monitored and prioritised (see Appendix 9.7). This is in keeping with Van Kleef et al. (2006) where a ranking of food risks by stakeholders (according to how well managed they perceive the

¹⁰ Mindful parenting is a parenting approach that focuses on intentionally bringing moment-to-moment, non-judgmental awareness to the parent-child relationship.

¹¹ FÁS Ireland is an Irish employment authority that promotes job opportunities and provides training courses and back-to-work schemes; usually targeted at the long-term unemployed.

¹² The ICA is the largest membership organisation of women in Ireland. Predominant in rural settings, members meet to learn new skills, participate in local charity initiatives and get involved in their local communities.

risks to be) in a focus groups setting was used to stimulate discussion regarding the effectiveness of food risk management in Europe.

Focus Groups – Thematic Areas

- 1) **Introduction** - the purpose of the session was clarified by the facilitator along with a broad summary of the research. Consent forms were produced for signature giving additional detail on how the responses obtained would be used and assuring their anonymity.
- 2) **Ice Breakers** - to put participants at ease, sessions were opened with group introductions and general discussion around personal food meanings, shopping habits and changes in food attitudes. More specific food safety questions followed including probing perceptions of the safety of the food that they consume in Ireland.
- 3) **Food Safety Concerns** - the group was presented with three food items and asked to discuss any related food safety concerns. Following identification of such hazards, participants were questioned where the responsibility should lie for managing the issues and compared to the reality of where they believe it does lie. Awareness of the FSAI was probed along with broader perceptions of Irish food risk governance effectiveness.
- 4) **Communication and Participation** - discussion then took place regarding existing and desired channels for food risk communication in Ireland. Levels of satisfaction with current structures and suggestions for future messaging were also probed, along with the degree of consumer engagement with the FSAI specifically.
- 5) **Policing Food Risk** – using laminated cards, participants ranked the FSAI food safety surveillance activities in order of surveillance importance. Participants were encouraged to discuss and debate their prioritisations before feeding the results (and reasons for ordering) back to the facilitator. Participants were also invited to add any additional food areas that they perceive require surveillance attention.
- 6) **Conclusion** – focus group sessions concluded inviting participants to discuss any additional areas of importance to them and/or ask the researcher any questions. A survey was also distributed to chart the demographics characteristics of each group (see Appendix 9.8).

Figure 3 Thematic Areas for Consumer Focus Groups

ID	Name	Gender	Age	Living Environment	Education	Income	No. of Participants	Date
1	FÁS Group	Male	30-65	Urban	Lower	Lower	7	25/5/11
2	Community Gardeners	Mixed	30-65	Urban	Mixed	Mixed	5	2/6/11
3	Retirement Association	Mixed	66+	Rural	Lower	Lower	3	3/6/11
4	Students	Female	18-35	Rural	Higher	Lower	6	7/6/11
5	Office Workers	Mixed	36-55	Urban	Middle	Mixed	5	8/6/11
6	Sports Players	Male	18-35	Rural	Middle	Lower	5	15/6/11
7	Mindful Parents	Mixed	26-45	Urban	Mixed	Mixed	9	17/6/11
8	ICA Group	Female	56+	Rural	Lower	Mixed	9	17/6/11

Table 13 Focus Group Demographics

Similar to Davies (1999) in an environmental valuation context, focus groups were conducted with aims of obtaining a range of views from different sections of society to enable insight into how consumers legitimise and prioritise everyday food risk concerns and understand and trust related governing structures. Particular desires existed to uncover underlying meanings, hidden values, intrinsic emotions and justifications associated with these perceptions that were not obtained through the quantitative surveys previously conducted in an Irish context (detailed in Section 4.2.1).

Drawing on the benefits associated with the 'natural' focus group method (Holbrook and Jackson, 1996; Davies, 1999), email contact was initially made with perceived gatekeepers of local community groups in each of the geographic research locations. Providing detail on the research scope and purpose and requirements for the focus group setting, a template of this initial email is provided in Appendix 9.2b. Follow-up emails and telephone conversations subsequently occurred with gatekeepers enabling rapport to be built with such participants who undertook responsibility to recruit additional members to the session. Recruitment to focus groups was however not an easy task. Following the relative ease with which the stakeholder interviews were set up (although a lengthy process to recruit 30 participants, the research was generally met with enthusiasm and a willingness to participate), many community groups were simply not interested in participating and seemed unwilling to recommend other groups in their locality. With persistence and some helpfully placed contacts however, the recruitment process began to snowball resulting in the conduction of focus groups falling within a couple of weeks of one another (from 25th May to the 17th June 2011). Bringing additional benefits to this empirical phase, this ensured consistency between the sessions, while pragmatically, it also lessened the number of trips taken to the research locations.

As with the stakeholder interviews, focus groups sessions were digitally recorded to allow the facilitator to remain engaged with participants and ease the flow of conversation. As similarly experienced by Davies (1999), despite recommendations for focus group facilitators to be separate to the case researcher, for pragmatic and financial reasons within PhD research, this was not possible. As such, the researcher also adopted the role of focus group facilitator. Formal training was undertaken to perform this role (including participating in research methods workshops), that also brought additional benefits including enabling an in-depth familiarity with the data to be achieved. Regarding focus group experiences, despite initial reluctance from community groups to engage, those recruited were enthusiastic and involved in each session. Indeed, there was only one session where some difficulties arose resulting

from an insistence of the group leader to continue with regular social activities alongside the focus group being conducted. Aside from this, focus group discussions remained engaged, balanced and involved with careful moderatorship from the facilitator. As recommended by Bell (2006), this included utilising probing questions to encourage others in the group to join in if one person was expressing particularly strong or lengthy opinions (for example, 'does everyone else in the group agree with that?'). This also allowed for the degree of consensus or conflict between participant opinions to be identified (a principal advantage of the focus group method (Morgan and Krueger, 1993; Finch and Lewis, 2003).

It is envisaged that conducting focus groups in an environment familiar to the group helped to put participants at ease and facilitated the flow of conversation. For the most part, this was in their usual meeting place, for example, the mother and toddler centre, community hall and/or work environment. This is particularly important within the focus group method where the usefulness and validity of the data depends on the participants' level of comfort to openly communicate ideas (Davies, 1999). Further, given the importance of food for all (biologically, socially and culturally) (Rozin et al., 1999, p193), consumers were readily and easily able to talk about the subject at hand. As Eden et al. (2008a, p13) similarly experienced:

"People buy food all the time and know a lot about it and, when prompted as they were in our groups, they can imagine even more"

Thus, the focus group setting resulted in rich and varied discussion of food risk in everyday contexts amongst consumers in this research.

Finally, it appears that the focus group session also served as a distinct learning experience for participants involved, echoing Wibeck et al. (2007). Many participants appeared to actively learn from one another, swapping food tips and experiences and questioning and clarifying responses to one another. Many consumers also openly thanked the facilitator at the end of the session stating that the discussion had sparked debate in their groups that would continue for some time, coupled with a related inspiration to learn more about food safety. Indeed, a distinct learning experience was apparent through the food product exercise conducted. Multiple questions were asked of the facilitator throughout, with several participants also commenting positively on the time and space this activity allowed to examine product labels in detail. Engaging participants in active thinking about food risk and its governance, some consumers (predominantly female parents, office workers, ICA members and students) even exclaimed that they would be more aware of their everyday purchasing and

consumption habits as a result of the focus group session. Following Berg (2004), questions remain however regarding how long such vigilance will persist in non-crisis scenarios given reports that it is tiresome and difficult to remain constantly vigilant. After all, as Frewer et al. (2002) similarly note, while UK beef consumption behaviours altered drastically around the time of the BSE crisis announcement in 1996, consumers were reported to return to normal beef consumption levels by 1997.

Overall, providing valuable data for future policy consideration, the focus groups provided insight into how consumers respond, resist and/or engage with current food risk practices in non-crisis scenarios. While difficulties may remain in translating the subjective emotions and values obtained into policy and practice, Davies (1999) contends that focus groups can help to empower publics in policymaking by including views from those whose voices are not usually heard in political processes. This resonates with calls to include consumers in food policy making cited by Wentholt et al. (2009) and König (2010). Indeed, it also reflects some focus group participant responses that attributed significant levels of responsibility to the researcher to portray the consumer agenda in resulting research publications (with additional desires to exclude the perceived pervasive industry opinion). The conduct of focus groups thus represented an apt and successful empirical phase within this research.

4.3.5 Data Analysis

Following the majority of qualitative, social science, environmental and food research, all thirty interviews and eight focus group sessions were transcribed verbatim for analysis. This contributes to the reliability, quality and depth of the research, allowing for the exact wording of quotes to be checked and low inference descriptors to be produced that enable the reader to decipher the reliability of the results, trace conclusions and distinguish their wider application (Silverman, 2005; Crabbé and Leroy, 2008). To help make sense of unstructured responses obtained, the data management package NVivo was utilised. While not capable of interpreting the data or developing conclusions, utilisation of this qualitative computer software package allowed for the comprehensive storage and organisation of the data that could then be coded by the researcher. Further, as with McCarthy et al. (2006, p880), utilisation of NVivo ensured *“that the text was coded in a coherent and constructive manner”*. Facilitating data analysis consistency, this is essential to ensure that inferences made from transcripts are valid, justifiable and well-founded. Moving through each transcript, NVivo software enabled the researcher to highlight and code responses as appropriate, thus aiding in

the discovering of patterns, the identification of themes and the development of meaningful conclusions. This analysis phase followed descriptive (according to schedules of questions) and conceptual coding techniques (according to emergent themes) (Kitchin and Tate, 2000). Coded data was organised into chunks (predominantly 'free' and 'tree' nodes in NVivo), allowing for the easy retrieval of themes and quotes in write-up stages (Silverman, 2005; Chambers et al., 2007).

During the analysis process, additional notes were taken in the form of comments on transcripts in Microsoft Word and thematic summary documents. This process highlighted similarities and differences between participant responses as well as comparisons across sectors and groups. Drawing on traditional expert/lay divides mooted in risk literature (explored in Chapter 2), later analysis phases expanded this comparative approach, focusing on the similarities and differences between stakeholder and consumer responses (similar to van Kleef et al. (2006)). Given central aims of data analysis to reduce the volume of data obtained and interpret the information (Bell, 2006), conceptual themes were derived from NVivo coded transcripts and related summary documents. Excerpts illustrative of these themes were also chosen. Such processes thus set the stage for drawing research conclusions (Milles and Huberman, 1994). The analysis reported in this thesis emerged from processes of writing, editing and rewriting as the analysis continued and themes emerged. Phrases such as 'Several stakeholders indicated that...' are employed to convey the level of consensus between participants in later analysis chapters, while quotes from stakeholder and consumer interviewees are also included to exemplify results.

4.3.6 Researcher reflexivity and positionality

Given criticisms of qualitative research as being highly subjective in nature, resting on the interests of the researcher and dependent on researcher-researched relationships, much thought was given in this project to the reflexive positioning and situatedness of the researcher in it (Morgan, 1996; Denzin and Lincoln, 2003). This was particularly necessary given the significant roles played by the researcher throughout, including as sole interviewer, focus group facilitator and interpreter of the resulting data. While this positionality sometimes yielded benefits (including creating interviewee openness, consumer trust and researcher familiarity with the data), other times it created difficulties in the researcher-researched relationship and level of objectivity of the results (with inevitable researcher bias, for example, in interpreting and presenting the findings). A strategy of constant vigilance of this positionality was thus adopted

throughout the research to reap the benefits of this situatedness in certain contexts, but limit the negative effects in others. In particular, attention was paid to the wording of questions (utilising neutral, non-leading language) and restricting the presentation of personal views within sessions to avoid researcher influence on results.

Further, the researcher-researched can be affected by variables of age, gender, social status and differing levels of power (Davies, 1999). With potential to limit respect for the interviewer or interviewee and/or create a challenging interview environment, Davies (1999, p299) particularly highlights the need to be cognisant of the power relationships inherent between a PhD researcher and “*people considered to be influential elites*” in environmental research fields. As a result, some argue that this makes interviewing an unreliable method, as interviewees may tailor their responses depending on how they perceive the interviewer. Efforts to address any potential age, gender and power imbalances (particularly in stakeholder interviews with purported ‘powerful’ individuals) were thus adopted, including dressing professionally for meetings, learning detailed background on participants to facilitate informed discussion and completing comprehensive literature and policy review phases on the research topic. Similar considerations were applied within the focus group sessions, with the additional execution of the food product and surveillance exercises allowing participants to work without the aid or influence of the facilitator.

As mooted in sections above, the execution of interviews and focus groups in environments familiar to the research participants also aided the quality of the research process and data obtained. Indeed, following Davies (1999), this geographic positioning results in the researcher representing the ‘outsider’ in such contexts and thus having to deal with associated nerves and apprehension as opposed to imposing these challenges on research participants. The utilisation of the natural focus group method also provided ‘safety in numbers’ for focus group members who were familiar with one another, thus easing any further tensions or apprehensions. Indeed, it is widely reported that such groups ‘place’ the researcher just as much as the researcher initially targets and places the participants into specific demographics. Examples of this were evident in some focus group settings in particular, where participants misplaced the position and power of the researcher. For instance, participants from the retirement association mistakenly believed that the researcher was a qualified nutritionist on commencing the session. Additional attempts were thus be made to clarify the research purpose and objectives in this group. Meanwhile, additional strategies to encourage a positive researcher-researched relationship included engaging in much informal conversation prior to commencing focus group session (with juices and snacks provided to create an

informal, natural atmosphere). Establishing a temporary and partial connection with participants, the facilitator also remained open to any questions throughout sessions to create a positive, transparent and trusting environment.

Misplacing of the researcher (and indeed the researched) nonetheless reflects a common challenge within the researcher-researched relationship; a relationship that is unavoidably subject to power relations, bias and sometimes suspicion. Indeed, while the majority of stakeholder participants were enthusiastic and passionate in interview, some exceptions existed, with a distinct cautiousness noted on behalf of some interviewees. In particular, this unsurprisingly included interviewees with strong affiliations to the FSAI and/or food risk policy making (including past and present FSAI employees and public sector participants). Although certainly not all of such participants, some appeared suspicious of the motives of the research and the researcher, resulting in some challenging interview settings. For example, in some cases, this resulted in extensive questioning of the researcher's academic and professional background. One interviewee was particularly confrontational on such matters, continuously challenging the researcher regarding the motives behind questions and seeking out the researcher's opinion and results obtained so far. Such reactions are perhaps reflective of the unpopular evaluator syndrome discussed by Crabbé and Leroy (2008) in environmental policy evaluation contexts. Forcing policy makers "*to look into a mirror*" (Crabbé and Leroy, p41), evaluative research can thus lead to controversy, debate and a level of participant defensiveness. Perhaps fuelled by threats of curbs in public spending and related desires to prove institutional worth of the FSAI, this may account for some of the hostility experienced by this researcher. Nevertheless, other interviewees appeared to be particularly open and frank in discussion, with several confiding specific details asking not to be quoted directly on such confidential matters. The letter of consent signed at the beginning of interview served as further reassurance of the level of anonymity regarding such responses. This form brought a level of professionalism to interview settings and perhaps aided in obtaining the open, enthusiastic responses from the majority of interviewees.

Meanwhile, reflecting on researcher positionality in analysis phases, the major criticism levelled at all styles of qualitative interviewing is researcher bias. Representing a subjective research approach and analysis process, interview results obtained may thus reflect the preconceived notions of the interviewer rather than the opinions of interviewees (Bell, 2006). A critical attitude was thus adopted as recommended by Bell (2006), particularly when transcribing and interpreting the data. This included full transcription of sessions as soon as possible after the event to avoid any

misrepresentations and minimise the likelihood for misinterpretations. Following Davies (1999) and Silverman (2005), any prolonged pauses or hesitations were also noted within the transcribed text along with any cases where irony, jest or sarcasm was implied. This further reduced the likelihood of data misinterpretation in analysis phases.

Consideration was additionally given to participant backgrounds and positionality when interpreting the results, with every emergent finding, reported quote and thematic area accompanied by an identity tag to allow the reader to understand what sector and demographic the response came from (for example, anonymous tags for student participants, past FSAI employees etc.). This is in keeping with Hajer and Versteeg (2005) who highlight the need in discourse analysis contexts to recognise that actors can utter statements with strategic goals in mind, both knowingly and unknowingly. The potential for bias, social desirability and vested interests on behalf of the research participants was thus also considered in analysis phases, and somewhat mitigated against by this provision of identity tags. Finally, an emphasis was placed throughout the research on ensuring a balanced selection of both documents and participants within empirical phases, to ensure that no source of evidence or point of view was excluded or equally over-emphasised or represented.

However, as with all qualitative research, its limitations in scope, methods and generalisability must be acknowledged. As such, it must be recognised that this research presents only a snapshot of food risk regulation and perspectives, limited to a particular time and place. Therefore, while the research makes significant contributions to both academic scholarship and regulatory circles, it must be acknowledged that results obtained are contextually, temporally and geographically specific. This is especially true within the dynamic arena that is food risk governance. The limitations and specificity of this research to one juncture in Irish food risk governance history must thus always be recognised.

Other minor limitations of note include pragmatic constraints in the documentary analysis phase preventing an assessment of all FSAI publications, pamphlets and outputs. The communications rhetoric uncovered is thus often specific to the communication of surveillance activities. While reflective of the non-crisis focus of the thesis, it is thus not representative of all FSAI communications. A final consideration includes the predominantly national positioning of stakeholder interviewees selected, despite Irish food risk governance often being influenced by wider supranational and international scales. Nevertheless, the choice of interviewees reflected key stakeholders involved in Irish food risk governance processes identified through the media trawl,

while many interviewees also possessed international and supranational experience that was drawn upon in interview. This (coupled with information obtained in wider literature and policy review phases) ensured a positioning of the FSAI and wider Irish food risk governance in broader international contexts without explicitly including participants from such geographic scales.

4.4 Conclusion

Through analysis of governance, food and research methods literature, this chapter has established that a qualitative methodology represented the most appropriate form of data collection for an in-depth analysis of the governance of food risk in Ireland. While quantitative methods provide rigorous results that can be easily generalised and quantified, this approach can also be branded as inflexible, sterile and at risk of ignoring the underlying perceptions, motives, attitudes, values and feelings that drive social thought and behaviour. It therefore seemed appropriate that qualitative methodologies formed the heart of this research. The prevalence of quantitative surveys in other Irish food and food risk contexts further supported this decision.

Adopting a constructivist approach where truth and meaning is considered relative and dependent on one's perspective (Yin, 2003; Baxter and Jack. 2008), the research thus explored stakeholder and consumer perceptions of food risk governance in Ireland utilising a multi-method approach. Primarily, this incorporated documentary analysis, semi-structured interview and focus group phases. Following Holm and Halkier (2009), a governance lens and societal analysis approach was adopted that allowed for the investigation of all relationships, not just state ones, involved in Irish food risk governance. Acknowledging that subsequent results represent only one such interpretation of the data (Silverman, 2005), this research also shares an epistemological approach consistent with qualitative research in that it assumes the data generated is constructed by both the researcher and the researched (Lincoln and Guba, 1985; Van der Stoep and Johnston, 2009). As such, much consideration was given to the role of the researcher in determining, influencing and altering results. Techniques to avoid such manipulation have been discussed in this chapter and were drawn upon extensively in the research process. Further, aware that responses may not always reflect stakeholder experiences but actively constructed narratives (Silverman, 2005), caution is taken in subsequent chapters to present responses accompanied by

relevant sectoral categories (for example, private sector participant or past FSAI employee). Such efforts increase the accuracy, reliability and quality of the results.

Overall, security represents a concept that can be both foregrounded and backgrounded, with place, scale and geopolitical context playing significant roles (Dodds, 2012). As similarly experienced throughout empirical phases, exploring the securitisation of food incorporated issues of time (including past experiences and desired future scenarios), place (specifically in the Irish context), scale (acknowledging the global food trade and positioning of governing actors across scales) and politics (food safety regulation and governance regimes in Ireland). Thus, overall, the methodological approach taken, although not without flaw, proved robust for this research. Providing insight into multiple dimensions of food risk governance and the work of the FSAI, it engaged stakeholder and consumer perspectives as well as internal, vested FSAI opinion. This enabled the comprehensive comparison of FSAI rhetoric, stakeholder experience and consumer realities to ensure a balanced representation of such governance processes in Ireland.

Chapter 5 Irish food risk governance: priorities, perceptions and practices

5.1 Introduction

According to Slovic (1999, p699) risk represents a “*socially constructed*” phenomenon, with risk assessment processes deemed to be equally subjective. Science blends with judgment, social, psychological, cultural and political factors to assess risk, with significant power therefore attributed to those who define it (Slovic, 1999). In this research context, significant power can thus be said to lie with government representatives, the FSAI and the service contract agencies as they seek to define food risk in Ireland and determine management solutions. As such, the research first sought to explore the food risk areas of most concern to those involved in determining Irish food risk policy and management agendas (including past and present FSAI employees, DAFF representatives and public sector interviewees). A list of precursor food risk questions were thus included at the beginning of each stakeholder interview, prior to more specific FSAI, governance and surveillance questions (results of which are explored in Chapters 6 and 7). Nonetheless, according to Slovic (1999), a need also exists to understand and incorporate public risk opinions into risk analyses. Over a decade on however, researchers continue to push for public participation in food risk governance processes (Wentholt et al., 2009; SAFE FOODS, 2010). As such, it appears that public concerns remain excluded from food risk governance practices. The research presented here is therefore ever pertinent in its efforts to combine both stakeholder and public opinion of food risk and its management in Ireland.

The following section explores stakeholder assessments of prevailing food risks in Ireland. A comparison is then made between these assessments and the reality of Irish risk management priorities (as determined from the FSAI website, food policy documents and Irish food risk legislation). From this, it is obvious that such stakeholders hold influence in the political arena, with multiple similarities and parallels obvious between stakeholder responses and current governing practices. As a result, the remainder of the chapter assesses food risk and governance perceptions of those who are typically unheard in policy processes- consumers.

5.2 Stakeholder perceptions, priorities and influence

Starting with risk definitions, FSAI interviewees articulated logical, calm and scientific definitions of food risk. Indeed, several referred to evolving risk understandings, consumer perceptions of risk and risk communication challenges. Other interviewees drew on more personal and casual risk definitions, often reflecting their key interests and positioning within the food industry. For example, one processor spoke of food risk as *“the things that can actually cause you to become ill, break teeth...or ultimately get dead”* (Private Sector 3). Meanwhile, reflecting the conflict between health and economics that has traditionally plagued food safety governance arenas (Abels and Kobusch, 2010), semi-state participants with interests in food economics spoke of food risk as taking one of two forms:

“Risk to your public health, people getting sick short term or, long term...what you’re going to do to your trade and exports”

(Semi-State 1)

Specific food risk issues perceived to require regulatory action by stakeholders primarily included concern for food contaminants (chemical, microbial and physical), food labelling (particularly food origin accuracy and transparency) and food technologies (especially GM). Certain concerns were however more apparent within different stakeholder groupings. For example, the private sector expressed most anxiety about contamination risks, with different contamination priorities also evident between industry sectors. Perhaps reflecting the risk issues experienced in everyday contexts by these participants, microbial risk was of most concern to processors, while physical contaminations dominated the retailer’s risk psyche. By comparison, food sourcing, traceability and staff education raised the most risk anxiety for caterers. Meanwhile, perhaps as a form of blame avoidance, some public sector, DAFF and FSAI participants discussed the tendency for changing food habits to create risk (including commentary on the increased urbanisation of populations, globalisation of the food supply and concentration of the food industry). Reference to the 2008 Irish pork dioxin crisis also featured in many stakeholder responses, with public and FSAI participants particularly vocal on this matter. This is perhaps reflective of their heavy involvement in managing this most recent indigenous food risk event, although the prevalence of the German dioxin crisis at the time of interviews may also have influenced such references.

Elsewhere, a sense that food risk is inevitable featured in many stakeholder discussions and even somewhat excused the continuing occurrence of food safety

incidents for several interviewees (particularly FSAI related). Echoing the need to constantly perform biosecurity or engage in 'biosecuring' (Bingham et al., 2008), a private sector participant discussed the subsequent need for validating suppliers, early alert systems and regular risk surveillance. The continued evolution of food risks similarly raised concern for several stakeholders, particularly regarding evolving food bacteria and viruses (for semi-state, private and civil society interviewees) and food technologies (for civil society participants particularly). Accordingly, past and present FSAI employees spoke of the need to continually evolve the FSAI remit and focus.

Nevertheless, patriotic understandings of heightened food safety were also evidenced across civil society, DAFF, FSAI and public sector interviewees, with beliefs that Irish food is inherently safe and food risk mainly comes from the 'outside'. Raising concerns of chemical residues, physical contaminants and exotic microbial diseases, such responses reflect fears of the 'outside' highlighted by Eden et al. (2008) regarding international organic standards and evidenced in the IFICF (2011) survey where American consumers cited chemical, transport, regulatory and hygiene fears surrounding imported products. Nevertheless, an overall confidence that food safety is well managed in Ireland was particularly obvious (perhaps unsurprisingly) across FSAI and public sectors. Indeed, several public sector participants argued that Ireland runs "a very strict shop" (DAFF 3) in terms of food risk governance and that "things pass in other countries that wouldn't pass here" (EHO 1). Such self-interested and patriotic responses reflect concepts explored by Hinchliffe et al. (2012, p10) who contend that:

"Safe life is [often] pursued through territorial cleansing acts, where putting one's own house in order allows an accusatory eye to be fixed firmly on outside causes of disease"

Denoting a form of "geo-biopolitics" (Hinchliffe et al., 2012, p10), the FSAI (and related stakeholders) could thus be viewed as attempting to put (or at least develop a perception of) its "own house in order", allowing an "accusatory eye" to be cast on outside causes of food risk and disease. Indeed, increased vulnerabilities were specifically associated with Ireland by civil society, FSAI and private sector participants as a result of its dependence on the perceived lesser food safety regulations of other jurisdictions (symptomatic of the increased globalisation of the food chain that has resulted in Ireland becoming a significant importer of food (Tovey, 2007)). Concerns were additionally raised by other DAFF, private and civil society stakeholders regarding the FSAI's ability to manage food and feed risk coming from abroad.

Despite these discussion points, food risk governance in Ireland was perceived by the majority of stakeholders as having improved dramatically in the last decade. Positive changes in education, research, science, traceability and related risk awareness were especially noted by private sector, civil society and public sector participants. Meanwhile, improvements in governing structures (including the establishment of the FSAI) were specifically referred to by DAFF and semi-state interviewees. Indeed, a belief that Ireland has evolved past food safety concerns was apparent across some civil society, public sector and FSAI respondents, with more concerns raised regarding future food security (a sustainable food supply) and obesity (a healthy food supply). However, a minority (including present FSAI employees and food processors) also noted repetition in the chemicals and microbes sparking food crises in Ireland, raising questions regarding progress in Irish food risk governance. A more focused discussion on governance performance, including case study detail on the effectiveness and impact of the FSAI, is provided in Chapter 7.

This introductory section has highlighted the food risk and governance priorities of those directly involved in food industry, policy and risk governing processes. Comparing stakeholder concerns with existing food risk legislation and reform, it is obvious that many similarities and overlaps exist. For example, contaminant concerns of private sector interviewees have been met with an onslaught of 'Hazard Analysis and Critical Control Point' (HACCP) strategies¹³ (at the FBO scale) and residue monitoring programmes (nationally coordinated by DAFF and Teagasc¹⁴). Sourcing and traceability concerns have also been appeased by a plethora of technologies and information systems including improved country-of-origin labelling and computerised tracking devices. Similarly, concerns relating to the evolving and unpredictable nature of food risk have been met with increased food risk research (nationally and internationally), with the EFSA also dedicated to conducting 'horizon scanning' to predict future food risks (EFSA, 2012). Specific anxiety regarding criminal activity in the food chain expressed by one past FSAI employee has also recently been met with the establishment of a food fraud task force within the FSAI in August 2012 (FSAI, 2012b).

Moreover, reflecting the majority of anxieties expressed across stakeholder groups, the FSAI's food safety surveillance activities include focuses on chemicals and microbiology (contaminants), GM and irradiation (technologies) and food labelling.

¹³ HACCP is a compulsory food safety management system that requires FBOs to identify points in their production or processing line where food hazards might emerge and place a relevant control to limit the likelihood of contamination there.

¹⁴ Teagasc is an Irish food and agricultural development authority that provides research, advice and training to agricultural actors and the food industry.

Finally, concerns for healthy eating and nutrition have similarly been placated by the establishment of *Safefood* as a committed promoter and educator of healthy eating and increased healthy eating attention in the media (for example, televised programmes such as 'Operation Transformation'). The FSAI also published two healthy eating guides in June 2012, marking its increased involvement in obesity and nutrition arenas. Thus, overall, such similarities suggest that the food risk concerns expressed by stakeholders (such as those interviewed in this research) are heard in food risk governance processes. Chapter 6 continues the analysis of stakeholder results, exploring more specific governance and FSAI perceptions. Consequently, this chapter now turns to examine the food risk concerns and governance priorities of those whose voices are not traditionally heard in political arenas (as similarly cited by Davies (1999) in an environmental planning context) – the lay public or consumers.

5.3 The consumer context: an introduction

Reflecting recent trends within securitisation theory to look beyond the extraordinary and dramatic to study banal, everyday contexts (Dodds, 2012), the following sections utilise empirical results from the consumer focus group phase of research to outline food risk and related governance perceptions in everyday, non-crisis contexts. Nevertheless, this analysis also acknowledges the fragile positioning of such a context operating within complex circulations of 'good' and 'bad' elements (for example, disease-free, healthy spaces surrounded by disease-causing microbes) (Barker, 2012; Hinchliffe et al., 2012). Indeed, at the time of the consumer focus groups, the non-crisis context was somewhat interrupted by 'bad' circulations occurring in Europe in the form of the 2011 e-coli crisis. While the influence of this scare was apparent in some consumer responses, given the limited impact this incident had on food routines in Ireland (compared to a nationally-based scare such as the 2008 pork crisis (see Casey et al. (2010), Jacob et al. (2010a) and Casey and Lawless (2011))), an indigenous non-crisis context can be said to have been prevailing at the time of consumer research.

Presenting a nuanced understanding of consumer food risk governance perceptions in Ireland and reflecting the aforementioned need to include consumer opinion in food risk governance processes¹⁵, the remainder of the chapter is divided into six sections. The next section (5.4) examines everyday food safety concerns of

¹⁵ As expressed, for example, by Slovic (1999) in a risk assessment context, Hansen et al. (2003) to understand expert-lay discrepancies in food risk perceptions, Houghton et al. (2008) to improve food risk management and Wentholt et al. (2009) in their proposed risk analysis framework.

consumers along with personal risk avoiding strategies adopted and consensus regarding the safety of food in Ireland. Section 5.5 subsequently explores findings relating to the two participatory exercises conducted in each focus group session that allowed consumers to contextualise their everyday food concerns (food product exercise) and consider priorities for food risk governance (surveillance ranking activity). Thereafter, Section 5.6 explores consumer awareness and expectations of Irish food risk governing structures, including perceived FSAI impact to date. Consumer perceptions and experiences of food risk communication strategies and engagement in food risk policy arenas are then interrogated and assessed, followed by suggestions for improving future practices. Finally, the concluding sections (5.8 and 5.9) provide a summary of results, including those relating to consumer demographics, stakeholder comparisons and the significant themes to emerge from the focus group phase. This includes relating to the development of a partial food risk society, perceptions of risk coming from the 'outside' and differences between consumer practice and theory.

5.4 Everyday purchasing and consumption routines

Reflecting the highly personalised nature of food consumption, opening focus group discussions regarding everyday food routines revealed significant differences in food meanings across groups. This was particularly evident regarding attributions of positive, negative and neutral food associations. For the majority, however, reflecting findings of French consumers by Rozin et al. (1999), food was associated with pleasure, satisfaction and fun. For example, ICA, retirement and office worker participants associated food with comfort, social occasions and enjoyment. In stark contrast, as with Coveney (2000) who contends that food can also be a source of great anxiety, participants from the mindful parenting group referred to the prevalence of allergies and 'fussy eaters' resulting in food being associated with worry, high concern and an increased risk consciousness. By comparison, rural male sports players portrayed more practical food associations, perceiving food as fuel and energy and linking with issues of necessity and health. Such responses suggest life stage and gendered elements to food associations, with new female parents, for example, more cautious and single young male sports players more practical in this regard. In part, this may be due to gendered stereotypes that associate females with disproportionate responsibility for the household food supply and higher risk perceptions than males. This is reported, for example, by Slovic (1999) in everyday risk scenarios, Hoffman (2000) concerning meat safety in Sweden, Berg (2004) regarding food safety

perceptions across Belgium, Norway and the UK and Fischer and Frewer (2008) concerning domestic food safety practices.

Next, participants were questioned regarding any recent changes in food purchasing and consumption habits, with increased desires and ability to find food value (aided by the growth of low cost supermarkets) and delight at the variety of foods now available evident across groups. Some negative responses also emerged however, with suspicions expressed by several office workers and FÁS participants regarding the motives and practices of certain food industry actors, processing methods and trends. Particular suspicions arose regarding the reliability of 'sell by' dates, the use of chemicals to preserve food, the integrity of Irish country-of-origin labelling and the emergent organic trend. Suggesting a mistrust of industry and over-arching governing bodies, these negative responses reflect much literature that cites high levels of consumer mistrust in industry (for example, see Dean and Shepherd (2007) concerning GM corporation mistrust and Papadopoulos et al. (2012) in a food safety regulatory context). By comparison, participating mindful parents were particularly supportive of organic produce (citing health reasons), with several noting changes in purchasing opportunities to include more organic shops, farmers markets and vegetable box schemes. This reflects reported increases in organic food and beverage sales by 4-6% per annum across Europe since 2007 (Scott-Thomas, 2012) and findings by O'Donovan and McCarthy (2002) who link concern for food safety, health and environmental quality with increased preferences for organic meat amongst Irish consumers. Similarly, locally produced food sparked feelings of quality, freshness and appeal for retired, ICA, parenting and community garden participants.

Meanwhile, linking with obesity and health concerns dominating academic and political food discussions of late (for example, see Pearce and Witten (2010) on the "*obesity epidemic*" that results in 1 billion overweight adults worldwide), male sports players discussed an increased consciousness regarding the salt and fat content of foods. Retired participants similarly referred to increased efforts to reduce portion size. Elsewhere, female students discussed feelings of comfort, familiarity and perceived superior quality associated with branded products. This echoes Cheftel (2005) who reports that 89% of French consumers surveyed also rate brand name as important in purchasing contexts. Indicating a level of openness, truth and consistency, the above food associations and changes in food practices were reflected and expanded upon in the rest of the focus group discussions.

5.4.1 Food safety concerns

Discussion around food associations and recent changes in food habits however failed to highlight many specific food safety concerns. This lack of overt food risk anxiety suggests that food safety is not a primary concern for the majority of consumers interviewed, perhaps as a result of the prevailing non-crisis context at the time of empirical research. For this reason, focus group participants were specifically questioned regarding the extent to which safety issues occur to them in everyday life. When probed in this way, most participants (aside from the male sports players) stated that food risks do generate concern for them. This mismatch between initial and prompted reactions may result from one of two factors: (1) participants were at this point aware that the purpose of the focus group was to discuss food safety perceptions; (2) food safety represents an underlying and unconscious concern that sparks significant emotion and debate when directly probed or when a risk event occurs. This latter argument is supported by Berg (2004, p23) who notes increased risk consciousness and altered behaviours during and immediately after a food crisis and Frewer et al. (2002, p701) who suggest that a “*social amplification of risk*” can occur amongst publics during a crisis due to increased risk coverage in the media.

In this research context, common food safety issues discussed when probed included debates surrounding best before labels as a measure of food safety and the impact of packaging on the taste, quality and perceived safety of products. Specific products were also identified as being riskier than others including shellfish (retirement association) and meat (across groups). For example, female students, parents and office workers indicated differences in meat quality across purchasing locations, with several expressing increased trust in local, artisan, independent and craft butchers. This echoes findings by Grunert (1997, p157) who found that “*place of purchase*” significantly influenced beef quality perceptions among German, French and Spanish consumers, with “*the butcher...regarded as a sort of guarantor of high quality*”. Parents and office workers were particularly positive in this regard, with extended conversation revolving around the trust, accountability and reliability of the local butcher and the perceived freshness, extra choice and quality of the products obtained. Thus, although issues of access and cost were associated with butchers, a distinct lack of trust in retailers as sources of fresh meat was expressed by many. Echoing a mistrust of commercial food retailers also exposed by Eden et al. (2008) in the UK, suspicions particularly arose regarding retailer handling of meat and perceived changes to expiration date labels that enable retailers to sell meat past its use-by date.

The country-of-origin of meat also posed concern for many participating consumers in terms of quality, freshness and safety. This reflects similar concerns uncovered in Sweden by Hoffman (2000) but contradicts Grunert (2000) where country-of-origin was reported to have no effect on meat quality perceptions in France, Germany, Spain and the UK. In this research context, adding a distinct geographical element to such perceptions, one male sports player for example commented:

Fred: Funny I was in Portugal three weeks ago and in eh, when I have a steak here, never think about it. But because Portugal gets a lot of their beef from Brazil, every time I was eating I was looking at it. And even though it was the nicest steak house I was in I was saying 'Jesus I wonder, you know, just with their reputation'.

R: Yea, you were conscious of where it was from?

Fred: Yea and that was in Portugal. Whereas I don't think like that here. If I go to McGuigans or Kellys I get the steak, it could be from Alaska, it could be from anywhere!

Male Sports Players

Similarly, female students spoke of increased health and safety fears when consuming food abroad, while retired participants spoke of a tendency to avoid foreign meat and mistrust the inspection of imports coming into Ireland. Such responses mirror findings from IFICF (2011) where 61% of American consumers also perceived imported foods to be less safe than domestic products. Reflecting stakeholder perceptions of risk coming from the 'outside', this also echoes ideas of the dangerous 'outside' mooted in recent biosecurity literature. For example, see Barker (2009) regarding the construction of the foreign 'other' in native species protection in New Zealand, Philo (2012) regarding the prevalence of boundaries and borders to securitise space against the outside and Hinchliffe et al. (2012) on the construction of blame in biosecurity contexts. It also reflects dependence on country-of-origin labelling to determine the quality, safety and trust of food products explored by Skaggs et al. (1996) in an international food marketing context, Juric and Worsley (1998) concerning imported products in New Zealand and Knight et al. (2007) who examined 'country image' factors influencing the sourcing decisions of food distribution stakeholders.

More specific food risk concerns raised by participating female students included fears of hormones and fish mercury levels, while one student (with an education in microbiology) also expressed fears of cross-contamination and allergens in GM food. A debate about the safety of GM similarly dominated the community gardening group. While the majority opposed GM foods, one gardener (from a scientific, highly educated

background) forcefully argued that GM techniques provide a more sustainable approach to agriculture that has been rigorously tested for its safety. This dismissal of GM food risk echoes concepts explored in the literature regarding the influence of education, career choice and risk exposure on risk perceptions. For example, Sjöberg (2002) suggests that the socialisation of values and risk perception takes place through professional training, Fischer and Frewer (2008) believe higher educated consumers exhibit less worry traits in domestic food safety contexts, while Connor and Siegrist (2010) report a tendency for higher educated publics to hold more positive attitudes about GM (owing to perceived increased knowledge levels about the issue).

Finally, reflecting the tendency for food safety concerns to not predominate everyday Irish life, female students reported more concern regarding food quality, taste and calories, while FÁS participants expressed worries about nutritional values, quality and cost. Further, reflecting the reported tendency for young white males to possess lower risk perceptions (Slovic, 1999; Finucane et al., 2000), male sports players stated outright that food safety is not an everyday concern. Indeed, suggesting a trust in food processors and expressing more concern for a balanced diet, one player commented:

Donal: We're all taught in school what are you eating kind of the carbohydrate level, the, you know, food pyramid and all that. That's more what you think when you get something. It's perfect and that's it. You don't have to think anything else about it like.

R: More trying to get the balanced diet in....?

Donal: In than, yea than think about how it was prepared or all that, you assume it's taken care of in the factory.

Male Sports Group

Echoing assignments of food safety responsibility under the European food safety governance reforms explored in Chapter 3, perceived practices conducted on the manufacturer's floor resulted in an added belief amongst sports players and female students that processed foods are safe. Suggesting that the more produced a food is, the safer it is perceived to be, modern food processing practices appear to have reduced the need for some to think about food safety. This reflects findings in America where 61% of consumers surveyed believe to have benefited from modern food practices, with 29% citing "*improved food safety*" as a specific related benefit (IFICF, 2011). This contrasts sharply with risk literature that attributes food risks to modern food production, industrialisation and intensification practices (Beck, 1992; Jackson, 2010; Lash and Wynne, 2011). By comparison, reflecting more clearly notions of reflexive

modernisation proposed by Beck (1992) and the “*age of anxiety*” highlighted by Jackson (2010, p147), other office workers, parents and students did suggest that modern food practices have created risk and new disease (for example, through the increased use of chemicals). With several contending that previous generations never suffered harm from food, this nonetheless comes in spite of a long history of health issues in Ireland owing to poor diets (for example, the prevalence of tuberculosis throughout the 19th and early 20th centuries (Pringle, 2009)). Such responses resonate with broader tendencies to view past experiences through “*rose-colored glasses*” or with positive memories to provide “*ammunition to rationalize*” current concerns (Cowley, 2008, p1046). Thus, lamenting pre-existing food practices, a longing for food of the past emerged in these and other (FÁS and retirement) groups.

5.4.2 Risk avoidance strategies

To overcome perceived food risks and concerns, a number of consumers highlighted specific risk avoidance strategies employed in everyday contexts. This included a matrix of activities ranging from a reliance on best before labelling, a patriotic comfort brought about by Irish food (avoiding products from the ‘outside’) and strategies of alternative product avoidance. Communication and knowledge channels influencing these strategies varied amongst participants from traditional beliefs (with ICA members, for example, reporting the traditional avoidance of products at certain times of the year) to personal food risk experiences and modern media influences.

To elaborate, some ICA, FÁS and retired participants claimed to avoid purchasing food products that are close to their expiration date. This reflects findings from multiple FSAI labelling surveys where the main reason for food label consultation by Irish consumers was reportedly to check the expiry date (FSAI, 2003; 2007). Nevertheless, other consumers in this research dismissed and/or downgraded the meaning of best before labels, preferring instead to judge the safety of a product according to its physical characteristics. Perhaps reflective of current economic difficulties, for some FÁS and retirement participants, this was linked with ideas of excessive food waste (or a ‘*throw-away society*’ (Aidan, FÁS Group)) and industry driving product purchasing. Other attributes inspiring feelings of safety included a reliance on packaging styles and country-of-origin (echoing the importance of country image highlighted by Skaggs et al. (1996), Juric and Worsley (1998) and Knight et al. (2007)). For instance, one male sports player attributed the plethora of ‘guaranteed Irish’ food labels as fostering trust, while female students joked about the Irish tendency

to trust products with a picture of a farmer on it, creating a 'false sense of safety' (Aisling, Female Students).

Despite these strategies however, feelings of exasperation and frustration existed regarding personal abilities to avoid food risk. For example, retired participants expressed difficulty in determining food safety levels while FÁS members claimed it to be too late to now worry about chemical risk issues, having consumed too many already. This echoes Shaw (2002, p284) who highlights a degree of "fatalism" associated with GM foods consumption by UK consumers (for example, due to its prevalence in the food chain and inadequate labelling) and Brunel and Pichon (2004, p373) who note degrees of food risk fatalism (defined as the "irremediable acceptance of the event") amongst some French consumers. Further, similar to a GM risk avoidance strategy uncovered by Shaw (2002), consumers in this research spoke of a need to grow one's own food or choose organic to remain risk-free. This contradicts findings by Smith-Spangler et al. (2012) who contend that no added health, nutrition or microbial safety benefits exist to consuming organic over conventional foods. It nonetheless supports similar perceptions obtained in a survey by O'Donovan and McCarthy (2002) where Irish purchasers of organic meat believe it to be superior in quality and safety. Regardless, associated organic and growing costs make these options problematic for many (including FÁS participants, sports players and students), with a lack of food risk control thus obvious:

Aisling: Like I find that's so frustrating, it's just like you can't avoid it like you know like unless you're going to grow all your own food [laughs]

Julia: Yea go out and catch your own fish!

Aisling: Like it's not even possible like no matter how conscious you want to be of these things. It is kind of almost impossible to do everything well.

Female Students

Furthermore, one gardener raised concern regarding the previous (and perhaps polluting) uses of the land now being utilised by people 'growing their own'. A sports player expressed similar doubt over this source of food, citing media commentary that originally attributed the German ecoli crisis to organic production methods. This suggests that even the method of food production cited by many as a key strategy to avoid food risk is not guaranteed to be safe, strengthening notions of perceived inevitable food risk.

Nevertheless, despite these discussion points, it was obvious that focus group

participants for the most part trust the safety of the food that they buy in Ireland. Reflective of unconscious trust definitions in the literature (Berg, 2004; De Jonge et al., 2008), for many, this trust is assumed, with several participants finding it difficult to articulate what it is based upon. For this reason, much language emerged that related to the emotions, feelings and gut instincts of consumers, echoing Loewenstein et al. (2001) who highlight the significant role played by emotions when publics make decisions about risk. By comparison, for a limited number in other groups (including community gardeners, office workers and retired participants) this trust was directly linked to a broad *'trust [in] the officials'* (Cathy, Retirement Group), a trust that industry *'[does] the right thing'* by consumers (Bernie, Office Workers) and/or more locally produced trust centred on farmer's markets.

Personal experiences with food risk were also called upon to further shape opinion of the safety of Irish food. For instance, food poisoning incidences were referred to by several consumers, with one male sports player joking that he had a good track record with Irish food, having not experienced food poisoning in twenty two years. Similarly, for one office worker, the fact that her food shopping routines have not caused any health impacts as of yet suggests to her that such practices are safe. Thus, not getting sick from food appears to develop a form of experiential trust for Irish consumers. This is similarly contended, for example, by Fischer and Frewer (2008) who note that safe food preparation can cause optimism (lower risk perceptions) and the subsequent adoption of habitual behaviours and Jackson (2010) who correlates consumer food anxieties with life history evidence (personal food risk experiences). However, as also highlighted by Fischer and Frewer (2008, p2878), very few are *"knowingly affected by food-related illnesses"*, thus the actual effect of unsafe food is unlikely to impact on behavioural or psychological constructs. Further, the rather invisible, accumulative effect of chemical food risk may also prevent consumers from perceiving problems with current food routines.

5.5 Contextualising food risk concerns: results of focusing activities

5.5.1 The food product exercise

To further examine how and where food (in)security is embedded in everyday Irish life, a strategy was adopted similar to that utilised by McCarthy et al. (2006) who

presented three food items (a chicken breast, an apple and potato crisps) to research participants to allow them to better contextualise food hazard concerns. For the authors, utilisation of this iterative process allowed publics to better verbalise the reasoning behind their anxieties and the strategies adopted to deal with such issues. In this research context, such an exercise additionally allowed consumers to place their concerns in everyday food contexts (outside of crisis scenarios) while also clarifying the types of risks requiring governance in Ireland. Similar to McCarthy et al. (2006), to ensure that safety concerns were elicited from across the food chain, three different items were presented to participants. This included a pork meat product (branded hickory smoked rashers), an organic fruit product (apples sourced from overseas) and a non-GM product (a can of specifically labelled baked beans) (see Appendix 9.6). The choice of products also aimed to reflect the three case study food safety surveillance arenas of the research: GM foods, chemicals and food labelling.

5.5.1.1 Pork Product

While the rashers did not raise concern amongst all participants, the food risks of most relevance when probed revolved around the presence of chemicals in, and perceived unhealthy characteristics of, the product. For example, female students and male sports players explicitly referred to the stated presence of 92% pork, questioning what made up the other 8%, leading to discussion concerning additives and preservatives in food. Further chemical concerns were framed by questions regarding the artificiality of hickory smoking processes (gardeners, office workers and FÁS participants) and perceived preservative use to ensure an extended shelf life (office workers and female students). The plastic packaging surrounding the rashers was also cited as a specific safety concern by ICA, retirement, student, office and community garden groups, linking with issues of chemical transfer, taste and smell. Meanwhile, several sports, retired and parent participants claimed tendencies to avoid fatty, salty and processed meat for health reasons, while two female students admitted to being most concerned about its calorie content.

Other issues raised regarding the first product included its cost and value (appealing to students but questioned by community gardeners) and package labelling. More specifically, its brand name sparked feelings of safety, quality and trust for students and sports players (similar to brand name appeal noted by Cheftel (2005)), although the Bord Bia quality mark received mixed responses. For example, FÁS participants associated higher food prices with Bord Bia labels, sports players claimed

to notice the label but not specifically look for it, while female ICA and retired participants actively seek it out. This reflects results from other food labelling studies that depict middle-aged women as most likely to consult food labels (including for meat (Hoffman, 2000) and fish (Pieniak et al., 2007)). Such responses also suggest that generational variances in labelling trust exist with younger groups more dismissive and older generations more trusting, contradicting much food labelling trust research (for example, Pieniak et al. (2007)). Income level may also represent an influential factor here (particularly in recessionary times), with food price continually reiterated as an important consideration in food purchasing decisions both in the academic literature (for example, see Baron and Mueller (1995) in Bulgarian and Czech consumer contexts and Knight et al. (2007) in the European food distribution context) and consumer surveys (with 56% of Irish consumers reporting pricing as key information sought from food labels in 2007 (FSAI, 2007)). Meanwhile, for those that responded positively, the Bord Bia label signalled a high quality product, evoking notions of patriotism and trust that the food is Irish and thus safe to consume. This echoes preferences for domestic food products expressed, for instance, by Guéguen and Jacob (2012) in France and by Juric and Worsley (1998) and Knight et al. (2007) concerning the 'halo' effect and related trust induced by domestic food references.

Interestingly, the 2008 pork crisis received no attention in the pork product exercise, despite it representing the most recent indigenous food crisis event in Ireland. This suggests that the crisis was indeed managed effectively by the FSAI as insisted by several stakeholders interviewed (explored later in Chapter 6), with decisive withdrawal action perceived to result in the crisis passing over relatively quickly by politicians (Oireachtas, 2009) and academics alike (Casey et al., 2010; Jacob et al., 2010a; Casey and Lawless, 2011). Alternatively, such responses could result from the effort required to remain constantly vigilant following a major food crisis event highlighted by Berg (2004). Consumers are thus perhaps settled back into pork purchasing routines two and a half years on from the dioxin scare.

5.5.1.2 *Organic Fruit*

Country-of-origin issues raised the most discussion regarding the second food product, indicating that food safety is not a primary concern associated with the apples. Indeed, reflecting positive organic perceptions uncovered in the FSAI (2007) survey, the organic label sparked inherent trust and feelings of safety for many students, retirement participants and sports players, as did the specific retailer brand. Instead, adding

distinct geographical and scalar dimensions to focus group discussions, country-of-origin conversations dominated. Issues of environmental sustainability, the true meaning of 'organic' and the need to grow and buy locally and nationally produced food were particularly apparent. For example, several participants (including one office worker and several community gardeners) contended that the apples should not be considered organic (and thus good for the environment) given the significant food miles travelled (either from Argentina or the USA). For example:

Tim: This is food for rich people who want to think they're doing the right thing.

Brigid: But their food miles, they couldn't be the right thing with the food miles.

Tim: Yea! Oh but it's got a lovely label and it says organic, you know? [mockingly] And a lot of people would only buy that.

Community Gardeners

The fact that apples can be grown easily in Ireland was also alluded to by ICA, parenting, retirement and gardening participants, linking with issues of patriotism and concern for the environmental consequences of air-freighted foods. This reflects growing consumer demand for sustainable and eco-friendly products (as contended, for instance, by Nidumolu et al. (2009) in business contexts) and recent attention paid to food miles and sustainability in academic and consumer scenarios¹⁶. Indeed, female students represented the only group to not comment negatively on the origin of the product, although the sustainability of the product packaging did raise concern. At an additional scale, a lack of standardisation in organic practices worldwide was alluded to by several participants. Adding to the recurrent theme of food risk coming from the 'outside', parents and male sports players particularly doubted the extent to which Argentinean organic standards would be comparable to Irish ones. Such concerns echo organic doubts uncovered by Eden et al. (2008a, p11) where UK consumers were found to be "*much more distrustful and uncertain about other countries' regulations*". Perceived difficulties in import inspections and variability in regimes fuelled such concerns.

Additional focal points concerning the second item included an interest and reliance on food aesthetics to determine purchasing and consumption routines. Indicating that perhaps taste and pleasure can overcome safety and patriotic concerns, numerous interviewees spoke of the 'look', 'sweetness', 'taste' and 'feel' of the apples.

¹⁶ For example, see Iles (2005) regarding sustainable agriculture in the U.S. and Europe, Pretty et al. (2005) on the environmental cost of an average UK food shop, Kemp et al. (2010) on reported food mile concerns of UK consumers and IFICF (2011) regarding recent consumer concerns with food sustainability.

For example, some female students, community gardeners, FÁS participants and office workers claimed preference to buy loose fruit to allow for physical examination (for example, to search for visible flaws and bruises) while preferences for the taste of the 'pink lady' variety was cited by student and office worker participants. Further, the mere 'look' of the product was enough to convince many consumers of its quality and safety, including sports players, FÁS participants, office workers, community gardeners and students. This reflects Grunert (1997) regarding the impact of meat aesthetics (particularly colour and fat visibility) on consumers' purchasing practices in the UK, Germany, Spain and France.

Finally, the risk issue of most concern with the apples related to chemical usage in fruit production processes (even organic fruit). Indeed, particular chemical suspicions arose due to the origin of the apples and the assumed need for chemicals to maintain freshness over the distance travelled. Thus, while their organic quality signalled an immediate sense of safety for many, several others (including ICA, sports, parent and gardening participants) doubted the extent to which the product was indeed organic. This reflects the prevalence of a "*sceptical consumer*" in UK food assurance contexts (Eden et al., 2008, p624). As a result of such concerns (along with additional fears of improper handling), many ICA, student, sports player and retirement participants cited a need to wash all fruit and vegetables regardless of labelled organic qualities.

5.5.1.3 GM-free product

Finally, the utilisation of beans as the third food item proved very successful in discussing the case study risk areas of GM foods and food labelling. However, for the majority of consumers (all bar one student out of forty-nine participants), its non-GM label went unnoticed until the researcher directed attention to it. This suggests a lack of awareness of and/or attention to such labelling in everyday contexts. Nonetheless, fears, concerns and opportunities associated with this technology were explored by participants when probed, with largely negative perceptions resulting. This reflects negative GM perceptions reported across the EU (Gaskell et al., 2010) and Ireland (Irish Council for Bioethics, 2005). Indeed, only two participants (one male sports player and one FÁS participant) suggested some potential GM benefits including its capacity to feed increasing populations (as similarly explored by Hall (2008) in a Scottish farming context and Cocklin et al. (2008) regarding its potential to aid food security in Australia).

Nevertheless, many consumers found it difficult to articulate what their specific concerns were relating to GM, with many simply basing their negative opinions on a 'gut

instinct' or feeling about the technology. For example, reflecting the significant role believed to be played by feelings when making risk decisions under conditions of uncertainty (Loewenstein et al., 2001), one parent commented:

Róisín: I don't know, I just don't like the idea of [GM], like it's disgusting like, I don't. It's not that I've done a huge amount of research into it or anything but I just, you know, the idea of it.

Mindful Parents

Meanwhile, echoing GM concerns raised in the literature relating to health, GM corporation transparency and the concentration of GM production (Shaw, 2002; Miles et al., 2005; Cocklin et al., 2008), other participants drew on more specific GM concerns. This included perceived health consequences (*'they say it's not healthy'* (Gavin, FÁS participant)), the power and profits of GM corporations (male sports players and FÁS participants) and the potential for a GM colonisation from America (FÁS participants and office workers). Reflecting additional debates regarding perceptions of naturalness on the acceptance of GM technologies (Shaw, 2002; Sjöberg, 2002; Miles et al., 2005; Connor and Siegrist, 2010), some mindful parents, community gardeners and FÁS participants similarly regarded GM as 'messing with nature' in its attempts to supply food. For example, in keeping with Connor and Siegrist (2010, p518) who contend that *"people for whom naturalness of food is important would be less willing to accept genetically modified foods"*, one community gardener commented:

Rob: I don't like the idea of messing around with what's natural or say, I like natural things in general...if you go against it then you're asking for trouble.

Community Gardeners

However, while the majority stated a preference for non-GM foods, very few purposefully seek it out when making everyday purchasing decisions. Indeed, only three participants (from community garden, office worker and mindful parenting groups) spoke of sourcing non-GM produce and this related only to soya. Thus, representing a conflict between consumer ideals and practices, many ICA, retired, sports and student participants simply assume that everyday food items are GM-free (indicating a lack of awareness of GM feed being utilised in Ireland cited by O'Regan (2011)). A perceived lack of GM labelling contributes to this lack of awareness and fear for many. Thus, while some information regarding GM appears to have reached certain consumers (for example, an office worker demonstrated significant awareness of Ireland's position on

GM foods while one community gardener discussed GM labelling loopholes in Europe), its awareness remained limited in the majority.

Outside of GM concerns, branding was of relevance in this third food item context, sparking interesting discussions around trust, familiarity and food routines. Reflecting the often cited 'fear of the unknown' in food risk literature (for example, see Fischer and Frewer (2009) on the impact of food familiarity on food risk and benefit perceptions), a lack of experience with the product brand provided reason for avoidance for many retirement, ICA, student and sports participants. Instead, FÁS participants linked bean purchasing with family traditions and routine, a retirement participant spoke of trust in the standard of branded products and female students admitted to unconsciously picking up familiar brands. Moreover, the use of a relatively unfamiliar product (including regarding brand, labelling and agave syrup content) proved useful to engage participants in social learning (a purported benefit of focus groups (Wibeck et al., 2007)). Participants learned both from one another and the researcher regarding GM processes, labelling laws and natural sweeteners.

Overall, the food product exercise proved successful in exploring everyday food safety concerns, highlighting a series of governance priorities for consumers and enabling significant learning experiences. Drawing attention to banal, everyday insecurities (Dodds, 2012), the exercise allowed consumers to debate and contextualise everyday, non-crisis concerns and probe the reasons behind these perceptions.

5.5.2 Governing food risk: priorities and future concerns

As highlighted in Chapter 4, a second activity was organised based upon the FSAI's 2011 food safety surveillance activities to generate more focused discussion concerning food risk governance in Ireland. Participants were asked to rank the activities in order of surveillance importance, that is, according to the level they feel each food area should be monitored and prioritised (GM foods, irradiation, microbiology, chemicals and food labelling - see Appendix 9.7). A need for group consensus on this positioning was emphasised, although levels of frustration were evident in some groups (including mindful parents, students and office workers) that desired all five areas to receive equal surveillance attention. Nonetheless, consensus was reached in all groups bar the community gardening group where the filtering out of participants to another meeting left one gardener from a scientific background arguing with another regarding

the safety of GM and irradiation processes. Ranking activity results are highlighted in Figure 4¹⁷.

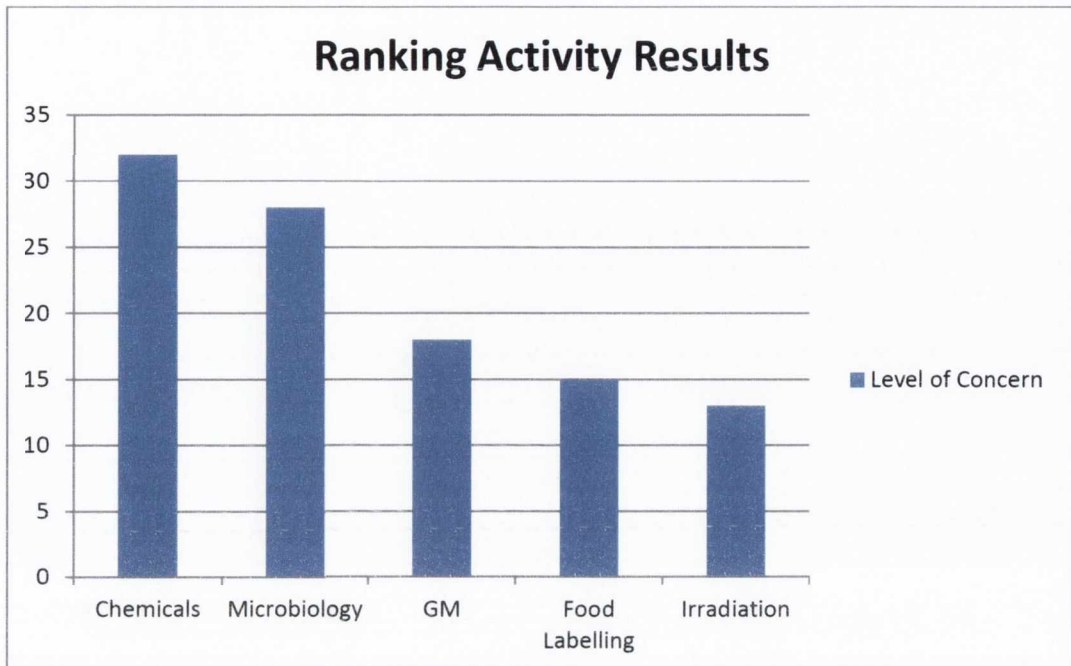


Figure 4 Consumer Ranking Activity Results

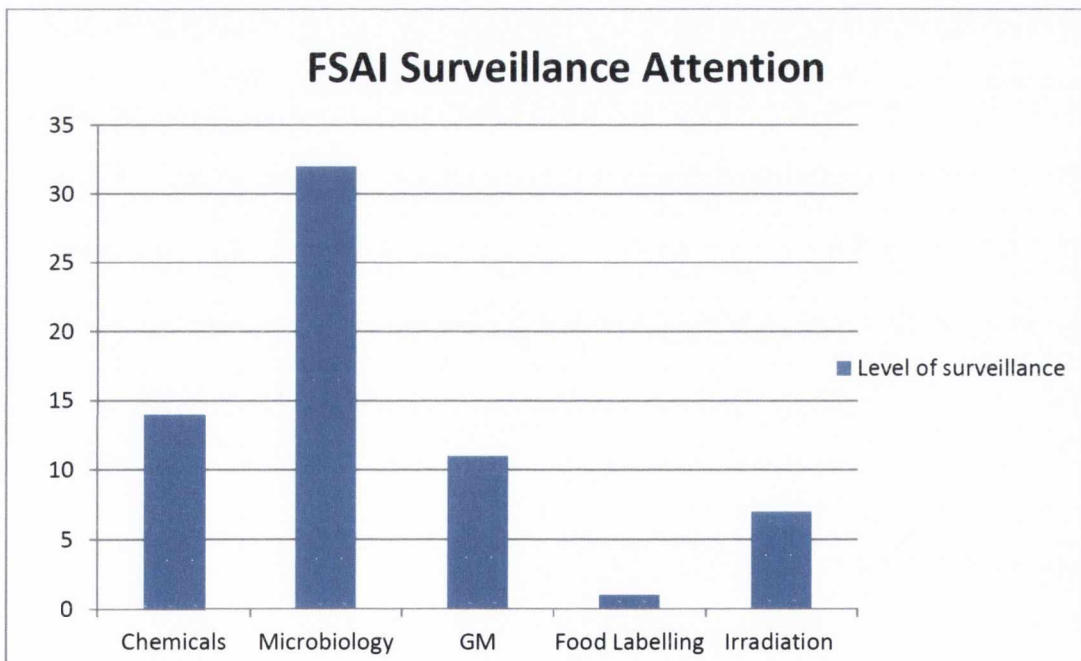


Figure 5 Surveillance Activities conducted by the FSAI as of June 2011

¹⁷ This figure was created by quantitatively attributing a level of concern from one to five to each food risk area (with 1 representing the least amount of concern and 5 representing the most concerning) according to how participants ranked these activities.

When compared with the level of surveillance undertaken by the FSAI as of June 2011 (highlighted in Figure 5 according to the number of investigations into each arena), chemical and microbiological concerns can be seen to be prioritised by both consumers and the FSAI. This reflects findings from the Eurobarometer 2010 that reports 59% of Irish citizens being worried about bacterial food poisoning, while 60% worry about chemical residues in food (Eurobarometer, 2010). However, microbiological surveillance receives significantly more attention from the FSAI, despite consumers ranking chemical surveillance as slightly more important. Levels of consumer concern relating to GM foods and irradiation also displayed some similarities to the prioritisation of these activities by the FSAI, indicating some convergence between expert and consumer opinion. This contradicts the expert-lay divide assumed to exist across risk (Slovic et al., 1981; Sandman, 1987; Hampel, 2006), environmental risk (Wakefield and Elliott, 2003) and food risk arenas (Hansen et al., 2003; McCarthy et al., 2006)).

Nonetheless, the biggest anomaly exists regarding food labelling surveillance. While food labelling ultimately came fourth in order of surveillance prioritisation for consumers, this area was often attributed significant importance in initial discussions before being downgraded as more immediate and severe consequences were associated with other issues. Nevertheless, echoing the importance of effective labelling emphasised in the literature (including regarding meat (Bernués et al., 2003), nutrition (Cheftel, 2005; Gracia et al., 2007) and GM foods (O'Fallon et al., 2007)), the need for honest, transparent and effective labelling was noted by several groups. Some (including office workers and female students) even attributed an overarching importance to labelling, stating that without it, consumers would be unaware of (and thus unable to avoid) GM and/or irradiated products. Country-of-origin labelling again held significance for ICA, retirement and FÁS groups, while references to the importance of allergen labelling also emerged from a community gardener. With only one FSAI labelling surveillance study present online as of June 2011, this contradicts the level of importance attributed to this food matter by consumers. Thus, overall, surveillance ranking findings suggest that while some similarities exist, differences remain between what is prioritised by the FSAI and what concerns consumers in everyday food safety contexts.

Additional areas perceived to require FSAI surveillance by consumers included further chemical concerns (particularly hormones and packaging contamination), country-of-origin transparency, agri-terrorism and cost concerns. For instance, office workers and students expressed desires for catering establishments to display meat origins on menus while the perceived ease with which terrorists could contaminate the

food supply was expressed by retired and ICA participants (as similarly explored by Bruemmer (2003)). Finally, the cost-conscious FÁS group called for increased monitoring over perceived price-fixing in food arenas. Such a diverse mix of suggestions indicates that both safety and non-safety issues concern consumer groups at present.

In terms of future food risk, fears over microbial, chemical and GM risks predominated, echoing the surveillance priorities of the FSAI. Nevertheless, significant additional fears cited by consumers included a fear of unknown, future consequences associated with current food practices. Sports players, office workers and mindful parents particularly alluded to fears concerning the evolution of food risk and what research has not yet revealed. A lack of consumer control and distinct mistrust in current food knowledge was therefore obvious. For example:

Karen: Well what nobody knows about yet, you know? What people feel is safe now but the information we don't have yet...what research has not found yet in terms of, you know, what they're saying is safe for them to do with food now, but we'll find in time it isn't you know?

Mindful Parents

Finally, linking with “*lifestyle hazards*” uncovered by McCarthy et al. (2006) and issues of self-control and nutrition explored by Coveney (2000), multiple students, parents and community gardeners raised concerns regarding nutrition, obesity and diabetes in the future. One mindful parent, for example, called for the increased regulation of ‘*junk food*’ (Gary, Mindful Parents), while several students spoke passionately about a need to make healthy food less expensive. Perceiving unhealthy processed food to be cheaper, such discussion reflects current debates regarding the imposition of a ‘fat’ tax on unhealthy foods and recent counter-arguments to instead focus on reducing the cost of healthy produce (Gray, 2012a).

Overall, the surveillance ranking activity proved useful for directing discussion towards specific food risk governance priorities. It also allowed participants to further engage in learning experiences and contextualise food risk concerns. Such results prove useful for comparison with the surveillance priorities of the FSAI (the ‘experts’) and could help the Authority to incorporate consumer concern in future surveillance activities. To further probe food risk governance perceptions and expectations, participants were also questioned regarding desired and actual sites of food safety responsibility in Ireland; results of which are provided in the following section.

5.6 Food risk governance in Ireland: perceptions, responsibility and effectiveness

Echoing the need for food safety to be controlled by governance rather than government explored in Chapter 2, a multitude of actors across scales and spheres were identified by consumers as holding responsibility for ensuring safe food in Ireland. This ranged from local production, processing and retailing scales to national governing structures and supranational regimes. For example, sports, office, FÁS and ICA participants placed food safety responsibility with food producers, while female students believe that a moral and contractual duty exists on behalf of processing industries to ensure safe food. Indeed, several participants (including sports players, students and office workers) spoke of a need for food safety responsibility to be distributed across this range of actors. Nevertheless, despite political and regulatory aims to attribute food safety responsibility to industry under Regulation (EC 178/2002), the majority of consumers (including from ICA, student, sports player, community garden, FÁS and retirement groups) continue to attribute food safety responsibility to broader governing structures of the state. More often than not, this included attribution to specific government departments such as the Department of Agriculture (rather than the currently responsible Department of Health).

Moving to the most intimate and local scale, the body, several consumers also spoke of personal food risk responsibilities. Contradicting Erdem et al. (2012) who found low levels of consumer acceptance for meat safety responsibility in the UK, consumer responsibility to personally seek out food risk information, question production practices and mitigate against food risk through individual consumption choices featured within parenting, sports player, FÁS, ICA and gardening groups. For example, sports players emphasised personal responsibilities to seek food safety information online, while ICA members contended that consumers possess the buying power to influence policy. Similarly, one parent attributed retail loyalty cards (a key form of surveillance emphasised in a biopolitical context by Dillon and Lobo-Guerrero (2008)) as aiding this consumer influence by making changes in consumer choices visible to retailers. However, FÁS participants also highlighted unwillingness on behalf of consumers to forgo certain food items to make a stand against industry as limiting their impact on food regulatory arenas.

Outside of these idealised notions, and when questioned by comparison what food risk governing structures consumers perceive to be currently in place in Ireland, a significant degree of uncertainty existed. Indeed, confusion regarding the role of

relevant food bodies was apparent in student, retirement and ICA groups. For example:

Edel: I don't know what the Irish government is doing. Or is it Bord Bia who does it at the minute? Are they regulating it?

Female Students

Indeed, Bord Bia (the Irish food marketing board) also mistakenly represented a key food risk governing body for ICA members and male sports players. Elsewhere, community garden and FÁS groups appeared the most aware regarding Irish food risk governing structures, although some dissatisfaction with such structures was obvious. For example, one gardener spoke of inherent conflict believed to exist in government department outsourcing of food safety responsibilities. FÁS participants similarly indicated significant awareness of food risk governing structures in Ireland with two participants immediately referring to the FSAI in this context. Two other consumers (one office worker and one parent) also spontaneously named the FSAI as a desired site for food risk responsibility though overall, awareness of, and unprompted referrals to, the FSAI were limited across groups. This reflects findings from the FSAI (2003) survey where only 8% of consumers spontaneously named the FSAI as a key food safety regulatory body (compared to 22% naming Bord Bia). Developing such results in a qualitative context, this item is explored in more depth in the following section.

5.6.1 FSAI awareness and trust: consumer perceptions

When questioned directly, most groups (including female students, ICA members, mindful parents and retired participants) maintained to be vaguely aware of the FSAI, with many believing to have heard of it, but unclear about its specific roles. This again reflects findings from the FSAI (2003) survey where 60% of participants recognised the FSAI name when prompted, but were unsure of its functions. Such repeated findings raise questions regarding the FSAI impact and outreach communications in the interim period. Indeed, when probed, most participants assumed that the FSAI conducts inspections of FBOs, with confusion again arising between the plethora of food bodies operating in Ireland. For example:

Julia: I don't know, Food Safety Authority, there's so many different boards.

Elaine: Yea it's hard to define which does which.

Julia: Yea, yea

Rachel: Yea

Julia: I don't know what Bord Bia really do even either like, do you know?

Female Students

Indeed, such confusion led to many focus group participants attributing food risk responsibility to an undefined 'they' when speaking of food risk governing actors in Ireland, reflecting concepts of the interchangeable expert explored by Shaw (2002) in a UK GM context. Further, similar to some private sector actors (see Chapter 6), several consumers (including young students and sports players) confused *Safefood* advertisements with those of the FSAI, while FÁS and sports players also attributed a nutrition remit to the Authority. A number of community garden, office and parent consumers meanwhile expressed no awareness of the FSAI whatsoever. Of those that were aware, a variety of positive and negative impressions emerged. For example, for one office worker, linking with the theme of 'no news is good news' also explored in Chapter 6, the fact that the FSAI can operate quietly and effectively in the background represented a positive. Forming a 'paradox of a crisis' theme, this participant further praised the FSAI's handling of the 2008 pork crisis, stating that this increased his trust in Irish food risk governing structures:

Brian: It might have been over-cautious but I think it, you know, it gave people confidence. [FSAI] mean what they say.

Office Workers

A second office worker echoed this, commenting that they would rather see drastic product withdrawals than lives put at risk. Similarly, the manager of the sport's team expressed trust in Irish food risk governing institutions as a result of their detection and management of food scares over the last decade:

Fred: Jesus if they're that able to pick out those things, and, you know, that they must be fairly thorough. That's what would hit my brain anyway, you know? That they're on top of their game.

Male Sports Players

A mindful parent also attributed positive connotations to the work of the FSAI (despite believing FSAI actions have been poorly publicised), with broader trust in food labelling regulations and strict organic standards further contributing to this positive

opinion of Irish food risk governance. This positivity however was not echoed by other consumers. For example, FÁS participants argued that the effectiveness and success of governing bodies is significantly hampered by the power of the food industry in determining food safety, consumption, research and regulatory agendas. This mirrors concerns regarding the subjectivity of scientific researchers reported in biomedical contexts (Wiltholt, 2009) and risk assessment arenas (Slovic, 1999; Shaw 2002). Specific frustration and mistrust of FSAI motives was indeed voiced by one community gardener who challenged the purpose and effectiveness of the Authority's surveillance activities:

Brigid: You say they monitor only, it's not sufficient...if they're monitoring chemicals, why don't they make a pronouncement on the nitrates and nitrites?... why don't they say that bacon should be sold naturally? Why don't they? Isn't that a huge, you know, indictment of their role in society? And why aren't they doing their job?

Community Gardeners

For this participant, such inaction by the FSAI is legitimising the use of harmful chemicals in food production processes. This reflects notions of inactive power explored by Crenson (1971) and Lukes (2005) regarding the legitimisation of pollution by steel companies in America. As a result, the community gardener lacks trust in the FSAI, revealing the potential for industry biases and economic motivations behind the Authority (also explored in Chapter 6):

Brigid: They're not as trustworthy to me in that respect because of their lack of, you know, critical examination of what goes into food. They call it monitoring – it's daft! I mean, you don't monitor something that shouldn't go into the food in the first place...Bin it!... it copper fastens the legality of it.

Community Gardeners

Additional negative and highly nuanced perceptions emerged from one parent who spoke of decreased trust in the FSAI as a result of communications it issued regarding breast feeding. Perceiving the Authority to possess significant '*commercial interests*', this parent questions its scientific credibility and independence from patriotic dairy industries (two aspects revealed in the documentary analysis phase (see Chapters 4 and 7) as creating trust in the FSAI following De Jonge et al. (2008)):

Una: I know they have very funny attitudes towards breast feeding and bottle feeding and since they came out with that I just don't have any time for them at all, no. Do you know, I just think they obviously have a very much commercial interest in formula and, you know, this idea that it's patriotic...since then they lost all credibility with me do you know? That they obviously have certain agendas...they should be totally impartial, you know, and they're not...if it was just going on research, you know, and evidence based then, you know, they wouldn't have made the claims they did.

Mindful Parents

More drastically, creating a complex geography of FSAI power (further explored in Chapter 6), one gardener believes that most food safety incidents are managed at the EU scale, while a second gardener and some ICA members perceive more power and influence to exist at local and personal scales.

Moreover, the transparency, frequency, purpose and outcomes of FBO inspections were called into question by sports players, students and ICA participants, echoing recent concerns for environmental policy effectiveness, efficiency and legitimacy expressed by Crabbé and Leroy (2008). For instance, recalling two and a half years of work experience in a restaurant, one male sports player contended that they always received prior notice to an EHO visit. As a result of this accurate scheduling (to the very time of day), the sports player comments how practices would change in the restaurant for this limited period to ensure EHO approval:

Tommy: I used to work in a restaurant and they all, the inspector came round and they would always tell you when he's coming around. And sure my manager had to come over and tell me change this, change that, put that there, hide that out the back. And we'd do it, you know? Thinking nothing of it. Nobody ever got sick from the restaurant as far as I know so.

R: Yea but the inspectors ring in advance that they're coming and give you a warning...?

Tommy: Oh it's, it's scheduled. You'd hear 'next Friday', make sure the thing is scrubbed yea. And when he went round he only had a quick look as well and then he got a free meal and often a glass of wine and he went home. That was it.

Male Sports Players

A female student similarly spoke of informed inspection processes in a hotel she worked in, while an ICA member spoke of restaurants warning one another when an

inspector arrived in a particular tourist town. Another ICA member questioned potential leniencies that could result from restaurants having personal contacts in the EHO arena. Indicating a level of corruption within the Irish food safety governance system, FBO ability to plan and increase cleanliness for an EHO visit is perceived to dampen the fear felt by such operators. Such responses echo the lack of industry fearfulness also uncovered in the stakeholder interviews (explored in Chapters 6 and 7).

Extending these arguments, the male sports player added that only one inspection took place in the restaurant during the extended period in which he worked there. Stating that this is '*not good enough*' (Tommy, Male Sports Player), he believes inspections need to be held every six months for food safety governance in Ireland to be effective. Indeed, also drawing on personal work experience, student and retired participants questioned the maintenance of hygiene standards in hotels and restaurants, with female students similarly calling for more '*random visits and spot checks*' (Edel, Female Students). Retired and sports participants also suggested the introduction of a rating system to Irish food safety inspections, whereby restaurants would be graded for safety and this information made available to the public. Such ideas already operate in Toronto, New York, Los Angeles and the UK, with dedicated databases of restaurant hygiene grades available online and through I-phone applications for public viewing (Consumer Focus Wales, 2012; NYC Health, 2012; Papadopoulos et al., 2012)¹⁸. Such mandatory displays are believed to have improved food hygiene standards in these regions, reduced food-borne illnesses and allow consumer to make informed consumption decisions (Consumer Focus Wales, 2012).

By comparison, ICA members overall spoke more positively of their health inspector experiences, deeming them to be conducted in a fair and regular manner (despite cited early warnings and personal contact fears). Indeed, echoing concepts of comfort brought about by surveillance uncovered in the stakeholder interview phase, one participant commented:

Tess: I do feel that they do keep a great eye on restaurants. I think we're one of the safest countries as far as that goes.

ICA Group

¹⁸ In such mandatory labelling systems, restaurants receive points for specific food safety violations and/or are rated out of 5 (as in the UK) for different aspects of food hygiene. Promises remain that restaurants will be closed in the case of serious public health violations.

However, some questions were raised by additional ICA participants regarding the impact of current economic constraints on the frequency of inspections (reflecting similar cutback concerns of the EHO interviewed). Elsewhere, discussion around inspection frequency and thoroughness sparked debate within the female student group regarding the over-regulation of the food chain. Echoing responses from retired participants and some private sector interviewees, students spoke of a need to be exposed to food risks to build up immunities:

Elaine: It's good to be exposed to a lot of things as long as it's not like salmonella!
[laughs]

Female Students

An additional community gardener similarly contended that food safety is over-regulated in Ireland, stressing a need for more flexible and tailored regulatory regimes when applied to small food businesses, cottage industries and festivals.

Finally, as a result of low consumer awareness of the FSAI, additional office workers, FÁS participants and students called for increased communications from the Authority. In particular, FÁS participants believe that the Authority is '*not on the ball*' (Gavin, FÁS group) concerning routine monitoring, surveillance and communication, with a need for increased regular proactive communications identified. Reflecting Frewer et al. (2002) who emphasise the need for proactive risk communication strategies to reduce the potential for risk amplification when media report future crises, FÁS participants commented of the FSAI:

Aidan: They come out every now and then with something, an ad on the telly but then it falls away. As Gavin said they always come out after the fact.

Dave: They're very low profile, they should be, it should be something that's there every week, you know?

Aidan: It should be in schools as well teaching the kids, yea, it should be

Gavin: It should be up there every week, yea it should be a bit more proactive.

FÁS Group

Further suggestions for improving food risk and FSAI communications are highlighted below following an exploration of existing communication channels and perceptions of the consumer voice in Irish food risk regulatory matters.

5.7 Communicating food risk: techniques, channels and practices

Echoing McCarthy and Brennan (2009, p552) who highlight multimedia intermediaries (including television adverts, newspaper articles and radio chat shows) as “*vital cog[s] in the food risk communication process*”, the most commonly referred to channels for food safety information for consumers included television, radio and newspapers. This also mirrors findings from the Safetrak (2006) survey where 18% of Irish consumers reported preferences for radio, television and newspaper advertisements for food safety and nutrition information, 10% cited newspaper articles and 6% regular radio pieces. Further, reflecting the power of the media in influencing food risk perceptions (DeBoer et al., 2005) and societal behaviour in Ireland (McCullagh, 2007), mindful parents, office workers, students and sports players predicated food product avoidance on media portrayals of food processing techniques and crises. For example, a recently televised programme regarding processed meat resulted in several participants (including mindful parents and ICA members) reacting and shaping their food risk concerns around this item. For example:

Tess: There was a programme done, processing of ham there recently, and I believe that you would, I didn't see, it but you'd never touch a bit of ham again.

Group: Mmm, mmm

Margaret: Good job I didn't see it then! [laughs]

....

Tess: It was scary, yea.

...

Tess: As well as that they mulch it all up and then they press it down.

Peggy: Put a clamp on it.

Tess: And this is what you're getting in most packet hams, you know? It's processed. They reckon now, some people, they wouldn't give it to the dogs after seeing the programme.

ICA Group

Similarly, students, sports players and office workers discussed their avoidance of salad products due to the (at that point ongoing) e-coli crisis in Germany. Serving as an example of the significant influence of the media on consumers (at the time of focus groups, organic salad producers in Spain had been wrongfully blamed for the scare), this also aligns with the reported impact of a crisis decreasing consumer trust, increasing risk awareness and altering risk practices (see Berg (2004) regarding the

impact of food scandals on consumer trust across Belgium, the UK and Norway and Halkier and Holm (2006) concerning the impact of BSE on public confidence in the food chain and regulatory controls).

In addition, the power of everyday televised media was referred to by female students, with dramatic food safety advertisements deemed to be particularly effective in raising awareness, increasing risk consciousness and inducing appropriate action (a sign of communications effectiveness for McCarthy and Brennan (2009)). The role and power of celebrities within the media in educating the public and influencing risk perceptions was also apparent in focus group sessions, suggesting potential to explore the delivery of food safety education through such advocates in the future. For example, one ICA member indicated an increased level of confidence in a brand of eggs as a result of their use by a celebrity chef on television. However, reflecting Wakefield and Elliot's (2003) contention regarding increased public trust in face-to-face communications, the importance of personal contacts and 'word of mouth' for food safety information was also emphasised by ICA and FÁS participants. This suggests that personal communication and contact remains important for consumers.

Levels of satisfaction with the way in which food safety information is currently communicated nonetheless varied across groups. For example, retired and sports participants were content with food safety communication processes, while FÁS participants called for more messaging in the future:

Dave: There should be a bit more [communications], yea I would say. For my grandchildren's sake at the moment. I look at me now, I'm full of chemicals now so I don't mind, but for them growing up, I'd like to see a bit more for them.

FÁS Group

Thus, while consumers are reported to be receiving "*more information than ever about food, health, nutrition, and food safety*" in America (IFICF, 2011), consumers in an Irish context expressed discontent at the levels communicated. Similar responses were obtained from a community gardener who noted a distinct lack of food safety information (including on the FSAI website), particularly in periods of non-crisis. Characteristic of the attention given to crises throughout academia and the media in food risk (Frewer et al., 2002; Berg, 2004; Shih et al., 2008) and wider risk contexts (Kitzinger and Reilly, 1997; Hall, 2002; Dodds, 2012), this participant notes no regular updates on the FSAI website regarding everyday food safety tests. She also hinted at levels of cover-up regarding the then occurring e-coli crisis and previous food scares.

Believing that if companies have passed safety inspections there should be no reason to hide such results, this participant argued:

Brigid: I think there's a lack of [food safety information]. Now the time of the scare about bacon and that, I used to go onto the website, the FSAI website. I haven't gone onto it since because I don't think they do anything, you know? They don't report regularly. And they certainly won't tell you what they have seen and the result of each test.

R: So it's only where there's a scare?

Brigid: Exactly and they only give general information then, they don't give particular information. They don't tell you the full results of anything. I don't see why they shouldn't. If the thing is passed, it's passed. You can rely on a person if it's passed, you know?

Tim: But their lawyers will tell them different

Brigid: They wouldn't, they couldn't. Like if it's passed they couldn't, the lawyer couldn't say get rid of that.

Tim: But they'll just look for proof beyond what is scientific proof, yea.

Brigid: Exactly I know, they can look for whatever they like, you know? We should be told factual stuff, we should be told results and we should, names should be named.

Community Gardeners

Suggesting a level of deceit and cover-up, this excerpt raises questions about trust in the legitimacy, honesty and transparency of the FSAI during times of non-crisis. Contradicting notions of normative 'good governance' explored in Chapter 2 (Stoker, 1998; EGN, 2001; Lodge, 2004; UNESCAP, 2008) and effective public health agency communication (Papadopoulos et al., 2012), the FSAI is perceived to lack transparent, regular and independent communications. Participating female students similarly suggested a lack of food safety information in everyday life, with concern also arising regarding conflicting messages being portrayed. Such uncertainty reflects findings from the FSAI (2007) survey where 47% of consumers reported to be often confused by mixed messages about healthy eating. Consumer confusion thus arises regarding the health of certain products:

Edel: They confuse you and it's like one minute they'll say one thing and that's good for you. Like eggs, 'don't eat too many eggs' and then it's like 'eat eggs' and you're like 'I don't know any more'

Female Students

Equally, for ICA participants, the tendency for changing food safety opinions results in one believing that food risk communications need be taken '*with a grain of salt*' (Margaret, ICA) or received with some degree of scepticism. This suggests that faith has been lost in food risk communications of late, echoing Roberts' (2011) report of decreasing faith in government institutions, science and democracy and Frewer et al. (2002) who note declining trust in science, scientific institutions and food risk regulatory bodies. Significant mistrust in industry communications also emerged across three focus groups (student, ICA and sports player), with one community gardener, for example, believing that food corporations withhold information from the public:

Brigid: I don't trust corporations at all and I do not trust that they will give us information, even when they have it.

Community Gardeners

Similarly, echoing the reported mistrust of government to manage environmental (Roberts, 2011), technological (Shaw, 2002; Macoubrie, 2006), and food (Frewer et al., 2002; Irish Council for Bioethics, 2005; IFICF, 2011) risk, a mindful parent spoke of a distinct lack of trust in government sources for providing independent and honest food safety information:

Gary: Government are not for the people. They're like the parent company of all the corporations in Ireland. That's what most of governments are, they're not for the people.

Mindful Parents

Meanwhile, echoing Eden et al. (2008a) regarding trust and hope in the UK food assurance context, ICA participants 'hope' that government systems are effective and honest, while community gardeners contend that monetary interests will always prevail. At a more local level, ICA members, office workers and retired participants attributed responsibility for food safety information (particularly safe storage guidelines) to local retailers, butchers and farmers markets. Reflecting the reported importance of interpersonal ties in food purchasing routines (Sage, 2003), a personal connection with producers and butchers formed a significant part of this trust for participants. This also mirrors findings from the Safetrak (2006) survey where 'leaflets in local supermarket' represented the preferred source of food safety and nutrition information (cited by 40% of consumers surveyed in Ireland).

5.7.1 The consumer voice

Meanwhile, as highlighted in section 5.1 and contradicting the reported need for risk communication to operate as a two-way process (Slovic, 1987; Frewer, 2004; Hampel, 2006), participating publics believe that the consumer voice is not heard in food safety policy making and implementation. Four groups (student, FÁS, retirement and sports player) nonetheless contend that this perhaps results from a lack of effort on behalf of Irish consumers. For example, several consumers stated that it is not in the nature of Irish people to complain utilising formal communication channels. Portraying a stereotypical identity revolving around the 'relaxed Irish', retired participants for example argued:

Clive: It's like complaining in restaurants, people tell you where to complain. They say well, people say 'oh don't bother, don't bother' but I said 'it won't improve if you don't tell them, how do they know?' If anyone has a grievance with their food, I say 'no I'll say it to them' you know? If it wasn't cooked or if it's something that, you know, otherwise they won't improve it.

Cathy: I, I, I, that's something I've noticed in Ireland, that's something I noticed in Ireland that people do not complain, they moan.

Clive: Yes, yea, but won't tell the...

Cathy: But they don't, they don't actually stand up and complain and go to the kitchen and send it back.

Clive: Yes, yea.

Retirement Association

Nevertheless, a lack of awareness of appropriate complaint channels may additionally hamper such communications. Indeed, a distinct learning experience was obvious in several groups regarding the existence of the FSAI helpline and website. This reflects findings from the FSAI (2003) survey which revealed a limited awareness amongst consumers regarding how to contact responsible food safety governing bodies. This again raises questions regarding the FSAI's communication outreach in the interim period, particularly given that such limited awareness was then somewhat justified by the "*relative newness of the organisation*" (FSAI, 2003, p20). Indeed, in this research, only one consumer (a community gardener) spoke of directly contacting the FSAI. For several ICA, parent and office worker participants, this linked with a sense of relief that they have never needed to make contact as a result of unsafe food experiences.

Nonetheless, expressing a need for the consumer voice to be heard, female students suggested that increased food safety education could prompt children to ask questions at home and motivate adults to take action. Meanwhile, retired participants declared that they would utilise FSAI communication outlets if they were aware of and had access to them. By contrast, FÁS members believe that they would not contact the FSAI even with a new found awareness of its communication facilities. Supporting Eden et al. (2008a) who notes challenges in relying on traditional 'knowledge-fix' approaches to engage consumers, receiving information about the relevant communication channels was not sufficient to encourage these latter participants to participate in food risk governance processes. Alternative levels of willingness to participate thus appear to exist amongst consumers; a characteristic that may be influenced by life cycle stage, perceptions of free time and/or personal interests (as similarly explored by McCarthy and Brennan (2009) concerning Irish consumer willingness to receive food safety communications). Indeed, FÁS participants also perceive that such a helpline would be permanently engaged or computerised, causing frustration and an unwillingness to make contact:

Gavin: I think technology is sort of pushing people to the back, I mean you can't get through to anybody any more, it's not just the food business, anything, 'please hold', 'please hold'...

Dave: You do get kind of cheated off on the end of the phone really or when you do get through it's press 1 for this, 2 for that, 3 for that. You press 3 then something else comes on! You know, 'you are through to such and such press one for' - aghhh [exasperated]

FÁS Group

Some male sports players also spoke of a tendency to avoid contacting governing authorities, preferring instead to obtain a compensatory voucher for use in the establishment that caused food poisoning. Such a response supports assignments of food risk vulnerability to this group by McCarthy and Brennan (2009) and resonates with the reported tendency for white males to possess lower risk perceptions (Slovic, 1999; Finucane et al., 2000). A perceived weakness of the individual consumer voice was also emphasised by this group, with several expressing defeat that consumer concern is not listened to unless a vast number of people formally complain.

5.7.2 *Improving future communications*

Despite disagreements regarding the need for more food safety communications, several participants suggested ways in which current communications could be improved. Revealing an interesting desire to apportion responsibility, most resorted to a top-down approach to such communications, although local actors were incorporated in a variety of ways. For example, ICA participants suggested that food governing bodies such as Bord Bia could engage with local communities through the ICA who attribute themselves as the principal food preparers in the home. By comparison, retirement, gardening, FÁS and sports participants believe that food safety communications should be led through government education programmes. For example, sports players and retired participants referred to a need to educate children about food origins (including through school gardening projects) and GM food. Further, speaking of a scientific illiteracy amongst the Irish population, one community gardener expressed a need for more general science education in schools to increase risk understandings. This reflects much of the literature that maintains a need to bridge the divide between expert and lay risk opinions based upon the traditional knowledge-deficit model. Involving the one way transfer of educative information from an authoritative expert source to publics, this risk communications approach persisted throughout the 1970s in an attempt to align consumer risk views with those of experts (Hilgartner, 1990; Frewer, 2004). Such approaches however contradict Siegrist et al. (2007) who found that increased knowledge through education has limited impact on consumers' acceptance and perception of GM technologies. The authors (p532) nonetheless contend that:

"This does not mean that the public should not be informed about gene technology. Providing information is necessary and may reduce misconceptions"

Hansen et al. (2003) similarly conclude that the knowledge-deficit model should not be wholly abandoned, particularly when consensus exists between experts and lay public regarding the values underpinning the risk area (with domestic food safety quoted as an example here).

Further suggestions from FÁS participants dramatically called for a weekly leaflet from the FSAI to be distributed through schools. Perhaps excessive in frequency, but providing updates on Irish food safety matters, it is envisaged that children would pass this information onto their parents. However, one FÁS participant disagreed,

believing such a regular communication to be unnecessary. Echoing themes of 'no news representing good news', this participant hopes that there would be no need for such a regular update from the FSAI:

Aidan: It would get to the masses if you give it to the kids, you know, because they're the ones in school and then it will get home but if you're handing it to someone in the street a leaflet, they won't, they'll just throw it away, you know? And who is going to see an ad, you know? It might get a few thousand but not everyone. You'd get more I think with the kids.

R: Alan you're saying no?

Alan: No it's just I hope there would be no need for it, you know? To get that far that people actually need to be warned on a weekly basis about food that's coming into the food chain. Like if the Food Safety Authority of Ireland are the sort of watchdog not necessarily an educational, you know, fora.

FÁS Group

Conversely, female students perceive the FSAI to play a pivotal role in food safety communications, even suggesting a channelling of FSAI surveillance activity resources to communicate with consumers about food safety. Other students stated a need for more general food safety advertisements, poster boards and leaflets to exist, along with food labelling lessons at primary school level. Transparent, honest and effective communication and education is seen as essential to empower consumer choice, echoing the call by Papadopoulos et al. (2012, p5) for "*public health agencies [to] communicate easily understood transparent, scientific information to the public*" to ensure wise consumption choices.

The role of the food industry in improving food safety communications was also highlighted by other focus groups. For instance, echoing "*graphic problems*" highlighted by Somerick and Weir (1998, p377) and labelling complaints expressed by older UK participants in Shaw (2002), calls to increase label font size emerged from sports player, student and retirement groups. Meanwhile, female students spoke of a need for more accessible food safety information on food labels. Highlighting an example of pictorial warnings on alcohol regarding its unsuitability for pregnant women, students spoke of a need to '*dumb down*' labels for consumers (Elaine, Female Students). Other students suggest the development of a code bar that could alert consumers to specific food hazards, while a need to standardise allergen labelling was also alluded to. Believing that such accessible information would allow consumers to better understand

and manage food risk, doubts however existed regarding the willingness of industry to implement such measures. Its potential nonetheless remained for some who noted an evolution of risk communications regarding smoking hazards in recent years (including on cigarette packets).

Finally, to successfully reach consumers, food safety information needs to be dramatic and *'in your face'* according to one office worker (Bernie, Office Group); a point echoed by a female student regarding the need to dramatise FSAI communications. This echoes some of the marketing and communication strategies utilised by *Safefood* of late and identified by McCarthy and Brennan (2009) as a common strategy of food risk regulatory bodies whose messages may be perceived as dull, uninteresting and confusing without such dramatisation.

Overall, this section has sought to demonstrate how consumers perceive, engage and interact with food risk communications in Ireland. Suggestions to improve food safety communication led to responsibility being attributed to a variety of scales and actors. Coupled with earlier desires for the display of EHO inspection results, this included a need for food governing bodies to engage with local communities, industry to improve the accessibility of food labelling and schools to educate the next generation on food traceability, origins and safety. Such responses reflect the governance literature explored in Chapter 2, which suggests a shift in governing responsibilities of late from the sole control of government to involving a myriad of public, private, civil society and semi-state actors (Stoker, 1998; Weiss, 2000; Strange, 2004; Chasek et al., 2006). Nevertheless, responsibility to educate about food safety ultimately lies with schools for several participants, rather than food risk governing bodies like the FSAI. A level of consumer responsibility was also however associated with food safety information and labelling consultation. The final sections of this chapter summarise consumer results, drawing on the key themes to emerge from the findings.

5.8 Consumer demographics and emergent themes

Outlining results from the consumer focus group phase of research, this chapter explored everyday consumer concerns, perceptions and experiences of food risk governance in Ireland. Although not statistically representative, the eight focus groups provided snapshots of opinion across a range of demographics known to influence risk

perceptions, including age, education, living environment and income (Juric & Worsley, 1998; Hoffman, 2000; Fischer and Frewer, 2008; McCarthy and Brennan, 2009). At a superficial level, and acknowledging that many variances occurred within groups, distinct concerns can thus be associated with each focus group category.

In keeping with literature that associates lower risk perceptions with white males (Slovic, 1999; Finucane et al., 2000) and younger demographics (Pieniak et al., 2007; McCarthy and Brennan, 2009), the male sports players portrayed the least level of food risk concern. Instead, this group was preoccupied with issues of nutrition and healthy eating, reflecting their active lifestyles. By comparison, the group of office workers were generally suspicious of a multitude of food sources and corporations. They displayed a distinct mistrust in retailers, lamented past food practices and placed trust in local personal contacts, particularly the butcher. FÁS participants were also particularly sceptical of current food chain practices and actors, expressing fear and mistrust of GM corporations in particular. This perhaps links with literature that associates lower educational levels with increased gene technology fears (Connor and Siegrist, 2010) and lower income with scepticism regarding food labelling (Pieniak et al., 2007). Issues of cost and food value were also of concern to this low income group, with significant calls also emerging for more food safety education and communications.

Opposing these sceptical and suspicious characteristics, ICA participants expressed a sense of hope and trust in the food chain and related governing actors, with many assumptions existing around the safety of Irish food, traditional practices and the intentions of governing bodies. This is akin with findings of Hoffman (2000) and Pieniak et al. (2007) where middle-aged women were found to be most likely to trust meat and fish labels respectively. Some suspicions nonetheless also arose in this group concerning particular products and industry practices. Meanwhile, retired participants portrayed food risk and governance perceptions that drew on multiple life experiences. Although generally trusting of governing structures in place, deteriorating health has caused some in this group to adopt increasingly personal risk avoidance strategies (for example, avoiding certain products and shopping in farmers markets). This is in keeping with McCarthy et al. (2006) who note the influence of personal health scares on food risk perceptions and Fischer and Frewer (2008) who highlight the impact of poor health on domestic food safety practices. The parenting group similarly assumed significant levels of personal food risk responsibility, assuming this responsibility on behalf of their young families also. This is consistent with Ristovski-Slijepcevic et al.'s (2010) exploration of the 'good mother' image created in a governmentality context to guide family eating practices (see Chapter 2). Representing a risk conscious group and

reflecting tendencies of the “*sensible*” consumer (who engages in precautionary practices to eliminate danger in food) (Berg, 2004, p23), issues around allergens, chemical residues and meat traceability represented important safety issues requiring governance. Such responses also echo stereotypes of risk-conscious females cited throughout risk (Slovic, 1999) and food risk literature (Rozin et al., 1999; Hoffman, 2000; Berg, 2004; Fischer and Frewer, 2008). Mistrust in governing structures and the motives of the FSAI was also obvious in this group.

Issues of consumer education were important in several focus group sessions, but were unsurprisingly prominent in the group of female students who were training to become primary school teachers. A significant responsibility to teach the next generation about food origins, risk, safety and labelling was assumed by this group, who altogether provided mixed responses regarding different food risk and governance priorities. Finally, the community gardeners displayed surprising results that did not reflect intuitive assumptions based upon consuming organic, local food to avoid food risk (for example, as reiterated by Shaw (2002) regarding GM avoidance strategies of vegetarian and organic consumers). Instead, as a result of a diverse range of participants (including from multiple nationalities and scientific backgrounds), gardeners expressed divergent opinions on food technologies, sustainability issues and the impact of food miles on purchasing routines. Mistrust in food corporations and FSAI-industry connections were nonetheless obvious, with perceptions also existing that food is over-regulated to date.

From the above focus group analysis, it is possible to pull out six key themes relating to consumer food risk and governance perceptions in Ireland. These are summarised in Table 17 in Appendix 9.9 (with accompanying focus group quotes and relative positioning in the literature) and can be categorised as follows:

- 1) **Food risk consciousness** – From focus group discussions, it became apparent that food safety does not predominate as an everyday consumer concern. Indeed, while some risk avoidance strategies are adopted, many consumers simply assume that food in Ireland is safe and are thus not overtly preoccupied with food risk in everyday scenarios.
- 2) **Risk from the ‘outside’** – Introducing geographical and scalar elements and linking with patriotic assumptions regarding the safety of Irish food, a significant perception emerged that food risk comes from the ‘outside’ into Ireland. Concerns for uneven food safety standards worldwide featured in such

discussions, with many choosing to buy Irish products as a strategy to avoid food risk. A spatiality of trust also emerged, demarcating between what is 'outside' and 'inside' from local to global scales.

- 3) **Personalised risk perceptions** – As highlighted above, one of the key findings of this research revealed public articulations of food risk and related governance as positioned within wider social, political and economic contexts. Gender, age, income and education represented significant influencing factors, although personal risk and work experiences were also found to influence such perceptions.
- 4) **Practice vs. theory** – Another significant finding from the research revealed a disconnect between what consumers say, believe and feel and how they behave in practice. Thus, while the majority highlighted food risk concerns when probed, most admitted to not considering these issues in everyday purchasing and consumption scenarios. Instead, citing defences such as a lack of time, income and knowledge, many simply resort to routine purchasing habits and appear to ignore risk for the advantage of an easy life.
- 5) **Food risk communications** – Discussions also revealed the principal food risk communication and education channels utilised and desired by consumers. Alternative levels of satisfaction with current communications were uncovered, with a distinct lack of interaction between consumers and food risk governance practices and bodies (including the FSAI) also apparent. A lack of personal motivation, disinterest, limited awareness and feelings of exasperation fostered this weak consumer voice. This presents a dilemma for policy makers who face criticism for not including consumer opinion in governance decisions, but cannot motivate the population to participate when efforts are made to include them.
- 6) **Trust in and need for the FSAI** – Despite varied food risk experiences and governance awareness levels, a need for independent food governing bodies such as the FSAI was highlighted by consumers. This came in spite of some scepticism and mistrust of the FSAI and related EHOs by consumers who perceive inherent bias from industry in government actions. Instead, this need was framed by desires to oversee mistrustful industries and a perceived lack of consumer time and ability to police food for themselves.

Of these six themes, three have been dealt with extensively in the literature. As highlighted in Chapter 2, this includes exploration of personalised risk perceptions (including demographic influences), food risk communications (particularly how to improve such communications) and trust in and need for governing and regulatory structures (see also Table 17, Appendix 9.9). As a result, deserving increased attention and representing more novel empirical findings, the other three themes will now be explored in more detail.

5.8.1 Food risk consciousness: the prevalence of a food risk society

Drawing on 'risk society' (Beck, 1992) and 'age of anxiety' (Jackson, 2010) literature, one would expect to find an increased food risk consciousness amongst participating consumers in Ireland. Instead, quite the opposite was found. Food safety did not dominate everyday concerns, with generalised discussion around everyday food habits, shopping scenarios and changes in food opinions failing to highlight specific food risk anxieties. Indeed, it was only when directly probed about food safety issues did consumer reveal their food risk concerns and related avoidance strategies. A continuous food risk consciousness thus appears to be absent in the everyday Irish food risk governance context. In its place, a partial food 'risk society' appears to exist.

On one hand, supporting risk society ideals explored in Chapter 2, some consumer groups reflected upon and questioned the development of food risk as a result of agricultural intensification, industrialisation and globalisation processes. Drawing comparisons to a safe and natural past, many referred to the development of new diseases of late, perceiving food to be riskier now than ever before. This reflects the irony proposed by Beck (1992) where despite extensive and increasing risk governance frameworks, publics view risk to be more extensive in life. Thus, some groups (particularly mindful parents) self-reflexively revert to 'grow it yourself' (GIY) schemes and organic produce to avoid risk. Further echoing characteristics of Beck's (1992) risk society, a simultaneous reliance on, but mistrust of, science to determine and describe new food risks, sources and technologies emerged. Indeed, a key role of the FSAI for Taylor (2003, p163) is to:

"Present evidence (much of which may be hazy and inconclusive) to 'inform' a public charged with making individual decisions based upon the risk."

However, the motives and independence of industry research (particularly GM-related) was questioned by multiple consumer groups, including FÁS and office workers. Indeed, some FÁS participants perceive the food industry to have influence over all scientific food research conducted, hampering trust in related results. Perceptions of government and the FSAI supporting industry profits raised additional mistrust across parent and FÁS groupings. Further scepticism was detected amongst office workers, parents and students regarding the incomplete nature of science. This particularly concerned both what science has 'yet to reveal' and criticism of past risk assessments that determined unhealthy products as safe. Lastly, echoing a final risk society theme, some consumers (particularly from younger student and sports player groupings) alluded to a growing individualisation of risk, identifying it as a personal responsibility to educate oneself and navigate food risk in daily life. A perception that the necessary information is available augmented such beliefs, with responsibility now believed to rest with consumers to seek it out. These perceptions were also applied to healthy eating concepts in other focus groups.

However, preventing the development of an absolute food 'risk society' in Ireland, many consumers also stressed a significant lack of control over food risk of late (contradicting Beck's (1992) thesis regarding a growing individual ability and confidence to manage risk). Indeed, feelings of exasperation, frustration and fatalism were associated with food risk throughout multiple consumer groups, but particularly amongst lower income student and FÁS participants. Such feelings were specifically applied to GM (similar to Shaw (2002)), chemical food risk (by FÁS participants) and even GIY trends (by sports players and community gardeners), fuelled by perceived income and choice limitations. A feeling that food can never be 100% safe was expressed by many, reflecting risk inevitability concepts of Hinchliffe et al. (2012) regarding the reality of permeable, incomplete and unsuccessful biosecurity strategies that fail to keep risk out.

Further contradicting the growing individualisation of food risk, the majority of consumers (including from ICA, student, sports, gardening, FÁS and retirement groups) continue to attribute food risk responsibility to broader state structures including government departments and semi-state actors. Suggesting a continued reliance on government structures to ensure food biosecurity in Ireland, references to DAFF and Bord Bia were particularly dominant. Finally, opposing Beck's (1992) ideals of citizen empowerment and sub-political decision making within the risk society, a lack of consumer engagement in food risk governance processes and contact with food risk governing bodies (including the FSAI) was obvious. While a lack of awareness of relevant communication channels may account for part of this (particularly for

enthusiastic retirement and ICA participants who desire more involvement), a distinct unwillingness to engage emerged amongst male FÁS participants and sports players in particular. Such findings contradict Beck's ideals of consumer empowerment, knowledge seeking and participation in the 'risk society'.

Contrasting Hinchliffe (2000) who noted broad cultural change towards risk society behaviour during the UK BSE crisis, such incomplete risk society findings are nonetheless in keeping with literature that highlights the appropriateness and application of some risk society features rather than all (for example, see Benn et al. (2009) on public responses to toxic waste management in Australia). Indeed, such findings resonate with incomplete risk society characteristics also uncovered by Tovey (2002) and Kelly (2007) in an Irish context and explored in Chapter 2. In this way, the risk society concept can be used more fluidly, with evident elements of Beck's (1992) thesis apparent in consumer focus group responses, and others entirely absent or contradicted.

5.8.2 Risk from the 'outside': patriotic understandings of food safety

The second theme worthy of expansion relates to perceptions of food risk coming from the 'outside' into Ireland. Throughout consumer groups, repeated references were made to:

- The safety, quality and high standard of Irish food;
- The dangers associated with produce coming from abroad;
- Health and safety fears when consuming food abroad;
- Patriotic duties to purchase and consume Irish food where possible;
- Patriotic duties to utilise Irish resources to grow food.

Reflecting the importance attributed to country-of-origin in creating trust in food products (Juric and Worsley, 1998; Hoffman, 2000; Knight et al., 2007), the geographical imagination of the consumer came to life in these contexts, with various images of unknown, unsafe and untrustworthy outside 'others' conjured up by research participants. Relating to other places, other food industry members and other national governing structures, this reflects concepts of the dangerous 'outside' mooted in recent biosecurity literature in biodiversity (Barker, 2009), disease (Hinchliffe et al., 2012) and security contexts (Philo, 2012). Thus, although globalisation is envisaged to have

detached food from place and nature (Tovey, 2007), patriotic desires to 'Buy Irish' remain strong amongst participating consumers.

Such patriotic responses also reflect concepts of 'othering' explored by Jackson (2010) in the justification of consumer food risk anxieties by industry members in the UK. Here, the creation of a defined 'other' (classified and distinguished by gender, race/nation or generation) was utilised to shift blame for food risk events. 'Othering' techniques have also been employed by Joffe (1999) to frame responses to risk events including nuclear war and health epidemics, Grove and Zwi (2006) in public health and migrant arenas and Nerlich et al. (2009) regarding misplaced blame onto the unhygienic 'other' in avian influenza contexts.

Complicating patriotic trust however, suspicions arose amongst some consumers regarding the authenticity of country-of-origin labelling. This disrupts patterns of reliance and confidence in 'buying Irish' as a personal risk avoidance strategy. Nonetheless, other Irish labelling was associated with creating trust, including pictures of farmers on produce (students), 'guaranteed Irish' assurances (sports players) and the Bord Bia quality mark (ICA participants). Such responses suggest a continuing level of comfort inspired by Irish products, echoing Knight (1999) and Guéguen and Jacob (2012) on consumer willingness to choose and pay more for domestically produced goods. For the majority of consumers however, patriotic trust in Irish food was not directly linked to any one causal factor such as a trustworthy Irish food industry or reliable national food safety governing actors (factors predicted to create a positive country image by Knight et al. (2007)). Rather, this trust was assumed, representing a 'gut instinct' for many participants. As such, language relating to emotions and feelings predominated these discussions, reflecting Slovic (1999) and Loewenstein et al. (2001) on the importance of emotions in public risk perceptions.

Consideration of scalar elements and relations is also central to discussions of risk coming from the 'outside'. More specifically, it is interesting to explore what exactly the 'outside' means to consumers, including demarcations of who and what is 'inside' and 'outside' (and thus trusted or not trusted) with potential for further research in this arena. From the research presented here, a distinct spatiality of trust was obvious. More precisely, the highest level of trust was attributed to local level actors (including butchers, farmers markets and neighbours) by office workers, mindful parents, retired participants and community gardeners. Echoing the importance of interpersonal ties in food purchasing routines in Ireland (Sage, 2003), consumers expressed feelings of reassurance, confidence and unquestioned faith when it came to sourcing food (and

risk advice) from such local individuals. Perceptions of safety were especially inspired by the perceived accountability of these actors, with additional perceptions of increased quality, freshness, transparency and choice also featuring.

Moving up the food chain, retailers and the food industry were especially mistrusted by consumers interviewed, with particular doubts existing regarding the motives, carelessness, honesty and intentions of these food chain actors. A perceived continuous drive for profits led consumers to believe that public health and safety is only of remote concern in these environments. Meanwhile, at the national scale, reported consumer trust in state governing bodies and actors was mixed. Some participants simply expressed 'hope' that such structures are abiding by consumer interests (ICA and retired participants) while others dismissed the intentions of state bodies, including the FSAI (mindful parents and FÁS participants). With several perceiving industry and government to withhold information to protect industry reputation, such responses contradict aims of recent food safety governance reforms (explored in Chapter 3) to restore public confidence in national governing structures (Hellebo Rykkja, 2004; Holm and Halkier, 2009). Trust in supranational food governing actors was similarly varied. For instance, some retired participants criticised Ireland's membership to the EU, perceiving it to have lost agricultural and food autonomy as a result (reflecting "*anti-EU feelings*" similarly explored by Ivaldi (2006, p66) in France). Contradicting this, a belief that supranational bodies possess more expertise and capabilities to manage food risk was obvious in other groups, with gardeners and students for example, perceiving enhanced policy and risk detection mechanisms at the EU scale.

Finally, there was limited mention to global actors within focus group discussions, highlighting the majority association of food risk governance with national and local scales. This comes in spite of the complex nature of international food trade that calls for effective and efficient global food governing structures (Gray, 2012b). Instead, scalar responsibility and related trust extended down to personal consumer and household levels. However, mixed perceptions ranging from food risk as being inevitable to controllable complicates a straightforward reading of consumer trust at this most intimate scale: trust in themselves. These alternative spatialities of trust are graphically summarised in Figure 6 below, highlighting consumer attributions of responsibility and trust. Such findings reiterate the importance of conducting nationally-based analyses of food risk governance and related pivotal positioning of geography as a disciplinary framework to understand the results.

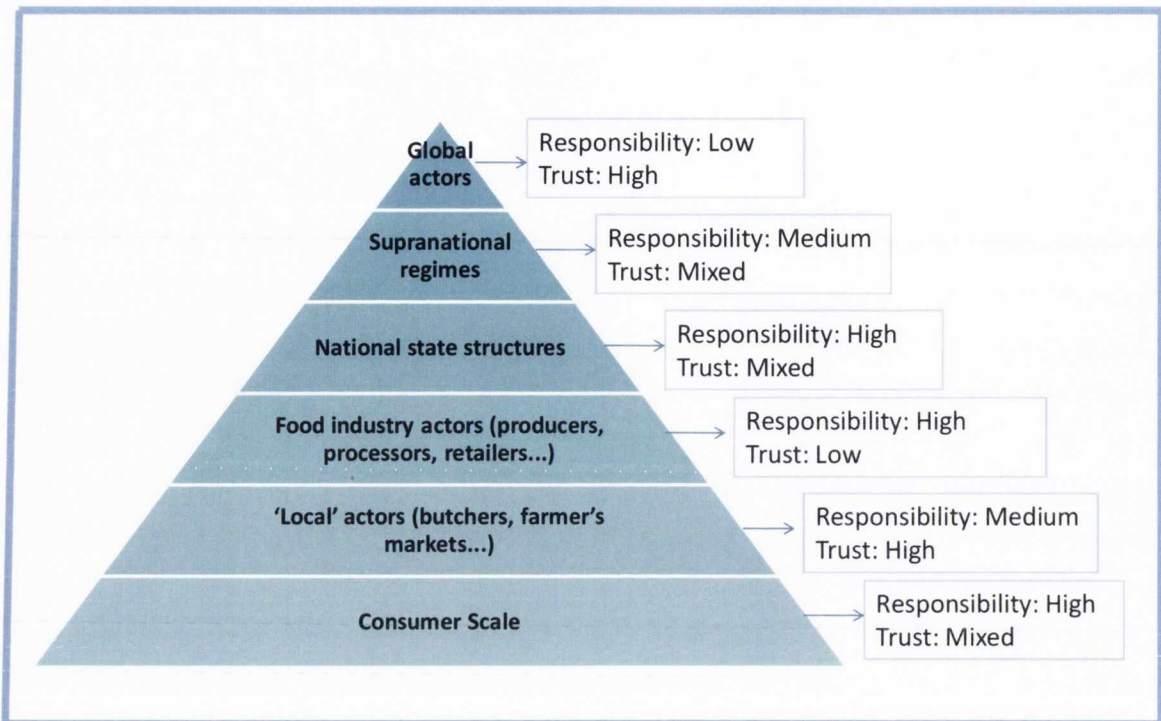


Figure 6 Spatiality of Trust in Irish Food Risk Governance

5.8.3 *“Do as I say, not as I do”*: consumer practice versus theory

Finally, the third focus group theme worthy of expansion notes significant differences between consumer opinion and practice. In other words, what consumers claim to feel and believe is often very different to how they behave in reality. This was particularly obvious given the number of food risks cited when probed, compared to descriptions of everyday food habits. Indeed, several admitted to not even thinking about cited food safety concerns in everyday scenarios, making no effort for example, to adjust purchasing routines, investigate food labelling, engage with food risk governing bodies or seek out non-GM produce. Such responses reflect findings from FSAI (2009) where only 3% of consumers surveyed reportedly seek out country-of-origin information from foods, despite 74% attributing importance to its presence on labels. Shaw (2002) noted similar traits in the UK context with consumers reporting concern for GM but doing little in practice to avoid it, while Kemp et al. (2010) also revealed significant differences between what UK consumers say and how they act regarding food mile concerns. Additionally, this reflects behaviours explored by Eden et al. (2008) where sceptical consumers were reported to do very little to appease their anxieties in everyday life. Drawing on the work of Wynne (1995) (who discussed a seeming level of ignorance and/or disinterest in understanding risks by nuclear plant

workers), Eden et al. (2008) conclude that a strategy of ignorance can indeed be employed to avoid having to confront unpleasant risks in life and thus disrupt existing routines and established relationships. In this research context, as with Eden et al. (2008, p629), acknowledgement of food safety concerns in everyday scenarios may therefore be too problematic for consumers and “*challenge existing shopping practices*”. Therefore, Eden et al. (2008, p629) conclude:

*“Choosing not to read labels or pay attention to food scares may
be a choice to make life easier”*

Thus, operating with a level of ignorance, distractedness and/or denial regarding food risk could represent a specific strategy adopted by Irish consumers to make life easier and more bearable. Consumers cannot be continuously preoccupied with risk without significant consequences to mental health and well-being (including developing depression or anxiety disorders). It is thus not practical, realistic or healthy to be anxious about food risk consistently. Such findings help to legitimise the evident gaps between consumer practice and theory in the Irish food risk context.

The mismatch between consumer beliefs and behaviours can also be explained utilising concepts explored by Berg (2004) who highlights the effort required to remain constantly vigilant in life. For Berg (2004), this helps to explain consumer reactions to food crisis events (such as BSE) whereby an increased risk awareness and risk avoiding behaviours predominate in and around the event, before gradually lessening as time progresses. Consumers are reported to return to normal purchasing and consumption routines after a crisis when they see the food chain as too complex for their understanding again, thus resuming trust in food chain actors. Therefore, given that the last indigenous food scare at the time of focus groups was the 2008 pork crisis (a crisis that was also renowned as being managed effectively (Oireachtas, 2009; Casey et al., 2010; Jacob et al. 2010a)), it can be assumed that consumers have already returned to normal food behaviours and routines. The lack of attention to the 2008 pork crisis during examination of a pork product in the food product exercise further strengthens this argument.

Thus, preserving risk attention until crisis events, the perceived time, effort, mental capacity and money required to avoid food risk appears to result in participating consumers operating with a level of distractedness and/or ignorance in their assessment of food risk in everyday life. Saving time, energy and worry, it enables participation in an increasingly fast paced life where, for many, the weekly food shop

represents a chore, hassle and routine event. Disinterest, convenience, habit, embarrassment, brand loyalty and/or taking safety for granted may also fuel such behaviours, ultimately allowing consumers to pursue everyday routines uninterrupted.

5.9 Conclusion

To conclude, while public concerns cannot wholly determine FSAI and food risk governing priorities (for example, for fear of incomplete attention to risks outside of public consciousness (Slovic, 1999)), they can provide useful, valuable and pertinent input into food regulatory agendas. Indeed, such inclusion could increase trust in food risk regulatory institutions such as the FSAI (as Houghton et al. (2008) similarly contend regarding public participation in EU food risk management processes). After all, according to Slovic (1999, p699), incorporating consumer perceptions into risk assessment could make the process:

“more democratic, improve the relevance and quality of technical analysis, and increase the legitimacy and public acceptance of the resulting decisions”

In other words, it could achieve a more open, transparent, inclusive and balanced food risk regulation landscape, one that incorporates both ‘expert’ and ‘lay’ perceptions.

Indeed, as trust in the safety of Irish food already appears evident amongst participating consumers, a need now exists to develop this confidence in related food governing bodies. This could also benefit consumer well-being, perceptions of effective government spending and help rid anti-establishment feelings that have recently formed (O’Sullivan, 2007; McCullagh, 2007). According to Houghton et al. (2008), consumer-expert integration can additionally highlight areas for governance improvement, while Juric and Worsely (1998) similarly contend that identifying differences in consumer perceptions can also assist the development of effective and targeted communication campaigns. This latter point is critical in Ireland given the reported heterogeneity of Irish food risk perceptions and the subsequent need to avoid mass communication campaigns (McCarthy and Brennan, 2009).

Nonetheless, although not an aim of the research, findings suggest that the traditional expert-lay divide is not as pervasive as initially assumed in the Irish food risk context. Despite utilising different qualitative methods and question schedules, discussions with both experts and consumers revealed joint concerns for microbial risks, chemical residues, traceability (particularly country-of-origin) and food technologies (including GM). Concerns relating to the evolving, unpredictable and unknown nature of food risk, as well as nutrition and obesity, also featured in both sets of discussions. Patriotic understandings of heightened food safety in Ireland were also evidenced throughout both groupings. Thus, while some differences were apparent (for example, consumers expressed more concern regarding meat safety and labelling surveillance, while stakeholders referenced the pork dioxin crisis more and the FSAI de-prioritises food labelling within its surveillance activities), the traditional expert-lay divide is not overtly wide in the Irish food risk context. The multiple identities of stakeholders representing both 'experts' in professional circles and consumers/'lay public' in everyday contexts perhaps provides partial explanation for this.

The next chapter explores the role, actions, strategies, power and impact of the FSAI specifically from this food industry stakeholder standpoint. Thus, moving away from everyday consumer perceptions, Chapter 6 highlights the perceptions, experiences and expectations of stakeholders who have actively engaged with the FSAI since its inception in 1999. This contributes to fulfilling the principal aims of the research, that is, to develop an in-depth understanding of the nature, determinants and methods of Irish food risk governance and communication, while also exploring the impact of this key food risk governing institution. Indeed, given the limited awareness among consumers of the FSAI, engagement of such experienced stakeholders was crucial to explore the regulatory performance, communications and biosecuring strategies of the FSAI specifically.

Chapter 6 Case Study: interrogating stakeholder perspectives of the FSAI

6.1 Introduction

Ten years on from the inception of the FSAI, it is an appropriate time to reflect on its impact to date. Progressing from the descriptive outline of the FSAI's inception, form and functions provided in Chapter 3 and consumer perspectives explored in Chapter 5, this chapter seeks to achieve this from a stakeholder viewpoint (that is, from the perspective of actors that have interacted with the Authority for the past decade). After all, as Crabbé and Leroy (2008) contend, evaluating past policies and implementation mechanisms is crucial to improve regulatory structures for the future while inclusion of stakeholders in such evaluative research is necessary to gain practical knowledge and experiential insight. Thus, drawing on results from the thirty stakeholder interviews conducted across public, private and civil society sectors, the chapter begins with detail on perceived principal drivers of the FSAI. This is followed by an analysis of key empirical findings relating to the Authority's institutional relations and communication strategies since its inception in 1999. Thereafter, Section 6.5 examines the broader geographies of Irish food risk governance within which the FSAI operates, with particular consideration given to FSAI performance and the scalar power relations and challenges inherent here. The conclusion (Section 6.6) seeks to assess the need for the FSAI moving forward and summarise perceptions of its activities to date.

6.2 Consumer watchdog or industry lapdog: drivers behind the formation, form and function of the FSAI

Despite an emphasis on consumer protection so evident in its establishing legislation (FSAI, 1998), several different perceptions of motivations behind the FSAI establishment emerged throughout the stakeholder interviews. Primarily, this included discussion around political, historical, social and economic driving forces. To elaborate, from a political perspective, six interviewees (from civil society, public and private sectors), mistakenly believed that the Authority was set up following European policy

developments; an unsurprising perception given the tendency for other Irish environmental and food legislation to emerge in this way (for example, see Connaughton (2005) regarding the influence of the EU on environmental policy in Ireland and EIU (2009) concerning its effect on the establishment of Irish regulatory agencies). For twelve others (including FSAI employees and civil society participants), the historical prevalence of BSE throughout the 1990s highlighted the fragmented and inefficient nature of food safety governance in Ireland. Given the importance of beef exports to the country (a tradition dating back to the 17th century (Tovey, 2007)), an FSA was thus seen as essential to bring efficiency and coordination to what was perceived to be a disjointed, flawed and inefficient system:

"It became quite evident in the late '90s that there was a need for a new approach to regulating food safety because of the very fragmented nature of how we did the job...there was no one agency connecting all those dots. That's where the FSAI came in"

(Private Sector 2)

This motive reflects positions evident in broader literature concerning the drivers behind food safety governance reforms across Europe (Hellebo Rykkja, 2004; Berg et al., 2005; Holm and Halkier, 2009) and in Ireland specifically (Wall, 1999; Taylor and Millar, 2004).

Most interviewee discussion concerning FSAI driving forces however, related to social and economic motivations. Dividing stakeholder opinion within interviews, social motivations (including the biopolitical protection of public health and consumer rights) opposed economic drivers (including the neoliberal protection of Irish food exporting markets, free trade, industry competitiveness and profits). This reflects a long established conflict between environmental/health protection and economic growth evident in a variety of other policy spheres (including pollution, waste and biodiversity (Roberts, 2011)). For over one third of interviewees, from civil society, private, DAFF and FSAI sectors, consumer health, protection and reassurance represented core drivers behind the FSAI inception. Other stakeholders however suggested that this is more of a rhetoric than reality for the FSAI. Mirroring failures to transfer rhetoric into action in other environmental governance arenas highlighted by Roberts (2011), this is particularly significant given comments (including from past FSAI employees and civil society) about the Authority yielding towards industry concerns and practicing 'light touch regulation' with larger food companies:

"There were occasions when I felt they weren't hard enough on certain very big food producers and certain very big multiples"

(FSAI (past) 1)

"[FSAI as] protecting the industry and giving them too many chances...it's a bit of a 'softly, softly' approach to industry"

(Civil Society 3)

In other words, the 'protector of the public' image of the FSAI is, for some stakeholders, tarnished and a cover for trade, economic and neoliberal agendas. As with Taylor's (1998) early discussion of the Environmental Protection Agency in Ireland permitting pollution to conserve economic performance, the FSAI is instead believed by over two thirds of stakeholders to have been established to restore, preserve and protect Ireland's food exporting industry, thus permitting profitable food production and circulations. Indeed, in 2006, it was similarly reported that 34% of Irish consumers believe that public authorities involved in governing food safety in Europe view profits of producers as more important than the health of consumers (FSAI, 2006). References to 'Brand Ireland' dominated interviewee discussions in this research context, with other economically-focused responses citing the importance of the food industry in Ireland, the negative economic impact of food scares and the unique selling point of quality Irish food. A topic of intense discussion also within the consumer focus groups (Chapter 5), such marketing, branding and reputational considerations also resonate in a variety of other environmental, crisis and economic spheres¹⁹. The benefit of thus possessing a strong FSA to endorse the free circulation of Irish produce was of particular significance here:

"In terms of protecting trade and protecting the reputation of Irish food – it's a huge one for FSAI"

(FSAI (past) 2)

"No matter what people say... it was a trade issue. Even though it was under Health there was a massive trade dimension to their reason"

(FSAI (past) 5)

¹⁹ For example, see Davies (2008) regarding desires to protect New Zealand's 'clean green' tourism image in a waste management context, Coombs (2007) and Shultz et al. (2011) on the importance of preserving organisational reputation during crises and Tovey (2007) on the use of locality to create brand recognition for artisan Irish food.

Similar to Robertson's (2004, p361) analysis of the neoliberalisation of ecosystem services, "*stabilising capitalist relations of power and accumulation*" for the Irish food industry is thus perceived to have been a significant driver behind the FSAI establishment. Given the financial importance of the food industry to Ireland for tourism, revenue and employment (Wall, 1999; Teagasc, 2010; Phelan and O'Connell, 2011), such economic and trade motivations do not necessarily represent a negative influence in the work of the Authority. Nevertheless, it contradicts the consumer focused discourse promoted in its establishing legislation and the aims of wider EU reforms to remove economic interests from food safety governance structures (Ansell and Vogel, 2006; Holm and Halkier, 2009; Abels and Kobusch, 2010). Further, it conflicts with the often cited testament concerning the independence of and trust in the FSAI as answerable to DoH, where vested industry interests are perceived not to feature. Indeed, this represents the ideal accountability line for FSAs according to Hadjigeorgiou et al. (2012). After all, as with risk analysis discussions by Slovic (1999) and similar criticisms of dual objectives within EFSA (Hellebo Rykkja, 2004), definitions of food risk according to economic and monetary loss may result in food risk management decisions being taken to the detriment of consumer health and protection.

As with other public and private sector institutions however, the drivers behind the FSAI do not necessarily have to be singular in nature. Reflecting the reported tendency for Irish regulatory bodies to demonstrate a mismatch of responsibilities and competing interests (EIU, 2009), a number of stakeholders stated a combination of crisis, economic and consumer motivations behind the FSAI. Nonetheless, almost all FSAI employees interviewed alluded to the BSE crisis as a key motivator behind the Authority's start up, indicating that this was a major focus of its establishing remit. Economic, market and trade protection benefits were also high on the agenda for these employees, suggesting a consciousness of such incentives in the everyday workings of the FSAI. For some employees however, rather than being a deliberate objective, this economic incentive manifests itself as an added bonus/dual purpose to protecting consumers:

"We're all about the consumer but the up-shot on the other side is that's good for the industry"

(FSAI (present) 2)

"So the consumer bit which is nice...that is a consequence of the protection of the agri-exports"

(FSAI (past) 1)

Suggesting a multi-functionality to the work of the FSAI, this dual purpose concept was also drawn upon by a civil society participant, public sector interviewees, four private sector stakeholders and a semi-state interviewee. Mirroring Taylor and Millar (2004), who maintain that scientific food risk assessment can simultaneously create consumer trust and serve economic interests, this suggests that several actors can benefit from the existence of the FSAI simultaneously. Nonetheless, as apparent from the mix of stakeholder opinions obtained, alternative agendas outside of the consumer protection role cited in the FSAI's establishing legislation are perceived to exist. These primarily relate to economic, trade and industry interests. Contradicting its establishing purpose and function, this will inevitably influence the Authority's everyday activities, institutional relations, priorities and performance in securitising the Irish food chain; interactions that are explored in subsequent sections.

6.3 Independence, institutional relations and interests

Regarding its external structure and positioning, the FSAI operates to control food risk within a complex web of food risk governance, interacting with a multitude of public, private and semi-state actors across a variety of geographic scales. As such, it is vulnerable to varying power relations, constrained and facilitated by different external forces and subject to complex security interdependencies. Similar to shifts in the management of other environmental arenas (Papadopoulos, 2007; Roberts, 2011), food risk management has witnessed a dispersal of power amongst government, industry and civil society across a variety of scales (Ansell and Vogel, 2006; Holm and Halkier, 2009). As such, the FSAI works over, under and with a multitude of actors and bodies to make food safe (see Figure 7). This includes defined relationships with government and its service contract agencies, mutual understandings with national research and semi-state bodies, coordinated contact with other national FSAs and legally binding loyalties to Codex, the FAO, WHO, EFSA and the EU. The FSAI also interacts with the food industry through a variety of consultation procedures apparent within the structure of the FSAI.

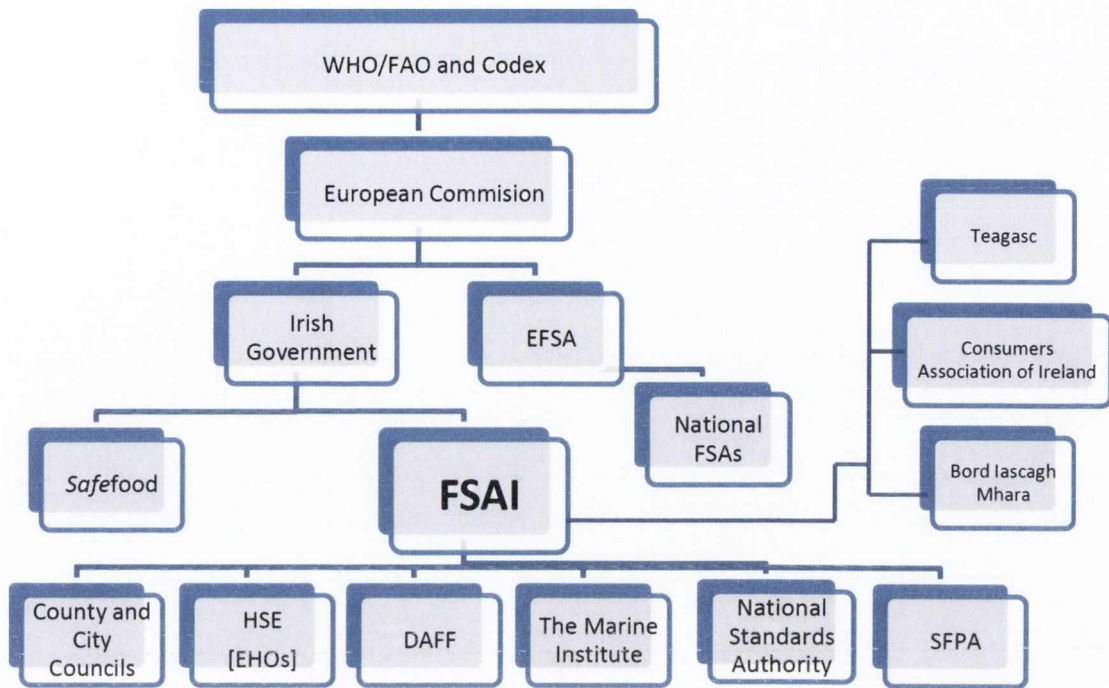


Figure 7 Web of Food Risk Governance in Ireland

6.3.1 Defined relationships and official reporting lines

At a national level, the FSAI has experienced a changing relationship with the Irish government over time including deciding accountability lines at the time of FSAI inception, ongoing tensions with different governmental departments and governmental suggestions in 2008 to merge the FSAI with the Irish Medicines Board and Office of Tobacco Control. Although interviewee awareness of FSAI-governmental relationships varied across sectors, the line of accountability to DoH and intentional separation of interests was deemed essential by most stakeholders, including FSAI and DAFF participants. In this regard, the perceived production orientated nature and related economic bias of DAFF was noted by several participants. Echoing historical conflicts surrounding close producer-regulator relationships in food regulation, not only in Ireland (Taylor and Millar, 2004) but throughout the developed world (Tovey, 1997), the resulting unsuitability of DAFF to govern food safety issues was of concern for most interviewees:

“There was at least a perception that maybe producer interests were over-riding consumer interests”

(DAFF 2)

"I think it was dead right that they were put up under Health rather than Ag and Food because the whole thing was just closed, closed box...it was to have an open, visible, you know, with the consumer at the top, public health, public safety"

(Semi State 1)

Indeed, despite some denials of absolute economic/producer interests in DAFF, DAFF representatives nonetheless spoke particularly positively of the FSAI's accountability line to DoH, with one stating that DAFF *"work very closely"* (DAFF 2) with the Authority regardless. Another claimed that no conflict exists between the two organisations. However, this impression of an amicable relationship is contradicted by terse relationship opinions obtained from many other participants across public, private and FSAI sectors. DAFF has traditionally wielded considerable power in political decision making in Ireland (Taylor and Millar, 2004), with tensions believed to thus remain based upon an alleged unwillingness of DAFF to be controlled by the relatively small and new FSAI:

"Their [DAFF] view when the FSAI was set up seemed to be 'who do these 75, 80 people think they are now coming over and telling us, a department of 5000 people with ten hundred million budget [what to do]?"

(FSAI (past) 2)

"Department of Agriculture have to work under the aegis of the FSAI but they absolutely hate that, to be straight about it, and they bridle at it and they don't want to be there"

(Private Sector 3)

Budgetary control and the large remit of DoH have nonetheless also impacted on the FSAI-governmental relationship, creating lines of dependence alongside, paradoxically, a sense of anonymity. Often a deliberate objective in the design of autonomous bodies (Papadopoulos, 2007), this suggests an Authority that is both seen and unseen by government: the FSAI is dependent on DoH for funding while at the same time easily lost within the wide-ranging responsibilities of the Minister for Health. For example, one present employee perceives the FSAI to represent only *"a small cog in the wheel"* of DoH with other health concerns (such as hospital beds and community care) believed to take precedence over food safety concerns (FSAI (present) 3). Raising questions regarding priorities in public health, food safety concerns may not predominate during periods of austerity when issues of efficiency and outcome-

orientated spending particularly prevail. This makes it unfair to compare food safety within the wider remit of DoH, particularly given difficulties associated with accurately measuring FSAI outcomes and deliverables (a theme explored in detail in Chapter 7). Thus, contradicting the majority opinion regarding FSAI accountability lines, this present employee suggests the potential for the FSAI to be answerable to the Department of Agriculture given that food is the *“raison d’être”* of this department (FSAI (present) 3). Meanwhile, governmental threats to merge the FSAI with the Irish Medicines Board and Office of Tobacco Control sparked controversy in media, academic and political circles (for example, see CIEH (2009) and Cullen (2009)). This culminated in a dismissal of merger plans in 2010. The paradoxical role of crisis management is believed to have significantly contributed to this, with the FSAI’s handling of the 2008 pork crisis proving the worth of the Authority for many (Oireachtas, 2009). This decision was also supported by several private sector and civil society participants in interview.

Progressing to the Authority’s institutional relations at the local scale, awareness of the FSAI service contract model as a mode of operating (outlined in Chapter 3 as the utilisation of the inspectorate staff of other state agencies to conduct FSAI biosecuring activities) varied amongst interviewees. Past and present FSAI employees (unsurprisingly) represented the only sector that was fully aware of this contracting out of FSAI activities, while the civil society sector was least aware. Nevertheless, for eleven stakeholders across sectors, although awareness of the system varied (and often had to be explained by the researcher), the service contract structure was deemed to overall represent an effective way of operating. Indeed, many defensively stating that they had no reason to believe that the model was not effective:

“I think it seems to be working and it has to be working”

(FSAI (present) 2)

Similarly, other interviewees praised the model as one that brings coordination to Irish food safety governance, avoids unnecessary overlaps in expertise and thus helps to limit governance inefficiencies. The duplication of this model by other FSAs and its approval by EU and US auditors also prove its effectiveness for several FSAI stakeholders interviewed. Meanwhile, for an additional seven interviewees across sectors, service contracts represent ‘the only way’ for the FSAI to operate successfully with minimal cost and disruption to existing structures.

By comparison, private sector participants in particular spoke very negatively of the service contract model, expressing uncertainties regarding the accurate

coordination of inspections and a lack of direct industry contact with the FSAI. One private sector participant, for instance, branded the model as “*cumbersome*”, “*fraught with interpretational difficulties*” and with significant “*scope for dysfunctionality to creep in*” (Private Sector 2). In addition, a semi-state participant and private sector interviewee spoke of perceived tensions between the service contract agencies, sensing an unwillingness of some bodies to change their long-established practices. Such mixed perceptions point to a need to assess the reliability, functionality and appropriateness of this system in current food risk governance. Indeed, this is particularly pertinent given claims within the governmental report on the handling of the pork crisis which stated that:

“The service contracts mechanism spectacularly failed to achieve its objective, and has been demonstrated that it is not adequate for the task with which it is charged”

Oireachtas Report (2009, p19)

This performance analysis is attempted in later thesis sections after further exploration of the geography of FSAI institutional relations and the power relations evident here.

6.3.2 *Food industry interactions*

Acknowledging governmental and service contract relationships, the perceived most influential form of FSAI interaction for the majority of stakeholders (sixteen out of thirty interviewed) takes place between the Authority and the food industry. Communication and influence is reported by many to operate in both directions in this regard, with five public sector and several FSAI participants referring to the various seminars, workshops and two way communications that they perceive the Authority host to connect with the food industry. Suggestions of such interactions are also apparent on the FSAI website through reference to FSAI monitoring of the food industry, the provision of information packages for food industry members and the existence of the FSCC as a forum for food industry debate and consultation on food safety matters. Indeed, Taylor and Millar (2004) contend that decisions to establish the FSCC consolidated and legitimised industry access to food safety policy processes, resulting in the FSAI being initially enthusiastically welcomed by the food industry. Thus, illustrating little departure from the traditional style of Irish policymaking that has historically enabled negotiation with vested interests (Taylor and Millar, 2004), industry

can influence the FSAI. In interview, two FSAI employees similarly admitted to the food industry's ability to influence the agenda of the Authority with one, for example, conceding:

"Industry will influence us regardless of what we say, they will influence us"

(FSAI (present) 3)

Comparable to Crenson's (1971) case study of powerful steel companies influencing US air pollution regulations, delaying or altering of policy implementation can arise out of anticipated industry reactions. This may well be the case in Irish food risk governance, particularly given the financial importance of the food industry to Ireland (Teagasc, 2010; Phelan and O'Connell, 2011) and the current difficult economic climate. Indeed, one semi-state participant spoke of a need to put a *"positive spin"* on negative food safety surveillance results so as not to damage food industry reputation. This participant further stated that the FSAI must also *'be practical'* in the demands it imposes on industry:

"I think they'd be well aware that they can't enforce some intervention or some monitoring plan that isn't economically feasible... they have to work within what is economically feasible and practical for the industry"

(Semi-State 1)

Taken together, these perceptions indicate a significant power and influence of industry bodies over the actions of the FSAI. Diminishing its independence, this contradicts its recurrent claims of being separate from economic interests.

Nevertheless, the lack of private sector consensus on this level of industry interaction must be noted given that these interviewees represent the 'food industry' actors referred to in this context. Indeed, only one private sector participant spoke of being able to freely contact the Authority for advice, with FSAI employees reported to equally be able to contact food processing plants to enhance their food production knowledge. Instead, for other private sector participants, this engagement with and influence on the food industry is not a reality. For example, a low risk processor and retail representative report limited contact with the FSAI, while a catering representative queries the continuation of a stakeholder consultative body for FSAI-industry interaction. Although this should not mean an exclusion of the food industry from FSAI

activities, these comments may indicate some efforts of the FSAI to remain independent from industry interests.

Indeed, elaborating on FSAI–industry interactions, one past employee highlights the nature of all stakeholder consultative councils as sometimes allowing “*inappropriate vested interests*” to be heard above other concerns (FSAI (past) 1) (that is, perhaps allowing economic interests of production to supersede consumer health concerns). This point is particularly significant on closer inspection of the FSCC where only three of its twenty-three members in 2012 were found to derive from consumer-focused backgrounds. Indeed, the majority of participants on this board possess industrial, governmental and/or research orientations. Raising questions about the key interests behind the FSCC (one which appears to project industry interests more than consumers), this compromises the legitimacy, purpose and independence of this advisory council. Exploring the legitimacy and accountability of deliberative institutions in environmental spheres, O’Neill (2001) similarly comments on the make-up of such institutions that include ‘representative’ group members but with no accountability or authorisation from those represented. Such findings also contradict EIU (2009) recommendations for consumer panels to have more representation within regulatory structures with no seats to be awarded to regulated firms. This is perceived necessary given the already established access of these latter groups to agencies through increased organisational and resource capacity (EIU, 2009).

Concerning participation in these fora, present FSAI employees joked about industry participants representing “*no shy violets*” (FSAI (present) 1) and consultations representing a “*necessary evil*” (FSAI (present) 3) within FSAI operations. More specifically, a semi-state participant spoke of how the artisan forum in particular “*vehemently*” fights its case with the FSAI concerning the safety of organic and traditional products (as exemplified, for instance, by the growing intensity of the ‘raw milk debate’ in Ireland (see Raw Milk Ireland (2012)). In contrast, a third FSAI employee spoke of a lack of stakeholder participation in FSAI consultations, noting that only one industry member responded to the Authority’s last consultation effort at the time of interview. Instead, FSAI–industry interaction is believed to occur more effectively at specialised conferences and ad-hoc meetings that target specific industry groups. Public response to open consultations is also generally poor according to this employee, contradicting Haugaard and Ryan’s (2007, p194) contentions of recent citizen empowerment in Ireland through processes of “*consultation, participation and negotiation*”. Such a finding reflects the lack of FSAI engagement uncovered in focus group discussions (Chapter 5), reiterating the reality that publics may not always

interact with institutions when given the opportunity, despite complaining about governmental establishments in their private lives. Nevertheless, as mooted in Chapter 5, this lack of participation may also arise from a lack of awareness of the existence and worth of such consultation processes, reflecting the need identified by Bier (2001) to clarify the scope, purposes, commitment and outcomes of stakeholder and public participation processes.

Finally, concerning the legitimacy of all institutional relations of the FSAI, many interviewees, including public and FSAI participants, emphasise the need for the Authority to remain neutral in its actions and not allow any one actor to predominate. For example, some public sector interviewees note the need for the FSAI to acknowledge, but not be *'thwarted'* by, varying influences and remain *"pure"* in any industry interactions (Politician 2). To ensure this independence, one present FSAI employee notes the importance of official reporting and accountability lines. Linking back to concepts of 'good governance' explored in Chapter 2, FSAI accountability must be maintained to prevent corruption and bias, ensure regulatory credibility and maintain optimal regulatory performance (Department of the Taoiseach 2004, 2007; EIU, 2009). However, this neutrality is questionable in light of dominant interviewee perceptions concerning economic motivations and industry interests behind the Authority's actions. After all, as with all environmental policymaking and governance:

"Within political systems, where vested interests operate with varying degrees of influence and success, the stated aims of a policy may often mask its real purposes"

(Roberts, 2011, p145)

Thus, echoing Falguera et al. (2012), a need exists to balance food chain influences to secure a food supply that is internationally competitive, respects the environment and ensures nutrition and public health. A difficult balance to achieve, this remains a significant challenge for the FSAI, threatening the independence and neutrality of its institutional relations.

Central to understanding these interactions also are the communication strategies of the FSAI. Effective communication is key to develop positive, productive and long-lasting relationships with governmental, European, service contract and industry stakeholders and make an impact with consumers. Stakeholder perceptions of FSAI communication strategies are thus explored in Section 6.4 below.

6.4 Food risk communication and the FSAI

Risk communication represents a vital process that aids public understanding of hazards and expert understanding of how best to manage them. As highlighted in Chapters 2 and 5, much research of late has been dedicated to developing ways of improving risk and crisis communication in all fields. This includes explorations of message, medium and audience factors across general risk communication contexts (Frewer, 2004; Leiss, 2004), crisis contexts (Coombs, 2007) and food risk scenarios (McCarthy and Brennan, 2009; McGloin et al., 2008; Jacob et al., 2010). Reflecting positions evident in this broad risk communication literature, for many stakeholders interviewed, certain message, audience, transmission and impact factors must thus be met for FSAI communication to be considered effective.

In general, message content related factors tended to dominate stakeholder discussions with a perceived need for messages to utilise clear, concise and relatively 'jargon-free' language to reach publics, ease understanding and maintain their interest. Reflecting recommendations of message clarity identified by Leiss (2004) to achieve effective risk communication, McGloin et al. (2008) concerning nutrition communications and Jacob et al. (2010) regarding food safety messaging, this point was emphasised by participants from civil society (3), public (5) and FSAI (4) sectors. Meanwhile, adopting a traditional approach to communication, two DAFF representatives and a past employee highlight the radio as the most suitable medium for food risk communications. Hardly progressive in its ideology, the appropriateness of this means of communication may be questioned in an increasingly virtual and visual world²⁰. Nevertheless, following Liu et al. (2011), the radio may be more appropriate in early stages of crisis communication when factual information is required, with social media preferred in later stages to vent frustrations and receive emotional support. Meanwhile, echoing recommendations to avoid mass media campaigns when communicating food risk information in Ireland (McCarthy and Brennan, 2009), the need to tailor messages to suit particular audiences was also highlighted by two civil society interviewees and one semi-state actor. For example:

"Effective communication is knowing who your audience is and telling them in the message that they can clearly understand"

(Semi-State 1)

²⁰ For example, see Krinsky (2007), McGloin et al. (2008) and Jacob et al. (2010) on the rise of internet risk communications, Schultz et al. (2011) on the power and effects of Twitter and Waters et al. (2009) on the benefits of Facebook.

Finally, differences emerged between interviewee sectors concerning the measure of effective communication. Of particular note was the tendency of FSAI participants to highlight that communication is only effective when it induces an action or results in behavioural change (echoing effectiveness attributes highlighted by McCarthy and Brennan (2009) concerning domestic food safety communications). However, this action may be hard to achieve in Ireland where an 'implementation deficit' in food safety practices is recorded to exist (McCarthy and Brennan, 2009) rather than a traditional 'knowledge deficit' (Hilgartner, 1990; Hansen et al., 2003; Frewer, 2004). In other words, receiving food safety information does not necessarily result in appropriate action being taken in Irish private spheres. This resonates with some focus group findings where increased knowledge of FSAI communications fora did not necessarily lead to desires to engage. Moreover, challenges associated with accurately measuring communication-induced action must also be recognised when considering FSAI communications effectiveness. Consumer calls to the FSAI helpline and number of downloads from the FSAI website could serve as one indication that the FSAI message is absorbed and trusted. Such figures are indeed quantitatively reported to have risen in recent years with a 13% increase in consumer complaints to FSAI helplines noted in 2011 (FSAI, 2012a). However, such results cannot serve as a complete indication of communication success. More complex research and observation methods would be required to assess, for example, if consumer food safety behaviours alter following FSAI communications and if industry members comply with targeted FBO communications.

Following these characteristics of effective communication and somewhat side-stepping the challenge of accurately measuring communication effectiveness, eleven stakeholders interviewed subjectively deemed FSAI communications to be generally effective over the last decade (including five FSAI employees, three DAFF representatives, two civil society participants and one private sector stakeholder). In this regard, one past FSAI employee believes that the Authority possesses an effective internal communications team (an essential factor similarly determining effective crisis communication for Marra (1998)) while three other interviewees comment how the FSAI does not over-utilise scientific jargon and produces information in a timely manner. Further, two public sector interviewees refer to the FSAI website and helpline as being particularly advantageous to ensure two way communications with consumers, while a past employee and two private sector actors also praise the FSAI website as a useful resource. This echoes Waters et al. (2009) who characterise websites as a top online strategy to develop stakeholder relationships. Nevertheless, such a communication strategy remains redundant if the correct stakeholders are not visiting the website. For example, reflective of results explored in Chapter 5, some interviewees (including public

sector and civil society participants) question the extent to which consumers visit the website:

"I'm not sure how many, what you would say, ordinary punters go onto the website...the vast majority of people won't go onto it, not at all, unless they've an interest in it."

(Politician 1)

An element of consumer responsibility is acknowledged in this context by a DAFF stakeholder, further complementing some focus groups findings explored in Chapter 5. Meanwhile, in a stakeholder context, although 67% of small FBOs recently surveyed are reported to be aware of the FSAI website, only 38% report visiting it in the previous year and only 14% utilise it regularly (FSAI, 2012c). Awareness of the website has thus not directly translated into action. Additionally, only 2.8% of small FBOs surveyed reported utilising the FSAI advice line in the previous twelve months (FSAI, 2012c). This further raises questions regarding the success of FSAI communications, particularly when two-way communication is deemed to represent a sign of communications success (as expressed in a range of risk contexts by Slovic (1987), Griffith et al. (1998), Frewer (2004), Hampel (2006) and Hanlon (2010)).

Finally, six stakeholders (five from the private sector and one from civil society) consider FSAI communications to be ineffective and/or insufficient. For example, one processor doubts the extent to which the FSAI message is received and understood by the Irish population, while a caterer perceives the Authority to constantly scaremonger through its communications. Meanwhile, a journalist criticises the FSAI as being over-cautious in its messages, failing to come "*down too hard*" and communicate about non-compliant FBOs, for fear of legal implications (Civil Society 3). Additional problems are identified by a caterer regarding the accessibility and flow of communications from the Authority, with information regarding legislative changes or food scares seen as particularly slow to hit the private sector. Drawing together such stakeholder and consumer opinions, the overall impact of FSAI communications is explored in more depth in Chapter 7.

6.4.1 Acknowledging evolution and changing requirements

Meanwhile, the evolution of the FSAI more broadly (and related impact on its communication activities) was discussed by six interviewees (one civil society, two

public sector and three FSAI participants). Of particular note was evolving leadership within the FSAI and the impact of different CEOs on the Authority's contact with stakeholders and publics. Providing evidence that is inevitably subjective in terms of characterising 'effectiveness' and 'good leadership', the first CEO of the FSAI was especially praised for his knowledge, charisma, media savvy and desire and ability to engage others. As with Lukes (2005, p78) who characterises charisma or "*magnetism*" as a form of inactive power, such traits can result in significant influence in regulatory, institutional and media circles. Indeed, many public and FSAI stakeholders asserted that the first CEO raised the profile, presence and credibility of the FSA, gained resources for food safety and influenced public awareness and political will on food safety matters. Just as Roberts (2011) highlights the need for inspirational leadership to overcome implementation barriers associated with environmental sustainability policies (including vested interests, inertia and short-termism), effective leadership is thus also essential for the successful functioning of FSAs and implementation of food safety policies more broadly.

However, as one past employee explained, "*a series of tragedies*" occurred when the first CEO retired and a new one recruited, only to pass away within a couple of months of appointment (FSAI (past) 2). Second in line for the position was thus recruited who was subjectively criticised by certain stakeholders as a poor leader, unfamiliar with media use and lacking the knowledge, skills and charisma necessary to lead the FSAI. Representing a five year period (2004-2009), this change in leadership resulted in what many referred to as the 'dark days' and a major 'glitch in the life' of the FSAI when its initial momentum is believed to have been lost, employee morale plummeted and public awareness of and trust in the FSAI eroded. Further, a past employee noted a decline in communication outputs from the Authority from 2004 to 2009 (including in the media), concluding:

"In the first six years it was very successful, in the next five it was disastrous and now it's being successful again...it's unfortunate but I'm being honest... the tone of the message and the engagement..it became very, very different"

(FSAI (past) 2)

This perceived ineffective reign ended in controversy when the publication of results relating to contaminated bottled water on the Irish market was delayed by the FSAI. Sparking outrage in the media, industry interests were believed to have been put before consumers by the Authority (for example, see MacConnell (2009)). Therefore,

although cautious of the subjective factors that may have determined these CEO perceptions, such narratives highlight the importance of leadership (and underlying leadership logics) on the perception, conduction and evolution of everyday institutional activities, power and impact.

Structural changes to the FSAI over time have also impacted on its communication strategies. In particular, the establishment of *Safefood*²¹ in 2001 is perceived to have “robbed a lot of their [FSAI] consumer remit” (Semi-State 1) and thus been “devastating from the communications point of view” (FSAI (past) 1). This was deemed particularly true regarding the demarcation of FSAI functions and staff responsibilities. Indeed, four participants across sectors also perceive consumer confusion to persist between the two bodies (as similarly evidenced in focus group settings (Chapter 5)). Meanwhile, a need for the FSAI’s remit to continuously evolve was noted by interviewees, with FSAI participants particularly concerned about the Authority’s ability to “stay on top of things” (FSAI (present) 2) regarding emerging food risks, contaminants and technologies. Echoing Casey et al. (2010, p1088) who stress a need for national FSAs to be “cognisant of new and emerging risks in the food chain”, one past employee notes that the FSAI must adopt new functions to remain a necessary and efficient organisation:

“It has to evolve because the risks are changing and the status quo never stays the same. The pitch is moving....BSE was our biggest priority, it’s not a big priority anymore.”

(FSAI (past) 5)

Meanwhile, interviewees also identified a need for the FSAI to continuously modernise its communication strategies in line with the changing media landscape and in particular the growth of the internet (Krimsky, 2007), Twitter (Liu et al., 2011; Schultz et al., 2011) and Facebook (Waters et al., 2009). Related to this, a present FSAI employee spoke of the difficulties in utilising media to portray food safety messages, given the perceived vested interests of journalists. This links with McCullagh (2007) regarding the influence and power of journalistic professionalism (the commitment to write articles free from vested interests) in shaping media output. Similarly, a second FSAI employee notes how positive food safety stories rarely hit the headlines relative to negative ones, leading to scaremongering often dominating news headlines. Such responses are in keeping with “*risk reporting*” tendencies explored by Kitzinger and

²¹ A cross border body (North-South Ireland) with responsibility for food safety and nutrition communications and education.

Reilly (1997, p319) and “*issue attention cycles*” explored by Downs (1972, p38) whereby crises and risk events are seen to receive significant media attention for a time before significantly reducing and thus fading from public consciousness. Such tendencies can distort publics’ views of risk, amplifying it in times of crises and disproportionately representing it after a time (Frewer et al., 2002).

To bring more consistency, a third employee interviewed noted a need for several FSAI spokespeople to consult media in times of food crisis, while a caterer also called for the sole control of food risk media coverage by the FSAI in crises to ensure a consistent and accurate message. Finally, the importance of the FSAI having a direct relationship with media was emphasised by one past FSAI employee, echoing Cope et al. (2010, p353) who contend that:

“Risk professionals should develop effective communication channels with media sources, as well as directly with the public, an approach which may be particularly relevant in a crisis context”

The frequency and timing of FSAI messages was also drawn upon by several interviewees when discussing communication effectiveness. On this, one public sector interviewee emphasised the need for the repetition of certain food safety messages (including messages of reassurance about the work of the FSAI), while another stated a need to avoid information overload by over-communicating with consumers. This links with reported overwhelmed feelings of Europeans consumers regarding food safety information, with increased information provision deemed counterproductive when such a saturation point is reached by Van Kleef et al. (2006). By comparison, for one civil society participant, the Authority is “*smart and prudent and effective in their communication methods in that they don’t try to be on the TV every week*” (Civil Society 6). Consequently, publics and stakeholders are believed to take notice when the FSAI communicates a message.

Meanwhile, reminiscent of effective communication ideals proposed by Marra (1998) and Frewer et al. (2002), a private sector participant emphasised the need for the prompt and proactive delivery of messages before incidences occur. Reflecting opinion obtained from FÁS participants in the consumer focus groups, this interviewee stressed the futility associated with communicating the safety message after a problem has emerged. After all, in times of crisis, the frequency of, and need for, communication shifts, with one present FSAI employee describing crisis communication as a time of “*mayhem*” in the Authority (FSAI (present) 2). Another DAFF representative additionally notes difficulties in balancing such messages so that publics remain informed but do not

panic. The FSAI appears to have maintained an effective crisis communications record in this regard, with the only breakdown highlighted by stakeholders revolving around the 'bottled water scandal' of 2007. Indeed, as mooted in Chapter 5, the management of the 2008 Irish pork crisis emerged as a matter of pride for many FSAI employees, with several (perhaps unsurprisingly including FSAI employees and public sector participants) believing that such effective management and communication raised public trust in the Authority's operations and preserved Ireland's international food reputation. This echoes findings by Casey et al. (2010) who praise the FSAI for its rapid risk assessment of the incident, particularly when contrasted with the Belgian handling of its dioxin crisis in 1999.

Contradicting these perceptions of effective crisis communication and management however, some private sector interviewees criticised the FSAI for its pork crisis management. For example, a caterer perceived confusion to exist between the FSAI and DoH concerning dioxin crisis management responsibilities, resulting in consumers ceasing to trust the FSAI and conspiracy theories developing around the incident. Similarly, a processor believed the dioxin scandal to have been out of the control of the FSAI, given that the affirmative testing took place outside of the country. In this light, doubts emerged regarding the emergency procedures and protocols of the Authority to detect and communicate risk incidents to publics. Echoing this, a retailer believed that the FSAI played a limited role in the control of the dioxin scare, with more work perceived (perhaps self-interestedly) to be carried out at the local scale by food corporations, retailers and multinationals.

Finally, reflecting the importance of effective communication to develop and maintain organisational reputation recognised in the literature (Coombs, 2007; Liu et al., 2010), calls emerged from several stakeholders for increased messages of reassurance and information about the FSAI during times of 'food-peace' (that is, outside of food crisis contexts). For example, one retailer linked this with a need for consumers to know their food safety rights, while a politician noted potential for these messages to act as a "*tool of sales for Bord Bia*" in promoting "*quality Irish food*" (Politician 2). Similar to consumer groups, recommendations for improving future FSAI communications as such included increased educational programmes in schools, more direct contact with stakeholders and consumers through targeted fairs, workshops and newsletters and the creation of 'fly-on-the-wall' style television documentaries about the FSAI. Similarly, a need was identified for the Authority to utilise PR more effectively (for example, by freely filling the spaces available on television talk shows) while continued development into new social and virtual media was also highlighted by interviewees. Following

Schultz et al. (2011), this could include the FSAI utilising Twitter more effectively to reach consumers, although such recommendations contradict the lack of consumer engagement with social media sources for this type of information highlighted in the focus group phase. Further, this medium may also not be appropriate to reach FBOs, given FSAI (2012c) findings that small FBOs recognise social media channels as complementary rather than alternate and reliable modes of communication.

Thus, while all of these recommendations could minimise panic during food scares and help to develop and maintain the FSAI's reputation in non-crisis contexts, heeding Liu et al. (2011), the Authority must match the information form with the most appropriate source to ensure that the right audience receives the message. If successful, this could also heighten awareness of and trust in the FSAI; aspects that are explored in subsequent sections.

6.4.2 Awareness of and trust in the FSAI

Representing a sign of communications success and indicative that the right audiences are receiving and understanding the messages, consumers and stakeholders should be aware of the FSAI. Stakeholder perceptions of public awareness of the FSAI nonetheless varied across and within sectors (see Figure 8). Most participants, particularly and unsurprisingly from the FSAI, believe that the public are relatively aware of the Authority (although only three participants stated outright that the public are continuously aware). By comparison, the private sector was most doubting in this context, with five participants here portraying an insistent belief that consumers are unaware of the FSAI. Such results are compared with actual consumer awareness levels in Chapter 7 to follow. This section instead focuses on stakeholder perceptions of consumer awareness and trust levels along with elements of FSAI awareness and trust amongst stakeholders themselves.

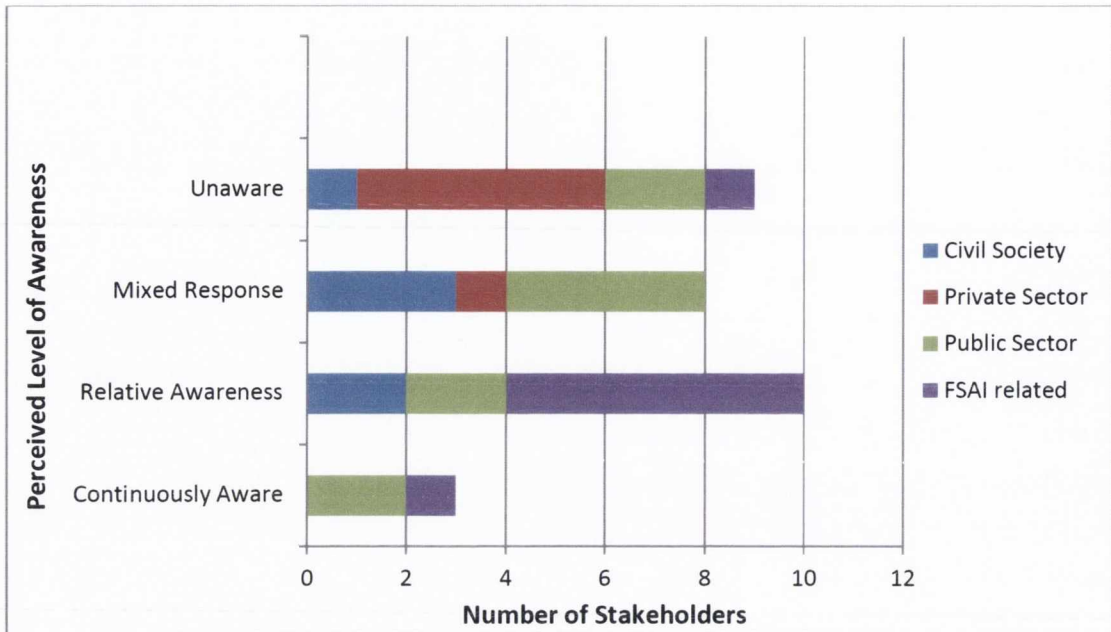


Figure 8 Stakeholder Perceptions of Public Awareness of FSAI

Indeed, a superior FSAI awareness of those engaged with the food industry compared to consumers emerged throughout interview discussions, given this cohort's vested interests in its existence, approval and activities. Only one DAFF representative contradicted this belief, stating that producers suffer from regulation fatigue which may lead to them ignoring the FSAI's presence. A related difficulty for private and semi-state stakeholders to discard their professional knowledge of the FSAI to accurately decipher what the general consumer might be aware of was also acknowledged in this context. Nevertheless, reflecting findings of McCarthy and Brennan (2009), varying interests of publics were deemed to represent a key factor determining public awareness of the FSAI (including by DAFF representatives, politicians and FSAI interviewees). In particular, occupational standing, food experiences, level of personal interest in food safety and/or the prevalence of more pressing concerns are perceived to limit FSAI-public awareness and contact. Indeed, making reference to a 'worry ranking', one past employee suggests that the prevailing economic recession means that people are preoccupied with monetary matters ahead of food safety concerns, thus limiting awareness of the FSAI (FSAI (past) 5). Similarly, the Eurobarometer (2010) highlights the economic crisis, environmental pollution and serious illnesses as presenting more immediate concern to people across the EU compared to food safety risks. Nevertheless, the Eurobarometer (2010, p7) also notes a growth in food risk concern of late (increasing "by 3 percentage points since 2005"). A survey conducted in Ireland in 2007 similarly revealed that while 67% of the population interviewed remains concerned

about food safety, this came third behind crime and health service worries. Such figures were nonetheless up 14% from 2002 (FSAI, 2007) and attributed to increased attention to food safety issues in the media of late.

Other interviewees referred to the evolving nature of public awareness of the FSAI, determined by both the evolution of the Authority and the stability of the food chain. For example, a general 'honeymoon' period of any new agency and the related difficulty of maintaining awareness and communications momentum was noted by two past FSAI employees. Additionally, general food chain stability was of note for other participants, with public awareness of the FSAI believed to be significantly heightened during times of food crisis (reflecting "*issue attention cycles*" explored by Downs (1972, p38)). An unsurprising perception given the increase in media coverage of food governing bodies during food scares, this result also echoes broader food risk communication studies conducted in Europe (for example, see Frewer et al. (2002) regarding BSE and GM foods coverage). Mirroring these findings, comparisons were drawn by interviewees to other risk-prone sectors, including the financial sector, with a general belief that publics are not aware of any regulatory agency until a problem arises. Instead, similar to findings by Berg (2004) concerning the effort it takes to remain constantly vigilant in food risk scenarios, public and private participants comment how consumers become aware of the FSAI for a time, only to resume their normal lives after the scare has passed:

"The level of awareness is quite low. And again, it's only... when something goes wrong. Cause if you were to ask the average man on the street, most of us just get on with eating our dinners"

(Politician 1)

Nevertheless, another politician recognises that low awareness of the FSAI may in fact represent a positive outcome for the Authority, reflective of the limited number of food crises experienced in Ireland. This 'no news as good news' theme (also explored in consumer context in Chapter 5) was reiterated by a present FSAI employee, who discussed the difficulty of making the public aware of the Authority's presence when it is subjectively deemed to proactively prevent food scares from escalating into withdrawals, crisis action and related media attention.

Finally, five participants across sectors referred to perceived consumer confusion existing between the plethora of food bodies that exist in Ireland to manage food quality, safety, marketing and research/education (see Figure 9 for an extensive

but by no means exhaustive list of such bodies). Interviewees believe this complex governing context significantly hampers consumer awareness of the FSAI and its precise role. As highlighted in the 2007 review of regulatory bodies in Ireland (Department of the Taoiseach, 2007), such a complex governing scenario is not unique to the food governance arena but evident in other transport, communications, finance and education regulatory sectors. This reflects a broader tendency identified within Irish governmental departments to think vertically rather than horizontally: setting up new agencies without first considering how roles could be assigned to existing bodies (EIU, 2009).



Figure 9 Plethora of Food Bodies in Ireland

Indeed, several interviewees (including a retailer and civil society participants) even confused the various food bodies in their interview responses, attributing Saferood and Bord Bia advertisements to the FSAI. Thus, adopting a realistic approach to understanding public awareness of the FSAI, one present employee admits that it can get lost within this complex web of Irish food governance:

“They do get us mixed up with other agencies, you know? You could cocoon yourself into thinking that everyone knows us, they don't really”

(FSAI (present) 3)

Finally, contrasting the varying stakeholder perceptions obtained concerning public awareness of the FSAI, the vast majority of interviewees deem the public to trust the Authority (see Figure 10). Linking with concepts of effective communication, consumer well-being and the economic importance of food exports to Ireland, trust in the FSAI is seen as essential to give “weight” to its messages, ensure consumer confidence and facilitate the development of new markets (with trust in the food industry similarly highlighted by Siegrist et al. (2007) to assist in the acceptance of new products). Public, civil society and FSAI participants were most positive in this regard, with several acknowledging that although the public may not be consistently aware of the FSAI, they are comforted by its presence and trust it when it communicates crisis messages in particular. These positive perceptions are reflected in the latest Eurobarometer (2010) results which indicate that 77% of Irish citizens surveyed are confident in the FSAI as a source of food risk communication (compared to the EU average of 64% in other national FSAs). Additional characteristics of the FSAI deemed to foster trust include its independent status, perceived lack of industry agendas, crisis management activities and tendency to take decisive action when necessary.

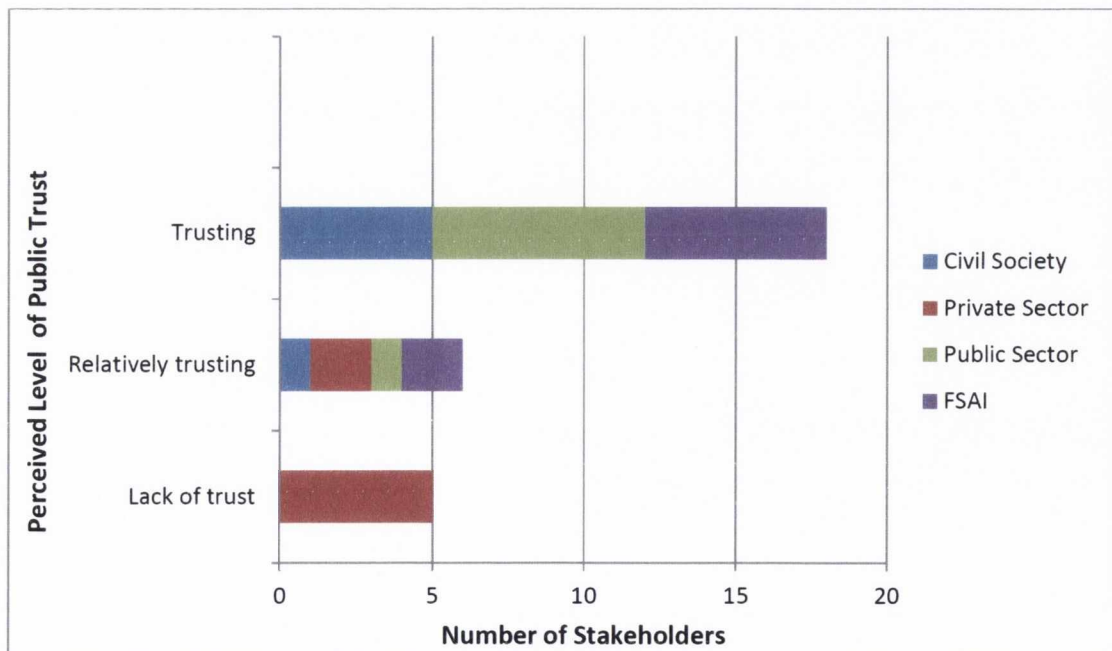


Figure 10 Stakeholder Perceptions of Public Trust in the FSAI

However, similar to responses obtained regarding FSAI awareness, private sector interviewees were most critical of public trust in the FSAI (see Figure 10). Negative personal FSAI experiences, perceived inefficient structures and food safety mismanagement (culminating in scares) legitimise this negative stance for these stakeholders. In addition, a perceived low degree of trust in the Irish government and institutions more broadly due to recent economic events and institutional revelations was also referred to by three stakeholders (one private sector and two FSAI actors). For these participants, this has led to a general “*anti-establishment*” feeling amongst the Irish population (FSAI (present) 3). Similar “*anti-establishment attitudes*” are explored by Ivaldi (2006, p48) in a political context in France while, more specifically, O’Sullivan (2007) and McCullagh (2007) explore this declining level of trust in relation to Irish institutions and media. Such feelings have grown in intensity of late in other environmental and economic sectors in Ireland also (for example, concerning turf-cutting restrictions, septic tank charges and household charges in 2011/2012).

Finally, trust in the FSAI is also perceived by several stakeholders (particularly FSAI participants) to represent an evolving entity, fluctuating and changing according to different events and time (echoing broader trust literature in risk (Slovic, 1999) and food risk contexts (Berg, 2004)). For example, as with Coombs’ (2007) discussion of the impact of crises on organisational reputation, three FSAI employees refer to the ease with which institutional reputation can be lost, with an impression emerging that the Authority is only as trusted as its handling of the last food crisis. For this reason, civil society members and FSAI employees comment how the organisation must continue to build consumer trust in its actions, and not “*take it for granted*” (FSAI (present) 2). Moreover, three FSAI and semi-state stakeholders contend that consumer knowledge and trust in the Authority is essential given that consumers represent its “*main custodian*” (Semi-State 2). After all, for one present employee:

“We’re here as a consumer protection agency so if consumers don’t perceive we’re doing a job that we were set up to do then we’re in trouble”

(FSAI (present) 1)

Another present employee and private sector member extended these concepts further, identifying a need for the public to realise how and where their tax money is spent. Suggesting an underlying fear of closure resulting from current economic restraints, public awareness of the Authority and its functions is conceived as key to mitigate this risk and demonstrate that the FSAI is “*worthy of [its] budget*” (FSAI

(present) 3). As part of this drive for efficiency and echoing wider European and governmental drives for 'better' regulation (for instance, see Baldwin (2005), Weiner (2006) and the Department of the Taoiseach (2004)), the chapter will now examine stakeholder perceptions of the performance and impact of the FSAI since its inception in 1999.

6.5 Geographies of food risk governance: performance, power and constraints

6.5.1 FSAI performance and impact

For Crabbé and Leroy (2008), an increase in the implementation of environmental policies since the 1970s has raised questions concerning the effectiveness, efficiency and legitimacy of these policies. This in turn has created a need for policy evaluations to be conducted according to the authors. Moreover, in light of looming governmental revisions and cuts to the public sector, a need exists to assess FSAI performance to date to determine its future.

Narratives from interviews conducted in this research highlight obvious differences in stakeholder opinion of FSAI performance. Nonetheless, it must be noted that more achievements than failures were associated with the Authority overall. Public, FSAI and semi-state participants were (perhaps unsurprisingly) the most positive in this regard. Perceived FSAI achievements revolved around the coordination the Authority is believed to have brought to food safety governance structures and, paradoxically, its management of food scares, particularly the 2008 pork crisis. Assuming that effective governing structures would mean that no food crises emerge, their occurrence, nevertheless, also serve to prove the worth of FSAs in managing such issues. This echoes the broader 'paradox of a crisis' theme consistent throughout this thesis (discussed in Chapter 5 relating to consumer perceptions and Chapter 7 in a broader food risk governance context). National and international consumer confidence in Irish food is also perceived to have risen as a result of the FSAI, with an increase in production standards additionally noted. Indeed, perhaps from a position of self-interest, many of the public, FSAI and semi-state actors could not identify any failures of the Authority. Proclaiming that the emergence of the FSAI was like "*superman visiting the earth*", one past employee in particular emphasised a multitude of FSAI achievements:

"It brought together a food safety control family ...it set benchmarks for enforcement, it brought consistency, it brought uniformity, it brought cooperation, collaboration...it informed an industry, it informed consumers, it brought a new awareness of food safety controls...it brought back the confidence in food safety...in the regulator...it has risen standards of production...it has protected politicians, it has protected the economy, it has protected tourism"

(FSAI (past) 2)

By contrast, private sectors actors were again the most critical of the Authority while civil society interviewees provided mixed performance responses (unsurprising given the diversity of civil society participants interviewed). Therefore, while the FSAI was praised for many achievements, various incidences in its history and areas requiring improvement were also highlighted. Perceived failures of the Authority included poor communication strategies, ineffective service contract structures, industry bias in FSAI actions and the poor handling of food crises. Raising questions regarding the true 'superman' ability of the FSAI, some participants commented, for example:

"Occasionally they're a little bit too quiet...I would love to think that everybody knew of the Food Safety Authority"

(Civil Society 1)

"If I was driving the show and the Food Safety Authority, I'd be pushing to make even more strides to get even greater clarity into my [service contract] relationships to take the scope for dysfunctionality out"

(Private Sector 2)

Finally, indicative of a dynamic, evolving and fluctuating Authority, the natural evolution of the FSAI is believed by several participants to result in it having a varying impact over time. Further complicating these limitations, a difficulty in measuring FSAI performance in any accurate or meaningful way exists. This links with broader literature concerning the difficulty of assessing the performance of any environmental, food or public sector institution in any consistent way, given the often lack of quantifiable, measurable outputs²². This aspect is explored in more depth in Chapter 7. Meanwhile, as part of a qualitative assessment of FSAI performance, subsequent sections will examine stakeholder perceptions of the power, scalar relations and constraints evident within FSAI operations.

²² For instance, see Kanter and Summers (1994) regarding measuring performance in non-profit organisations and Davies and Mullin (2010) concerning the performance of environmentally focused social economy enterprises.

6.5.2 *Exercising and measuring power*

Echoing literature explored in Chapter 2, while authority based upon legitimacy and consent represents the most effective source of power, forms of “*coercive power*” (Haugaard and Ryan, 2007, p196) also exist to enable authority to be exercised. Predicated “*upon the threat of deprivation or punishment*” (Haugaard and Ryan, 2007, p196), it is this latter form of power that is exercised by the FSAI and its service contract agencies over FBOs to enforce food safety legislation (with the threat of closure serving as a key instrument of power here). Nevertheless, the act of the FSAI enforcing ‘power over’ FBOs also maximises their ‘power to’ achieve tasks, that is, the profitable sale of safe food products and services. In this way, moving beyond a discourse of domination (where one actor enforces power over another against the subject’s interests), the FSAI also practices forms of “*beneficent power*” (Lukes, 2005, p84). This type of power may be challenging for FBOs (in terms of the time/effort required to implement food safety legislation) but averts harm (to the public and business reputation) in the long term.

Adopting a Foucauldian governmentality perspective explored in Chapter 2, the FSAI can also be viewed as a body that simultaneously acts as, and utilises, ‘techniques of government’ (including an ensemble of institutions, tactics and procedures) to exercise power over populations and thus regulate conduct (Foucault, 2007). Through this, the FSAI aims to produce compliant subjects (FBOs) and normalise their routines (food safety behaviours). Extending these ideas further, issues of panoptic surveillance explored in Chapter 2 may also be relevant in the FSAI context. Similar to the socialisation effect of schools explored by Foucault (1977) and Haugaard and Ryan (2007), the FSAI may act as a panoptic watchtower operating in the food industry landscape, searching for, disciplining and punishing against crimes of non-compliance. Forms of coercion and punishment are at the disposal of the FSAI (for example, through the serving of closure orders), however the principal aim of recent food safety reforms mirrors Foucauldian socialisation effects to instill good food safety behaviour amongst responsible FBOs.

Acknowledging the subjective notions inherent in power assessments (Lukes, 2005), but to arrive at a qualitative assessment of stakeholder perceptions of the FSAI’s overall power, interviewees were questioned regarding the Authority’s power in managing the food supply, influencing businesses and consumers and dealing with government. Akin to variances uncovered in performance opinions, resulting stakeholder perceptions varied dramatically across and within interviewee sectors. For some, particularly from the private sector whom the FSAI is attempting to regulate, the

Authority is perceived as relatively powerless. Contrary to much public sector belief of industry fearfulness of the FSAI, many actors (including from production, processing, catering and retail outlets) suggest no fear of the consequences that the FSAI could impose. The all-seeing panoptic eye and securitising reach of the Authority is not as pervasive as it first seems with various anecdotal reports from private sector interviewees of low food safety legislation compliance, food safety document falsifications, limited EHO inspections and inadequate FSAI communications. For example, a retailer confessed that there is no constant fear or dread of the FSAI watching or monitoring retail activities. Such findings are corroborated by focus group participants' experiences of working in the food service sector, where advanced warnings of inspections were described. Moreover, the retailer admits, along with a caterer, to witnessing industry members forging documents relating to the HACCP food safety management system enforced by the FSAI.

Instead, reflecting broader shifts to governance operating outside of state control (including within the contested 'hollowed out' state thesis (Rhodes, 1994) and the broader privatisation of environmental regulatory regimes (Castree, 2008; 2008a)), one retailer felt that internal audits and self-imposed retail standards take precedence over any FSAI request or inspection. This echoes concepts of the *"third food regime"* believed to have recently emerged in the UK by Burch and Lawrence (2005, p2), characterised by a reorganisation of power relations towards retailers within a wider context of flexible manufacturing and high levels of innovation and new agri-food commodities. In this regime, retailers seek to meet increased consumer demand for food safety and quality by implementing private regulatory regimes and own brand products (Burch and Lawrence, 2005). Wales et al. (2006), Tovey (2007) and Hinchliffe et al. (2012) note similar shifts in food power to retail arenas across the UK, Ireland and broader disease control arenas respectively. Likewise, a food processor interviewed stated that the majority of improvements in food safety have resulted from private sector initiatives (such as the 1998 development of the British Retail Consortium's global quality and safety standards) rather than from any governmental or institutional efforts:

"A lot of the systems we would have put in place would have been driven from retail rather than from regulatory requirements"

(Private Sector 6)

Although these latter comments may derive from a position of self-interest (that is, wanting to project an image that the private sector is capable of self-regulation), all of these experiences suggest little fear of, or respect for, the FSAI amongst the food

industry. It also implies that these actors are rarely reprimanded for such falsifications and poor conduct. Thus, similar to other panoptic and surveillance focused research (for example, see Lyon (1993) regarding panoptic surveillance through computer databases, CCTV cameras and electronic tagging, Timmons (2003) on the panoptic call centre monitoring and correcting employees behaviour and Gallagher (2010) regarding panoptic schools), Foucauldian comparisons of the FSAI to the 'all seeing eye of the panopticon' are incomplete. Unlike the idealistic impact of the panoptic watchtower inducing "a state of conscious and permanent visibility" and ensuring the "automatic functioning of power" within a prison system (Foucault, 1977, p201), the FSAI does not appear to generate this feeling within the food industry. Indeed, Foucault himself contends that the panopticon must not be understood as a "dream building" but rather a "mechanism of power reduced to its ideal form" (Foucault, 1977, p205). Thus, although the FSAI may be preventing the worst excesses of non-compliance and supporting industry self-regulation, its mere presence does not appear to act as a deterrent to all fraudulent and disobedient industry behaviour. Instead, comments obtained within interviews suggest the persistence of a fractured, disjointed FSAI and a partial panoptic structure which has not entirely infiltrated, swarmed or disciplined this food industry society. This reflects acknowledgement amongst Giddens (1985), Lyon (1993) and Timmons (2003) that while panoptic power is extensive in society, it is not (as of yet) all-pervasive. Instead, FSAI surveillance activities represent only one of its many securitising activities, making attributions of a biosecuring institution perhaps more appropriate. Such biosecurity characteristics are explored in more depth in Chapter 7.

Meanwhile, for other stakeholders, including from civil society, FSAI and private sectors, the Authority possesses some degree of power in managing the food chain, but is subject to constraints. Other stakeholders are perceived to hold as much, if not more, power than the FSAI, with many interviewees noting the enormity of the food industry and the comparative ability of the perceived 'small' FSAI to take action against it. Finally, for many public sector and FSAI actors in particular (and reflecting these groups previous positive associations with the Authority), the FSAI represents a powerful biting watchdog whose ability to close down non-compliant FBOs gives it power to govern food safety effectively:

"Well quite powerful really, I mean it can close down food establishments overnight"

(Politician 3)

"It's very powerful...if they ask you to carry out certain improvements... you go ahead and do it cause you're dead otherwise"
(DAFF 1)

However, an interesting point was raised by some participants concerning this capacity of FBO closure. This power does not lie with the FSAI, but rather with the EHOs whom it contracts inspection work out to. The FSAI is simply informed of inspection outcomes (including FBO closures), possessing no power to alter these decisions. Instead, its role lies in communicating order outcomes to interested parties. Indeed, utilising Lukes (2005) measure of power as the capacity to bring about a certain outcome, EHOs can thus be seen to have a more immediate and direct impact on the interests of FBOs, producing more significant outcomes than the FSAI. Introducing a complex geography of power to the role, influence and impact of the FSAI, and Irish food risk governance more broadly, coercive and disciplinary power is thus perceived to exist at the local EHO level rather than at the national FSA scale.

Reflecting the importance of understanding alternate "*spaces of biosecurity*" (including the role of new actors and forms of expertise in constructing biosecurity approaches at different scales) (Enticott and Franklin, 2009, p389), food risk governance in Ireland is further complicated by the input and power of additional actors at national, supranational and international scales. For example, dependence on DoH for funding (and related governmental ability to influence FSAI activities, cut its budget and reduce its powers) was of particular concern for some FSAI, private sector and civil society stakeholders. This reflects the potential for conflicts of interest within, and influence from, governmental departments in FSA actions explored by Hadjigeorgiou et al. (2012). Indeed, one private sector participant commented how it is very difficult to be "*independent from the person who pays you*" (Private Sector 6) while for one past employee, legislative and financial dependence on government leads to it "*play[ing] a big role in the life of the FSAI*" (FSAI (past) 2). Perceived to interfere with the Authority's independence, governing autonomy and power, this governmental influence has particular significance relating back to the economic drivers of the FSAI, given that trade and market competitiveness are of utmost concern to the Irish government in present times of austerity.

Meanwhile, at a supranational scale, as with O'Sullivan's (2007, p1) contention that "*Ireland is increasingly governed as much by Brussels as it is by Dublin*", the political power of the European Commission and Parliament to develop and determine food safety policy was noted by other stakeholders. Europe "*pulls the strings in Ireland*"

according to one civil society participant, with perceptions thus existing that European bodies rule and determine the FSAI agenda and Irish food safety standards. In this sense, the Authority can be viewed as a mere conduit of EU policy and decisions, simply implementing what has been decided by European bodies and transposed into Irish law by national government. Adding to this complex geography of power, for some FSAI and semi-state stakeholders, Irish food risk governance agendas are influenced by additional international bodies such as Codex and the World Health Organisation. Indeed, Taylor and Millar (2004) similarly noted the initial guiding influence of protocols developed by the World Trade Organisation (WTO) on the structure and creation of the FSAI. Further, while the proactivity of its surveillance work is worth noting, the FSAI appears to be largely reactive in nature, often only responding to food safety incidences after they have occurred. It provides reassurance and advice when a food crisis has hit, a food allergen is already unlabelled on the market or a contaminated product needs to be recalled. Despite wider governmental efforts towards improved emergency planning in Ireland (including the establishment of a dedicated 'Office of Emergency Planning' in 2001), no in-house measures for predicting future food risks are in place according to FSAI employees interviewed. The Authority thus appears to be waiting on instructions from Europe or the next food crisis to occur.

Thus, similar to Rhodes' (1994) exploration of power relations in the 'Europeanisation' era where national sovereignty is believed to be eroding and the principle of subsidiarity dominates, influential power in the food risk governance arena is perceived by stakeholders to exist at local, supranational and international levels and to have somewhat skipped the national FSAI. Consequently, the Authority is naturally bound by institutional and scalar constraints, restricting its autonomy and power, and limiting its ability to act in any way that could make itself unpopular with government, the Minister for Health, the EU, EFSA or international bodies. Moreover, as the global economic recession continues to negatively impact on disease prevention and surveillance programmes worldwide (for example, see Rose (2011) regarding such cutbacks in America and Moran (2012) concerning "savage cuts" to healthcare services in Greece), stakeholder fears of increased food safety shortcuts remain. Indeed, FBOs are perceived to be reducing staff, education and food safety training as EHO inspection rates are simultaneously decreasing. Governmental aims to increase Irish food production under 'Food Harvest 2020' plans (DAFF, 2010) further complicate this matter, as companies strive to produce 'more from less' and hence potentially, according to public and private stakeholders, cut corners. Indeed, despite governmental promises to support the agri-food sector and increase Irish food production, recent budget publications highlight objectives to save approximately €60million in 'food safety

(and public health), animal health and welfare, and plant health' arenas (Department of Finance, 2012). The power of the FSAI to thus conduct necessary activities in a limited resource environment remains a challenge.

6.5.3 *Scalar constraints and challenges*

The current economic recession however represents only one way in which Irish food risk governance and the FSAI is perceived to be constrained in executing everyday activities, powers and securitising functions. Additional challenges highlighted by interviewees include the plethora of food bodies involved in governing food in Ireland (including as part of the service contract system, see Figure 9 above) and specifically the gaps and overlaps envisaged to exist as a result. Indeed, some interviewees claim that it is gaps in this disjointed system that allow food scares to occur. The FSAI works under, over and with a variety of actors to securitise the food chain, and while this system is perceived to have been even more fragmented prior to the establishment of the FSAI, the remaining potential for gaps, overlaps, tensions and confusion in food safety responsibilities was highlighted by several stakeholders:

"I think there are too many agencies maybe involved in food... I do think there is over-lapping and there's no need for that"

(EHO 1)

"I think there is a level of confusion between the Department of Ag, the Department of Health, the Food Safety Authority and the operatives that work to the Food Safety Authority"

(Civil Society 6)

After all, according to Rhodes (1994, p147), when the delivery of services increasingly depends on "*linking sets of organisations*", issues of fragmentation and difficulties in coordination can arise:

"Fragmentation not only weakens coordination, it also reduces efficiency. Fragmentation leads to functional and jurisdictional overlap, otherwise known as duplication and waste, thereby increasing inefficiency"

Meanwhile, the extent of FSAI remit, specifically the fact that the Authority only regulates from farm gate to fork (rather than 'from field to fork' as commonly referred to

in FSA literature), signals a significant gap in the geography of Irish food risk governance. Despite recent European aims to remove agricultural interests from food chain securitisation (Abels and Kobusch, 2010) and the well documented lack of public trust in government departments to act in consumer interests and communicate risk effectively (for example in general risk (Frewer 2004), nanotechnology (Macoubrie, 2006) and GM contexts (Dean and Shepherd 2007)), Irish food and feed safety governance is split, with DAFF maintaining responsibility for feed safety regulation and inspections on-farm. For many interviewees, this raises further concern given that the majority of recent food crises resulted from feed safety mismanagement (for example, BSE and the Irish pork crisis). Moreover, DAFF regulates food safety in the majority of the large food exporting companies in Ireland, representing another considerable gap in Irish food chain biosecurity. This is also particularly significant given the volume of food produced in these companies (up to 85% of total food production according to one past FSAI employee). Reflecting the fragmentation of power and responsibility in the global age (Beck, 2008), additional divisions in responsibility exist between the North and South of Ireland, with the FSAI responsible for food safety enforcement in the Republic, the Food Standards Agency in Northern Ireland and *Safefood* acting as a cross border consumer communications body between the two.

These divisions of governance indicate a lesser power on behalf of the FSAI, particularly in terms of the percentage of the food chain it controls. It also further alters the image of the Authority as an all-encompassing panopticon over-seeing the food chain 'from field to fork' nationwide and raises questions concerning the need for the plethora of bodies on such a small food island. Revisions to Irish feed governance have been recently suggested according to FSAI and DAFF interviewees, although it appears that these will not be particularly revolutionary. Feed control is predicted to remain with DAFF but merely included under its service contract to the FSAI. This is of specific concern given previously explored interviewee comments about existing tensions between DAFF and the FSAI, particularly resulting from DAFF's traditional power in Irish food policy arenas (Taylor and Millar, 2004). Further concerns arise on consideration of the positioning of the FSAI within the service contract system that dominates the division of food safety responsibilities in Ireland. FSAI power is perceived to be constrained here by several interviewees (including past and present FSAI employees), particularly owing to its lack of budgetary control over the contracted agencies. This is believed to automatically limit the influence it can have over these agencies' functions and performance: if the contracted agency performs poorly and/or fails to uphold its activities as part of its service contract arrangement, the FSAI has no way of reprimanding it in any meaningful way without budgetary control. This structural

failure is further flawed by the lack of audits or 'section 17 reports' (FSAI (past) 2) carried out by the Authority to assess contract agency performance over the last decade.

Additional challenges remain for the FSAI principally revolving around potential public sector reform on the future functioning, biosecuring priorities, communications, survival and impact of the FSAI. While most interviewees admit that some internal savings may be possible within the FSAI (for example, through strategic prioritisation techniques (focusing resources on the riskiest areas) and cutting unnecessary layers of bureaucracy), a need to maintain the 'frontline' staff and 'core work' of the FSAI and its contracted agencies was emphasised. This was particularly the case regarding EHO inspection frequencies. Thus, progressing beyond forms of subtle control and panoptic surveillance (Lukes, 2005; Foucault, 1977), this suggests a need for a continuous and visible presence of the FSAI amongst FBOs. After all, as Casey et al. (2010, p1088) conclude:

"Official oversight in the form of inspections and audits...needs to be adequate to verify that feed and food business operators meet their legal responsibilities"

Nonetheless, opportunities may also exist in this austerity context for the FSAI to revise its current structures, rid any gaps and overlaps in responsibilities and potentially become a more proactive, visionary Authority for the future. One option may be to create a single food safety agency with the entire inspectorate brought under one roof (as mooted both in the 1997 Fianna Fáil and 2011 Fine Gael manifestos). Similar to notions of "super-regulators" explored by the EIU (2009, p162/163), this could result in:

"Greater consistency in policy, reduced overlap and duplication of functions, more efficient use of technical expertise, reduced risk of regulatory capture and an opportunity to reduce administrative costs"

However, associated start-up costs and disruption to existing services made this option unlikely in the past and even more unlikely in the current economic climate. Alternatively, existing structures could be improved according to stakeholders, through the introduction of changes in contract audit and monitoring techniques, increased FSAI budgetary control over agencies and the utilisation of powers of publication in agency audit reports. After all, according to Papadopoulos (2007, p481) forms of peer accountability can represent a strong mechanism for behavioural change with the "sheer fear of 'naming and shaming'...deemed to yield disciplining effects" as a result of

risks to reputation and related loss of trust and revenue. Regarding the future remit of the FSAI, aside from the incorporation of food safety management, many stakeholders also suggest a need for the FSAI to branch into managing 'healthy eating' education (currently managed by *Safefood*). As Tovey (2007, p291) reports, much concern now exists in Ireland regarding *"how to discipline dietary choices"*, with obesity similarly representing a significant future food risk for several interviewees. With food pleasure deemed to challenge personal self-control, Coveney (2000) also speaks of a need for constant societal warnings *"that we could be digging our own graves with our knives and forks"* (pviii). One public sector participant even suggested that the FSAI change its name to the *'Food Health and Safety Authority'* to incorporate this wider remit (Politician 3). Such a decision could also eliminate the need for the plethora of food governing bodies in Ireland and enable the FSAI to build brand awareness and institutional trust in times of 'peace' or non-crisis (as recommended in Section 6.4.2 and echoing communication recommendations of Marra (1998) and Frewer et al. (2002)).

Nevertheless, despite its complex evolution, varying geographies of power and scalar constraints, the need for the FSAI moving forward represented a matter of consensus amongst the majority of interviewees. Reverting to earlier motivations regarding establishment (Section 6.2), the continuation of the FSAI was perceived as necessary by many stakeholders to promote Irish food exports, encourage food industry growth and pave the way out of economic recession for Ireland. Despite the agricultural sector declining in relative importance during the economic boom (with food exports constituting 20% of all Irish exports in 1993 and only 8.4% in 2003 (Tovey, 2007, p289)), in recession, prospects for agricultural produce and employment in Ireland are perceived to have risen again. Reflecting marketing strategies developed by Bord Bia (Dermody, 2011; Fitzgibbon, 2011) and cited by Sage (2003) as forming the foundation for new Irish food markets, a *'clean, green food island'* image is attainable for Ireland according to many civil society and private sector stakeholders, with the FSAI deemed essential to promote and protect this image:

"Having an orderly system of regulation moving forward is going to become even more important ...and I think with the FSAI as an independent agency...clear voice of regulation, we actually stand some chance of allowing the industry to grow in a safe way over the next ten years"

(Private Sector 2)

6.6 Conclusion

At the time of the Irish food safety governance reforms and related FSAI inception, the service contract model aimed to define, divide and streamline existing food safety responsibilities amongst relevant actors who would then be answerable to the FSAI as coordinating body. What has resulted however is a governance system still fraught with difficulties, power struggles, tensions, gaps and overlaps with the number of actors involved in food safety governance not being reduced as drastically as initially envisaged. This reflects early positions cited by Taylor and Millar (2004, p601) who noted how *“rather more exists in the way of continuity than change”* within Irish food safety governance reforms. Essentially, previously established food risk responsibilities and management structures were maintained on creation of the FSAI, with the same system of governance persisting over a decade on. Thus, the attempt to streamline Irish food safety governance can be seen to have led to a mere streamlining of management approaches rather than significantly reducing the number of actors involved. As one present FSAI employee commented:

“We have 36 different agencies now....at the beginning we had 52 so we are moving them down slowly but surely”

(FSAI (present) 1)

Nonetheless, comparative to other FSAs worldwide, the FSAI is admired within political and regulatory circles and is perceived to be performing well. For example, the FSAI was awarded ‘The World Health Organisation Food Safety Award’ in June 2008 *“in recognition of the international contributions it has made to promote food safety in the global economy”* and assistance it has provided in developing the food safety mandates of other national, supranational and global food safety governing institutions (FSAI, 2008). Indeed, various incidences of institutional imitation were noted by FSAI stakeholders interviewed including similarities between the FSAI and Dubai FSA websites and Chinese delegates visiting Ireland to learn how the FSAI operates. Therefore, for stakeholders on the outside (and many on the inside in public and FSAI sectors), it appears that the Authority is performing effectively (albeit with a form of imperfect effectiveness in its management of food crises). However, a disconnect exists between this perception and the tensions, challenges and failures of the FSAI expressed by other stakeholders and consumers, including relating to governance duplication, efficiency, confusion and waste. Many of these competing perceptions also differ from the terms laid out in the FSAI’s establishing remit. Revealing interesting

relations between the regulator and the regulated, this is particularly evident regarding perceived FSAI aims and private sector fearlessness. Thus, differences can be said to remain between the FSAI's required duty (policy), actions in reality (practice) and stakeholder experiences and opinions (perceptions). Such differences could result from common difficulties associated with translating policy into practice (for example, as similarly highlighted by Roberts (2011) concerning environmental sustainability policies), while differing stakeholder perceptions may also result from a multitude of personal characteristics, vested interests, motivations and backgrounds.

Concerning its overall performance, the natural evolution of the FSAI can be seen to have resulted in significant periods of successes and failures for the Authority, while the emergence of a complex geography of power and constraints has created difficulties in terms of independence, power, influence and proactivity. Practical suggestions for improving the structure and functioning of the FSAI are highlighted in Chapter 8 alongside more general suggestions for enhancing Irish food risk governance more broadly. Given the importance of the food industry to Ireland, such changes should be viewed as fundamental, with the long term impact of further food scares on public health, economics and food industry reputation more costly than the short term measures required to prevent their occurrence.

Situated between literature that focuses on measuring good governance and food risk research that focuses analyses on crisis contexts, this chapter makes a new contribution to knowledge through its detailed decadal assessment of FSAI operations in everyday contexts from a stakeholder perspective. Moreover, it expands existing FSA literature from a focus on FSA establishment to a qualitative evaluation of FSA performance, impact and future. Nevertheless, it also highlights the paucity of objective and accurate evaluative mechanisms for determining FSA performance worldwide. The following chapter expands on this performance theme, incorporating quantitative and qualitative approaches to develop a stronger framework for FSA evaluation. Comparing, contrasting and linking expert (stakeholder interview) and lay (consumer focus group) opinion with FSAI rhetoric (documentary and website analyses results), the next chapter also explores the principal food risk governance themes to emerge from this research. In doing this, it answers the three established research questions relating to food risk regulatory performance, communications impact and biosecurity implementation in Ireland.

Chapter 7 Food risk regulation, communication and biosecurity in Ireland

7.1 Introduction

The overall aim of this research was to develop an in-depth understanding of the nature, determinants and methods of food risk governance and communication in Ireland. This was achieved through the development of three research questions to frame the research process. As outlined in Chapter 1 and reiterated in Table 14 below, the first question relates to the regulation of food risk in Ireland, questioning the role and impact of the FSAI since its inception in 1999. The second concerns the communication of food risk and related securitising activities, asking what impact the communication strategies of the FSAI have had on external agents. The final research question considers the wider implications of the research within a broader biosecurity framework. It questions how logics and strategies of biosecurity have infiltrated and performed within Irish food risk governing practices.

	Research Question
1	In terms of regulation, what has been the role, and impact, of the FSAI on the landscape of food risk regulation in Ireland since its inception in 1999?
2	Regarding communication, what impact have the strategies of the FSAI had in terms of communicating food risk securitising activities to foster compliance, trust and awareness in external agents?
3	Concerning biosecurity, how have the logics and strategies of biosecurity infiltrated and performed within food risk governing practices in Ireland?

Table 14 Research Questions

The creation and utilisation of such research questions provided unique insight into the logics, actors, values and concerns underpinning political, communicative and food securitising practices in the Republic. Examining conclusions arising from each research question, this chapter is divided into three sections. Drawing on some new material generated through the documentary, website and media analyses and reflecting on consumer (Chapter 5) and stakeholder (Chapter 6) results, it discusses the principal findings of the research relating to the regulation, communication and biosecurity of food risk in Ireland.

7.2 Regulation

For participating stakeholders and consumers alike, food risk is perceived to require regulation in Ireland. As highlighted in Chapter 5, chemical, microbial and technological food risk particularly dominated risk psyches, reflecting findings of McCarthy et al. (2006) regarding Irish food hazard concerns and wider food risk priorities of the World Health Organisation (WHO, 2011). As with Tovey (2007) and Pearce and Witten (2010), anxieties regarding nutrition and obesity also featured in both groupings. Regarding the effectiveness of Irish food risk regulation however, consensus amongst stakeholders and publics was not as apparent. While, many consumers normatively consider food to be safe in Ireland, they do not necessarily attribute this to effective governing structures. Indeed, the majority were unsurprisingly unable to name responsible food governing actors (including the FSAI), although a general sense emerged that food safety responsibility lies with broader governing structures of the state (particularly the Department of Agriculture and Bord Bia). Such responses contradict the reported increased individualisation of risk by Beck (1992) but may reflect representative democracy ideals²³. In this latter context, consumers do not need to be aware of, or mitigate against, food risk in everyday life as institutions (such as the FSAI) have instead been established to manage these arenas, make choices and take decisions and precautions on behalf of publics. A key element for publics in such circumstances is therefore to have trust in the transparency, intentions and accountability of these organisations and faith in their performance. This may be particularly difficult however in risk governance arenas if Beck's (1992) dependency thesis holds true regarding increased public dependence on scientific institutions to manage risk yet simultaneous decreased trust in scientific assessments. A need to assess the perceived performance and communications of such governing institutions (as in this thesis) thus remains pertinent in this context.

However, while many stakeholders concede that food risk regulation has improved in Ireland in the last decade, direct and tangible measures of this success were not easily drawn upon. As a result, reflecting Loewenstein et al. (2001) regarding the importance of feelings in risk perceptions, many participants resorted to emotions and 'gut instincts' to articulate food risk and related governance opinions. Such assumptions and emotions highlight a distinct difficulty in accurately measuring the

²³ For example, see Besley and Coate (1997) for further reading regarding representative democracy in democratic policy making (albeit an approach that relies on publics to participate in political process by electing candidates to represent them) and O'Neill (2001) regarding the legitimacy of deliberative institutions operating with representative ideals.

effectiveness of food risk governance in any meaningful way. This reflects a paucity in objective, evaluative criteria for measuring the performance of FSAs, and risk regulatory structures more broadly. Crabbé and Leroy (2008) and Roberts (2011) express similar difficulties in evaluating environmental policy effectiveness, while the EIU (2009, p168) also conclude that there are “*no consistently accepted set of metrics on which to base performance evaluation*” in the Irish (or indeed any other) regulatory context.

As such, drawing on literature presented throughout this thesis and reflecting the need established by the EIU (2009) for regulatory sectors to develop accurate performance measurements, a number of measures are proposed below that could form the basis for an evaluative model of FSA performance worldwide. Applied to the FSAI, this includes a combination of mechanisms proposed to measure the effectiveness of environmental policies (Crabbé and Leroy, 2008; Roberts, 2011), biosecurity strategies (Hinchliffe et al., 2012), power (Lukes, 2005) and ‘good’ governance (including at global (Woods, 2000, 2004) European (EGN, 2001) and national scales (Graham et al., 2003; Lodge, 2004)). Qualitative stakeholder and consumer perceptions are also integral to such evaluations to assess whether current governing structures are operating to the expectations, desires and approval of those involved in producing and consuming the food under regulation. As such, research participant perceptions are also littered throughout the following FSAI impact analysis.

7.2.1 Assessing FSAI performance and impact

Crabbé and Leroy (2008) contend that by measuring the effects of a policy, one can consequently determine its effectiveness. Depending on the approach to policy adopted, ‘effectiveness’ can be defined as the problem-solving capabilities of the policy (a rationalist perspective), its ability to create networks and facilitate interactions between interests (a political interaction perspective) and/or the level of institution building and institutional capacity developed (an institutionalism angle) (Crabbé and Leroy, 2008). Thus, following “*policy effects*” distinctions outlined by Crabbé and Leroy (2008, p5) in an environmental context, FSA effectiveness can be examined by exploring the “*policy outcome or social change*” (for instance, behavioural impact on FBOs), the “*environmental impact*” (for example, an increase in food safety standards and/or decrease in food risk incidents) and the “*policy output*” (including the quantity and quality of services delivered). Following impact and behavioural guidelines, while increases in food safety standards were noted across stakeholder and consumer groups, a distinct fearlessness of, and lack of respect for, the FSAI’s power and

influence was obvious amongst private sector participants. Moreover, perhaps from a position of self-interest, several semi-state, EHO and private sector interviewees contended that attention to food safety was high in Ireland prior to the establishment of the FSAI, with multiple references to alternate retailer-induced food safety initiatives also obvious. Thus, although some private sector participants noted a heightened food risk consciousness across the industry of late, a food safety consultant, retailer, caterer and processor interviewed dismissed the role, impact and influence of the FSAI on industry practices.

Further, starting from a position of FSAI monitoring and evaluation, the performance of the FSAI can be measured by the presence of food risks and occurrence of food scares in Ireland. Indeed, Hinchliffe et al. (2012) similarly attest the potential to judge the performance of biosecuring institutions (such as the FSAI) by their ability to limit flows of undesirables (food risks) across territories (Ireland). In other words, following a rationalist approach, this perspective seeks to uncover if established policy has resolved the problems it intended to. Thus, drawing on the 'environmental impact' assessment within the 'policy effects' model (Crabbé and Leroy, 2008), such an evaluation in the Irish food risk governance context also results in some contradictions to participants' beliefs that food is better governed than before. Although difficult to pinpoint and accurately measure (particularly relative to the previous rate of incidences prior to the coordinated records of the FSAI), the persistence of microbial food risks, FBO closures, product withdrawals and intermittent food scares suggests that the FSAI has not completely eradicated food risk in Ireland. While it must be acknowledged that increased surveillance can result in increased risk detection (as similarly explored by Dennis (1999) to explain increases in skin melanoma cases and mooted by O'Regan (2012) in a recent Irish e-coli outbreak context), as noted by one past CEO of the FSAI within a media communication:

"The fact that there are any [closures] at all is not helping to build confidence in the safety of Irish food"

(Edwards, 2005)

Furthermore, high levels of campylobacter (a foodborne bacterium that causes diarrheal illness in humans) have been recorded in Ireland according to one semi-state participant and numerous EFSA surveys. For instance, 98% of Irish broiler carcasses are reported to be contaminated with the bacterium (FSAI, 2010a; HPSC, 2012), while illness from campylobacter were also reported to be slightly above the EU average in Ireland in 2008 (41.4 annual cases per 100,000, compared to the EU average of 40.7) (FSAI, 2010b). Similarly, despite the presence of the FSAI, the Health Protection

Surveillance Centre (HPSC) notes increasing e-coli incidences (another food poisoning bacterium) in Ireland since 2005. Indeed, Ireland was reported to possess the highest rates of e-coli infections in Europe in 2008 and 2009 (HPSC, 2010), while recent reports have also highlighted a 200% increase in e-coli incidences up to June 2012 (with 212 Irish cases detected compared to 69 cases for the same period in 2011) (Gartland, 2012). Such occurrences are unsurprising as food technologies and practices continue to develop, intensify and globalise, resulting in an increasingly vulnerable food chain as policy and regulation struggle to keep up with these developments. Reflective of a retrospective policy environment, a lag thus often exists between what food safety policy is regulating (based on pre-existing experience and practices) and continually evolving food industry practices²⁴. Drawing on the work of Owens et al. (2006) however, research can prove useful to address gaps between knowledge and policy. Indeed, research findings in urban environmental policy arenas, for example, are reported to often be “*uncomfortably ahead of contemporary policy agendas*” (Owens et al., 2006, p637). Problems associated with gaining policy traction for research results however remains a challenge (perhaps thwarted by vested interests or political reasons).

Meanwhile, externally sourced and internally produced food scares including BSE, foot and mouth and dioxin incidences further punctuate Ireland’s food risk history, raising additional questions regarding the impact of the FSAI. In particular, such incidences raise questions over its ability to act as both an inwardly and outwardly looking body to police the global food chain as a nationally-based agency operating within the globalised food network that has developed (see Tovey (2007)). A need thus exists to acknowledge contentions of Hinchliffe et al. (2012) that pay attention to what occurs inside biosecurity walls (to uncover risk that emerges and occurs from within), while still being aware of food risks that can arise from taking part in a globalised food market. Indeed, as explored in Chapter 5, both consumers (including across retired, student, parent and sports player groupings) and stakeholders (across civil society, DAFF, FSAI and public sectors) perceive food risk to primarily come from the ‘outside’ into Ireland. Indeed, demarcating who is ‘outside’ and ‘inside’ in these contexts was a significant result of this research, culminating in the creation of the ‘spatiality of trust’ framework in Chapter 5 (Figure 6). Reflecting concepts of the dangerous ‘outside other’

²⁴ Policy implementation lags have also been found to create instability and insecurity in macroeconomic contexts (particularly regarding delays in implementing stabilisation policies) (Asada and Yoshida, 2001); non-renewable energy scenarios (with lags between policy announcement and implementation found to result in increased emissions) (DiMaria et al., 2010); climate change mitigation (especially when new institutions are required to manage new risks) (deOliveira, 2011); and environmental regulation cases (with business members condemning the reactive regulation approach in England and Wales) (Petts, 2000).

mooted in recent consumer (Eden et al., 2008; Jackson, 2010) and biosecurity literature (Barker, 2009; Philo, 2012; Hinchliffe et al., 2012), additional concerns were raised by DAFF, private and civil society stakeholders regarding the FSAI's ability to manage food and feed risk coming from abroad. Moreover, increased vulnerabilities were associated with Ireland as a result of its dependence on food, and thus related food safety regulations, of other jurisdictions. As such, the success of the FSAI as an “*environmental fix*” to the broader neoliberal context of “*endemic economic growth*” (that is, established to deal with the consequences of the industrialisation and globalisation of food) (Castree, 2008, p146) is questionable.

Nonetheless, some positives exist regarding the presence of food risks in Ireland, with statistics from the Pesticide Control Service of DAFF regularly reporting low levels of chemical residues in Irish food comparative to allowances under EU regulations. It is also largely contended that the European food chain is one of the safest in the world (Cnudde, 2005). Further, echoing Dennis (1999) and O'Regan (2012) above, such negative risk governance perceptions are contradicted by some FSAI participants who claim that it is because of increased FSAI and EHO vigilance that more risks are being detected and FBOs reported. Improvements in scientific risk detection further compliment this reality for another past FSAI employee. Such responses reflect the impossibilities associated with nullifying risk in everyday life recognised by Foucault (2007) who emphasises a need to instead focus on achieving the best possible circulations for populations. Similarly, Hinchliffe et al. (2012, p16) discuss the inevitability of risk and disease within a Foucauldian framework of living within a “*pathological life*” rather than one that is pathogen-free. Biosecurity practices can thus be established but can also fail according to the authors, particularly in food risk and disease arenas where “*the objects to be excluded are submicroscopic and...the circulations and mobilities of their carriers are so extensive*” (p11) (as in the global food trading system).

Contradicting such notions of risk inevitability however, frustration emerged from one processor interviewed who argued that many past food safety incidents were easily avoidable in Ireland, again raising questions regarding FSAI effectiveness:

“Are these things avoidable? The simple answer is yes they are. You know, should they have happened? No they shouldn't... It should and could and ought to have been prevented”

(Private Sector 3)

Issues of causality however also complicate such impact performance evaluations; a point that is recognised in both political (EIU, 2009) and academic spheres (Crabbé and Leroy, 2008; Roberts, 2011). Indeed, determining cause and effect relationships and isolating the effect of external conditions is particularly difficult in environmental and food arenas. This is fuelled by the complex manner in which biological and physical systems interact, the availability of relevant data and the often long timescale required for problems to manifest (Crabbé and Leroy, 2008; Roberts, 2011). Thus, acknowledging limitations to 'policy effects' measurements, Crabbé and Leroy (2008) for example, note difficulties in determining whether environmental goals have been achieved as a result of policy implementation or due to favourable external circumstances, the impact of another policy and/or foreign influence. For instance, decreased levels of pollution may be attributed to successful environmental policy implementation although it may also result from lower levels of industrial production induced by global economic recession (Roberts, 2011). More broadly, the EIU (2009, p168) also report difficulties in "*isolating the effects of regulation from other factors such as external economic or technology works*".

Similarly, in an Irish food risk context, rather than reflecting poorly on the FSAI, heavy rainfall (and the related contamination of water supplies by agricultural run-off) has been partly blamed for the 200% spike in e-coli rates in early 2012 (Gartland, 2012; O'Regan, 2012). Thus, as in other environmental and regulatory spheres, difficulties in linking a food safety management input (including FSAI activities) to a direct and measurable output (such as decreases in food poisoning cases) remain. In other words, low chemical food risk in Ireland is not necessarily a result of FSAI actions just as high levels of microbial risk cannot be attributed to a lack of FSAI vigilance. The vague language utilised in its establishing legislation and number of bodies involved in implementing food risk policy in Ireland further prevents calculations of measurable FSAI impact. This is in keeping with Crabbé and Leroy (2008) who criticise the prevalence of unclear, vague and thus immeasurable aims and multiple scales, paths and actors in much environmental policy. More specifically, in an early analysis of food regulatory reforms in Ireland, Taylor (2003, p161) similarly highlighted the "*opaque quality*" of the FSAI establishing legislation, claiming it to contain numerous phrases that have "*little meaning in legal terms and [represent] little more than an aspiration*" (for example, the FSAI's establishing remit to take 'all reasonable steps' to ensure the safety of Irish food).

As a result of such discrepancies and moving away from behavioural and impact assessments, a third 'policy effect' outlined by Crabbé and Leroy (2008, p5)

incorporates measuring policy outputs (including the quantity and quality of services) as an indicator of regulatory performance. FSA performance could thus be quantitatively measured in accordance with the number of FBO inspections conducted, the number of FBOs closed down, the amount of information provided by the FSA, the number of helpline calls received etc. However, as noted in an Irish regulatory performance context, a reliance on such “*statements of activity*” (EIU, 2009, p168) does not necessarily equate to effective performance. Alternatively, FSA performance could be judged according to economic dimensions and focuses (Crabbé and Leroy, 2008), with the EIU (2009, p169) similarly recommending institutions be evaluated according to their “*operating costs*”. While keen to stress that low-cost regulation does not necessarily equate to good regulation, the EIU (2009) reports regulatory operational costs to be much higher in Ireland compared to similar international contexts. Insufficient examination of costs, higher tendencies towards litigation and a high reliance on external experts are suggested to account for this discrepancy. In the FSAI context, although the FSAI budget is reported by Lynch (2012) to have trebled from 1999 (€5.5 million) to 2008 (€18 million), it is estimated to hold only about €7-8 million once local authority funds have been distributed (FSAI (past) 2). Unsurprisingly, for some past and present FSAI employees interviewed, this money is perceived to be spent wisely although others raise questions regarding the impact and outcomes of some FSAI activities (including its food safety surveillance activities (discussed in section 7.4)). Measuring the FSAI according to its budget is thus also extremely subjective due to personal perceptions of what represents ‘value for money’.

Progressing from the ‘policy effects’ approach (Crabbé and Leroy, 2008) and allowing an increased focus on the regulatory performance of institutions, FSA impact could also be measured through an evaluation of its relative power to influence others and achieve certain outcomes. This is in keeping with Lukes (2005) who, although admitting that power is a contested term and merits multiple definitions (from a one dimensional to a three dimensional view), believes that a common understanding of it can be achieved that can be applied to analyse the power of individual and collective agents. Measured as a “*capacity*” to bring about certain outcomes (Lukes, 2005, p73), power assessments thus include measuring abilities to determine how others exist, constrain actions and ensure compliance. Thus, as mooted in Chapter 2 and utilising the power assessment criteria proposed by Lukes (2005, p79), FSAs could be deemed successful if they can have influence “*over a variety of issues, in a range of different circumstances, generating significant unintended consequences*” and without having to undertake significant activities or cost.

In this research context, the FSAI can be seen to exert influence “*over a variety of issues, in a range of different circumstances*”, acting as a somewhat generalist and catch-all agency in its everyday management of chemical, microbiological, technical and physical food risks throughout crisis and non-crisis contexts. Moreover, according to past and present employees and promoting an image of a flexible FSAI, the remit of the Authority has also expanded since its inception as new food legislation, science and issues arise. This has included shifts in its original focus from BSE to include additive, flavouring, GM and nutritional concerns. Regarding achieving unintended consequences without significant cost, several stakeholders also contend that the FSAI creates an “*atmosphere of compliance*” (FSAI (present) 3) where constant activity and surveillance of FBOs is unnecessary. In addition, as explored in Chapter 6, the FSAI appears to simultaneously protect public health and food industry reputation, with both aspects reported to represent an unintended consequence of the other by different interviewees. This echoes Taylor and Millar (2004), who maintain that scientific food risk assessment can simultaneously create consumer trust and serve economic interests. Further, the FSAI can be seen to receive a small budget comparable to the food industry it attempts to regulate. The reality of these power perceptions are however questionable in light of some stakeholder and focus group experiences, particularly regarding the distinct lack of private sector fear of, and respect for, the FSAI as explored in Chapter 6.

Furthermore, absolute power remains constrained by the complex geography of power outlined in Chapter 6 relating to the positioning of the FSAI within the web of food risk governance in Ireland (reiterated in Figure 11 below). Here, as with Rhodes’ (1994) exploration of the Europeanisation era, significant power appears to remain at local and supranational scales, somewhat skipping the national FSAI. Indeed, it is at these alternate scales that food risk agendas are set, food safety legislation is developed and closure or improvement orders are issued. Suggesting a rather ‘toothless’ FSAI watchdog, such perceptions mimic the lack of power initially associated with the Environmental Protection Agency in Ireland by Taylor (1998) and more recently with the European Environment Agency (Connaughton, 2005).

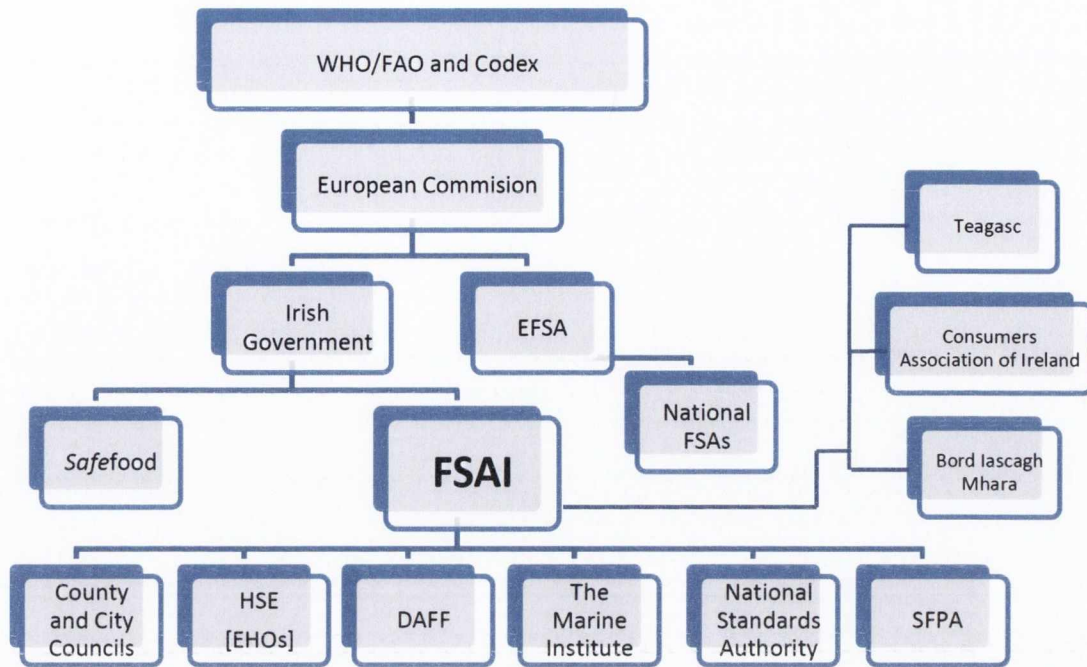


Figure 11 Web of Food Risk Governance in Ireland

In addition, FSAI power is constrained by its lack of responsibility for food risk assessment within food risk analysis processes. According to Slovic (1999), significant power lies with those who determine risk, with the FSAI merely responsible for later phases of risk management (through the enforcement of food safety legislation) and communication (a role that has also been severely diminished on the establishment of *Safefood* in 2001). Potential to create a more unified agency that incorporates all three risk analysis phases however appears unrealistic under current economic constraints. Further, such a development would contradict aims of the food safety governance reforms to keep risk assessment independent from risk management (Halkier and Holm, 2006; Abels and Kobusch, 2010). Moreover, while the FSAI may lack significant power in risk assessment and communication contexts, its coordination duties under risk management processes are perceived by many stakeholders to remain pivotal in the Irish context.

Finally, drawing on normative and idealised good governance principles explored in Chapter 2, FSA performance can be assessed according to the prevalence of accountability, transparency, effectiveness/efficiency, inclusion/participation, fairness and responsiveness in their operations. Such principles are outlined, for example, by Weiss (2000) at a variety of governance scales, Woods (2000, 2004) regarding global and financial governing institutions, EGN (2001) in European governance networks, Graham et al. (2001) in a Canadian context, Lodge (2004) concerning national

governing institutions and Papadopoulos (2007) as part of desirable multi-level governance systems. Furthering the 'policy effects' model, Crabbé and Leroy (2008, p21) also place significance with "*the internationally formulated criteria of 'good governance'*" when evaluating environmental policy. Contested definitions of governance, difficulties in measuring regulation on-the-ground and assumptions regarding what represents the 'best' model of governance however may hinder the reliability of governance effectiveness results according to Minogue (2005). Nevertheless, although not without politics or contestation, 'good governance' principles prove useful as targets and benchmarks of comparison for how governing institutions should ideally perform and behave (Crabbé and Leroy, 2008).

Utilising a 'good governance' framework and drawing on the literature outlined above (explored in more detail in Chapter 2), accountability in food risk governance contexts could include FSA obligations to explain and justify their conduct to a relevant authority (be it a governmental, consumer or industry body, or a combination of these). FSA ability to face questions, judgment and consequences imposed by an external forum could also be considered here. This is particularly important given that FSA board members are not elected by publics or stakeholders (those influenced by their actions). Meanwhile, to ensure transparency, the structure of the FSA and processes involved in food risk decision-making and action-taking must be accessible and assessable by interested parties. The (generally scientific) information utilised by FSAs must thus be easily understandable and made freely available to those affected by organisational decisions.

Regarding effectiveness and efficiency, results must be produced by FSAs that meet societal needs in a way that makes the best use of institutional and financial resources and does not harm the environment or public health. Equitable participation of men, women and vulnerable groups in FSA activities and decisions must also be allowed in an informed and organised manner to achieve inclusiveness aims of FSAs. This may involve providing costly formal communication and participation mechanisms for the inclusion of different actors in such processes. Rules, standards and common law must also be followed for FSA governance to be considered fair and good, with a need for an even and just distribution of power, resources, legislative enforcement and outcomes necessary. Finally, FSAs must respond to stakeholder and consumer communications within reasonable time frames, including those received through formal communication channels (including FSA helplines, websites, workshops and meetings). With considerable costs attached to many of these endeavours, FSAs must thus be well-resourced and staffed to achieve such good governance ideals.

Applied to the Irish food risk governance context and as detailed in Table 15, it is obvious that while the FSAI exhibits some elements of the good governance principles, it does not encompass them all. Thus, reflecting the tendency for very few institutions to achieve good governance in its totality (UNESCAP, 2008), discrepancies remain in the FSAI context. For example, extending institutional relations, motivations, communications and geographical themes explored in Chapter 6, evidence provided in Table 15 demonstrates tensions regarding the FSAI's accountability to DoH and service contract accountability to the FSAI. In addition, the Authority lacks transparency in wholly achieving the 'name and shame' approach with FBOs and publishing timely and accurate inspection data. Perceptions of over-regulation, unfair food safety regulation and uneven legislation enforcement also featured in both stakeholder and consumer discussions. Such responses contradict establishing aims of the FSAI highlighted by Taylor (2003, p150) including *"the promise to 'out' offending premises that fail to achieve 'acceptable' standards, and the pledge to endorse greater political transparency"*.

Moreover, taking efficiency to mean the accomplishment of a task with a minimal expenditure of time, finances and effort and Crabbé and Leroy's (2008) take on policy effectiveness as achieving intended policy effects (impact and behavioural change), the multitude of food governing bodies in Ireland hampers FSAI efficiency and effectiveness. Creating economic and financial waste and opposing neo-liberal drives for efficiency (Castree, 2008; 2008a), food risk governance in Ireland remains fragmented with concerns raised regarding the potential for gaps and overlaps in these structures. Finally, the Authority faces challenges in engaging stakeholders and consumers in provided participation channels. Indeed, as reported in Chapters 5 and 6, a distinct unwillingness to engage emerged from several consumer and stakeholder groups. The FSAI nonetheless appear to respond to industry communications in a prompt and efficient manner for the most part, judging by researcher experiences, stakeholder contentions and praise for the FSAI website.

Good Governance Principle	Supporting evidence	Contradictory evidence	Conclusion
Accountability	<ul style="list-style-type: none"> Accountable to DoH Answers to Minister for Health Receives funding from DoH Clear hierarchical structure within the FSAI 	<ul style="list-style-type: none"> Beliefs that the FSAI can get 'lost' within DoH Arguments for FSAI to become accountable to DAFIF Lack of service contract accountability to the FSAI 	<p>Tensions and conflict remain regarding the accountability lines of the FSAI with some perceptions that it goes unnoticed within the wide remit of DoH. Similarly, gaps remain in service contract accountability to the FSAI, attributed to a lack of budgetary control and meaningful audit reports.</p>
Transparency	<ul style="list-style-type: none"> FSAI promises to publish surveillance activities, food alerts and withdrawals online Detail available online regarding the background of FSAI board members 	<ul style="list-style-type: none"> Time delays in publishing surveillance results Failure to publish detail from EHO inspections and orders. Failure to identify offending FBOs in surveillance publications. Issues of access for non-internet users. 	<p>While efforts are made to make information available online regarding the FSAI and its activities, some discrepancies remain that indicate a lack of transparency. Linking with fears of FBO protection of many consumer groups, the FSAI fails to publish detail regarding FBOs under inspection and surveillance. Issues of access and publication timing also feature.</p>
Effectiveness/ Efficiency	<ul style="list-style-type: none"> Food is perceived to be generally safe in Ireland, suggesting that the governing structures are operating effectively Recent improvements in food safety governance noted by research participants, with the FSAI deemed to accomplish many achievements The positive image/branding of Irish food remains intact despite numerous food scares. 	<ul style="list-style-type: none"> The number of food bodies in Ireland raises confusion amongst consumer participants and questions of spending, effectiveness and efficiency for stakeholders. Perceived gaps, overlaps and waste in food risk governance structures in Ireland. Continuation of food crises, product withdrawals and FBO closures 	<p>The plethora of food bodies involved in governing food risk in Ireland hampers effective and efficient attributions. Indeed, many participants questioned the need for so many bodies on one small food island with issues of inefficient spending, governance duplication and management gaps of concern. Calls to further streamline and standardise food risk governance remain as food safety incidents continue to occur.</p>

<p>Fairness</p>		<ul style="list-style-type: none"> Perceived differences in the inspection of and leniencies given to large companies compared to small FBOs Perceptions of over-regulation concerning food safety in Ireland 	<p>A belief that larger food corporations are often forgiven certain food safety faults was obvious across stakeholder groups and linked with economic, export and reputational protection. Smaller FBOs are further perceived to be hampered by overly strict, inflexible food safety management systems. Food risk is believed by some to be over-regulated in Ireland, imposing unfair and unrealistic expectations on FBOs.</p>
<p>Inclusion</p>	<ul style="list-style-type: none"> Existence of the FSCC to allow industry and consumer input into the FSAI Public and stakeholder consultations available online concerning new food risk legislation Presence of an FSAI helpline, newsletter and online fora for participation Dedicated industry fora for retailers, artisan producers and food service sectors. 	<ul style="list-style-type: none"> Issues of consultation access and awareness Unclear how consultation information is utilised within the FSAI; some experiences highlighted insufficient usage of views presented. Perceptions of the enforcement of unrealistic food safety standards on the food industry, suggesting a lack of stakeholder engagement in legislative processes. 	<p>While methods for inclusion exist, awareness and utilisation of these structures remains limited amongst stakeholders and consumers alike. This comes in spite of complaints that consumer and industry voices are not listened to within FSAI structures. However, it remains unclear how such information is utilised, with the FSAI board holding ultimate decisions regarding the FSAI agenda. Stakeholders also lack influence in the development of food safety legislation.</p>
<p>Responsiveness</p>	<ul style="list-style-type: none"> FSAI promises prompt responses to calls, emails and letters sent to the FSAI Positive experiences of industry members, and indeed the researcher, in contacting the FSAI and utilising its website 	<ul style="list-style-type: none"> The one consumer who contacted the FSAI experienced limited feedback from the Authority and instead communicated with EHOs 	<p>The FSAI appear to respond to industry communications in a prompt and efficient manner for the most part.</p>

Table 15 Good Governance and the FSAI

7.2.2 *Perceptual Performance*

Drawing on alternative methodological approaches to study regulation outlined in Chapter 4, Minogue (2005) highlights a need to move away from quantitative governance indices, calling for more qualitative research in this field. Following this, the performance of FSAs can be qualitatively assessed according to stakeholder and consumer perceptions of their activities. After all, stakeholders must regularly interact and engage with FSAs in their combined efforts to create a safe food chain. Similarly, consumer awareness of and trust in FSAs is critical given that it is in their interests that FSAs were established with aims of restoring public trust in the food supply (Hellebo Rykkja, 2004; Holm and Halkier, 2009). Issues of public dependency on the FSAI under representative democracy ideals further this need for trust and awareness. Similar qualitative perceptions are utilised by Bok (1997) in understanding public trust in the U.S. government, Crabbé and Leroy (2008) in an environmental policy evaluation context and Ernst and Young (2011) in a recent review of EFSA performance.

Overall, the principal and most novel component of stakeholder and consumer perceptions of FSAI performance incorporates a 'paradox of a crisis' theme. For many, FSAI management of the 2008 pork crisis marked a significant success for the Authority, inspiring faith and trust in the capabilities of Irish food risk governing structures. Such confidence stemmed from both the ability of risk governing structures to detect and trace such contamination (despite the pork dioxin element being initially detected in laboratories outside of Ireland) and the quick management of the issue that allowed the scare to pass over relatively quickly (for example, compared to the UK BSE crisis (see Wynne (1996) and Hinchliffe and Woodward (2000)). Such positivity reflects Casey et al. (2010) who praise the FSAI's effective pork withdrawal actions and communications. Nevertheless, the involvement of a past CEO of the FSAI in the drafting of such positive findings must be acknowledged given potential for bias. This reflects a broader problem within Ireland regarding the rather closed and limited policy community that exists for different areas of expertise. A generally small pool of experts is available as a result of the small country size. This is reflected in findings of the EIU (2009) who report a high reliance on external consultants in Irish regulatory arenas.

Nonetheless, the Oireachtas (2009) report and Jacob et al. (2010a) similarly conclude effective dioxin management on behalf of the FSAI, particularly relating to its management strategies adopted and effective media communications. Such responses are envisaged to have limited "*adverse public reaction*" by reducing risk uncertainty amongst consumers and preserved "*the economic standing of the country's food and*

farmington industries” (Jacob et al., 2010a, p261; p267). Assuming that if food risk regulatory measures were sufficient, no crises would occur, a paradox thus exists in the utilisation of crisis management as a measure of effectiveness by stakeholders, consumers, academics and political figures alike. Suggesting positive attributions to the FSAI post-failure, crisis occurrences are indeed costly occurrences, and a marked failure of the relevant authorities to prevent and control food risk. Although the pork dioxin crisis may not have been as extensive or grave as the BSE outbreaks, Sheehan (2009) nonetheless commented:

“Ireland’s food safety regime failed “spectacularly” to prevent the pork dioxin contamination crisis and it will end up costing taxpayers up to €200m in compensation”

Similarly, illustrating the prevalence of fragmented food safety governance structures in Ireland, the Oireachtas (2009) report placed dioxin crisis blame with the service contract system coordinated by the FSAI.

Outside of crisis contexts, other qualitative perceptions of FSAI achievements (unsurprisingly emphasised by vested FSAI and public sector participants) include the coordination the Authority is believed to have brought to Irish food safety governance, the confidence in Irish food that it has induced and a perceived increase in production standards. While vested interests are inevitable in a contested terrain like food risk governance (Ansell and Vogel, 2006), causal relationship questions remain regarding the direct and assumed link made by these participants between FSAI inputs (actions and activities) and such consequences or outputs (reflecting the difficulty in deciphering cause and effect relationships in environmental and food arenas (Crabbé and Leroy, 2008)). Indeed, as outlined in Chapter 6, private sector actors were particularly sceptical of FSAI activities, identifying a number of FSAI failures including poor communication strategies, ineffective governance structures, crises occurrences and industry bias in FSAI actions. Reflecting typical differences in opinion between the regulator and the regulated (as similarly explored by Petts (2000) concerning environmental regulation in small and medium sized enterprises (SMEs) and Yapp and Fairman (2006) where FBOs in the UK were equally found to be dismissive of food safety regulations), such responses may result from desires of industry to promote an image that it is capable of self-regulation. After all, as highlighted in Chapter 6, receiving ‘The World Health Organisation Food Safety Award’ in June 2008 and influencing the food safety mandates of other FSAs provides some evidence that the FSAI is admired in political and regulatory circles worldwide.

The dynamic evolution of the Authority also prevents an absolute and definitive performance measurement of FSAI impact, with the Authority instead deemed to have had a varying impact to date. Drawing on the “*issue attention cycle*” explored by Downs (1972, p38) to explain alternating levels of public interest in social and environmental issues²⁵, this evolution is visually represented in Figure 12 below. This qualitative, interpretative graph plots perceived effectiveness of the FSAI since its inception in 1999 (incorporating interviewee perceptions of trust, awareness, communications effectiveness and activity levels) through the various CEO and crisis contexts reported by interviewees. Although Down’s (1972, p38) issue attention cycles primarily relate to media attention given to environmental issues, this maps similar tendencies for problems (including food crises and poor CEO management) to suddenly “[*leap*] into prominence, [*remain*] there for a short time, and then – though still largely unresolved – gradually [*fade*] from the center of public attention”.

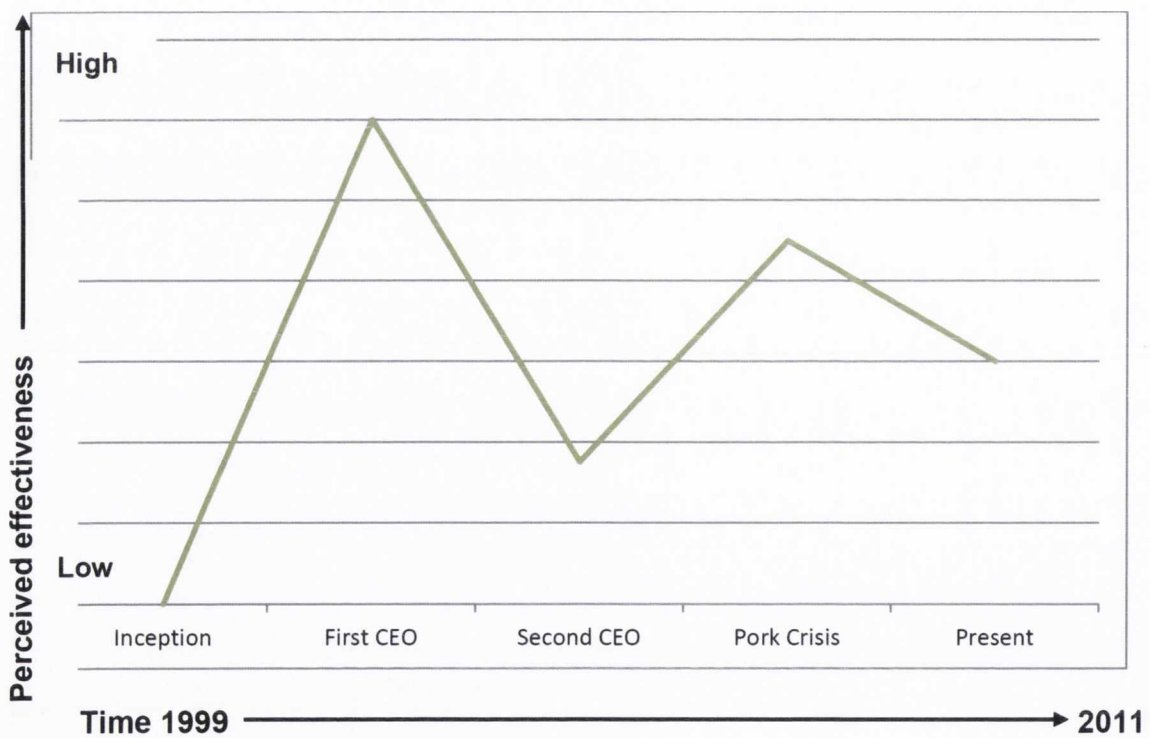


Figure 12 Dynamic Evolution of the FSAI

²⁵ Downs’ (1972) work has been similarly drawn upon in wider American policy (Peters and Hogwood, 1985), tourism (Hall, 2002), public health epidemic (Shih et al., 2008) and climate change (Lockwood, 2011) contexts.

Overall, a feeling that the past decade of food regulatory change has been more evolutionary rather than revolutionary was thus obvious in some research participants' responses, with emphasis that more remains to be done to further improve the Irish food risk regulatory system. One semi-state interviewee articulated such points particularly effectively:

"The setting up of the Food Safety Authority was a tremendous thing... we're certainly way better than we were ten years ago. But like we're not done yet like. So no, there has been a massive improvement, but I say room for more, yea"

(Semi-State 1)

In sum, this research highlights the paucity of accurate and objective measures of FSA performance, thus laying foundations for further empirical work to develop practical suggestions for measuring and improving future food safety governance performance. Drawing on the 'policy effects' approach outlined by Crabbé and Leroy (2008) and utilising qualitative measures relating to influence and behavioural impacts, and quantitative methods regarding the occurrence of food scares, product withdrawals and FBO closures, an attempt was made to evaluate FSAI performance. Identifying some limitations to this evaluative model (particularly its intended narrow focus on environmental policy (as opposed to institutional) outcomes, and problems associated with determining cause and effect relationships), additional evaluation criteria were incorporated to better assess the institutional, regulatory and governing elements of the FSAI. This included the utilisation of additional qualitative evaluative mechanisms relating to institutional power, good governance and stakeholder and consumer perceptions (the expectations and experiences of those impacted upon by the FSAI). A key deliverable of case study research in environmental policy arenas (Crabbé and Leroy, 2008), such evaluations provide a baseline for future FSA performance measurement that could identify improvements for future food risk regulation regimes.

Another dimension of effective regulation and performance, particularly for public health agencies such as the FSAI (Papadopoulos et al., 2012), involves being known, trusted and respected by the actors influenced by and dependent on the regulatory decisions and actions taken. In the Irish food risk governance context, this relates to levels of awareness, trust, engagement and compliance of stakeholders and consumers; factors that can only be developed through the execution of effective communication strategies. The impact of FSAI communications is thus explored in the following section.

7.3 Communication

This section seeks to answer the second research question by exploring the impact of FSAI communication strategies on stakeholders and consumers in Ireland. Combining website, documentary and media analyses results²⁶ with perceptions explored in Chapters 5 and 6, FSAI rhetoric, stakeholder perceptions and consumer realities are compared and contrasted. This includes a reiteration of the principal communication practices desired by consumers and stakeholders, followed by a detailed analysis of the strategies utilised by the FSAI both online and within the media. Next, the reception of these communication strategies by experts and the lay public is explored to understand communications impact on food safety behaviours (compliance), FSAI perceptions (trust and awareness) and engagement in governance processes. Highlighting multiple communication goals, the section concludes on the importance of appropriate message construction and dissemination in the FSAI.

7.3.1 Communication strategies and the FSAI online

Four goals of risk communication, identified by Rowan (1991), include enhancing awareness of important phenomena, increasing understanding of complicated ideas, motivating action and reaching agreement about policy options. A fifth risk communication goal is added by Bier (2001), involving the creation of trust in the communicator. As a result of such varied aims, Bier (2001, p139) contends that:

“Different strategies of risk communication may be appropriate for different goals. For example, simple, vivid risk communication messages are best for raising awareness...while stakeholder participation methods are likely to be more appropriate for reaching agreement on a course of action”

FSAI communications similarly possess different aims with some messages seeking to develop compliance in industry, others aiming to build trust in and awareness of FSAI actions and others still to educate about food safety and/or reassure businesses and consumers in times of crisis. Communication strategies must thus be carefully developed within the FSAI. In addition, the need to consider the characteristics

²⁶ For a summary of documentary and website results, see Appendix 9.10 (poster presentation format)

of the target audience when developing risk communication strategies is emphasised by Bier (2001), among others. Reflecting the related unsuitability of mass media campaigns to communicate food risk in Ireland (McCarthy and Brennan, 2009), some past FSAI employees interviewed also stressed the need to develop targeted risk messages in the Irish food risk context.

In reality however, FSAI documentary and website analyses revealed tendencies towards limited, one-way, blanket communiqués with little differentiation in style or content for different sectors of the public or food industry. Exhibiting flaws in message construction, reporting consistency and communication channels utilised, this was found to be particularly true regarding FSAI food safety surveillance communications where audience diversity is also not acknowledged and vulnerable groups rarely identified. Thus, despite recent efforts by the FSAI to improve its risk communication strategies and reach wider audiences (for example, through Twitter and Facebook), current communication strategies lack a significant level of interaction with the communities it wishes to engage with.

To elaborate, regarding message content, following recommendations of message clarity identified by Leiss (2004) to achieve effective risk communication, McGloin et al. (2008) concerning nutrition communications and Jacob et al. (2010) regarding food safety messaging, it can be noted that most of the language utilised throughout the FSAI website and publications is simplistic, clear and easy to understand. Indeed, very positive, proactive language is employed on the FSAI website with a focus on *promoting*, *encouraging*, *coordinating* and *ensuring* the *safety* of the food chain, rather than *reducing* food *risk*. However, exceptions exist, with some surveillance reports (for example, GM surveillance reports of 2000 and 2007 and chemical contaminant reports of 2007 and 2008) resorting to complex, technical and scientific language incorporating little explanation of key scientific terms (particularly 'maximum acceptable limits'). Following McCarthy and Brennan (2009), presentation of such complicated information may lead to consumers dismissing the message being communicated. Indeed, as highlighted in Chapter 5, some focus group participants (including from student, ICA and sports groups) referred to the perceived complicated, confusing and conflicting messages of food risk governing bodies. As such, an ICA participant claimed that food risk communications need to be received with some degree of scepticism while female students called for more consistent food risk messaging.

Meanwhile, inconsistencies throughout surveillance reporting and wider FSAI publications (including regarding report length, content, presentation format and language), a lack of graphical/pictorial matter to clarify meaning and time delays in publication further raise questions regarding the efficiency and effectiveness of FSAI communication outputs. Doubts thus remain regarding communications effectiveness to reach appropriate audiences, be understood by those who receive them, induce behaviour change and maintain interest in and awareness of FSAI activities (following the risk communications literature explored in Chapter 2 in risk (Bier, 2001; Frewer, 2004) and food risk contexts (McGloin et al., 2008; McCarthy and Brennan, 2009)). Regarding preferred channels for food risk communication, participating consumers stated preferences for traditional media sources including television, newspapers and radio, with minimal references to online resources and none to social media options. As highlighted in Chapter 5, this reflects Safetrak (2006) results where only 9% of Irish consumers reported sourcing food safety information online. Such traditional preferences contradict McCullagh (2007, p150) who notes a “*significant decline in the level of public trust in media output*” in Ireland, attributing this to increasingly restricted media ownership, contested power relations and the rise of celebrity journalists. It also challenges recent pushes towards online and social media risk communication, including through websites, chatrooms and blogging (Krimsky, 2007), Twitter (Schultz et al., 2011) and Facebook (Waters et al., 2009). Further reflecting Safetrak (2006) findings, retailers were also highlighted as a preferred source for food safety information by consumers interviewed, with the importance of word-of-mouth and personal contacts also emphasised. Such findings echo Wakefield and Elliot (2003) regarding the trustworthiness of face-to-face communications in environmental risk contexts.

Meanwhile, stakeholder usage of the FSAI website also contradicts the importance attributed to this source by some stakeholders in interview. Indeed, only 14% of industry members recently surveyed report visiting the website regularly, despite 67% being aware of it (FSAI, 2012c). The over-reliance of the FSAI on online resources to communicate with external actors is thus questionable and fails to take into account consumer desires for more traditional media sources and personal connections, and stakeholder preferences (explored in Section 6.4.1) for more direct contact and consultation. Thus, while online resources should not be ignored given the potential for the increased utilisation of interactive blogs, fora and social media in the future (Babu and Gopaldaswamy, 2011), they should not be used in isolation. Indeed, such reliance ignores the inevitable ‘digital divide’ that persists today that results in subsets of the population having no access to the internet and/or lacking the sufficient skills or motivation to utilise it properly. This is reported, for example, by Brodie et al. (2000)

regarding accessing online health information in America, Rogers (2001) concerning the beneficiaries of the internet and Min (2010) regarding political internet use.

To help explain the lack of stakeholder and consumer engagement with FSAI online resources, and following measures of website effectiveness developed by González and Palacios (2004), the FSAI website was assessed in this research context according to characteristics of accessibility, speed, navigability and content. Aiming to measure website quality according to more objectively defined measures (as opposed to personal opinions of what constitutes easy access, clear text, effective colours etc.), González and Palacios (2004) propose for example, measuring the accessibility of a website according to the number of hits it receives, its link popularity and search engine presence. Speed, by comparison can be measured by the complexity of the website and related response time for webpage loading. Meanwhile, website navigability can be determined by the presence of site menus and keyword search functions (helping the user locate specific information). Finally, assessing content incorporates informational and communicational factors including the presence of detail on company background, financial information and daily news highlights as well as specific contact information, email services and entertainment (González and Palacios, 2004).

Utilising the web assessment index proposed by González and Palacios (2004), Figure 13 highlights the quality, performance and effectiveness of the FSAI website. From this, it appears that the site performs effectively and demonstrates quality on a number of counts, including regarding search engine presence, link popularity, webpage loading and navigability. As such, website quality fails to provide reason for the lack of stakeholder engagement with this resource. A problem appears to remain in initially attracting users to the website; something that could perhaps be aided by an increased promotion of FSAI online resources and encouragement of website use by EHOs when making face-to-face contact with FBOs. Moreover, some website limitations remain that could be rectified to encourage return visits including relating to entertainment and visuals (with current deficiencies also contradicting Lavie and Tractinsky's (2004) aesthetic recommendations to increase user satisfaction). Failure to regularly update the website and time lags in publishing information (including the minutes of meetings and surveillance activity results) also merits attention. Moreover, informational gaps regarding the sample collection, assessment, investigation and follow-up of a variety of surveillance activities persist, while some maintenance issues (particularly broken links) are also prominent. Identification of these limitations provides scope for the FSAI to build on the efficiency, reliability and accuracy of its site and potentially improve user numbers.

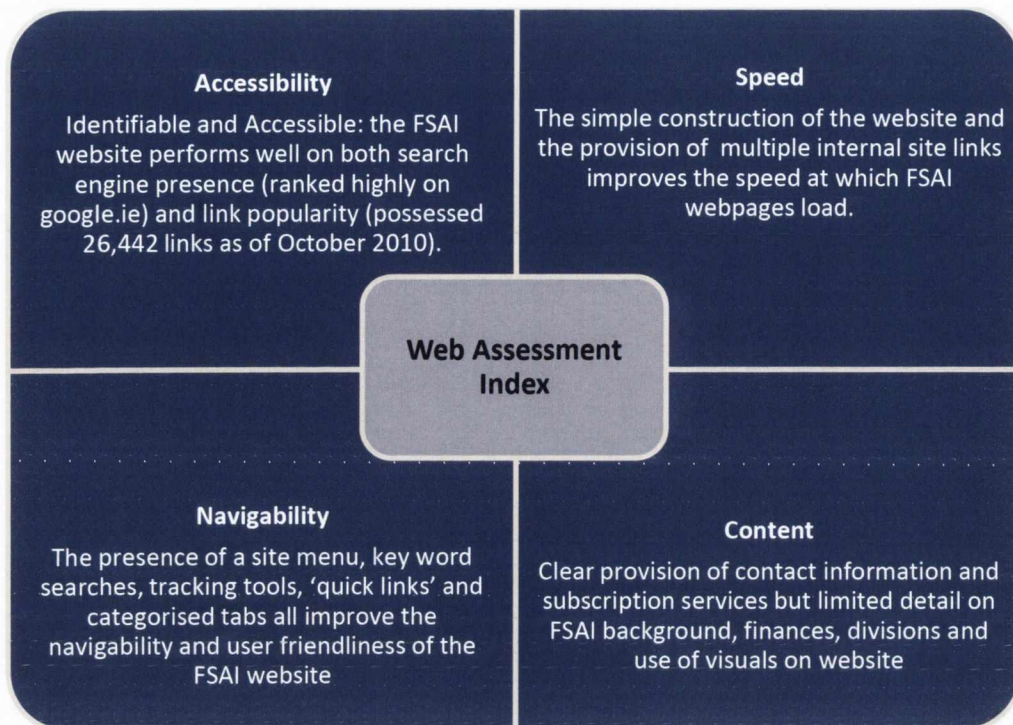


Figure 13 Assessment of the FSAI website following González and Palacios (2004)

As a result of reported limited website use, it is thus pertinent to explore other communication resources utilised by the FSAI. Given the established role of the media in influencing consumer perceptions and knowledge (as evidenced throughout environmental (Wakefield and Elliott, 2003), nutritional (McGloin et al., 2008), food risk (McCarthy et al., 2008) and wider societal (McCullagh, 2007) contexts), this represents an avenue meriting further investigation.

7.3.2 *The FSAI in the media*

To determine FSAI utilisation of the media, the positioning and material of newspaper articles relating to the Authority were assessed as part of the wider media trawl conducted to identify stakeholder interviewees (explained in Chapter 4). While not an extensive content analysis of media items²⁷, a keyword search through the *Irish Times* online newspaper archive highlighted the positioning of FSAI articles from January 1996 to 2010. Conclusions can be drawn from this regarding the priorities and place of the FSAI within a wider food risk communications and governance context.

²⁷ A methodology that can be utilised to map specific language patterns; see Krippendorff (2004).

As illustrated in Figure 14, the majority of the 1190 FSAI articles printed in this 14 year period were positioned within sections dedicated to 'Irish news' (706 articles). This highlights the importance of geographic scale within FSAI operations, representing a dedicated national food safety governing body for Ireland. This mirrors consumer associations of food risk governance as operating primarily at national and local scales explored in Chapter 5, and stakeholder attributions of the FSAI securing a clean, green and specifically Irish image explored in Chapter 6. It also reflects the importance attributed to national biosecuring regimes in the literature (for example, in New Zealand (Jay et al., 2003), across Europe (Lentzos and Rose, 2009) and in the UK (Nerlich et al., 2009)). Meanwhile, 134 articles were printed in the 'Health' sections of the *Irish Times* compared to 55 in 'Finance' sectors. Suggesting that while a considerable amount of FSAI articles are linked with trade and economic issues, public health interests still dominate FSAI messaging.

Meanwhile, only 3.2% of FSAI-related articles were positioned on the front page of the *Irish Times* during this time period. Reflecting the tendency for increased focus on risk issues in times of crisis in food risk (Frewer et al., 2002; Berg, 2004; Shih et al., 2008) and wider contexts (Kitzinger and Reilly, 1997; Hall, 2002; Dodds, 2012), this occurred primarily around BSE, salmonella, foot and mouth, avian flu and pork dioxin scares in Ireland. The 'Other' category also featured prominently in FSAI media positioning, highlighting the importance of food safety across multiple sectors including education, science and world news. Finally, resonating with the personalised nature of food consumption, risk and safety perceptions uncovered throughout interviews and focus groups, 57 articles were found in the 'Opinion' sections of the newspaper.

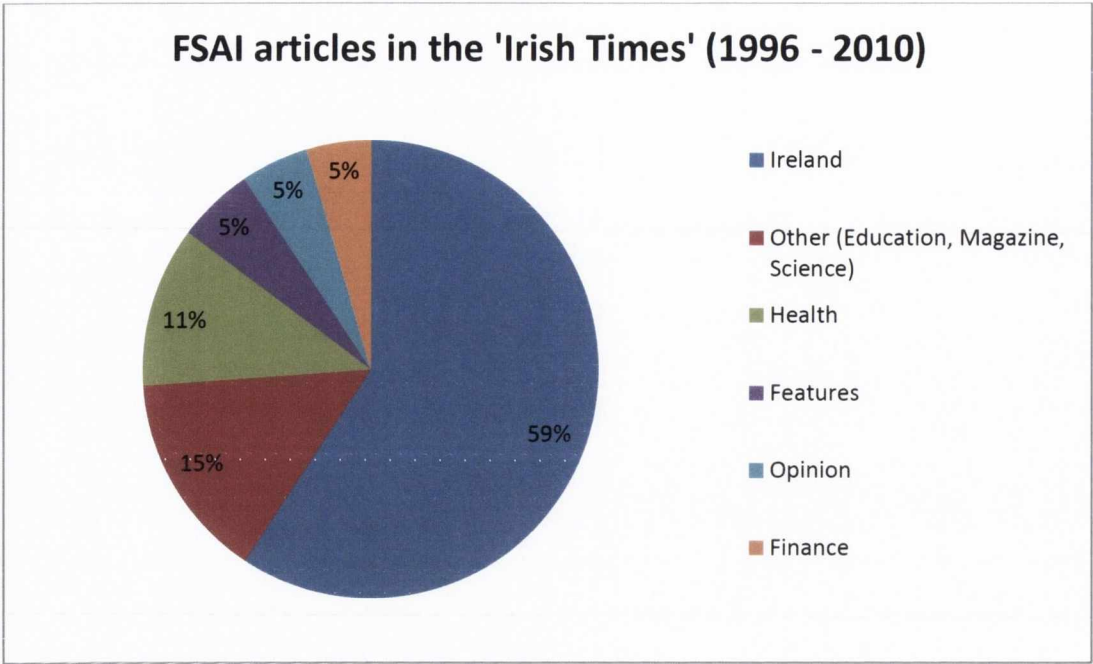


Figure 14 Nationally-Focused Reporting: the FSAI in *The Irish Times* (1996-2010)

Regarding article content, overall, the FSAI has been portrayed in a very positive light in the *Irish Times* over the last 14 years. Emphasis has been placed on the Authority operating in the interest of public health, with numerous articles outlining closure orders issued to FBOs that pose “*a grave and immediate danger to public health*”. Utilisation of the media for such communications underscores the role of the FSAI in securitising food safety in everyday contexts. Meanwhile, many other articles detailed FSAI reassurances regarding the safety of certain products, particularly in times of crisis. Correlating with related global food scares, this included BSE reassurances in the late 1990s/early 2000s and avian flu placations in 2004, 2006 and 2007. Such articles highlight the significant reassurance role also played by the FSAI during times of food crisis. Similarly, the Authority was found to issue warnings through the media regarding the consumption of products discovered to contain harmful properties (for example, Sudan Red dye in 2005). Finally, the structure of, and changing roles within, the FSAI were announced through the press, with the time period analysed witnessing a transition through four chief executives. Detailed background information was often provided on these candidates, increasing the accountability and transparency of the Authority.

In sum, the media was found to have been utilised by the FSAI both in crisis and non-crisis contexts, issuing warnings, reassurances and political information as

appropriate. Fulfilling multiple risk communication goals outlined by Rowan (1991) and Bier (2001) including raising hazard awareness (of harmful foods and scares), building institutional trust (through the communication of everyday activities and FBO closures) and motivating action (encouraging product avoidance when necessary), one risk communication goal overtly missing in the media revolves around education. This perhaps results from the establishment of *Safefood* in 2001 which saw the transferral of the FSAI's public communication and food safety education remit to this new body. Concerning the FSAI's future utilisation of traditional media sources (particularly newspapers), challenges remain in an environment that exhibits preferences for negative news and risk reporting²⁸. Further, the FSAI must exercise caution regarding the spread and diversity of newspapers it engages to ensure that all target audiences are reached. This is particularly essential given differences between tabloid and broadsheet readership in Ireland noted by McCullagh (2007) and broadsheet audience characteristics detailed by McCarthy et al. (2007).

Therefore, overall, the FSAI appears to fail in wholly achieving consumer and stakeholder expectations regarding message, audience and transmission communication factors. Accomplishing elements of both sets of aspirations, it thus does not realise its full potential in either context. For example, while most FSAI messages utilise simple, clear and non-scientific language, some exceptions exist that result in the prevalence of complicated, scientific language being utilised. Meanwhile, concerning audience, a documentary analysis of FSAI food safety surveillance reports revealed blanket communiqués that demonstrate little differentiation in style or content to engage stakeholders and consumers. Such an approach ignores contentions of Garvin (2001) who stresses that policymakers, scientists and publics often employ different rationalities when understanding and evaluating risk evidence (employing political, scientific and social rationalities respectively), and thus require different risk communication approaches. Indeed, tendencies towards one rationale (in the FSAI case, predominantly scientific) may lead to other groups dismissing the relevancy of the message. Such communications also assume trust and credibility in expert knowledge (Garvin, 2001); something that was not found to continuously exist amongst participating consumers in this research. Finally, regarding instrumental communication channels, stakeholder praise for, and simultaneous FSAI reliance on, online resources (including its website, Facebook and Twitter) to communicate food safety messages contradicts both consumer and stakeholder desires and engagement with such

²⁸ For example, see Kitzinger and Reilly's (1997) 'risk reporting' analysis, Frewer et al. (2002) regarding BSE and GM foods coverage and Shih et al. (2008) on the coverage of public health epidemics in print media.

resources. Traditional media preferences instead predominated, although challenges also remain for the future utilisation of such sources as outlined above.

To further uncover the impact of FSAI communications, stakeholder and consumer perceptions will now be probed relating to communications reception, perceived effectiveness, trust and effects. Adopting a comparative approach and further exploring website analysis results, this extends, and seeks to explain, perceptual explorations detailed in Chapters 5 and 6.

7.3.3 *Consumer and stakeholder reception of FSAI communications*

Effective communication is essential if the FSAI is to control “*adverse public reaction*” during food scares (Jacob et al., 2010a, p261), build institutional trust and allow consumers to form accurate risk opinions in non-crisis scenarios (Frewer et al., 2002). Effective risk communication will also benefit consumers and the food industry, ensuring that publics make correct consumption decisions while increasing trust in, and acceptability of, products of the Irish food industry (as similarly reported by Frewer et al. (1996) and Siegrist et al. (2007) in GM contexts). As outlined in Chapter 6, mixed perceptions regarding the effectiveness of FSAI communications were obvious (and indeed expected) across stakeholder groupings. While eleven stakeholders subjectively deemed FSAI communications to be effective over the last decade (including from FSAI, DAFF, and civil society), six stakeholders (five from the private sector and one from civil society) consider FSAI communications to have been ineffective and/or insufficient. This may be reflective of vested regulator and regulated reactions evident throughout the literature, whereby the regulated (private sector stakeholders) portray more negative governance opinions as they desire to remove themselves from perceived costly and disruptive regulations (Yapp and Fairman, 2006). However, Yapp and Fairman (2006) also contend that excuses revolving around the time and cost required to comply with food safety legislation may hide more complex values and attitudes. This includes a lack of trust in food safety legislation and related EHOs, an absence of motivation to engage with perceived irrelevant legislation and a lack of knowledge and understanding of the issues involved. Thus, while particular praise was given by the former groups to FSAI crisis communications (especially the 2008 pork crisis), website effectiveness and message clarity, other private and civil society stakeholders perceived FSAI communications to scaremonger populations, be insufficiently received and understood and fail to transparently ‘name and shame’ non-compliant FBOs.

Moreover, reflecting evolution themes explored in Chapter 6, the success of FSAI communications is also perceived by stakeholders to have evolved over time. The impact of varying CEOs on communications outputs was particularly apparent among these responses, with a notable drop in media communications from the FSAI during the reign of the reported ineffective CEO also evidenced through the media trawl phase. Certain FSAI campaigns were also deemed to have been more effective than others by stakeholders (including crisis communications and the salt reduction campaign). The reactive nature of FSAI crisis communications was however also noted by stakeholder and consumer groups, leading to FÁS and gardening participants calling for increased proactive messaging from the Authority. Nevertheless, regardless of the purpose, type, timing or medium utilised in a risk communication effort, one necessity determining its effectiveness remains constant: the risk communicator must be trusted before any awareness raising or behavioural change can be achieved (McCarthy et al., 2008; McGloin et al., 2008). As mooted in Chapter 2, multiple opinions of what constitutes and increases trust exist throughout the literature. In a food risk governance context however, De Jonge et al. (2008) simplify this to three factors of openness, care and competence.

Following De Jonge et al. (2008), the website analysis phase thus also explored communications emphasising FSAI competence (which primarily involved an insistence on the use of science in FSAI operations) and care (attempted through reiterations of the FSAI 'putting the consumer first'). Meanwhile, strategies to portray openness included emphasis on FSAI accountability to DoH and independence from industry, increased transparency through the provision of background information on FSAI board members and efforts to appear approachable through imparting multiple contact details. However, presentation of these features by the FSAI is inconsistent throughout communication efforts, with many discrepancies and a lack of commitment obvious in some trust areas. For example, caring messages that consumers 'come first' are complicated by FSAI messages stating that the website and subscription services are primarily for industry bodies (perhaps discouraging consumer use and contact). As a result of the splitting of food safety securitisation in Ireland, consumers could instead be directed to *Safefood* for more consumer information; a notification that is not evident on the FSAI site. Moreover, research participant perceptions of industry motives and related monetary incentives behind FSAI activities further hinder this caring consumer dimension. Regarding competence and commitment, the FSAI fails to build institutional trust with multiple 'empty promises' regarding future surveillance work and supposed 'routine' surveillance also inconsistently undertaken. Finally, efforts to increase openness and transparency are hampered by significant time delays between food

sampling and results publication. This contradicts McGloin et al. (2008) who state that there should be no delay in the disclosure of risk information to publics. Failure to 'name and shame' non-compliant FBOs further debilitates this arena, with the bottled water scandal of the FSAI highlighted in Chapter 6 also contradicting recommendations to communicate in a prompt, honest and open manner.

Nevertheless, drawing on interview data explored in Chapter 6, the majority of stakeholders assume that the public trust the FSAI, attributing this to its perceived independence, health agendas and crisis actions taken. A different picture emerged however on speaking with consumers, with limited FSAI engagement and degrees of scepticism obvious. The spatiality of trust explored in Chapter 5 (reiterated in Figure 15 below) further complicates this trust dimension, with significantly more consumer confidence placed in local retailers, butchers, producers and personal contacts for food safety information rather than national food risk governing bodies. This is in keeping with Sage (2003) who attests the importance of inter-personal relations in food routines in Ireland. Such findings thus highlight distinct differences between stakeholder perceptions of and actual consumer trust in the FSAI. While stakeholders adopt a positive perception, in reality, consumers exhibit significant traits of the sceptical consumer explored by Eden et al. (2008) in a food assurance context in the UK and Berg (2004) in a food safety context across Belgium, Britain and Norway. Such differences perhaps result from the self-interest of public sector, semi-state and FSAI stakeholders to portray an image of a trusted, successful and financially worthy FSAI. Strategies of denial explored in a consumer context in Chapter 5 may also be at play here for stakeholders, whereby remaining ignorant of actual consumer perceptions of food risk governance allows stakeholders to continue with existing patterns of policy and action. In other words, it prevents existing governance arrangements from being disrupted as similarly explored by Wynne (1995) in a nuclear risk context and Eden et al. (2008) in UK consumer trust scenarios.

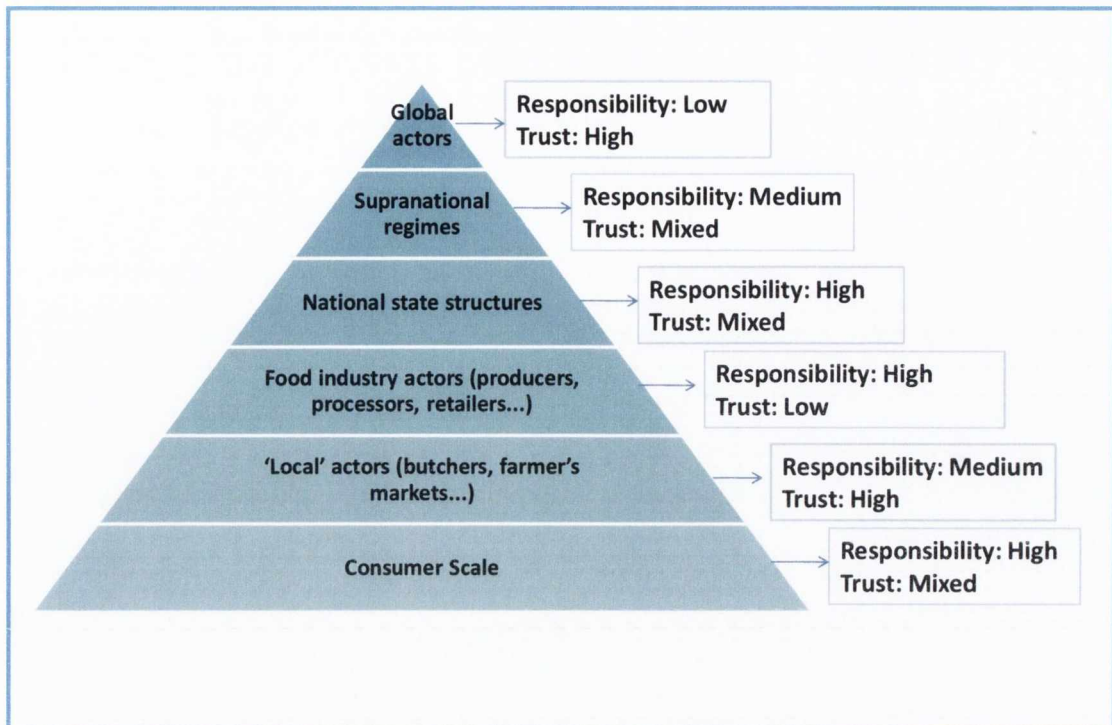


Figure 15 Spatiality of Trust in Irish Food Risk Governance

Indeed, private sector interviewees were more critical of perceived consumer trust levels, believing that the poor handling of incidents by the Authority over the last decade contributes to a low level of public trust. A broader 'anti-establishment' feeling amongst the Irish public further contributes to this negativity for stakeholders, reflecting the "*anti-Establishment attitudes*" and political discontent explored by Ivaldi (2006, p48) in France and echoing the declining level of trust in Irish government institutions reported by O'Sullivan (2007). However, this again may result from biases to portray the food industry as capable of self-regulation and not in need of regulatory authorities such as the FSAI. Work by Petts (2000) regarding environmental regulation in SMEs supports such hypotheses, where notions of self-regulation were particularly supported by business interests who perceive weaknesses in reactive regulation approaches (similar to calls for increased proactivity uncovered in this research). Petts (2000) thus tentatively suggests the need to find a balance between command-and-control style regulation and self-regulation in the environmental arena. Nevertheless, Yapp and Fairman (2006) contend that the ethos and structure of FBOs in the UK do not fit with self-regulatory approaches, particularly due to a lack of food safety knowledge and the absence of effective management systems (with no designated food safety managers, for example, or regular staff meetings). Thus, private sector dismissiveness in this research context may be similarly unfounded with a need for regulatory bodies such as the FSAI thus remaining. Indeed, Yapp and Fairman (2006) further report that legal

obligations represent the most cited reason for food safety compliance amongst FBOs (75%, compared to just 9% stating it is a moral duty).

Nonetheless, despite varied perceptions of consumer trust, most stakeholders across groups stressed the importance of consumers trusting the FSAI, linking this with the importance of the food industry in Ireland. Public trust was also recognised by stakeholders to be an evolving entity that is subject to wider institutional awareness, vulnerable to broader food chain and political contexts and can be easily lost. The FSAI must thus be aware of such fluctuations and continue to develop its brand awareness and credibility to ensure consumer trust in the future.

Another dimension demonstrating the impact of FSAI communications incorporates stakeholder and consumer awareness. Representing a communications success, the majority of stakeholders interviewed were aware of the FSAI and its key functions, with a superior FSAI awareness of those engaged with the food industry obvious. Nonetheless, some uncertainties did exist amongst civil society and retail participants, suggesting that the FSAI could do more to directly contact these sectors. Furthermore, the prevalence of industry fearlessness explored in Chapter 6 raises questions regarding the impact of FSAI communications on industry compliance. Stronger communications involving accurate 'name and shame' approaches, targeting of industry sectors and scaremongering strategies may be required to impact on future FBO compliance and related respect for the FSAI.

In terms of perceived and actual FSAI awareness amongst consumers, many stakeholders (including from public and FSAI sectors) conceded that not all consumers are continuously aware of the Authority and its activities. Consumer confusion between the plethora of food governing bodies in Ireland was proposed as a reason for this, although others deemed public awareness of the FSAI to fluctuate regardless according to the evolution of the Authority (including a general 'honeymoon period' in its initial years) and food chain stability. Thus, many stakeholders assume that consumers trust the FSAI when they come into contact with it (usually during crisis scenarios) despite being unaware of it in everyday life. In reality, limited FSAI awareness was indeed apparent across consumer focus groups, with evident confusion existing between the activities of the various Irish food governing bodies. Only four out of forty-nine consumers mentioned the FSAI when discussing Irish food risk governance prior to prompting from the facilitator, suggesting a lack of FSAI communications impact with consumers.

Nonetheless, for some office workers, FÁS consumers, public sector actors and FSAI stakeholders, the ability of the FSAI to operate quietly in the background represents a sign of performance success. In this latter context, no news is deemed to represent good news by these participants, with no need identified for regular communications from the FSAI to raise awareness. Reflecting representative democracy ideals proposed by Besley and Coate (1997) and O'Neill (2001) whereby expert and political institutions exist to remove risk decisions from consumers in everyday contexts, this contradicts Frewer et al. (1996; 2002) who contend it necessary for organisations to communicate proactively and regularly with publics to build trust and prevent panic during crises. Indeed, the FSAI (2007, p29) survey concludes that it is due to *“effective advertising campaigns and regular communication, [that] considerable inroads have been made in changing consumer perceptions and behaviour”*. Furthermore, as explored in Chapter 6 and highlighted by present FSAI employees in particular, it is necessary for the FSAI to regularly communicate to demonstrate its worth, clarify where tax money is being spent and highlight the action it is taking to prevent food risk in everyday scenarios. This may become increasingly necessary to prevent future budgetary cuts to the FSAI.

Finally, following recommendations in a variety of risk (Slovic, 1987; Frewer, 2004; Hampel, 2006; Hanlon, 2010) and food risk contexts (Griffith et al., 1998), for communication to be truly effective it must operate as a two-way process. Indeed, for Bier (2001), stakeholder participation represents the most appropriate communication strategy when attempting to reach consensus on controversial issues (as food often is). The lack of industry and consumer engagement with the FSAI unveiled in Chapters 5 and 6 thus raises challenges for communications effectiveness. Indeed, the prevalence of perceptions of unrealistic, excessive and difficult to implement food safety legislation amongst stakeholders (see Table 15) suggests a lack of consultation with industry members to develop effective but realistic food safety legislation. This contradicts desires for stakeholder engagement in food risk management decisions expressed by Wentholt et al. (2009), SAFE FOODS (2010) and Walls et al. (2011). Such exclusion may result from FSAI attempts to remain independent from industry, although the presence of multiple channels for engagement in the FSAI agenda suggests that something more complicated is at play here.

In particular, the presence of the FSCC, stakeholder and consumer consultation processes and various industry fora (including for artisan producers, retailers and food service sectors) suggest efforts towards the inclusion of stakeholder opinion in food risk governance processes. Indeed, according to Taylor (2003), the presence of such

structures enables the formal inclusion of agribusiness interests in Irish food safety politics. Nonetheless, it remains unclear how gathered opinions are utilised by the FSAI, with potential remaining for scientific rationalities of risk (utilised by the FSAI) to clash with social, or indeed economic, rationalities perhaps employed by these latter groups (in keeping with Garvin (2001) regarding the adoption of alternate risk rationalities by different actors). Following Bier (2001), a need thus exists for the FSAI to clarify the scope, purposes, commitment and outcomes of stakeholder and public participation to mitigate against the levels of scepticism and unwillingness to engage uncovered in this research.

Thus, while controversy remains in including publics in food risk management processes (for example, for fear of slowing food risk decision-making in crisis scenarios (Houghton et al., 2008) and/or ideals inspired by representative democracy whereby risk decisions are made by “*a group of wise, independent experts*” (Bier, 2001, p145)), consumer inclusion in everyday, non-crisis contexts should not be overlooked. After all, incorporating human rights issues and a realisation that the implementation of unpopular policies can result in decreased trust in governing bodies and/or widespread protest, Rowe and Frewer (2000, p24) proclaim that:

“There is increasing contention that public participation in policy making in science and technology is necessary to reflect and acknowledge democratic ideals and enhance trust in regulators and transparency in regulatory systems”

Increased consumer participation in Irish food risk governance and the FSAI could thus increase consumer awareness and trust of such regulatory structures, mitigate against ‘anti-establishment’ feelings and increase confidence in Irish food. Additional issues regarding the limitations of experts (including the inevitable role played by value judgements in scientific risk analysis processes (Slovic, 1999)) provide further reason to inform, consult and involve publics in risk management for Rowe and Frewer (2000). As revealed in the website analysis however, the steady decline in FSAI-public consultation efforts since 2004 does little to inspire confidence in the Authority’s willingness to, and success in, engaging consumers. Challenges remain in motivating consumers to engage in the partial food risk society found to exist in Ireland where perceptions of a lack of consumer time result in strategies of ignorance and denial being commonly adopted to address food risk. Indeed, as reported in Chapter 5, only one consumer of forty-nine interviewed spoke of contacting the FSAI or utilising its website. As with FSAI (2007), challenges thus remain to retain positive behavioural change, compliance, trust and awareness amongst industry members and consumers

whilst avoiding information overload and without compromising FSAI independence and legitimacy.

As suggested by Rowan (1991) and with respect to Bier (2001), the FSAI must choose goal appropriate communication strategies and channels when hoping to impact on consumers and stakeholders. As evidenced by these research findings, a need exists for the FSAI to reduce reliance on online resources and continue to develop contacts with traditional media, national television channels and local retailers, butchers and farmers markets. Further, given distinct consumer food risk perceptions and information preferences explored in Chapter 5, a need remains for the FSAI to understand target audience concerns and knowledge bases, and tailor messages as such (as similarly recommended in other risk (Bier, 2001) and food risk contexts (McCarthy and Brennan, 2009; Jacob et al., 2010)). Thus, while there is no universal or optimal medium for food risk communication or stakeholder participation (Rowe and Frewer, 2000; McGloin et al., 2008), following Jacob et al. (2010), the FSAI must acknowledge preferred communication channels if it is to achieve effective communications. Thus, the appropriateness of obtaining consumer and stakeholder risk, governance and communication opinions (as in this research) is ever pertinent for the development of effective risk communication strategies for the FSAI and related governing bodies. Further practical suggestions for improving FSAI messaging are outlined in Chapter 8.

Stepping back from this case study focus on the FSAI and acknowledging methodological recommendations to situate qualitative, case study research within wider contexts to increase its quality, validity and reliability (Bell, 2006; Baxter and Jack, 2008; Crabbé and Leroy, 2008), this chapter will now turn to the broader positioning of the FSAI within food risk governance and biosecurity practices in Ireland.

7.4 Biosecurity

The final section of this chapter addresses the third research question concerning the infiltration and performance of biosecurity in the Irish food risk governance context. Issues of biosecurity, defined as "*making life safe*" (Bingham et al., 2008, p1528), and biopolitics, the exercise of power over life in the interest of populations (Foucault, 1978; Dillon, 2007; Dillon and Lobo-Guerrero, 2008; Lemke,

2011), are relevant to the arena of food risk governance. Certainly, the complex and varied systems of food safety controls that exist in the present day can be described as attempting to make life safe through efforts to ensure a risk-free food supply for populations. This includes the monitoring, enforcement and surveillance activities conducted worldwide by FSAs, including the FSAI. However, such biosecurity motivations do not act in isolation, competing with other motives, including neoliberal and economic agendas, on a regular basis. These latter motivations shift the prioritisation of FSAI activities towards processes of free trade, market competitiveness and economic incentives to promote and sell Irish food.

Predominantly drawing on consumer and stakeholder perceptions of FSAI motives, purposes, power and performance presented in Chapters 5 and 6, this section explores the dynamic interplay between biosecurity and neoliberal operating logics within the work of the FSAI. Some background information is first provided to position this analysis within existing literature. Thereafter, attention is given to the biosecurity strategies of the FSAI, particularly relating to its monitoring, enforcement and surveillance activities. Utilising previously unexplored stakeholder and consumer results, the use of science and HACCP as part of the FSAI biosecurity discourse receives particular consideration. Such findings are then contrasted with perceived neoliberal drivers behind the Authority, especially relating to its need to promote a clean, green food image for Ireland. Highlighting the presence of competing operating logics in the Irish food risk governance context, the section seeks to determine which logic predominates in the FSAI. It concludes by outlining the appropriateness of this conceptual lens for understanding FSAs worldwide, while practically, thought is also given to the future evolution of the FSAI.

7.4.1 Biosecurity and neoliberal ideals: a complex interplay

Attention to processes of neoliberalisation has dominated much academic discussion to date assessing concepts of free trade, market competitiveness, privatisation and deregulation, including within environmental governance spheres (Castree, 2008; 2008a). Nevertheless, multiple meanings, applications and outcomes of neoliberalisation exist in different contexts, creating difficulties in uniformly assessing and comparing the concept (and its infiltration) across sectors. Indeed, there is general agreement that no one form of neoliberalisation exists (Brenner and Theodore, 2002; Castree, 2008) although it is largely conceived to incorporate:

“A (re)negotiation of the boundaries between the market, the state, and civil society so that more areas of people's lives are governed by an economic logic.”

(Castree, 2008, p143)

Castree (2008, p142) further outlines how neoliberalisation is often achieved socially, environmentally and globally through processes of privatisation (the assigning of property rights and ownership to social and environmental phenomenon), marketisation (the assigning of prices to previously unpriced and unmarketed items) deregulation (*“the ‘rollback’ of state ‘interference’ in numerous areas of social and environmental life”*) and reregulation (policies facilitating marketisation and privatisation processes). In a food safety context, forms of neoliberalisation can be understood to have occurred around processes of deregulation in particular. Devolving food safety responsibilities from the state onto a number of public, private, semi-state and civil society actors, the adoption of the General Food Law in 2002 (explored in Chapter 3) encouraged a shift in food safety responsibility to the private sector and the establishment of FSAs worldwide.

Similarly, as highlighted in Chapter 2, preoccupations with biosecurity have also risen to prominence in both academic and policy circles, with the term also being utilised and understood differently in alternate contexts. In general, biosecurity is concerned with regulating and/or halting the movement of life forms (including animals, plants and microbes) to prevent and manage risk to life and health (FAO, 2007; Bingham et al., 2008; Hinchliffe and Bingham, 2008; Barker, 2009; 2012). However, for some, biosecurity is primarily associated with the control of agricultural disease (Donaldson, 2008; Enticott, 2008, 2008a; Nerlich et al., 2009), for others it is the management of invasive species (Barker, 2009) while for others still, discussion around bioterrorism and the purposeful spreading of biological agents predominates (Kurth, 2004; Gaudioso et al., 2009) (see also Hinchliffe and Bingham (2008)).

More recently, the interplay between neoliberal and biosecurity concepts has been explored, although this topic remains relatively underdeveloped to date. Most notably, Maye et al. (2012, p150) explore the governance of biosecurity in what they describe as a *“neoliberal world”*. Comparing national biosecurity practices to free trade strategies of the WTO, the threat to biosecurity posed by international trade is emphasised. Further, comparisons between the UK and Australia highlight how attempts to simultaneously govern neoliberalism (trade liberalisation) and biosecurity (limiting invasive pests and disease) create both compatibilities and conflicts (Maye et

al., 2012). Recent work by Major (2008) and Bingham and Lavau (2012) also touch on the tensions between neoliberalism and biosecurity; the former regarding neoliberal strategies creating vulnerabilities for healthcare and hospitality workers in advance of a major biosecurity event (SARS in Toronto) and the latter concerning regulatory approaches adopted in the governance of meat and related food safety inspections. The exploration of interactions between biosecurity and other operational logics (including animal welfare, cost effectiveness and retailer price pressures in poultry disease management) by Hinchliffe et al. (2012) also suggest the potential for tensions and compatibilities in this area.

Complementing and extending the limited attention to biosecurity-neoliberal interactions, this section explores how these agendas play out within the Irish food risk governance context. Addressing research question three and constituting a novel approach to understanding national food risk governing institutions, this analysis is specifically undertaken through the lens of FSAI actions, internal governance processes and external perceptions.

7.4.2 FSAI: neoliberal or biosecuring institution?

To fulfil its designated consumer protection role and (bio)securitisation remit, the FSAI coordinates and enforces food safety legislation at national and local scales. As highlighted in Chapter 3, this is achieved through the inspection, approval and licensing of FBOs (the principal biosecurity targets of the FSAI), the sampling and analysis of food and ingredients and the undertaking of legal proceedings against FBOs (serving prohibition, improvement or closure orders as appropriate) (FSAI, 1998). Moreover, the FSAI conducts routine surveillance of the Irish food chain in an effort to protect against unpredictable future food risks. Incorporating elements of action, oversight and anticipation, the FSAI thus demonstrates a variety of biosecuring strategies (Bingham and Lavau, 2011; Barker, 2012; Hinchliffe et al., 2012), operating within the Irish food industry landscape to prevent, identify, trace, control and communicate food risks before and as they occur.

In terms of stakeholder perceptions of such biosecurity performance, while generally positive opinions emerged from public, semi-state and FSAI sectors, other public, civil society and private sector actors criticised FSAI activities. Indeed, as detailed in Chapters 5 and 6, several believe that food safety was well managed prior to the FSAI establishment, while others contend that retailers possess more power than

the FSAI in this arena. Meanwhile, given recent shifts in securitisation approaches from tangible forms of protection against the defined enemy (Schmitt, 1996) to techniques of pre-emption and preparedness against the less certain and unknown (Cooper, 2008; Dillon and Lobo-Guerrero, 2008; Hinchliffe et al., 2012), particular questioning took place in interviews and focus groups regarding the FSAI food safety surveillance activities. As reported in Chapter 5, consumer focus groups ranked the five surveillance areas (chemicals, microbiology, GM, irradiation and food labelling) in order of perceived surveillance importance. Some similarities emerged regarding FSAI and consumer prioritisation of chemical and microbiological surveillance, although some differences remain, including regarding the order and extent of activities and the prioritisation of labelling surveillance. Such differences may result from the “*underlying epistemological distances*” reported to exist between scientists’ and publics’ risk understandings and constructions of knowledge (Garvin, 2001, p443). Culminating in different risk rationalities, this may lead to the FSAI scientifically determining the likelihood and severity of food risks (and thus appointing surveillance resources to ‘proven’ risky areas) conflicting with socially-constructed fears of consumers. This is not to say, nor did Garvin (2001) imply, that consumers cannot behave rationally nor the FSAI engage social rationalities. Rather, it suggests the persistence of some form of an expert/lay divide in risk governance arenas; one that is not all pervasive but nonetheless evident.

Regarding stakeholder perceptions of FSAI surveillance activities, a general consensus emerged regarding the five food areas chosen by the Authority. Indeed, the five areas reflect initially cited food risk concerns of stakeholders (outlined in Section 5.2) regarding food contaminants (chemicals and microbiology), technology (GM and irradiation) and labelling. Moreover, previously unexplored interview findings reveal that several stakeholders across sectors also contended that the FSAI surveillance arenas represent the food areas of most concern to consumers, the riskiest elements in the food chain and the most recent trends requiring governance attention. The need for consumers to be informed and aware of these activities was also emphasised and linked with ideas of building trust in Irish food and related risk governance. This reflects Bier (2001, p147) who argues that “*mechanisms by which people can monitor potentially hazardous situations*” helps to foster trust. Surveillance activity awareness amongst industry stakeholders was deemed equally important to allow people to “*sleep at night*” (Civil Society 1) and raise industry awareness that “*somebody [is] keeping an eye on things*” (FSAI (past) 1). Some interviewees even became quite defensive on the appropriateness of the surveillance arenas, suggesting desires to promote the expertise and protect the reputation of the FSAI:

"Well basically if you look at them five, that's the whole food chain. So it's not a question that they picked five areas, there's fuck all omitted there except feed, animal feed... Well what is missing?"

(FSAI (past) 5)

Nonetheless, the documentary analysis phase, as well as revealing inconsistencies in surveillance activity communications (see Section 7.3), raised questions regarding the effectiveness of these activities. In particular, the persistence of negative results throughout surveillance reporting raises impact concerns, coupled with the lack of industry fear noted throughout interviews regarding these activities. Similarly, as reported in Chapter 5, a community gardener also questioned the purpose and effectiveness of FSAI surveillance, believing it to merely legitimise poor industry practice rather than eradicate it. A need thus exists to establish a stronger legislative basis for the surveillance activities to ensure that appropriate follow up action is taken against industry. Similar to recommendations in 7.3, stronger 'naming and shaming' of non-compliant FBOs could also foster increased compliance and respect for this biosecuring activity (in keeping with Papadopoulos (2007)).

In terms of a broader FSAI biosecurity discourse, the use and communication of science was deemed to represent a positive and legitimate driving force behind the Authority by the majority of stakeholders. Perceived to build credibility, respect and a positive reputation, this reflects Taylor and Millar (2004) who note the increased use of science to govern food safety arenas. For the authors, this focus allows the expansion of the free market by determining the safety of products and promoting an industry mantra that if *"no risk is proven, it is not risky"* (p594). This perspective however ignores existing consumer concerns regarding the risks that science, and thus by association the FSAI, have yet to determine. Similarly, limitations to science were noted by several interviewees, with five civil society participants, two private sector stakeholders, three public sector interviewees and two FSAI participants stating additional needs to utilise science with care, identify legitimate scientific studies and acknowledge other viewpoints (including environmental and sustainability impacts and international expertise). Similar to FÁS, parenting and office worker perceptions, some questions were also raised (by civil society stakeholders in particular) regarding the independence of scientific analyses. This echoes similar scientific independence concerns of Slovic (1999) whereby scientists' values and funding bias are inevitably deemed to influence risk assessment priorities and results and Papadopoulos (2007) regarding the credibility of experts in multilevel governance systems. Similarly, in an environmental policy

context, Roberts (2011, p230) attests that *“all science is at least potentially political, whether scientists like it or not”*.

Indeed, in a food risk context, one of the most frightening aspects of the UK BSE crisis according to Wynne (1996) was that supposedly ‘independent’ scientific evidence utilised for policymaking was reportedly shaped and altered by scientists’ perceptions of what would be politically digestible. This resulted in a withholding of accurate scientific data, fuelling perceptions of cover-up and mistrust amongst publics. Therefore, applicable to the Irish food risk governance context and promoting a cautious use of science in environmental policy making, Roberts (2011, p95) argues that:

“Policy makers need to understand the limitations of the scientific method, as well as the information it generates”

Additionally, for other interviewees, claims of scientific expertise by the FSAI are not as transparent as they first appear, with several public, private and FSAI stakeholders highlighting that the Authority does not possess or utilise its own laboratories. Instead, it relies on alternative scales of expertise including state, international and private laboratories. Indeed, an EHO interviewed perceives FSAI scientific committees to represent mere *“talking shop[s]”* rather than loci of scientific action given this dependence on outside testing. Commenting that the Authority is merely useful for *“grouping stuff together”* in terms of research results, she concluded:

“I don’t see them as being major leaders in the scientific field”

(EHO 1)

Meanwhile, utilisation and enforcement of the biosecuring HACCP food safety system received a mixed reception amongst stakeholder interviewees. Requiring FBOs to pre-empt risks and place controls in hazardous areas of production lines, much praise existed regarding the proactivity and ability of this system to control and increase awareness of risk. However, echoing concepts of over-regulation mooted in gardening, student and retirement focus groups, some criticism emerged from private sector and civil society spheres in particular, with suggestions that HACCP represents an onerous, unnecessary and impractical system, laden with document falsifications. This reflects findings of Taylor and Kane (2005) who found limited implementation of HACCP in food SMEs in the UK. Here, businesses similarly perceived HACCP *“as a difficult, complex set of activities requiring great amounts of time effort and with few, if any, perceived benefits”* (p833). The authors conclude however that with sufficient guidance and

support, HACCP implementation is possible within FBO settings. Indeed, calls for more flexible, simplified and tailored HACCP systems also emerged from public, private, semi-state and FSAI actors in this research. Proposals regarding 'HACCP light' (a reduced form of HACCP) were also discussed, although mixed opinions resulted regarding its safety and necessity. Nevertheless, overall, while the biosecurity strategies of the FSAI received mixed performance perceptions across stakeholder and consumer groups, discourses of science and surveillance appear most accepted and useful.

Moving away from the FSAI's discourse of biosecurity and reflecting more clearly concepts of neoliberalisation, over two-thirds of stakeholders across sectors perceived a cocktail of economic, trade and market competitiveness motivations behind the FSAI agenda. Suggesting the presence of aims beyond consumer health protection, this was particularly linked with FSAI desires to promote profitable circulations of Irish food exports worldwide and protect the reputation of the Irish food industry (see Chapter 6). This mirrors broader neoliberal strategies of the Irish government to compete in international food markets identified by Tovey (2007) and more specific neoliberal agendas noted by Taylor (2003, p163) in his early discussion of food governance reforms in Ireland being:

"circumscribed by agreements between the EU and the WTO, which ensure that any measures taken to protect food safety have as little impact as possible on free trade".

Further reflecting discussions of neoliberal trade liberalisation priorities constraining biosecurity practices in the UK and Australia discussed by Maye et al. (2012), such motivations are particularly obvious in Irish food crisis contexts. For example, several stakeholders linked the draconian withdrawal actions taken by the FSAI during the 2008 pork crisis with reputational and monetary protection rather than direct health concerns. Indeed, several contended that the dioxin levels present in the contaminated pork were insufficient to cause damage to human health (a point also emphasised by the FSAI at the time). Meanwhile, speaking of the crisis, Jacob et al. (2010a, p267) similarly concluded that:

"Timely public communication, acknowledgement of both real and perceived risks, and control of related stigma throughout the event limited damage to the government's domestic and international credibility and at least partially preserved the economic standing of the country's food and farming industries"

Moreover, emerging as an area of consensus amongst stakeholders and reverting to its perceived establishing motivations, the continuation of the FSAI in the future was also deemed necessary to promote food exports, encourage food industry growth and pave the way out of economic recession for Ireland. As mooted in Chapter 6, creation of a 'clean, green, food island' image forms a significant part of this future role, reflecting marketing strategies developed by Bord Bia (Dermody, 2011; Fitzgibbon, 2011) and cited by Sage (2003) as forming the foundation for Irish food markets. Such desires also reflect the importance of country image highlighted by Knight et al. (2007) when examining the sourcing patterns of food distribution stakeholders. Here, *"the integrity of regulatory systems"* (p792) is reported to constitute a significant part of a positive product-country image and related confidence, trust and support for products. Indeed, suggesting a need to move away from diffuse 'clean green' images, Knight et al. (2007) call for New Zealand to instead base its commercial strategies and governmental policies on its quality control and traceability mechanisms; reputation for trustworthiness and minimal food scares; and reliability in production, processing and delivery services. The importance of a trusted, efficient, reliable and effective FSA to support these elements in Ireland is thus obvious, particularly when agriculture is increasingly hailed as a lucrative avenue for future revenue across political spheres (including in the recently developed 'Food Harvest 2020' plan (DAFF, 2010)) and media circles:

"Farming, it seems, is the new cool. When the rest of the country boomed, farming was in recession. Now that developers and bankers have left the country nursing a multi-billion euro hangover, farmers are enjoying a renaissance"

(Sheehan, 2012, p12)

"Food safety regulation must continue to underscore Ireland's commitment to being one of the safest centres of food production in the world, but must be 'smart' to avoid imposing unnecessary burdens on the supply chain"

(DAFF, 2010, p2)

Combining biosecurity and neoliberal ideals, exploration of the FSAI's establishing and current motivations in Chapter 6 revealed a multi-functionality to the work of the FSAI whereby many stakeholders viewed the FSAI as simultaneously protecting consumer health and economic trade interests. Suggesting a dual purpose and/or unintended consequences to the work of the FSAI, this reflects the potential for

compatibilities between biosecurity and neoliberal ideals in keeping with Maye et al. (2012). It also reflects “*poly-functionality*” concepts explored by (Foucault, 2007, p19) relating to the multiple purposes of towns in the 17th century and similar “*polyvalent*” properties attributed to the panopticon (explored in Chapter 2) (Foucault, 1977, p205). Here, Foucault (1977) was referring to the multiple functions of panoptic (surveillance) watchtowers in a variety of contexts including capabilities to reform prisoners in prison systems, instruct children in schools, treat patients in hospitals, supervise workers in industry and/or confine the insane in psychiatric institutions. However, the reality of such ‘poly-functionality’ in the FSAI context is questionable on consideration of traditional debates in food safety governance that argue for a separation of health and economic interests. Indeed, one of the principal aims of the European food safety governance reforms was to remove perceived vested economic interests, with beliefs that consumer and industry interests are inherently conflictual and cannot be simultaneously pursued (Halkier and Holm, 2006). Further, it contradicts the often cited testament concerning the independence of and trust in the FSAI as answerable to DoH (where vested industry interests are perceived not to feature) and the reiteration of consumer protection cited in the FSAI’s establishing legislation and on its website.

Elsewhere, suggesting further conflict between neoliberal and biosecurity ideals (and related differences regarding what is prioritised under each agenda), narratives from stakeholders explored in Chapter 6 highlight obvious differences in opinion of FSAI performance and power. While public, FSAI and semi-state participants were the most positive regarding FSAI power and achievements, private sectors actors emphasised a multitude of failures and industry fearlessness. As such, a disconnect exists between perceptions of effectiveness emphasised by public and FSAI stakeholders and the tensions, challenges and failures of the FSAI expressed by others. Suggesting a conflict between the implementation of broader neoliberal agendas (that call for private sector self-regulation and unfettered food trade) and the continuing need for (bio)securitising structures (to ensure biopolitical and ontological security for populations domestically and abroad), varied opinions of FSAI role, motivations, power, impact and institutional performance thus exist. A politics of evaluative success could also be at play here, with desires to prioritise efficiency under the neoliberal (self-regulatory) logic (promoting free markets and economic efficiency) conflicting with priorities of effectiveness emphasised within the FSAI’s biosecurity logic (concerned with managing risk to life and health).

After all, focuses on biosecurity can impose costly and burdensome regulations on industries that are attempting to circulate food at a profit. For Mensah and Julien (2011), for example, this is particularly true when industry is not consulted on the

development of such policies. This can result in inherent conflicts between the regulator and the regulated, as exemplified by private sector dismissiveness of the FSAI and also noted by Yapp and Fairman (2006) in the UK food SME context. Thus, while the aims of FSAI security logics need not always diverge (for example, biosecurity mishaps in food safety are not beneficial to the food industry reputationally or economically²⁹), the conditions under which the FSAI is declared a 'success' varied amongst stakeholders.

As such, with evident differences between the FSAI's required duty (policy), actions in reality (practice) and stakeholder experiences and opinions (perceptions), to determine whether one security logic has dominated since the inception of the FSAI remains a difficult task. Indeed, such a neat conclusion may be impossible in the food risk governance arena given the impact various crises (including of food, economics and internal politics) have on FSA priorities and actions through time. Therefore, it seems appropriate to understand their work and impact through the dynamic interactions that occur between neoliberal and biosecurity logics. After all, assessing the last decade, this research has highlighted the evolution of Irish food risk governance through the institutional lens of the FSAI, exposing alternating periods of success and failure for the Authority. Indicative of a dynamic and fluctuating biosecurity/neoliberal interface, perceived performance and communications variations are perhaps due to changing security and operational logics in these different contexts. For example, perceived health/biosecurity priorities of the first CEO resulted in active engagement with the media and consumers, while perceived industrial /economic interests of the second CEO culminated in the bottled water scandal of 2007 and perceived protection of industry reputation.

Causing fluctuations in governance approaches, leadership styles, communications, power, achievements, failures and FSAI outputs, variations in internal governance, broader changes in political governing parties (and related governmental priorities) and food chain stability (crisis versus non-crisis contexts) were found to significantly contribute to such evolution patterns. For example, the influence of the CEO on the power, impact and communications of the FSAI was traced in Chapter 6, while the influence of food crises and reigning government parties was also explored. Indeed, a 'paradox of a crisis' theme was reiterated throughout the thesis, with the 2008 pork crisis serving to prove the worth of the Authority and alter its predicted merger with the Irish Medicines Board and the Office of Tobacco Control. The emergence of a complex geography of power and constraints across supranational and service contract

²⁹ Indeed, Yapp and Fairman (2006) report that reputational risk motivates over two-thirds of participating FBOs to comply with food safety legislation in the UK.

scales, as discussed in Chapter 6, has also created difficulties in terms of FSAI independence, power and influence over time.

The potential for biosecurity and neoliberal logics to continue to fluctuate in an uncertain future is obvious. Continuing economic crisis, looming public sector reform, changing food technologies and sporadic food scares will define what security logic predominates as the FSAI progresses. In particular, the FSAI will continue to evolve under its current CEO, be influenced by food crisis events (determining its worth, priorities and appraisals) and be subject to the financial and remit constraints of the reigning government party (including, for example, induced budgetary cuts, suggestions of structural reform, pushes under Harvest 2020 to increase food production and political decisions to reject or explore GM foods). Thus, a significant degree of uncertainty remains regarding the future functioning, structure and power of the FSAI, with potential for influence from a number of economic, political and social angles. Moreover, the impact of budgetary, remit and scientific assessment decisions taken now will only become clear in time.

Nevertheless, despite its complex evolution, mixed performance opinions, varying geographies of power, scalar constraints and fluctuating operational logics, the need for the FSAI moving forward as part of broader biosecurity and neoliberal frameworks is obvious for both the health of populations and the promotion of Ireland's 'clean green' image. As mooted in Section 7.2, this is particularly true in a world where food production and technologies continue to evolve and a time lag often exists between food policy implemented and production practices in operation. Indicating an ongoing need for the FSAI in this retrospective political landscape, this echoes findings from the EIU (2009) where the need for continued regulation in Ireland across telecommunications, energy, financial and health and safety sectors is expressed and linked with the evolution of markets, technology and competitive drivers. Indeed, the EIU (2009, p162) attest a particular need for continued regulation in areas "*where consumer protection remains an objective, alongside economic regulation*"; as revealed in this analysis of Irish food risk governance.

7.5 Conclusion

This chapter explored research findings relating to food risk policy, practice and theory in Ireland, highlighting distinct differences between FSAI rhetoric, stakeholder experiences and consumer perceptions. Achieving the principal research aim of developing an in-depth understanding of the nature, determinants and methods of food risk governance and communication in Ireland, the three research questions outlined in Chapter 1 have been answered relating to Irish food risk regulation, communication and biosecurity. As explored in this chapter, this revealed a paucity in objective measures of FSA regulatory performance (with suggestions proposed to overcome this), varied communication impacts on stakeholders and consumers and the persistence of a fluctuating interplay between biosecurity and neoliberal operating logics in the work of the FSAI.

In regulatory terms, Section 7.2 expanded existing FSA literature from a focus on FSA establishment to an evaluation of FSA performance and impact. Drawing on both qualitative and quantitative strategies, suggestions for measuring FSA performance were proposed incorporating elements of the 'policy effects' model (Crabbé and Leroy, 2008), measures of power (Lukes, 2005) and good governance principles (drawn from global (Woods, 2000, 2004) European level (EGN, 2001), national (Graham et al., 2003; Lodge, 2004) and multi-level scales (Papadopoulos, 2007)). Utilising results of this research, qualitative stakeholder and consumer perceptions also featured. Such an exercise highlighted the lack of accurate and objective measures of FSA performance, thus laying foundations for further empirical work to develop practical suggestions for measuring and improving future food safety governance performance.

Addressing research question two, mixed impact perceptions were obtained regarding FSAI communications, particularly regarding stakeholder and consumer expressions of compliance, awareness and trust. This included significant levels of industry fearlessness and dismissiveness of the FSAI, raising questions over its impact on industry compliance. FSAI awareness meanwhile remained strong amongst industry members although was revealed to be less obvious amongst consumers. Degrees of food risk governance scepticism, mistrust and motivational suspicions were also uncovered in focus group sessions, impacting on consumer trust realities. Indeed, many of the consumer realities explored in this section contrasted sharply with perceptions of consumer trust and awareness presumed by stakeholders in interviews. Highlighting a variety of discrepancies and misconceptions between FSAI communications rhetoric,

stakeholder experiences and consumer realities, such findings suggest a need for the FSAI to continue to develop and improve its message, audience and communication transmission factors. This is essential to ensure effective future communications and optimum impact on stakeholder and consumer compliance, trust and awareness.

Finally, demonstrating the value of utilising theoretical neoliberal and biosecurity perspectives (and the interplay between them) to understand the role, actions, performance and impact of FSAs, Section 7.4 highlighted the dynamic coexistence of both neoliberal and biosecurity agendas in the work of the FSAI. Representing a novel approach to understanding national FSAs and reflecting recent academic attention to the relationships between neoliberalisation and biosecurity (for example, Maye et al. (2012)), the interplay between neoliberal and biosecurity logics was found to produce a variety of tensions and compatibilities in the Irish food risk governance context. No logic was deemed to overrule the other in this context, with potential for FSAI priorities to fluctuate as a result of variations in internal governance approaches, government parties and food chain stability (crisis versus non-crisis contexts) revealed. Highlighting the temporal and vulnerable positioning of FSA activities, the potential for these logics to continue to fluctuate in an uncertain future is obvious as food risks and technologies continue to evolve, economic recession continues to threaten widespread public sector reform and internal governance issues inevitability alter the path and priorities of the FSAI. As such, the food risk governance process should be viewed as a constantly evolving and dynamic area of decision making, policy implementation and regulatory enforcement, with numerous uncertainties existing regarding the future. The potential for continued research in this arena to monitor FSA priorities and incorporate spending impact analyses is therefore pertinent to ensure the securitisation of food safety regimes that could benefit both individual (health) and state (economic) biosecurity.

The following chapter concludes the thesis by summarising the contributions of the findings to both academic and food risk policy arenas.

Chapter 8 Conclusion

This PhD research adopted a multi-method approach to achieve an in-depth understanding of the nature, determinants and methods of food risk governance and communication in Ireland. Combining documentary, website and media analyses with semi-structured stakeholder interviews and consumer focus groups, Irish food risk governance and FSAI rhetoric, performance and impact was explored, resulting in a number of contributions to academic and policy spheres. This chapter begins by summarising the key empirical findings, linking these with the initial research questions and related academic and conceptual contributions. Thereafter, Section 8.2 highlights research contributions to policy and practical arenas, with attention then given to arenas requiring further research in Section 8.3. The final section provides some concluding comments on the research.

8.1 Key Findings and Academic Contributions

Drawing on the research questions established in Chapter 1 and reiterated in Chapter 7 relating to regulatory performance, communications impact and biosecurity infiltrations, this section summarises and extends findings relating to each of the three areas. As evidenced below, the three questions played an important role in framing the research process, while their exploration also gave rise to additional themes meriting further investigation.

Q1: In terms of regulation, what has been the role, and impact, of the FSAI on the landscape of food risk regulation in Ireland since its inception in 1999?

To objectively determine the impact of the FSAI remains an arduous task given the difficulties uncovered in this research in proving a cause-effect relationship between governance efforts and food safety. For example, decreases in food risk outbreaks cannot be accurately attributed to the work of the FSAI alone, particularly given the multitude of actors working across scales (local to global) and spheres (public, private and civil society) to govern food risk in Ireland. Further, attempts to answer this research question raise immediate problems regarding the subjective meaning of terms such as impact, performance, success and failure (for example, see Yang and Holzer

(2006) regarding the subjective measures, meanings and images of government performance in wider contexts). As such, and expanding existing FSA literature from a focus on FSA establishment to an evaluation of FSA performance and impact, suggestions for measuring FSA performance were proposed in Chapter 7. Extending the environmental 'policy effects' approach outlined by Crabbé and Leroy (2008) that focuses on policy outcomes, outputs and impacts, qualitative measures of power, normative guidelines of good governance and research participant perceptions were added to incorporate institutional and stakeholder performance assessments. While this model is vulnerable to accusations of subjectivity, potential remains for it to be further developed, tested and expanded upon to measure FSA performance worldwide.

Empirical results revealed mixed perceptions of FSAI performance amongst stakeholders with some (unsurprisingly perhaps from public and FSAI sectors in particular) highlighting significant FSAI achievements and others (particularly from private and civil society sectors) noting degrees of failure in the face of a lack of fear of, and limited respect for, the FSAI amongst food industry members. Ireland's reputation for 'good, safe' food however is subjectively acknowledged by many public, FSAI and semi-state stakeholders to remain intact as a result of the FSAI, with its handling of food crises also drawing much praise from such research participants. Questions nonetheless remain regarding the accuracy of such performance attributions to the FSAI, with nostalgic views of agricultural practice in the 'Emerald Isle' perhaps distorting such opinions and not reflecting existing industrial farming practices. Further, as highlighted in Chapter 5, the success of the Irish food risk regulatory system was not overly apparent in consumer responses. Although many assumed food in Ireland to be safe, they did not specifically attribute this to effective governance performance or a successful FSAI. Instead, subjective emotions and 'gut instincts' that Irish food is safe and can be trusted dominated such discussions. Thus, providing a unique governance focus excluded from Irish food risk research to date, the contributions of such stakeholder and consumer experiences, perceptions and emotions were crucial in drawing conclusions of FSAI impact. While potential for bias and self-interest in responses must be acknowledged, such perceptions should not be disregarded as meaningless. After all, it is these actors who engage, interact, are answerable to and/or are the beneficiaries of the FSAI's existence.

Nevertheless, while the FSAI is largely believed to have been effective in its governance of food risk to date (albeit with some 'paradox of a crisis' themes), doubts remain on consideration of its efficiency. For example, with a principal role of coordinating food risk governance in Ireland, the efficiency of the FSAI is questionable

for many research participants given the plethora of actors still involved in governing food risk in Ireland (including through the FSAI-led service contract system). While some stakeholders attest that the current system is considerably more coordinated than previous governing arrangements, the persistence of a complex web of food risk governing bodies continues to confuse consumers and hamper FSAI awareness. Such a convoluted system may also provide opportunities for industry to devolve food safety responsibility onto this structure and dodge liabilities, making bodies such as the FSAI the scapegoat for food safety responsibility. Meanwhile, other interviewees attribute gaps and flaws in this system as allowing food scares to occur. Thus, indicating distinct differences between perceptions of FSAI effectiveness and efficiency, this research highlights the often subjective nature of institutional performance measurement. What is deemed effective or efficient for one may not match another's experience, with interests, bias, value judgements and power playing significant roles.

Finally, the proactivity of the FSAI may also be questioned when considering its role and impact to date. Indeed, multiple research participants criticised the FSAI's perceived reactive communications and focus on crisis management rather than crisis prevention. Although FSAI stakeholders claim to prevent multiple food risks from escalating into crises (which are subsequently not reported in the media and brought into consumer consciousness), additional documentary analysis, website and interview evidence points to an Authority that is merely waiting on instructions from Europe or for the next food scare to occur. Thus, in sum, while the inception, activities and strategies of the FSAI have brought multiple benefits to the Irish food risk governing landscape, significant room for improvement remains. Practical suggestions for how this might be achieved are outlined in Section 8.3.

Q2: Regarding communication, what impact have the strategies of the FSAI had in terms of communicating food risk securitising activities to foster compliance, trust and awareness in external agents?

Preoccupations with effective risk communication have dominated many academic and policy spheres to date. Effective communication in the food risk arena may be considered particularly essential given the significant impact accurately received information can have on domestic and industrial food safety practices and, by consequence, human health and state economics. As this statement suggests, effective communication thus not only depends on organisations communicating messages

effectively but audiences being willing to receive and trust them. The impact of FSAI communications was thus assessed from both a technical, risk message construction standpoint and by perceptions of such communications by relevant audiences. Results from the documentary and website analyses proved particularly useful to establish the FSAI rhetoric in this regard. For instance, while the FSAI website was found to feature multiple examples of positive communications and website quality, other online items require improvement. This includes both in terms of website content and site advertising (to attract more users). Meanwhile, a documentary analysis of FSAI surveillance publications revealed tendencies towards one-way, blanket and standardised communiqués with little differentiation in content or style for the audiences it wishes to engage. This contradicts recommendations by McCarthy and Brennan (2009, p551) to avoid “*one voice/one message*” food risk communications in Ireland given the reported heterogeneity of the Irish population, and calls from Frewer (2004) to develop targeted risk communications to maximise information delivery to at-risk or vulnerable individuals. Such findings perhaps provide partial explanation for the experiences gleaned from interview and focus group phases, particularly regarding stakeholder and consumer expressions of compliance, awareness and trust.

Regarding communications impact on industry compliance, for example, significant levels of private sector fearlessness and dismissiveness of the FSAI were found to exist. Such results may nevertheless reflect naturally tense regulator-regulated relationships uncovered in other environmental (Petts, 2000) and food safety contexts (Yapp and Fairman, 2006). Indeed, such reactions are perhaps only natural in governance arenas as different actors seek to secure dominance, pursue vested interests and ensure that their agenda is prioritised at the lowest possible cost to their operations (financial and temporal). In communicative terms, these motivations may result in different actors wanting to hear different things from the messages supplied by governing authorities. As with subjective FSAI performance perceptions, a cocktail of personal agendas, interests, values and contexts can thus be deemed to also influence communication reactions and acceptance.

Regarding FSAI awareness and trust, while most stakeholders were able to discuss the FSAI in depth (a sign of communications success in stakeholder spheres), many consumers were unsurprisingly unable to name any specific food risk governing body in Ireland. This latter response is perhaps somewhat reflective of the complex plethora of food risk governing actors that exists, although it may also be indicative of

representative democracy ideals³⁰. FSAI awareness would nonetheless represent a further sign of 'good' regulatory governance and communications for the Authority. Nevertheless, despite this lack of consumer awareness, stakeholders assume that publics trust the FSAI, particularly when a crisis occurs. In reality however, degrees of scepticism and motivational suspicions were uncovered in focus group sessions.

Complementing and extending existing food risk communications literature by introducing a distinct Irish, non-crisis and institutionally-focused element to these discussions, many consumers were also found to be confused by perceived contradictory food safety messages, lack interest in food safety education and lack access to relevant information. Perceptions of industry and governmental cover-up, an ongoing digital divide and a lack of interest in online resources that the FSAI depend upon fuelled these latter experiences. A distinct lack of participation and engagement with food risk governance processes was also evidenced throughout focus group sessions, with most consumers seemingly unaware of the communication and participation fora of the FSAI. Such findings may however also be explained utilising frameworks proposed by Beck (1999) regarding levels of societal ignorance or gaps in knowledge bases in the world risk society. For Beck (1999), this unawareness may arise, among other things, out of society's inability to know (lacking conceptual tools for knowledge advancement), unwillingness to know (fuelled by a lack of interest and enthusiasm), selective transmission and reception of knowledge and/or a lack of confidence in the present knowledge provided (see also Ekberg (2007)). This suggests that a lack of public engagement in, and awareness of, Irish food risk governing processes may not in fact be indicative of poor FSAI communications. Feelings of distractedness, disinterest and 'anti-establishment' portrayed by some consumers (explored in Chapter 5) further support Beck's (1999) theses of unawareness.

Meanwhile, the creation of *Safefood* in 2001 was found to further complicate the FSAI's communications impact. Splitting the communications responsibility of the Authority, it is thus no longer within the FSAI remit to educate consumers about food safety or nutrition. However, recent attempts by the FSAI to gain traction in this arena (for example, publishing healthy eating documents in June 2012) raise questions over the efficiency and clarity of this split. Presenting simultaneous problems of communications duplication and possibilities for communications inaction (on belief that the other organisation will do it), greater clarity is therefore required in the FSAI

³⁰ Whereby publics do not have to actively engage, think about or take action in food risk governance as a result of designated, established bodies (Besley and Coate, 1997; O'Neill, 2001).

communications remit. Practical examples for how this may proceed are also provided in Section 8.3.

In sum, this research revealed various discrepancies and misconceptions between FSAI communications rhetoric, stakeholder experiences and consumer realities. This raises questions regarding the positive impact and purpose of FSAI communications. While effective communication cannot act as a panacea for problems of compliance, confidence and awareness, it can encourage progress towards a more transparent, trusted, respected and effective FSAI. However, being aware of the FSAI also does not necessarily ensure compliance with (and/or trust in) its agenda. As such, a broader examination of FSAI actions, and in particular, the underlying logics and rationalities behind these activities, is required to develop effective mechanisms for future communication and action that ensure optimum industry and consumer compliance, trust and awareness.

Q3: Concerning biosecurity, how have the logics and strategies of biosecurity infiltrated and performed within food risk governing practices in Ireland?

Drawing on Rasborg (2012), addressing this research question opened up further avenues of investigation regarding the risk logics and rationalities of the FSAI. Acknowledging the development of a partial risk society in Ireland (Chapter 5) and a partial panoptic structure in the form of the FSAI (Chapter 6), additional risk governing logics were found to exist in the Irish food risk context. Demonstrating the value of utilising theoretical neoliberal and biosecurity perspectives (and the interplay between them) to understand the role, actions, performance and impact of FSAs, this empirical research highlighted the dynamic coexistence of neoliberal and biosecurity agendas in the work of the FSAI. Incorporating increased tendencies to govern life by economic logics (neoliberalisation) (Castree, 2008; 2008a) and efforts to prevent and manage risk to life and health (biosecurity) (FAO, 2007; Bingham et al., 2008), this complements and contributes to the (as of yet) relatively under-developed literature on biosecurity-neoliberal interactions (see Major (2008), Bingham and Lavau (2012) and Maye et al. (2012) for some exceptions).

In particular, the interplay between such operational logics was found to produce a variety of tensions and compatibilities in the Irish food risk governance arena (Devaney, 2013). Indeed, such tensions were evident in the ambivalent responses of

stakeholders and consumers towards FSAI activities and impact. Although cautious of the subjective factors that may have determined these varied perceptions of purpose, power and performance, tensions were apparent between stakeholder attributions of FSAI success as a biosecuring agent operating to make life safe for consumers, and others who criticised its inefficiencies, called for the protection of industry profits and mooted ideas of unfettered food trade and private sector self-regulation. Mixed perceptions of FSAI performance were thus prevalent throughout consumer and stakeholder groupings, with apparent tensions arising between opinions of effectiveness characterised under biosecurity logics and reflections of efficiency within neoliberal regimes.

At a broader food risk governance level, such tensions manifested between individuals who called for more securitising structures, regulations and policing actors (motivated by concerns for biosecurity) and those driven by neoliberal and economic logics that emphasise more efficient spending of food risk governing budgets, less waste and more streamlined structures in Ireland. Such operational logics need not always be in conflict however, as similarly suggested by Maye et al. (2012) and Hinchliffe et al. (2012) in alternative biosecurity contexts. For example, some compatibilities were obvious in non-crisis, risk communication arenas explored in this research that underscore the need for increased knowledge and cooperation to securitise life, as well as efficiency in terms of how messages are transmitted.

Exploring what logics predominate FSAI actions and broader food risk governance processes in Ireland nevertheless remains a difficult task. Instead, research findings position the FSAI as an institution that is neither wholly neoliberal in practice nor solely preoccupied with biosecurity ideals. Policy, regulation and state intervention remain important characteristics in the Irish food risk landscape preventing absolute attributions of the FSAI as an institution of the "*neoliberal world*" (Maye et al., 2012, p150). Equally, the prevalence of industry interests, concerns for international competitiveness and desires for unfettered food trade remove it from solely representing a biosecuring institution. Instead, operating at the interface of these two logics, the FSAI appears to attempt to securitise both the health and safety of populations and industry profits, unrestricted food trade and Irish market competitiveness. Following Hinchliffe et al. (2012, p18), the FSAI can thus be said to operate within a complex "*borderland*" where biosecurity ideals are forced to interact with alternative operating logics. Similarly, as with Bingham and Lavau (2011, p26), the FSAI can be considered a "*mingled body*" whose role lies not only in securitising the health of populations but stabilising "*capitalist relations of power and accumulation*" (Robertson, 2004, p361) for

the Irish food industry. Thus, as with Foucault's (2007, p19) description of a multi-functional 17th century town, the FSAI operates with a form of "*poly-functionality*" in its efforts to securitise the Irish food supply.

The potential for these logics to continue to fluctuate in an uncertain future is obvious as emerging food risks, economic recession and internal governance issues inevitably vie to shape the path and priorities of the FSAI. Questions can also be raised concerning the impact competing security logics have on food risk governance in practice and whether it matters what dominates the FSAI rationality if food is kept safe. Regardless, the ability of the FSAI to fluctuate between these two approaches provides hope that the most accurate security logic will predominate when necessary. This includes, for example, in times of crisis (when biosecurity should be prioritised) or non-crisis (perhaps a time to focus on the neoliberal efficiency of current structures). The portrayal of these ideals compared to actions in reality may however mask ulterior motives in times of crisis (for example, with belief amongst many interviewees that the FSAI reaction to the 2008 Irish pork dioxin crisis was predominantly for economic rather than health reasons). Thus, the ultimate governing logic adopted depends on decisions made by the elites driving food risk governance at present. Highlighting the continuing role of competing powers, interests and scalar relations in food risk governing practices, the potential for influence from industry and European bodies on risk governing logics thus remains in the national FSAI context. The need to incorporate consumer concerns and participation is therefore perhaps ever pertinent to ensure a balanced approach to food risk regulatory matters in the future.

Constituting a novel conceptual lens for understanding FSAs, tensions and compatibilities between neoliberal approaches (that call for economic rationality and claim more structures are not needed) and biosecurity needs (that call for increased policing, security investment and actors in food risk governance) were thus found to predominate the Irish food risk governance context.

8.2 Research Implications

Moving beyond an academic sphere, the research findings also have a number of implications for those involved in governing food risk in Ireland across institutional, national and international scales.

8.2.1 Implications for the FSAI

First, the lack of compliance amongst industry and limited trust and awareness amongst consumers suggests a need for the FSAI to improve its message, audience and communication transmission factors, to ensure effective future communications and optimum impact. As explored in Chapter 7, this could include improving the use of traditional media communications (the preferred communication channel of consumers) and direct contact and workshops with industry (the preferred communications method of stakeholders). More dramatic advertisements for publics and persuasive tactics to evoke fear in industry communications are also perhaps necessary to increase FBO compliance and consumer food safety awareness. Further consistent and subliminal messaging (for example, regarding the FSAI's activities and achievements) in non-crisis contexts may also increase FSAI awareness amongst publics. To build and maintain public trust in its activities, the FSAI should additionally aim to increase the transparency of its operations and promote public participation mechanisms where possible (including, for example, the presence of the FSCC, online public participation mechanisms and increasing the detail provided about EHO inspections). This is particularly important given levels of scepticism and lack of FSAI awareness amongst consumers participating in this research.

Meanwhile, following risk communications literature detailed in Chapter 2, it is considered imperative that risk assessors, managers and communicators gain understanding of how the lay person conceptualises, understands and responds to risk to ensure effective risk communication strategies and trusted action (Slovic, 1987; Griffith et al., 1998; Frewer, 2004; McCarthy and Brennan, 2009). The results of the research presented here may thus prove useful for developing appropriate risk communication regimes within the FSAI, incorporating consumer (and indeed stakeholder) expectations, desires and knowledge bases. More specific recommendations for improving FSAI communications are highlighted in Table 16 drawing on such research findings and effective risk communications literature concerning GM foods (Frewer et al., 1996; Dean and Shepherd, 2007; Siegrist et al., 2007), nutrition (McGloin et al., 2008), food risk (Frewer, 2004; McCarthy and Brennan, 2009; Cope et al., 2010) and general risk contexts (Bier, 2001):

In terms of....	Strategies for improvement: the FSAI should...
Message	<ul style="list-style-type: none"> • Strive to simplify its messages, limit scientific jargon and clarify meaning without losing accuracy. • Communicate the benefits, probabilities and uncertainties associated with hazards as well as the risks. • Communicate the food risk management, prevention and control programmes in place to address food risk. • Provide FSAI contact details in all publications, advertisements and press releases to encourage stakeholder and consumer engagement. • Utilise channels of communication most appropriate and desired by target audiences. • Seek to communicate surveillance and activity results in a shorter, more accessible format - perhaps through targeted industry newsletters. • Include more colour, visual matter and graphs in communications to increase interest, readability and understanding.
Audience	<ul style="list-style-type: none"> • Seek to understand existing audience knowledge bases, perceptions, needs and concerns and focus messages and activities accordingly. • Recognise the range of audiences that FSAI publications appeal to (industry, policy-makers, scientists and consumers) and construct messages as such. • Identify vulnerable or 'high risk' groups and focus communication efforts here. • Highlight the relevancy and impact of the surveillance results on everyday life to increase uptake and understanding. • Pre-test messages with key audiences
Institutional Trust	<ul style="list-style-type: none"> • Aim to demonstrate honesty, openness, transparency, care and competence in all communication efforts. • Show a willingness to consult and engage stakeholders and the public in its activities through clarification and advertisement of the purpose, scope and outcomes of consultation efforts. • Display evidence of the success of past FSAI activities where possible • Collaborate with health and consumer agencies when communicating results to limit perceptions of industry bias. • Develop an FSAI stamp for foods produced with the specific approval of the FSAI and/or include informational lines in radio and television food advertisements regarding the regulatory activities of the FSAI.

Table 16 Recommendations for Future FSAI Communications

Moving beyond communication recommendations, while the majority of stakeholders and consumers interviewed highlighted a need for the continued existence of the FSAI as a key food risk governing institution, many proposed conditions under which it should continue in this capacity. For the majority across sectors (including DAFF representatives), this revolved around a need to remain independent from DAFF

and related perceived vested industry and economic interests. One exception to this emerged from one present FSAI employee who believed that the FSAI can get lost within the wide remit of DoH (to whom it is currently accountable), suggesting that a trial accountability to DAFF may prove beneficial. Nonetheless, for the majority interviewed, a need for the FSAI to remain with DoH was emphasised. Although this is somewhat contradicted by the persistence of a poly-functionality in the FSAI (whereby economic and health interests simultaneously feature), accountability transferral to DAFF may further hamper perceptions of FSAI efficiency, trustworthiness and loyalty to consumer interests. Indeed, at a time when other countries are reported to be turning to Ireland for food safety and national FSA advice (FSAI, 2008), the importance and need for the FSAI to achieve the most effective and efficient governance and communications positioning is ever pertinent. As such, rather than inducing a dramatic shift in accountability to DAFF, potential exists to develop better inter-departmental interaction between DoH and DAFF to ensure that all perspectives are considered and connected in governing food risk in Ireland. This is particularly important given persistent divisions in food and feed risk governing remits.

Nevertheless, drawing on Peters and Hogwood (1985, p252) regarding the inevitability for "*periods of succession and termination [to] follow periods of initiation*" in an American regulatory institution context, it is inevitable that the FSAI's structure, remit and existence will alter according to prevailing economic, political, social and crisis conditions. A need thus remains for the FSAI to persist as a responsive, and hence dynamic, body capable of changing according to prevailing external conditions and demands. In addition, as with all FSAs, a need exists for the FSAI develop an improved structure, routine procedures for performance evaluation, an effective leader and a more clearly defined, perhaps expanded, remit. For example, as mooted in Chapter 6, the need for a proactive, charismatic and knowledgeable CEO is essential for future FSAI success in terms of communication outputs, internal employee morale and institutional awareness, transparency and respect. Meanwhile, possibilities to incorporate a broader 'healthy eating' remit and responsibility for feed safety remain. This could additionally help to reduce food governance gaps and overlaps in Ireland, ensure consistent monitoring 'from field to fork' and ultimately reduce food risk in the Irish food chain. Moreover, these aspects could allow the FSAI to become more independent, efficient and proactive in the future, enabling it to challenge industry, ensure compliance, develop trust and awareness and assert itself as a reflexive, flexible and respected institution in the food governance landscape. Moving beyond an institutional FSAI focus, a need to improve, enhance and simplify the wider web of governance currently evident in Ireland was also uncovered in this research.

8.2.2 *Implications for wider food risk governance processes*

With specific concern arising around the confusion, overlaps and gaps in food safety responsibilities in Ireland (perceived to allow food scares, inefficiencies and monetary waste to occur), several stakeholders highlighted the small island and population status of Ireland when dismissing the need for the number of food governing bodies currently operational. Thus, while Irish food risk governance is perceived by the majority of stakeholders to have improved significantly over the last decade and consumers assume food in Ireland to be safe (albeit not specifically attributed to such governing structures), this research highlights the need and potential to improve the structure, efficiency and effectiveness of this governing system further. For example, in times of austerity, it may be appropriate for the FSAI to merge with *Safefood* to bring greater consistency to Irish food safety communications, demonstrate efficiency and highlight the effective spending of public money. Streamlining and clarifying responsibilities by creating one body responsible for safe and healthy food in Ireland, this reverts to the original plan for the FSAI prior to the politically-motivated establishment of *Safefood* in 2001. The FSAI may then also possess a clearer remit, positioning and respect, rather than getting lost within the complex web of governance that currently exists. Further, given increasing anti-establishment feelings amongst the Irish population (McCullagh, 2007; O'Sullivan, 2007), it is essential that no waste is shown to exist within public sector structures. As such, potential also remains to amalgamate (or at least coordinate) the food safety structures of the Republic with those of Northern Ireland to govern Ireland as one 'clean, green food island' more effectively and efficiently.

As mooted in Chapter 6, the potential to create a single, unified food safety agency also remains in the Irish context (bringing the entire inspectorate under one roof). However, associated start-up costs and disruption to existing services make this option unlikely in the current economic climate. Thus, improvements to the service contract system could serve as an initial guiding step for food safety governance reform, with increased FSAI budgetary control over the service contract agencies and enhanced utilisation of the powers of publication representing possible approaches in this regard. This could ensure stricter accountability lines within the service contract system and FSAI capabilities to reprimand agencies when necessary. Incorporating elements of good governance and better regulation, such reforms could further increase the accountability, transparency and efficiency of the food risk regulatory system in Ireland.

For consumers, alternative ways of improving the effectiveness and transparency of national food risk governance also exist, with responsibility attributed to actors across the inspectorate. This included suggestions for more spontaneous, transparent and regular EHO inspections at the FBO level, with a rating of such inspections and display of resulting grades in FBO windows also deemed desirable (similar to rating systems in New York, Toronto, Los Angeles and the UK (Consumer Focus Wales, 2012; NYC Health, 2012)). Suggestions to introduce monetary fines for non-compliant FBOs were also proposed by consumers, although questions remain regarding how to measure and impose such penalties on the private sector. Promoting the food safety education of food business owners as well as EHO's understanding of catering operations were also suggested by stakeholders to enhance food risk regulation in Ireland and related industry-inspectorate relationships.

Finally, moving to an international scale, desires to standardise food risk governing regimes worldwide were expressed by stakeholders and consumers alike. This reflects findings of Eden et al. (2008) regarding UK consumer perceptions of variable organic standards worldwide and concerns of American consumers regarding unpredictable and fluctuating food legislative regimes of exporting countries (IFICF, 2011). Although difficult to achieve in practice as a result of varying national resources, crisis experiences and political contexts, such efforts are particularly important given consumer perceptions of food risk coming from the 'outside' into Ireland. Concerted and coordinated efforts by international food risk governing structures such as the EFSA, the FAO, Codex Alimentarius and the US Food and Drug Administration would be required to achieve this. Pushes for increased standardisation and improved food safety controls worldwide thus remain, reflecting concepts mooted in recent biosecurity literature regarding the practice of biosecuring as a never-ending process that can always improve and evolve to better make life safe (Bingham et al., 2008).

Incorporation of these research suggestions into practical and political spheres could thus serve to enhance existing food risk governance in Ireland and abroad. This is particularly important as food production continues to intensify, producing new and increasing risks to human health and food industry reputation. Indeed, such advances are especially crucial for Ireland given the significant human and economic dimensions dependent on safe food regimes for future stability. Nonetheless, while these practical suggestions could significantly improve food safety management, the inevitability of food risk and crises in everyday life must also be acknowledged. In other words, despite governance improvements, it is unlikely that food risk will ever be fully eradicated. A

need to remain alert, communicate and cooperate with international 'others' will thus prove vital in *controlling* food risk in the future.

Food risk governance represents a perpetually evolving process, with multiple uncertainties existing regarding its future as a result of unpredictable crisis contexts, economic climates and technological (and related risk) development. For example, the occurrence of the 2008 pork crisis altered the trajectory of the FSAI life cycle, saving it from amalgamation with other government bodies on the basis of its crisis management skills (Oireachtas, 2009). Thus, while suggestions to improve future structures outlined above are valid and important, it is possible only to understand and develop these ideas based on present contexts, existing data and current knowledge bases. A need for continual and further research in such arenas is thus crucial, with specific suggestions outlined below.

8.3 Suggestions for further research

By answering the three questions established from the outset of the research, several areas were highlighted that merit further investigation. First, from a regulatory performance perspective and highlighting the lack of accurate and objective measures of FSA performance worldwide, the qualitative analysis of FSAI performance outlined in Chapter 7 lays foundations for further empirical work to develop policy-orientated proposals for measuring and improving future food safety governance. Care must be taken however in directly applying one food safety governance approach, or FSA performance model, worldwide. With significant variances reported to exist between national FSAs and the context they operate within (Holm and Halkier, 2009; Abels and Kobusch, 2010), a need to tailor such models to suit local economic, political, social, structural and historical contexts thus remains. Potential for further comparative and collaborative research throughout the EU therefore exists to develop geographically sensitive food risk securitisation regimes and performance measurements.

Next, regarding communications approaches and engagement with the FSAI, further research is required to identify how publics form (or fail to form) relationships with food risk and relating governing structures. While extensive work has been carried out by Walls et al. (2011) in a European context regarding appropriate methods to engage stakeholders in food risk management, a paucity exists in the Irish consumer context. Extending concepts of the sceptical but denying consumer uncovered in this research, this could include ethnographic and action research incorporating methods of

observation and trial runs to identify the most appropriate measures for future engagement. With respect to governance and communications more broadly, the unstable and fluctuating economic, political and crisis contexts evident in Ireland at present also provide a suitable backdrop to develop more nuanced research in a variety of other environmental and health contexts. This could include, for example, attention to governance priorities, communication strategies and operational logics with respect to water, waste, biodiversity, climate change and sustainability issues in this unstable and economically restricted context. Representing another “*critical juncture*” (Abels and Kobusch, 2010, p12) in food risk and governance history, the need for academic scholarship to track, identify and inform policy in such dynamic times remains pertinent. Cross-disciplinary and international comparative research may prove particularly useful in this regard given the tendency for environmental and food issues to cross-cut a range of sectors, interests and political arenas.

Concerning biosecurity, the need for further research regarding the conditions under which different security logics are employed in food safety securitisation is essential given the significant impact competing logics (and the interplay between them) can have on securitisation performance. In particular, a need remains to continue research regarding the interplay between biosecurity and neoliberal logics in security arenas (food and others) to ensure the accurate protection of public health in the most economically efficient manner. This is particularly important in recessionary times as risks persist and may indeed increase due to cutbacks in risk policing areas, for example. A veil of secrecy surrounding security issues may somewhat prevent an accurate and detailed exploration of such arenas however. For instance, taking an extreme example, attempts to clarify or explore risk or security logics relating to terrorism may be hampered by the persistence of protected data, secretive locations and classified knowledge. Obtaining knowledge without compromising policing reputation and/or exposing the inner workings of security may thus prove difficult. Such inaccessibility may perhaps be less extreme in more transparent security areas (such as food risk governance) where confidential information is not as pervasive.

Nevertheless, despite the FSAI rhetoric portraying an open and transparent body, some hostility to this research being undertaken was experienced by the researcher. Manifesting in the form of suspicious, defensive and sometimes accusatory interviewees, such experiences were perhaps fuelled by the economic importance of the food industry to Ireland. Additional desires to portray positive and ‘politically correct’ responses to risk governing questions were also perhaps more predominant in such situations of national importance. This has the potential to raise significant challenges

when researching matters of secrecy (secret security) and matters of transparency (open security), with additional complications thus arising regarding security matters of particular national importance. The methods utilised in this research however were successful in somewhat circumventing these challenges, allowing food risk governance to be viewed from multiple perspectives. Highlighting the need for multidimensional, flexible approaches in security research areas, the political, practical and theoretical dimensions of Irish food risk governance were thus effectively explored in this way.

Finally, further reflecting the dynamic nature of food risk governance, potential to expand research findings relating to future food risk concerns and governance challenges exist. This is particularly important given reported needs to increase food supplies (while reducing food waste and production impacts on the environment) to meet increasing food demand to 2050 (for example, see Godfray et al.'s (2010) analysis of navigating the 'perfect storm'³¹ to ensure future food security). With strategies of intensification and increased technological interventions somewhat inevitable in such responses, the potential for increased food risk in production and consumption phases thus remains (with processes of past intensification, for example, reported to increase campylobacter rates in poultry sectors (Hinchliffe et al., 2012)). Further research could thus include qualitatively tracing the emergence of biotechnology or functional foods, for instance, to identify the reception, perceptions and impact of potential emerging food risks. While some quantitative research has been conducted regarding the acceptance of these technologies in Ireland (for example, see Irish Council for Bioethics (2005)), there is a lack of in-depth qualitative analyses in the fluctuating 'crisis-prone' environment that exists today.

In particular, scope exists to research innovative ways for addressing future food risks, with potential to pilot novel governing systems as such. This could include adopting 'participatory backcasting' approaches to develop effective food risk governance futures (as similarly utilised in a sustainable consumption context in Ireland, see Davies et al. (2012) and Davies (forthcoming)). Further, moving into the obesity arena (a highly contested subject of late and highlighted by numerous stakeholders as the principal future food risk for Ireland), reactions to and engagement with new obesity-reducing incentives (including the recent push for calorie counting on restaurant menus and the contested introduction of a 'fat tax' on unhealthy foods) merits further investigation. More specifically, a need exists to investigate how industry stakeholders react, respond to and resist such measures given that industry compliance is essential if

³¹ Encompassing the challenges of making food production sustainable whilst controlling greenhouse gas emissions, preventing biodiversity loss, conserving diminishing water supplies and ending hunger.

any such initiative is to succeed. This research is pivotal in a time when obesity is increasingly recognised as a major public health issue.

8.4 Concluding comments

By articulating the governance and communication of food risk in Ireland, this thesis progresses environmental and food risk research, particularly in the burgeoning academic and political arenas of food risk regulation, communication and biosecurity. Revealing the complex and dynamic nature of food risk governance processes, the subjectivity of stakeholder and consumer perceptions and importance of safe food was evident across participant contexts. After all, as with Rozin et al. (1999, p193):

“For human beings, food is a critical contributor to physical well being, a major source of pleasure, worry and stress, a major occupant of waking time and, across the world, the single greatest category of expenditures”

Food risk perceptions are thus inherently personal, emotional, deliberative, and conflictual and, as revealed in this research, subject to a variety of interests, power relations, internal politics, cultural influences and external forces. Indeed, it has been a dismissive approach to acknowledging stakeholder and consumer opinion in risk politics that has resulted in degrees of scepticism, mistrust and a lack of confidence across regulatory spheres, including those of food risk governance. Appreciation of such qualitative, in-depth perceptions (as in this thesis) is thus essential to the success of future food, and other, risk regulatory regimes. Indeed, research findings reveal that although Ireland is inundated with food risk legislation and teeming with food governing bodies, many consumers and stakeholders remain sceptical of their efforts and lack trust in these regimes. While trust in the safety of Irish food is high (indeed, patriotic food safety perceptions were found to exist regarding the superior safety and quality of national produce), this was rarely attributed to current governing regimes and/or the establishment and actions of the FSAI. Further, fears remain among consumers regarding the motives and practices of certain industry actors and the long term impacts of current food habits and behaviours. Such findings suggest significant implementation gaps either between Irish food risk governing rhetoric and actions in practice, or between Irish food risk governing practices and consumer perceptions and awareness. Whether real or perceived, a need exists to eradicate such implementation gaps to increase trust in food risk governing structures and counteract stakeholder and

consumer feelings of uncertainty and discontent. Benefitting public health and well-being, Irish food industry profitability and national GDP could also be protected in this way. Combining biosecurity (securing health) and neoliberal (securing economics and trade) ideals, the potential to realise compatibilities in this arena remains.

Indeed, a unique dimension of the research revealed compatibilities and tensions between biosecurity and neoliberal ideals in the Irish food risk governance context. This highlights the importance of understanding alternate risk logics and rationalities in contemporary risk governing regimes (as with Rasborg (2012)). Drawing on Beck's (1992) risk society thesis and Foucauldian positions on panoptic surveillance and governmentality (Foucault, 1977), this research is thus not promoting a single, uni-dimensional approach to understanding food risk governance and FSAs worldwide. Rather, findings highlight the need to adopt flexible, multidimensional approaches in such research and policy contexts to cater for the emergence of additional and alternative risk rationalities. Acknowledging the dynamic nature of food risk governance processes, alternative theories, logics and understandings may also become more relevant as priorities shift and governance agendas progress. For now however, this research has revealed a representation of Irish food risk governance from multiple perspectives, in a particular time and context. A need remains to reflect further on the links between such diverse frameworks and ideologies as food risk governance continues to evolve under dynamic economic conditions, changing food technologies and fluctuating crisis contexts.

In the final instance, that food is an essential component of existence means that it will remain a significant priority for research. Cross-cutting health, economic, environmental, development and social arenas, food risk research such as that outlined in this thesis is, and will continue to be, important across geographic, political and contextual scales. Adopting multiperspectival and adaptive research approaches, practical suggestions for policy could thus be developed with benefits for individual (health), state (economic) and environmental biosecurity.

Appendix

9.1 Documentary Analysis Worksheet

1. TYPE OF FSAI DOCUMENT:

<i>Press Release</i>	<i>Report</i>	<i>Fact Sheet</i>	<i>Leaflet</i>	<i>Survey</i>	<i>Poster</i>

Other: _____

2. DATE OF DOCUMENT:

3. AUTHOR OF DOCUMENT:

POSITION:

4. TYPE OF MESSAGE:

Educational/Awareness Raising

Research Results

Surveillance Activity Results

Enforcement Related

Food Allergen or Risk Alert

Other

5. TONE OF MESSAGE:

<i>Positive/Encouraging</i>	<i>Negative/Scaremongering</i>	<i>Neutral/Inform</i>

6. LANGUAGE UTILISED:

<i>Legal</i>	<i>Scientific/Technical</i>	<i>Everyday/Layman</i>

7. INTENDED AUDIENCE:

Industry

Producers

Retailers

Consumer

Government/Policy Maker

Researchers/scientists

EFSA

Internal FSAI body

Media

Other

8. ACKNOWLEDGEMENTS OF DIVERSITY WITHIN AUDIENCES:

9. PRESENCE OR ABSENCE OF:

	YES	NO
Background on FSAI		
Background on relevant legislation		
Aims and objectives of study		
Justification of samples taken		
Detailed Methodology		
Discussion of Results		
Development of conclusions/implications of results		
Indication of any future action/commitments		
Notes to editors (attempts to control media)		
Contact details for more information		

10. UNWITTING EVIDENCE – UNDERLYING ASSUMPTIONS AND INTENTIONALITY?

11. PRESENCE OF BIAS?

12. CIRCUMSTANCES IN WHICH DOCUMENT PRODUCED:

13. DOCUMENT INFORMATION:

- A. 3 key points from document:
- B. Why was the document written?
- C. Missing Information that could be useful:

14. PRESENCE OF OECD (2002) GOOD RISK COMMUNICAITON FACTORS:

	YES	NO
Distinguishing between hazards (the types of possible harms) and risks (the likelihood of people suffering from such harms)		
Specifying exposure rates and vulnerable groups		
Indicating the quality of the current knowledge base		
Describing any risk uncertainties and/or probabilities		
Providing compelling justifications for what constitutes a risk		
Contact information for further information		

15. USE OF VISUALS

9.2a Initial Contact with Interviewees

Dear Mr./Ms. X,

I am a second year PhD student in the Department of Geography of Trinity College and am conducting research into food risk governance in Ireland under the supervision of Professor Anna Davies. In particular, I am interested in the structures and bodies that govern food risk in the Republic. As part of this research, funded by the Irish Research Council for the Humanities and Social Sciences (IRCHSS), I aim to carry out approximately 30 interviews with various stakeholders to obtain their perceptions and opinions of food risk governance issues here.

As X [*previous/current position and interests of candidate that makes them appropriate for interview*], I would be really interested in getting your views on these issues. As such, I would be really grateful if you would be able to take the time in the coming weeks to meet with me and answer some questions? We could meet at a time and a place that is most convenient for you.

Thank you very much for your time and I look forward to hearing from you.

Best wishes, Laura Devaney

9.2b Initial Contact with Focus Groups

Dear X,

I am a second year PhD student in the Department of Geography of Trinity College and am conducting research into food risk governance in Ireland under the supervision of Professor Anna Davies. As part of this research, funded by the Irish Research Council for the Humanities and Social Sciences (IRCHSS), I aim to carry out approximately 8 focus groups comprising of individuals from different sectors of the public (in terms of living environment, gender, age and education) to obtain their opinions on food risk issues here.

I would be really interested in getting the views of X [group] and would thus appreciate the opportunity to set up a focus group with some of your members in the coming weeks. I hope this is something that you will be able to help me with.

I would need a group of between 6 and 8 participants and the session would revolve around discussing and sharing opinions on food and food risk in a relaxed and open manner. Participants would not have to prepare nor bring anything to the focus group session bar a willingness to participate. I would only need to meet with the group once and could meet at a time and a place that is most convenient for them. The session would last about one hour.

Thank you very much for your time on this and I look forward to hearing from you.

Best wishes, Laura Devaney

9.3 Letter of Consent



Dear Interviewee,

Thank you for agreeing to allow me to interview you as part of my PhD research. I would appreciate if you could sign this consent form to confirm that you understand the following:

- The interview will be recorded using a digital dictation machine
- The interview will be transcribed by the researcher, Laura Devaney
- All interview recordings will be destroyed once the project has been completed and the thesis written and finalised
- All interviewees shall remain anonymous and shall be identified using interviewee category titles such as, for example 'Politician 2', 'Consultant 6'
- Transcripts of the interviews will be kept for reference purposes, but the names of the interviewees will not be identified in these transcripts
- Direct quotes from the interviews shall be used in the thesis report and any resulting papers in the context of the analysis of the interviews, again the speakers will remain anonymous
- All care will be taken to ensure that quotes or excerpts from the interviews do not serve to identify the speaker beyond the interviewee category title used
- The recordings gathered during these interviews will not be released to any other party at any stage

I, the undersigned, understand the conditions listed above and on that basis agree to be interviewed by Laura Devaney for the purposes of her PhD research.

Signed:

Date:

9.4 Stakeholder Interview Question Schedule

(Example: Public Sector)

1) Introduction, identity and organisation

- a) What party/organisation do you belong to and what is your role within that party/organisation?

2) Irish Food Risk Governance

- a) In your view, what are the main risks related to food in Ireland at present?
 - i. how have these changed over time?
 - ii. how do you see these risks changing in the future?
- b) What structures are in place ensuring the safety of food in Ireland?
- c) How well do you feel these structures deal with food risks (for example, GM, pesticides, chemical contaminants)?
- d) *How necessary do you feel these structures are in the present day?
- e) Why, in your opinion, despite these measures are we still experiencing food product recalls, food business closures and food scares?
- f) Have your opinions on the effectiveness of food risk governance in Ireland evolved or altered over the last decade? (if yes, how and why?)

3) Role of FSAI in Irish Food Risk Governance

Now I would like to look at one food governing body in particular – the Food Safety Authority of Ireland

Purpose and Power

- a) What role do you perceive the Food Safety Authority of Ireland (FSAI) to play in governing food risk here?
- b) Why was the FSAI established in your opinion?
- c) How powerful do you perceive the FSAI to be? *(prompt: in managing the food supply? Influencing your business? Influencing consumers? In dealings with government? In dealings with corporations?)

Institutional Relations

- d) What or who do you perceive to be the main interests or drivers behind the FSAI and its activities?/ Whose interests do you perceived to be protected by the FSAI?
- e) Can you describe for me the relationship between the FSAI and the Irish state/government? (* and with Europe?)

- f) What key parties or actors do you perceive to be influenced by the FSAI and how, in turn, would you rate the relative power of each of these groups in influencing the agenda of the FSAI?

Functioning

- g) The FSAI insist that they utilise the most recent and best scientific information available in framing their activities and opinions- What is your opinion on the use of scientific evidence and advice in framing FSAI activities and are there any other viewpoints you would like the FSAI to consider?
- h) *Are you aware of the 'service contracts' the FSAI has with external actors and, if so, how effective do you perceive these to be?
- i) What is your opinion on the HACCP system as promoted by the FSAI?

4) Discourse of surveillance

- a) Are you aware of the routine food safety surveillance activities conducted by the FSAI, and if so, what purpose do you believe these to fulfill?

IF UNAWARE OF ACTIVITIES, EXPLAIN: *According to the FSAI website: "The FSAI continually implements the surveillance of food for the protection of public health. This monitoring is undertaken in conjunction with the official agencies and their associated laboratories." This surveillance is separate from the Environmental Health Officers' inspections of restaurants and food business premises and in total, five food areas are surveyed in this regard. This includes genetically modified food, irradiated food, the presence of chemicals, microbiological aspects and food labelling. In general, this involves the random sampling of products across the food sector at varying intervals in time and assessing for the presence of GM ingredients, irradiation, chemicals etc.*

- b) Why do you think these food areas were chosen for surveillance by the FSAI?
- c) *How important (if unaware)/ effective (if aware) do you believe these activities to be?
- d) Are there any other food areas you would like to see closely monitored in a similar manner? If yes, what?
- e) How necessary do you think it is for the public and stakeholders to be aware of these surveillance activities?
- f) *How could communication of such activities be improved upon in the future?

5) Communication

- a) What does the term effective communication mean to you?
- b) Applying this definition to the FSAI, how effective do you feel their communication strategies have been in the last decade? (so both in terms of crisis/risk and non-crisis communication)
- c) *What is your opinion on the types of messages and language utilised by the FSAI in their communication processes?
- d) How would you rate levels of public awareness of the FSAI and its activities?
- e) How would you rate levels of public trust in the FSAI and its activities?
- f) How necessary is it for the public to know about and trust in the FSAI and its activities?
- g) How important do you feel it is for the public to be involved in FSAI activities?
 - i. *Can you tell me about any measures that you are aware are in place at present to involve the public in FSAI activities?
 - ii. *How could these be improved upon for the future?

6) Performance of the FSAI

- a) In your opinion what have been the main achievements, if any, of the FSAI over the last ten years since its establishment?
- b) What have been its main failures, if any?
- c) Overall, what is your opinion on the performance of the FSAI over the last decade and how could it be improved upon in the future?

7) Future

- a) In your opinion, who should be responsible for the implementation and enforcement of food law in Ireland?
- b) What lies ahead for the FSAI both in terms of challenges and opportunities?
 - i. With all the budgetary talk of late, do you consider food safety governance to be an area where cutbacks can or should be made?

8) Conclusion

- a) I have no further questions, is there anything else you would like to add or discuss?
- b) Is there anything you would like to ask me before we finish the interview?

9.5 Focus Group Question Schedule

1) **INTRODUCTION** – Introduce session, purpose of focus groups, broad summary of my research etc. Produce consent forms for signature.

2) ICE BREAKERS (15 mins)

- a. Begin by going around the group with everyone giving a brief introduction of themselves and two key terms they associate with what food means to them so 'my name is ___ and for me food is ___ and ___'.
- b. Can you tell me about any changes in your food attitudes or habits that you have experienced in recent years? Perhaps, where you shop? Why you shop there? Types of foods you buy? Opinions on food production methods?
- c. I have noticed that the safety of the food you buy and consume is/does not appear to be an issue influencing your food habits. Why is this?
 - i. What does the term food safety mean to you?/What makes a food safe? 2 words?
 - ii. Do you believe that the food you buy in Ireland is safe?
 - iii. What is this trust/mistrust based upon?

3) FOOD SAFETY CONCERNS (20 mins)

****Present group with 3 food types – one meat, one fruit, one GM related – and get them to express their food safety concerns regarding each item ****

- a. What food safety issues most concern you regarding each item?/ do you relate to each item?
 - i. Pork – country of origin, quality label, safety, pork crisis
 - ii. Organic or conventional fruit – chemicals and pesticides debate
 - iii. GM related product – GMOs, long term impacts, chemicals used here, do they know of any GM in Ireland? Where did they hear about it?
- b. So in terms of regulating food safety, whose responsibility should it be to reduce, minimise or control these hazards you have identified?
- c. By comparison, who do you see at present regulating these areas? Do you trust them?
- d. Has anybody heard of the Food Safety Authority of Ireland? (Mission Statement, enforce law, coordinate governance, advice, helpline)
- e. How could this risk minimisation be achieved in practice? So how should this be done?
- f. Overall, how well do you feel these areas (such as chemicals, labelling and GM) are regulated to date?

4) COMMUNICATION AND PARTICIPATION (15 mins)

- a. What or who are the main channels through which you receive your food safety information at present?

- b. How satisfied are you with the way this food safety and risk information is communicated at present?
- c. Any suggestions for how the communication of food safety information could be improved? (would you like more information, would it change behaviour?)
- d. Who should be responsible for providing information on the food areas discussed today?
- e. Has anybody ever contacted any of the food governing bodies in the Republic, such as the Food Safety Authority of Ireland? How would they rate this interaction?
- f. *How do you feel your voice is heard in matters of food safety policy making and enforcement? Would you like to be more involved? (Inform of FSAI consultations?)

5) **GROUP ACTIVITY**** POLICING FOOD RISK (20 mins)**

- a. Rank the routine food safety surveillance activities in order of importance – GM, irradiation, chemicals, microbiological aspects, food labelling (state that it is something done by FSAI – where should they concentrate their efforts)
- b. While you do this I would like you to think about:
 - i. Which areas do you see as the most important to survey and monitor regularly? Which areas should the FSAI prioritise?
 - ii. What would you like to see more policing of, if any?
 - iii. Is it important to survey and monitor these areas?
 - iv. [Ask them to debate the topics out loud as they rank – need to come to a group consensus]
 - v. Start maybe by everyone saying what they would like put first.
- c. Brief feedback at the end outlining the reasons behind their choices.
- d. *Discuss any additional food area they would like to see monitored and reasons why.
- e. Looking to the future, including or outside of these food areas, what food issues do you think will be of most concern to you?

6) CONCLUSION (5 mins)

- a. Is there anything else anybody would like to add or discuss relating to the areas we talked about today?
- b. Is there anything you would like to ask me?
- c. Distribute survey for demographic profile- age range, gender, education, residence, familial status etc. Also provide room for additional comments.

9.6 Food Product Exercise



Photo 1: Food Product 1 – Branded rashers



Photo 2: Food Product 2 - Organic apples



Photo 3: Food Product 3 - Non-GM beans

9.7 Focus Group Surveillance Ranking Activity

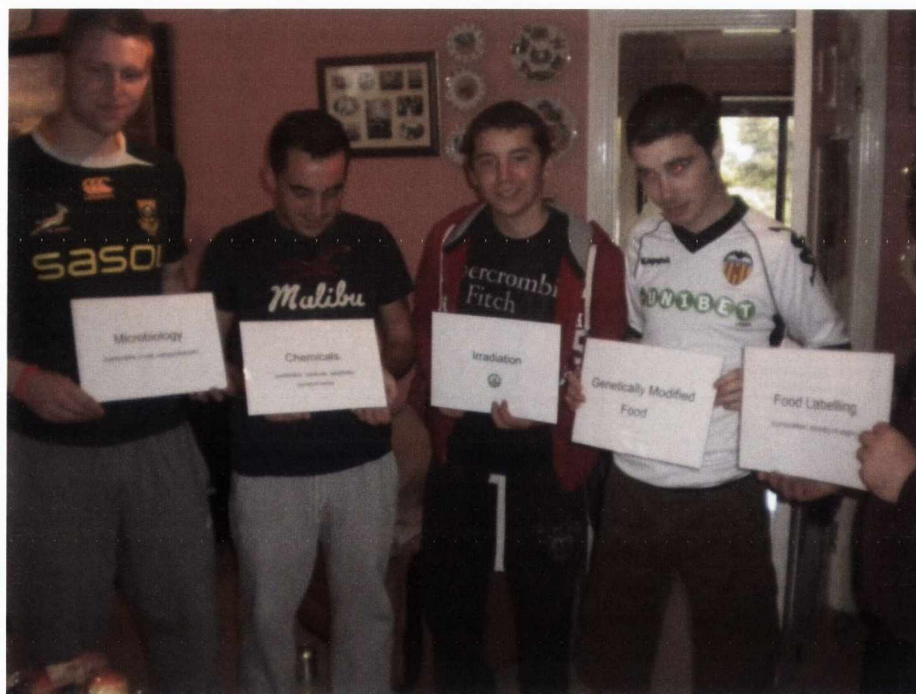


Photo 4 Surveillance Ranking - Sports Players

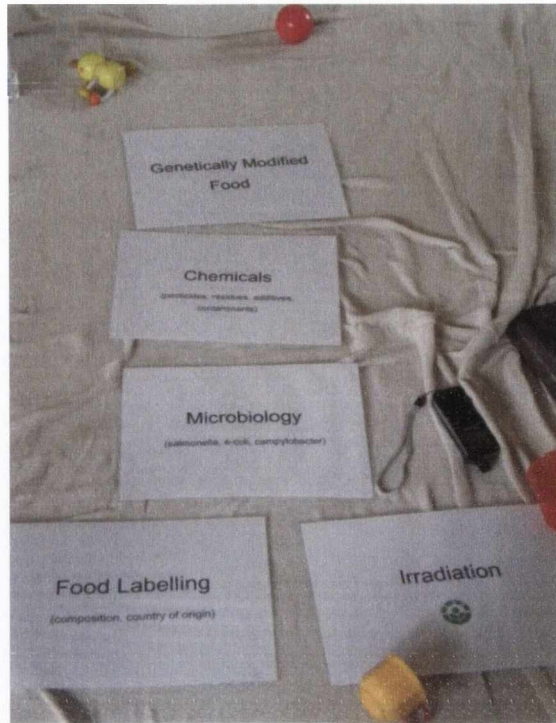


Photo 5 Surveillance Ranking - Mindful Parents



Photo 6 Surveillance Ranking – ICA Group

9.8 Focus Group Demographic Survey

Demographic Survey

Thank you for participating in this focus group session. I would appreciate if you could fill out the following survey before you leave to assist the research analysis process (*Tick as appropriate*)

GENDER: Male Female

LIVING ENVIRONMENT: Urban Rural

HIGHEST LEVEL OF EDUCATION COMPLETED TO DATE:

Primary Education	<input type="checkbox"/>	3 rd Level Degree	<input type="checkbox"/>
Junior Certificate (InterCert)	<input type="checkbox"/>	Masters Degree	<input type="checkbox"/>
Leaving Certificate	<input type="checkbox"/>	Doctoral Degree (PhD)	<input type="checkbox"/>
Higher Certificate/Diploma	<input type="checkbox"/>	Other (please specify) _____	

AGE:

Under 18	<input type="checkbox"/>	26-35	<input type="checkbox"/>	46-55	<input type="checkbox"/>	66+	<input type="checkbox"/>
18-25	<input type="checkbox"/>	36-45	<input type="checkbox"/>	56-65	<input type="checkbox"/>		

INCOME LEVEL (PER ANNUM):

€0 - €14,999	<input type="checkbox"/>	€30,000- €44,999	<input type="checkbox"/>	€60,000- €74,999	<input type="checkbox"/>
€15,000- €29,999	<input type="checkbox"/>	€45,000- €59,999	<input type="checkbox"/>	€75,000+	<input type="checkbox"/>

Other (please specify) _____-

******Thank you very much for your time******

9.9 Summary of Focus Group Findings

Theme	Detail	Example quote	Situation in broader literature
Food risk consciousness	<ul style="list-style-type: none"> Lack of food safety prioritisation by consumers Other food concerns predominate including nutrition and country-of-origin Consumers assume food in Ireland is safe 	<p>"I think a lot of us, whatever you're given, you eat it and that's it!" (Donal, Sports Players)</p> <p>"I think like you just sort of, you just sort of hope that it's safe" (Julia, Students)</p> <p>"Certain things I will eat and it wouldn't bother me now about anything" (Anne, Office Worker)</p>	<p>The 'Risk Society' (Beck, 1992) and its prevalence in Ireland (Tovey, 2002; Kelly, 2007) and the UK (Hinchliffe, 2000)</p> <p>'The age of anxiety' (Jackson, 2010)</p>
Risk from the 'outside'	<ul style="list-style-type: none"> Patriotic trust in Irish food Food from the 'outside' considered unsafe due to varying safety standards 	<p>"I'd definitely be more confident buying food here than I would abroad" (Caoimhe, Students)</p> <p>"Yea [GM] is something that I'd associate it with happening in America or something, you know? I just, you wouldn't think of it here" (Donal, Sports Player)</p>	<p>Biosecurity literature and the dangerous 'outside' (Barker, 2009); Hinchliffe et al., 2012; Philo, 2012).</p> <p>Sociological concepts of 'othering' (Joffe, 1999; Grove and Zwi, 2006; Nerlich et al., 2009; Jackson, 2010)</p>
Personalised risk perceptions	<ul style="list-style-type: none"> Influence of gender, age, education, income, living environment on risk and governance perceptions 	<p>"I wouldn't buy organic because it's too dear" (Aidan, FÁS)</p> <p>"I have to make a lot of food as well because of my son's allergies and that has made me conscious" (Jane, Parents)</p>	<p>Explored in a range of food risk contexts including regarding:</p> <ul style="list-style-type: none"> Food imports (Juric & Worsley, 1998) Meat and fish safety (Hoffman, 2000; Pieniak et al., 2007)

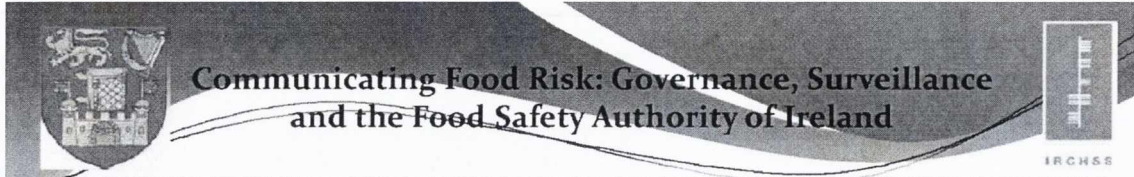
	<ul style="list-style-type: none"> • Role of personal food risk experiences in influencing safety perceptions 	<p>"Twenty two years without food poisoning is a pretty good run!" (Tommy, Sports Player)</p>	<ul style="list-style-type: none"> • Domestic food safety (McCarthy et al., 2006; Fischer and Frewer, 2008) • GM technology (Connor and Siegrist, 2010) <p>Also explored in broader risk contexts (Slovic, 1999; Finucane et al., 2000; Sjöberg, 2002)</p>
<p>Consumer practice versus theory</p>	<ul style="list-style-type: none"> • Consumers note food safety concerns but purchasing and consumption actions do not reflect idealised notions • Consumer actions do not reflect rhetoric 	<p>"I just eat and drink or eat whatever like, I wouldn't be thinking about it actively while I'm talking [about risks]" (Julia, Students)</p> <p>"I think there's so much of everything in everything you eat now, that you almost are afraid to read the label if you know what I mean" (Tess, ICA)</p>	<p>Risk awareness but inaction (Berg, 2004)</p> <p>Tiresome and impractical to remain constantly vigilant and disrupt routines (Berg et al., 2005; Wynne, 1995; Eden et al., 2008; 2008a)</p>
<p>Food risk communications</p>	<ul style="list-style-type: none"> • Significant role played by the media in food risk communications • Trust in local actors for food safety advice • Limited consumer voice in food risk governance processes 	<p>"There was a programme done, processing of ham there recently, and I believe that you would, I didn't see it but you'd never touch a bit of ham again" (Tess, ICA)</p> <p>"I actually stopped buying ham since I saw that" (Róisín, Parents)</p>	<p>Much risk communications literature has focused on desired communication channels and methods for improving messaging:</p> <ul style="list-style-type: none"> • In crisis contexts (Marra, 1998; Coombs, 2007; Liu et al., 2011)

	<ul style="list-style-type: none"> • Calls for increased proactive communications and education 	<p>“You also get advice in supermarkets, somewhere like SuperValu would advise you on that” (Cathy, Retirement Association)</p> <p>“[FSAI] should be up there every week, yea it should be a bit more proactive” (Gavin, FÁS)</p>	<ul style="list-style-type: none"> • General risk contexts (Frewer, 2004; Leiss, 2004) • Food risk scenarios (McGloin et al., 2008; McCarthy and Brennan, 2009)
<p>Trust in and need for FSAI</p>	<ul style="list-style-type: none"> • Simultaneous mistrust and dependence on government bodies • Attributions of food risk responsibility to the state • Need for independent FSAI 	<p>“Well the only option is the state isn't it? I mean would you trust anybody else to do it?” (Tim, Community Gardener)</p> <p>“Yea I think you really need to just make sure you have like a total external assessment [of food risk] like the Food Safety Authority if they would be, I don't know, or the World Health Organisation” (Elaine, Students)</p>	<p>Mistrust in government to manage:</p> <ul style="list-style-type: none"> • Risk (Renn and Klinke, 2001; Frewer et al., 2002; Macoubrie, 2006) • The environment (Hajer and Versteeg, 2005; Crabbé and Leroy, 2008; Roberts, 2011). <p>Anti-establishment feelings (Ivaldi, 2006; McCullagh, 2007, O'Sullivan, 2007)</p> <p>Trust in regulatory structures = trust in food (Berg, 2004; Berg et al., 2005; Knight et al., 2007)</p>

Table 17 Consumer Focus Group Findings

9.10 Summary of documentary and website analyses results

(Poster presented at the European Federation of Food Science and Technology Conference, November 2010)



ABSTRACT **AIMS**

Despite an increasingly sophisticated food regulatory framework and the formation of food safety authorities across Europe, the continuing existence of food hazards means that European consumers remain sceptical of the food chain and governing institutions currently in place. This poster presents the landscape of food risk governance in Ireland ten years on from the formation of Ireland's Food Safety Authority (FSAI). It illustrates the findings of a textual analysis of the FSAI's risk communication strategies conducted through a Foucauldian framework of surveillance and governmentality.

Analysis of data published on the FSAI website and in FSAI documents was undertaken to examine:

- The regulatory functions, structure and organisation of the FSAI.
- FSAI communication strategies.
- The surveillance strategies adopted by the authority.

METHODOLOGY

This element of the research project consisted of two key stages:

1. A detailed review of the information presented on the website of the FSAI including an assessment of the quality of the site through application of the Web Assessment Index developed by González and Palacios (2004).

2. A detailed analysis of selected reports posted on the FSAI website, specifically relating to the routine food safety surveillance of GM foods, chemicals and labelling. Throughout these documents, key communication strategies were noted along with the language utilised to communicate results, food risks and management practices.

RESULTS

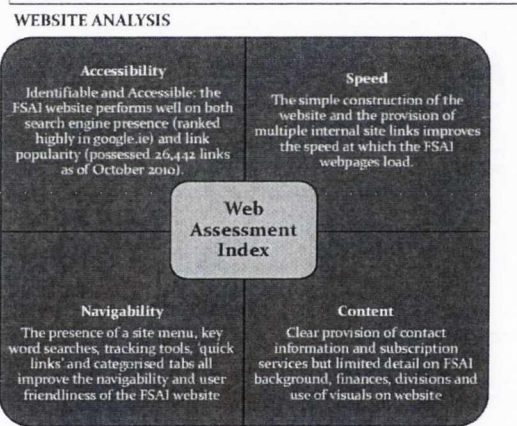


Figure 1: Results from the Web Assessment Index.

Additional Website Analysis Results:

- Language utilised: generally simple, positive and proactive
- Attempts to reach wider audiences: Facebook page, multi-lingual food safety training documents.
- Trust Building Techniques (De Jonge et al., 2008):
 - ❖Competence – emphasis on utilising science
 - ❖Care – emphasis that the 'consumer comes first' (though some contradictions exist)
 - ❖Openness – assurances concerning the independence of the authority, detailed information provided on FSAI employees and the provision of multiple means for contacting the authority all increase the transparency and accountability of the FSAI.
- Limitations of the FSAI website:
 - ❖Time lag in publishing information
 - ❖Informational gaps
 - ❖Maintenance issues – presence of broken links

DOCUMENTARY ANALYSIS

- ❖**Message:** Inconsistencies between reports exist in terms of length, content, presentation format and language. The majority of the reports also fail to define key terms (especially 'maximum acceptable limits') and justify samples while a limited use of graphical/pictorial matter to clarify meaning is also obvious.
- ❖**Audience:** The FSAI does not acknowledge diversity among and within its surveillance report target audience. In addition, vulnerable groups in society are rarely identified in these reports.
- ❖**Institution:** The FSAI reports fail to build trust effectively – multiple 'empty promises' are made regarding future surveillance work while significant time lapses between the conduction of experiments and the publication of results are also evident. Further, although surveillance activities are labelled 'routine' they are inconsistently undertaken (see figure 2).
- ❖**Impact, evaluation and compliance:** Questions can also be raised regarding the effectiveness of the routine food safety surveillance activities given that negative results continue to persist throughout the studies while there also appears to be no industry fear or obligation to comply with the FSAI.

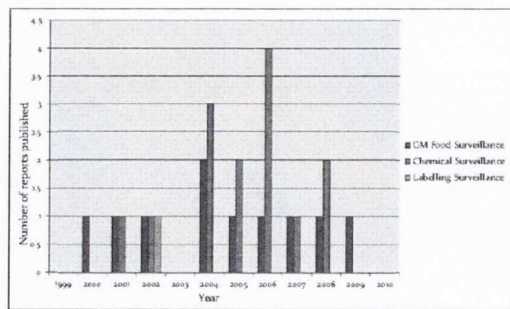


Figure 2: GM Food, chemical and labelling surveillance reports published

INITIAL FINDINGS

Despite recent efforts by the FSAI to improve its food risk communication strategies and reach wider audiences, current strategies adopted still lack a significant level of interaction with the communities it wishes to engage with. The messages tend to be limited, one-way, blanket communiqués with little differentiation in style or content for different sectors of the public. In particular, a severe deficit exists in terms of information communicated regarding the routine food safety surveillance activities. Such findings provide one explanation for the apparent lack of awareness of, and trust in, the FSAI.

ONGOING RESEARCH

Further in-depth research will be conducted to deepen understanding of the relationship between governance, surveillance and food risk communication in Ireland. This will include conducting stakeholder interviews and public focus groups.

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