



**The 'Horse-Meat' Scandal: Illegal activity in the Food Supply Chain.**

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## The 'Horse-Meat' Scandal: Illegal activity in the Food Supply Chain.

### Abstract

**Purpose:** Food supply chain theory and practice generally assumes that the business practices and processes involved are ethical, legal and value adding when this is not always so, as demonstrated by the ongoing 2013 Horsemeat Scandal. Although it is ostensibly a UK based affair it encompasses the meat processing industry across Europe. We thus examine supply chain criminality and highlight 'scandal scripts' which amplify underlying issues.

**Approach:** A systematic review of extant literature on the scandal adds to that body of work, updating the existing narrative to include a detailed analysis of 'convicted 'industry insiders', highlighting supply chain issues involved in the frauds. Micro-stories of businessmen involved are presented to enable an empirical exploration of their illegal involvement in the meat trade. Using storied data from accounts of the scandal as contemporary examples, emerging themes and issues are outlined through a mixed methods qualitative approach consisting of ethical covert research, utilising documentary research strategy underpinned by Narrative Inquiry.

**Findings:** Media coverage perpetuated various myths notably that the fraud was carried out by 'shadowy', Eastern European 'Mafia figures' exploiting the extended food supply chains. The analysis is aided by the use of media hypothesis. Far from being a mafia inspired fraud the criminal activity was organized in nature and committed by insider businessmen. The findings demonstrate that supply chains are complex and require an understanding of storied business practices including the ethical and illegal.

**Research implications:** From an academic perspective there are implications such as the dearth of academic research and policy-related studies into food fraud possibly because of the difficulty in obtaining data because of access to such enterprises and entrepreneurs necessitating reliance upon documentary sources and investigative journalism.

**Practical implications:** There are distinct policy implications particularly the need to legislate against international criminal conspiracies and everyday ordinary organized food frauds perpetuated. Lax penalties do little to prevent such crimes which need to be taken more seriously by the authorities, and treated as major crime. In formulating food laws, rules and regulations, greater cognizance should be taken to consider how supply chains in the food industry could be better protected from predatory criminal actions.

**Originality:** This novel qualitative study will enable academics and practitioners to better understand illegal enterprise, food fraud and risk management from both operational and supply chain perspectives and will be useful to investigators by furthering our understanding of entrepreneurial practice and morality in the food industry.

**Key Words:** Ethics: Risk Management: Food fraud; Illegal Food Supply; Illegal Enterprise; Abattoir Owners.

## 1. Introduction.

There is a growing literature on criminality and food-fraud in the supply chain (McElwee, Smith and Lever, 2017). Additionally, in the wake of the Horse-meat scandal of 2013 [aka Horsegate] (Premanandh, 2013; Agnoli et al, 2016), and despite an increasing literature on food fraud (Shears, 2010; Rouvière, 2012; Manning and Soon, 2016; Manning, et al, 2016; Koubová, Samková and Hasonová, 2018) such research seldom features in supply chain journals (Oglethorpe and Heron, 2013; Simangunsong, Hendry and Stevenson, 2016) nor in academic literatures on farming, food policy, operations and food production management. This is an obvious research gap to be filled. Simultaneously, media reports and evidence from official government reports suggest that there has been an increase in food related criminal activity since the global financial recession of 2007-08 (see Smith, 2017; McElwee et al 2017; Fassam and Dani, 2017 for more in-depth discussion).

The commonly held perception of food fraud is that it is committed by organized criminal gangs and mafias (as suggested by Lord, Elizondo and Spencer, 2014). This article and embedded case studies pushes the boundaries of supply chain management research and practice by showing that the meat industry and its supply chains, is as open to exploitation and malpractice by criminal gangs as it is to legitimate entrepreneurs. However, the majority of those highlighted in this paper are individual businessmen who cynically and criminally exploit the meat trade for financial gain. Although these individuals purport to sell meat products as genuine through legitimate business channels, the evidence from official data such as convictions, indicate that it is criminal fraud. Moreover, operationally, these business channels appear to be highly organized. In the cases narrated here the majority of firms involved are all registered in the Irish or UK 'Companies house' and appear to operate via an extensive network of legal and illegal contacts throughout the UK, Europe and Ireland. Of necessity, our embedded case studies focus on the activities of named and convicted businessmen.<sup>i</sup> The overt inclusion of their names is justifiable because it would not be possible to discuss the scandal without using the names of the individuals and companies involved. This overt/covert paradigm is accepted research practice in qualitative research (Spicker, 2010).

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3 The aim of this study, by investigating the scandal, is to demonstrate that supply chain  
4 theory and value chain analysis can be used to better understand the illegal activities of  
5 entrepreneurs and businesses as a parallel supply chain. Failures in understanding the  
6 nature of food related scandals hinder society from taking appropriate action against  
7 increasing levels of food fraud. Moreover, there is a need to challenge the ways in which  
8 supply chain criminality is viewed and to acknowledge the existence of supply chain  
9 criminality and malpractices. The food industry is a high pressure, high volume, low profit  
10 business involving a wide range of entrepreneurial actors, including farmers, small  
11 business owners such as butchers and abattoir owners, independent entrepreneurs, large  
12 meat processors and supermarkets (McElwee, 2008; Smith and McElwee, 2015). All these  
13 stakeholders compete to extract profit from a crowded food supply chain.

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22 Food fraud incidents are invariably labelled as scandals. Elliot (2017) articulates that  
23 such scandals have an ‘anatomy’ and utilise alternative scripts and explanations to divert  
24 attention from the real causes of a phenomenon. These scripted explanations also act as  
25 ‘neutralisation techniques’ (Gottschalk and Smith, 2011) to ensure that damage limitation  
26 is achieved by the person, or company, caught up in a scandal. The storylines of such  
27 “*scandal scripts*” have explanatory power and contribute to the creation of “*amplification*  
28 *spirals*” and “*moral panics*” (Cohen, 1972). A scandal is defined as – ‘*An action or event*  
29 *regarded as morally or legally wrong and causing general public outrage*’ (Oxford  
30 Dictionary). In the farming and food industries, it is common to label such cases as scandals  
31 when they are prime examples of criminal entrepreneurship and endemic supply chain  
32 malpractices.

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41 In referring to fraud, we utilise the definition from the provisions stated in UK Fraud  
42 Act (2006, c.35, 2.):

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45 (1) A person is in breach of this section if he (sic)  
46 (a) dishonestly makes a false representation, and  
47 (b) intends, by making the representation—  
48 (i) to make a gain for himself or another, or  
49 (ii) to cause loss to another or to expose another to a risk of loss.  
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51 (2) A representation is false if—  
52 (a) it is untrue or misleading, and  
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3 (b) the person making it knows that it is, or might be, untrue or misleading.  
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5 Our overarching research question is straightforward: How can an understanding of  
6 illegal processes help to reach a more nuanced understanding of how the food supply chain  
7 operates. The question is answered by examining the activities of illegal adulteration of  
8 meat products by industry insiders. Overall, the synthesis of the literature and the empirical  
9 examination of the cases make a contribution to the logistics, criminology, food fraud and  
10 food policy literature, as well as providing an interesting example of management theory  
11 in alternative, non-traditional business settings. This research pushes the boundaries of  
12 supply chain research and practice, demonstrating international relevance in respect of  
13 theory and practice whilst contributing by extending supply chain knowledge into the  
14 illegal domain.  
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22 The article is structured as follows. First an account of the food fraud literature in  
23 relation to supply chain theory is presented before providing a brief summary of the Horse  
24 and Beef meat market in Europe and the UK. Next, an alternative lens shows how to view  
25 supply chains by outlining a theoretical model of the Beef industry from producer to  
26 consumer, termed as from 'farm to fork' (Dani, 2015). The methodological approach and  
27 subsequent data analysis is then presented. An alternative explanation of an unofficial but  
28 nevertheless 'real' illegal supply chain is presented. The article concludes by discussing  
29 the implications of how the understanding of alternative supply chains discussed can enable  
30 those charged with crime prevention to restrict offenders in this and other areas.  
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## 39 **2. A literature review on food fraud, supply chain theory and Horse-gate.**

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41 The focus of this review is the Horse-Meat scandal, involving numerous multi-national  
42 companies across Europe and the UK and has led to two inquiries: the Scudamore Inquiry  
43 in Scotland and the Elliot Review in England, Wales and Northern Ireland. Both inquiries  
44 were critical of the UK and European Union's investigative apparatus.<sup>ii</sup> This is important  
45 because illegal meat products entering the mainstream meat market *increased* after  
46 Horesegate (Marsden and Morely, 2014; Smith et al, 2015). This review begins with a  
47 discussion of food fraud before moving on to consider how it is related to criminal  
48 entrepreneurship (Baumol, 1990; Smith, 2009) in the meat and abattoir sectors. Of  
49 particular interest are legitimate entrepreneurs who use their insider status to perpetuate  
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3 organized criminal food frauds (Lord, Elizando and Spencer, 2014). UK markets (both  
4 legal and illegal) are discussed before concluding with a discussion on supply chain issues  
5 in the industry. Hitherto, the food industry and in particular abattoir owners have not been  
6 subject to serious academic scrutiny in relation to illegal business practices, with the  
7 exception of animal cruelty issues. Abattoirs, by their very nature are private areas not  
8 generally open to public view and thus evade scrutiny.  
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15 **Food Crime and Food Fraud:** Food-fraud is a collective term encompassing the  
16 deliberate and intentional substitution, addition, tampering, or misrepresentation of food,  
17 food ingredients, or food packaging; or making false or misleading statements about a  
18 product for economic gain (see Gallagher and Thomas, 2010; and Spink and Moyer, 2013).  
19 Food-fraud is an economically motivated crime carried out intentionally alongside  
20 associated actions to avoid detection by regulatory bodies or consumers (Grundy *et al.*  
21 2012). The profits are comparable to those from cocaine trafficking, but with fewer risks  
22 (Smith and McElwee 2015, McElwee, Smith and Lever, 2017). It is a lucrative crime which  
23 is unlikely to be detected under normal circumstances. Moreover, the investigation and  
24 detection of food-fraud in the UK/Europe is hampered by a variety of inter-linked factors.  
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33 There has been an evident increase in illegal criminal activity in the farming and food  
34 industries, where food-fraud is now big business (Gallagher and Thomas, 2010:352). The  
35 UK food sector is valued at around £103 billion a year to the UK economy (DEFRA  
36 2013:10). The literature on food fraud generally portrays the industry as victims of  
37 'predatory' criminal gangs (Lord, et al, 2014). Seldom is the role of industry insiders or  
38 rogue-farmers considered (see Smith 2004; and Smith and McElwee, 2013 for a discussion  
39 of crimes where industry specific knowledge is needed).  
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46 Ostensibly, the meat industry is a continuation of the farming industry and many abattoir  
47 owners have experience of farming. There are however, a few reports which provide a  
48 sketchy coverage of criminal activity in the meat industry including studies into the  
49 activities of businessmen involved in Police operations Aberdeen and Fox (Haslam,  
50 Undated). Smith et al (2015) illustrate that during the last two decades in the UK there have  
51 been several high profile food-fraud cases, the Halal Meat Scandal (Smith, 2004); the  
52 Eurovet Scandal (Smith and Whiting, 2013); and the Black-Fish-Scandal (Smith, 2015).<sup>iii</sup>  
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3 In all cases the business owners involved were prosecuted using lesser legislative acts than  
4 fraud and each investigation, although started by a government agency, was taken over by  
5 the police because of their proven investigative ability (Smith et al, 2015). Nevertheless,  
6 despite the existence of such high profile cases, little consideration is given to insider  
7 knowledge and criminal complicity (Lord et al, 2014).  
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13 **Supply chain criminality:** Prior to the last decade criminality in supply chain  
14 management research was an under researched phenomenon. However, of late there has  
15 been a growth in interest in the topic: Gaonker (2004) on frameworks for determining risks  
16 and solutions at a strategic, operational and tactical level; Finch (2004) and Asbjørnslett  
17 (2009) on risk management; Smith (2004) and Smith and McElwee (2016) on the supply  
18 chain side of the illegal smokies trade; Oglethorpe and Heron (2013) in relation to  
19 observable operational and supply chain barriers and constraints; Basu (2014) on the  
20 economics of illicit supply chain activity including concealment and corruption; Smith  
21 (2015) on the illegal fish supply chain; McElwee, et al (2017) on the illegal halal trade in  
22 the UK; Simangunsung et al (2016) on collusion in the supply chain; Manning, et al  
23 (2016) on a typology of criminals in the food supply chain; Smith and McElwee (2016)  
24 on the theft of tractors for sale abroad; Smith (2017) on the theft of sheep; Gold, Trautrim  
25 and Trodd (2015), New (2015), and Stevenson and Cole (2018) in relation to human  
26 trafficking; Fox, et al. (2018) on seafood supply chain fraud; and Soon et al (2019) relating  
27 to 'pinch-points' in the food supply chain. It is if note that these examples of supply chain  
28 criminality involve business processes and practices making them of interest to supply  
29 chain scholars and practitioners.  
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43 A major theme of these studies relates to parallel legal and illegal supply chains and  
44 crossover points, or antagonistic gateways between legal and illegal logistics systems from  
45 a supply chain perspective causing Finch (2004) to opine that organized theft is a crisis in  
46 modern day supply chains. Another emerging theme is that of the increasing complexity  
47 and length of supply chains and their exposure to vulnerability and criminal acts within a  
48 complex global marketplace (Asbjørnslett, 2009). To handle the unforeseen consequences  
49 of this complexity there are two main approaches: (1) design supply chains with built in  
50 risk-tolerance and; (2) contain the damage once the undesirable event has occurred.  
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3 Nevertheless, both approaches require a clear understanding of the potential for such events  
4 to occur as well as the associated consequences and impacts of these events. Moreover, as  
5 stated much of the the literature treats the business and the supply chain as the victim of  
6 outside perpetrators, not as a platform for insider fraud (Lord, et al, 2014). These themes  
7 are particularly relevant to the horsemeat scandal. Of course, short supply chains may  
8 minimise the opportunities for fraud with the added benefits of reducing food miles and  
9 reducing carbon footprints whilst simultaneously adding value at local and regional levels.

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11 There are numerous business processes and other issues including barriers and  
12 constraints which facilitate supply chain criminality. Oglethorpe and Heron (2013)  
13 researched the observable operational and supply chain barriers and constraints that  
14 occur in local food supply chains in the UK concentrating on smaller producers who  
15 seek to increase market penetration across a wider geographic area. They drafted an  
16 empirical supply chain map and explanatory narrative which records the burdens and  
17 impacts occurring in local food supply chains. This identified seven broad categories  
18 of constraint type: constraints due to the nature of the market; due to scale and the  
19 nature of products; constraints related to employment and skills; institutional  
20 constraints; constraints in supply chain relationships; certification, policy and  
21 regulatory constraints; and constraints around personal beliefs and anthropomorphism.  
22 It is of note that they did not directly consider criminal intent. Furthermore,  
23 Simangunsung et al (2016) argue that the implementation of a joint purchasing  
24 mechanism is a key strategy for combatting collusion amongst suppliers.  
25 Simangunsung et al empirically investigate the effective management strategies for 14  
26 sources of supply chain uncertainty, with an emphasis on uncertainties or strategies  
27 that involve ethical issues. They highlight numerous issues, such as evidence of  
28 collusion amongst suppliers, to rationing of supplies and increase in prices; unethical  
29 influences on government policy; and “abuse” of power by large retailers at the  
30 expense of smaller competitors. These issues are germane to most countries. As well  
31 as having implications for customers and suppliers these are lessons to be learned by  
32 the authorities and fraud investigators.

### 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 **Academic literature on the Horse-meat scandal.** 56 57



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There is a paucity of academic articles relating specifically to the scandal and those that are in print tend to be descriptive in nature, acting as commentaries, rather than deeper level analyses. One plausible explanation for this is the slowness of the official response and of the investigations into the scandal, combined with the international element and complex nature of the frauds. There is no unifying theme in the academic articles to date. One of the first academic articles was a review of regulations relating to Romania and a commentary on the Romanian government's efforts to combat food fraud (Stanciu, Dumitrascu, et al, 2013). Premanandh (2013) in reviewing the press and media content in relation to the incidences of food mis-description and adulteration argues that the scandal and the 'authenticity concerns' arising from it was a 'wake-up-call' to the regulatory authorities. Premanandh highlights the role of the regulatory authorities in circumventing the issues relating to meat authenticity including science based technological solutions to combat fraud and/or accidental mislabeling. Premanandh calls for a greater need for collective action by continuous monitoring schemes; along with improved detection methodologies and stringent regulation on defaulters to minimize or eliminate authentication problems.

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In acknowledging the academic and journalistic investigations/lay debates into the scandal, Abbots and Coles (2013) argue that the articulation of food fraud is inherently problematic because the debates surrounding them are invariably labelled as scandals, moral panics and crises; and also because the supply chain systems themselves are unstable. Within the debates, particular types of consumers (typically poor and working class); particular types of producers (Agri-industrial food businesses); and particular types of retailers ("budget" and "corporate" supermarkets) are vilified. Using Horsegate as a case study they unpacked and disentangled these discourses of food and found that "what is wrong with food" is less related to its systems of provision, but more in the ways its various agents are discursively cast and subsequently moralized as perpetrators of a globalized and industrial food system.<sup>iv</sup> Madichie and Yamoah (2016), argue that the root cause of the scandal is a power asymmetry imbalance in the food supply chain between major suppliers (including supermarkets) and farmers and that imbalance may have contributed to a supplier culture that tolerated the unethical decision making leading to the scandal.

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3 In addition, Ibrahim and Howarth (2015) argue that the vilification of shadowy Eastern  
4 European mafia figures resulted from stereotypical notions of otherness. In a subsequent  
5 paper, Ibrahim and Howarth (2016) argue that the media framed the 2013 scandal by fusing  
6 discourses beyond the politics of food. They identify three recurrent media frames and  
7 dominant discourses which converge with wider political debates and cultural stereotypes  
8 in circulation in the media around immigration and intertextual discourse on historical food  
9 scandals. They find that Horsegate gave rise to affective media debates and frames which  
10 invoked fear of the other (horse meat and the supposed mafias who supply it) and the  
11 transgression of a sacred British identity, often juxtaposing 'Britishness' with a constructed  
12 and alien 'Otherness'.  
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### 22 **3. Methodological Approach.**

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24 Empirical data, primarily documentary sources on the scandal, i.e. press and media  
25 material were accessed (Scott, 2006), supplemented by a systematic review of academic  
26 publications on the scandal. Through a process of *immersion* (Borkan, 1999; Ellingson,  
27 2009) relevant material was assembled. *Immersion* as a process permits researchers to  
28 submerge themselves in their collected data by experiencing, reading or examining some  
29 portion of the data in greater detail. The data was authenticated by writing it up using  
30 "Narrative Inquiry" techniques (Clandinin and Huber, 2010; Hunter *et al*, 2014). From this  
31 data, micro-stories of the insider activities of businessmen involved in the scandal were  
32 developed. This 'dual processes' (Borkan, 1999) emerged over time, framing the synthesis  
33 of the individual stories, vignettes and data to make sense of this illegal trade and activity.  
34 The meaningful data processed was subsequently articulated a sustainable thesis (Borkan,  
35 1999) against which the working empirical hypothesis - "*That the criminal activities of the*  
36 *businessmen involved in the scandal are examples of fraudulent insider criminal activity*  
37 *and not predatory organized criminal activity committed by outsiders*" was tested.  
38 Additional hypotheses were developed (see below) from the media reporting of the scandal  
39 to illustrate the scale of the organized criminal conspiracy, thus evidencing that the scandal  
40 was not perpetuated on the industry from outside but from within.  
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53 The inquiries were consolidated and organized into a spreadsheet database following  
54 the acknowledged investigative processes of collecting, reviewing and collating data by  
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3 number allocation. From this database of insider criminals, we created a master file,  
4 making connections, uncovering themes across and between stories, articles and other  
5 forms of data. Subsequently a process of initiating, diversifying, focusing and refocusing  
6 that the 'seeing of connections' before reviewing and regrouping the data to make more  
7 sense of the stories. These cases or micro-stories (Yin, 2010) provided a narrative order  
8 underpinned by a chronology of events and narrated through a continuing story.  
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#### 15 **4. Documenting the Horse-meat Scandal.**

17 In the UK, the slaughter or sale of horses and horse meat is not illegal provided that it  
18 is correctly labelled as such. Although, the horsemeat industry in Europe is a thriving one,  
19 in the UK, horsemeat is considered a taboo meat for cultural and historical reasons. The  
20 scandal began in late 2012, early 2013 when the Food Safety Authority of Ireland (FSAI)  
21 which oversees the implementation of food safety controls in Ireland (set out in Irish and  
22 EU laws) conducted a two month long investigation into the authenticity of beef products  
23 which culminated in the publication of a report which highlighted the presence of  
24 horsemeat in in a frozen burger produced in Ireland (O'Mahony, 2013). This report  
25 triggered a pan European food fraud-scandal with regulatory implications relating to how  
26 the industry will be regulated in the future. The fraud caught many within the industry  
27 unawares because the industry was regarded as being already highly regulated. The issues  
28 raised related to the complexity of the food supply chain, traceability issues and the need  
29 for DNA based testing within the industry to be more common. The report was highlighted  
30 in the press triggering the scandal.  
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43 **Documentary Sources:** The narrative chronology of Horsegate can best be pieced  
44 together from the primary documentary evidence (Scott, 2006) from press and media  
45 articles because there has been no definitive academic analysis or synthesis of the material  
46 relating to the scandal to date. The scandal initiated a continuing debate in the UK Press.  
47 The purpose of this section is to document salient points of the scandal, not to provide an  
48 in depth and exhaustive account. For more detail, see (Lawrence, 2013) and (Lawrence, et  
49 al, 2013). A major aspect of early articles was that of disbelief and shock that such a fraud  
50 could be perpetuated (Woods, 2013). A feature of the general tone of the debates  
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3 surrounding the scandal were that they were set by the UK and Irish Press focusing upon  
4 the cultural abhorrence against eating horse meat. In other European media outlets the  
5 scandal was initially seen as being a 'parochial' one. However, in reality the adulteration  
6 was a global problem (O'Mahony, 2013) which spanned the EU. The scale of the scandal  
7 was quickly uncovered by the efforts of the investigative journalists involved. It  
8 subsequently spread from the UK and Ireland to Norway, Sweden, Finland, Denmark,  
9 Germany, Austria, The Netherlands, Belgium, The Czech Republic, Romania, Poland,  
10 Switzerland, France, Spain, Portugal, Italy, Cyprus and Hong Kong. The ensuing debate  
11 gave rise to various media hypothesis, including:-

- 20 • **Media hypothesis 1** – It was an International – Pan European Fraud / Conspiracy  
21 (Lawrence, 2013).
- 22 • **Media hypothesis 2** - 'Shadowy', Polish, Eastern European and Italian mafia  
23 gangs were to blame (Doward, 2013; Lichfield, Randall and Sanchez, 2013; Kelly, 2013).
- 24 • **Media hypothesis 3** – It was a result of a lack of regulation, deregulation and cuts  
25 in numbers of inspectors (Hutton, 2012; Taylor and Meikle, 2013; Carrington, 2013).
- 26 • **Media hypothesis 4** – That Supermarket chains were complicit by failing to check  
27 meat suppliers and by imposing unreasonable cost structures for suppliers to fit their  
28 economic model (Mason, 2013; Bennett, 2013).
- 29 • **Media hypothesis 5** – The complexity of the food supply chains were to blame  
30 (Lawrence, Allen and Scruton, 2013).
- 31 • **Media hypothesis 6** – UK customers were complicit themselves by demanding  
32 cheap ready-made meals (Craven, 2013).

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44 The scandal caused major reputational damage to food companies including European  
45 household names e.g. Burger King, Tesco, ASDA, ALDI, LIDL, IKEA, Co-op, Nestle,  
46 Prima, Picard, Comigel, Silvercrest and Findus (King and Buckley, 2013; Neville, 2013;  
47 Williams, 2013; Neate and Moulds, 2013) leading to huge financial losses. As a  
48 consequence, many consumers lost confidence in their national food supply systems. This  
49 journalistic investigation highlighted the countries and companies involved and the  
50 complexity of the supply chains and the sheer number of companies in the supply chain.<sup>v</sup>  
51 Each company issued press releases either denying knowledge or an intention to deal with  
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the resultant PR and financial crisis. None of the major food companies, suppliers nor supermarkets were implicated in wrong doing and the official focus of the inquiries in all countries were on the food processors. A list of suspect companies is presented in table 1:

Suspect Companies	Reason for suspicion
<b>ABP Food Group</b> Ireland – owned by Larry Goodman and consisting of 4 subsidiaries Silvercrest; Dalepack; Fresh link; and Dairy Crest	Silvercrest was identified as the first source of the scandal. Although no charges were ever brought Tesco dropped them as a supplier and Tesco, COOP, ALDI and Makro dropped Dalepack products. The company blamed rogue managers for buying meat from another Irish trader and sacked them. Silvercrest later went out of business.
<b>Spanghero</b> – a French Company. It had a holding company Poujol which bought the meat from Romania.	The French government reported that Spanghero knowingly sold horsemeat mislabeled as beef and falsified documents. The authorities suspended their licence. Links to Comigel and Draap. Arrests were made of 21 people in France in December 2013. In 2019 four accused including Jan Fasan went on trial in Paris in connection with the Spanghero and Comigel cases (see below).
<b>Comigel</b> – a French Company. Owner - Erik Lehagre.	Found to be complicit by French authorities and bought contaminated meat from Spanghero. Staff at Comigel were blamed for not noticing anomalies in paper work. Dropped by Findus as suppliers. Links to Spanghero and Draap.
<b>Draap</b> – Dutch company owned by Jan Fasan.	Draap is a reversal of the Dutch word Paard which means horse. Fasan had previously been convicted of horsemeat fraud in 2007 and the company is registered in Cyprus.
<b>Wiljo Import en Export BV</b> – owned by Willy Selton.	Selton was implicated by the Dutch authorities and was the first accused to be arrested in May 2013.
<b>Calderdale meats</b> , Todmorden, Yorkshire, owned by <b>Peter Boddy</b> and managed by <b>David Moss</b> .	The company was named as a supplier of horse meat in the Irish inquiry. Boddy and Moss were arrested on 14.2.2014.
<b>Farm Box Meats</b> , Abersytwth, Wales owned by <b>Dafydd Raw-Rees</b> and managed by <b>Patterson</b> .	The company was named as a supplier of horse meat in the Irish inquiry. The pair were arrested on 14.2.2014.
<b>Andronicos Sideras of Dinos &amp; sons</b> , City of London and Ulrik Nielsen of Gentofte, Denmark owner of the Danish Company Flexifoods and Alex Beech, manager at the Flexifoods plant in Hull, UK.	The company was named as a supplier of horse meat in the Irish inquiry. Alleged links to Jan Fasan.  Andronicos Sideras, 55, was sentenced to four and a half years, while his co-conspirator, 58-year-old Ulrik Nielsen, was jailed for three and a half years

**Table 1 – List of Suspect Companies.**

Table 1 provides detail of the cases discussed but is not a definitive list of companies nor people involved. Several other cases encountered are not included because prosecutions were discontinued. The press and media coverage continued throughout 2013

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3 to the present date as investigations unfold. The general tone of the articles was critical of  
4 the slow and frustrating progress made by authorities in the individual countries with  
5 interdicting the alleged offenders involved in the scandal. Press and media articles relating  
6 to the investigations and convictions of the accused are further discussed below as micro-  
7 stories.  
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14 **Official Reports and investigations:** The Irish investigation led by Professor Alan  
15 Reilly of the FSAI confirmed the presence of horsemeat in the samples tested and asked  
16 for an official investigation. The 'investigation' by Ireland's Department of Agriculture,  
17 quickly published its findings in March 2013 concluding that there was no evidence that  
18 Silvercrest knowingly purchased horsemeat, thereby closing off the Irish investigation.<sup>vi</sup>  
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22 In the UK, a House of Commons Select Committee on Environment, Food and Rural  
23 Affairs report expressed concern that horsemeat contamination resulted from fraud and  
24 other criminal activity committed across the European Union. It evidenced a complex  
25 network of companies trading in and mislabelling beef/beef products which is both  
26 fraudulent and illegal. The UK and Scottish Governments also initiated Inquiries into the  
27 scandal. In England, Wales and Northern Ireland the Inquiry was led by Professor Chris  
28 Elliott and the subsequent report became known as the Elliott Review (Elliott, 2014). Elliott  
29 was commissioned by the UK government to conduct an independent review of the UK  
30 food supply system to determine what had gone wrong and to suggest measures to make  
31 the system much more robust from fraud. Elliott made eight major recommendations to the  
32 UK government/food industry about how to deal with the serious issues of criminality in  
33 the UK food system. The report detailed a systems approach to food crime prevention  
34 particularly in relation to how advances in analytical science can help combat food fraud.  
35 In Scotland a separate inquiry by Lord Scudamore produced similar findings (Scudamore,  
36 2015). Both Inquiries highlighted that the scandal was a food fraud perpetuated from within  
37 the industry and resulted in changes to their respective Food Standards Agencies  
38 Investigative structures and procedures.  
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## 54 **5. Findings / Results.**

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3 The gap or lacuna in the literature on criminality in the food supply chain is driven by  
4 the binary assumption relating to the belief that criminality within the food supply chain is  
5 perpetuated by predatory criminals operating from outside the supply chain (Lord et al,  
6 2014) when in reality it is only logical to consider that in some instances, insider  
7 involvement may be in play. Thus, the literature appears to support the assumption of the  
8 outsider thesis. Consequentially, one must always consider the possibility of the  
9 insider/outsider dichotomy holistically. Additionally, the extant literature on food fraud  
10 appears to implicitly consider supply chain criminality and risk management from an  
11 insider perspective. However, the emerging literature on supply chain criminality and risk  
12 management is beginning to challenge this position by considering the involvement of  
13 predatory industry insiders. Moreover, the media hypothesis discussed above also appear  
14 to support the outsider thesis as argued below. For example, media hypothesis 1 that the  
15 horsemeat scandal was an international Pan European Food Conspiracy when taken into  
16 consideration along with media hypothesis 2 relating to the involvement of shadowy Mafia  
17 figures also supports the thesis by lending credence to it. This position overshadowed  
18 media hypothesis 3, 4 and 6 relating to the lack of regulation and the complicity of super  
19 market chains. Also Media hypothesis 5 relating to the complexity of the frauds appeared  
20 to serve the purpose of excusing the authorities from any blame. It is surely of note that  
21 the media hypothesis formulated did not even consider the possibility of insider  
22 involvement in the crimes. From an analysis of the documentary evidence it becomes  
23 evident that the rhetoric used by the media and authorities and in particular the focus on  
24 'rotten apple' thesis and on rogue managers and rogue traders dilutes the presence of the  
25 insider criminal from the equation. It took an extended period of time from 2013 to 2019  
26 (6 years) in which time patient investigation tested in the criminal justice system and a  
27 more in-depth investigative journalism process to uncover the insider involvement and thus  
28 highlight the theoretical importance of consider the insider / outsider dichotomy in full.  
29 Defense claims of poor management - not criminality also served to obfuscate the matter.  
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50 One of the main findings relate to the complexity of the meat supply chain and the  
51 number of countries, agencies and stakeholders involved. From the analysis we identified  
52 numerous stakeholders who play a part in the process. See figure 1 for a visual  
53 representation:-  
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3 **Insert figure 1 here**  
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5 We identify two basic supply chain types – localised and extended. Figure 2, models  
6 and illustrates the fraud, demonstrating the complexity of the horsemeat supply chain. The  
7 figure illustrates the layered complexities of extended supply chains involving other EU  
8 and non-EU countries taking into cognisance the different types of dealers and individuals  
9 involved and also factors in the aspects of illicit, illegal and criminal involvement in the  
10 trade. It is not an exhaustive diagram because it does not factor in the different political,  
11 legal, legislative nor local differences in institutions and structures involved. There will  
12 always be players involved of whom little is known so the models built can only be  
13 tentative. For example, before ‘Horsegate’ the authorities and the public did not suspect  
14 that the meat supply chain was being adulterated with horse meat.  
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22 **Insert figure 2 here**  
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25 **Presenting the case stories.**  
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27 This section narrates the micro-stories of those investigated as a result of the scandal  
28 and discusses the nuances of the cases analysed before reporting on the findings. Table 2,  
29 presents the individual micro-stories, chronologically as the prosecutions occurred  
30 illustrating the linkages to associated companies and sentences imposed.  
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Accused/Companies Involved	Narrative chronology and micro-story	Sentence/Fines
<b>Wiljo Import en Export BV</b> – Dutch company owned by <b>Willy Selton</b> .	Selton was implicated by the Dutch authorities and was the first accused to be arrested in May 2013 and prosecuted.	Selton was sentenced to 2 and a half years. He was declared bankrupt facing damages claims of 11 million euros (\$12m; £8m) <sup>vii</sup> .
<b>Draap</b> – Dutch company owned by <b>Jan Fasan</b> and registered in Cyprus. <sup>viii</sup>	Fasan described as millionaire meat trader had previously been convicted of horsemeat fraud in 2007 in an American scandal. He received a six-month suspended sentence and a \$50,000 fine. He was convicted in 2012 for a south American horsemeat fraud and arrested in 2013 for questioning with respect to the activities of Draap who supplied Comigel and Spanghero. He denied the offences. He was later arrested in France in 2014 and charged with fraud. In 2017 he was again arrested for offences arising out of the scandal and for a new horsemeat fraud. In 2017 it was reported that he masterminded	In 2012 Fasan and his manager Hendricus Windmeijer were convicted of food adulteration offences in respect of their involvement. The main case is still under investigation and as such is sub-judice. His holding company is in Cyprus where banking

	a new fraud where his gang stole domestic and sick horses across Europe (Belgium, Italy, Romania, The Netherlands, France and Spain) and passed them off as farmed horses. Seventy five people were arrested across Spain and charged with fraud, theft, forgery, criminal organization and money laundering. <sup>ix</sup> At the time of writing he is facing prosecution for his involvement in the Spanghero and Comigel cases.	details are private.
<b>Spanghero</b> – French Company.	The French government reported that Spanghero knowingly sold horsemeat mislabelled as beef and falsified documents. The authorities suspended their licence. Links to Comigel and Draap. Arrests were made of 21 people in France in December 2013 and in 2019 Jan Fasan and three other co-accused from Spanghero went on trial. <sup>x</sup>	Four accused – were found guilty in 2019 – Jacques Poujol the owner; his manager Patrice Monguillon, Jan Fasan and his business partner Hendricus Windmeijer. Poujol was sentenced to two years in jail and had his homeme and 100,000 euros confiscated; and the Spanghero manager Patrice Monguillon received a 1 year suspended sentence. Jan Fasan received a 2 year sentence and his manager Hendricus Windmeijer was also given a 1 year suspended sentence <sup>xi</sup> .
<b>Comigel</b> – French Company. Owner - Erik Lehagre.	Found to be complicit by French authorities and bought contaminated meat from Spanghero. Staff at Comigel were blamed for not noticing anomalies in paper work. See narrative above in relation to Spanghero who were held to have supplied Comigel with the meat.	Case still underinvestigation.
<b>Calderdale meats</b> , Todmorden, Yorkshire owned by Peter Boddy and managed by David Moss. <sup>xii</sup>	Boddy and Moss were arrested on 14.2.2014 in a joint operation between the FSA and police. Moss admitted falsifying invoices / paperwork. Both blamed the shambolic record keeping which meant that the sources and destinations of horses could not be proven.	Boddy pled guilty to failing to abide by EU Meat traceability rules over 17 horses and of failing to keep records of sales of 50 horses. Moss admitted forging invoices regarding the sale of horsemeat. Boddy was fined £8000. Moss received a suspended 4 month prison sentence. They were ordered to pay £10,000 legal costs.
<b>Farm Box Meats</b> , Abersytwith, Wales, owned by Dafydd Raw-Rees and	Raw-Rees and Patterson were arrested on 14.2.2014 in a joint operation between the FSA and police. Investigators found goat meat falsely labelled	Patterson pled guilty to 17 counts of falsely mislabeling goat as

<p>managed by Colin Patterson.<sup>xiii</sup></p>	<p>as lamb. Information received that the firm were supplying horsemeat could not be proven and the two accused were not charged with horsemeat offences. The pair initially denied the offences and used neutralisation tactics to avoid criminal blame. Raw-Rees claimed to be a silent partner with little daily contact with the business, whilst Patterson denied knowing the difference between goat and sheep carcasses. Patterson also blamed his poor book keeping abilities and the lack of an adequate recording system. The company's books were described by prosecutors as being a 'shambles'. The duo had multiple Directorships of several other companies many of which went into liquidation. This could be an evasion tactic. The company went into administration with losses of over £1 million. It is not known if the directors have started up in the business again.</p>	<p>lamb. He was sentenced to a 12 week sentence suspended for 2 years. Raw-Rees pled guilty to one count of failing to comply with EU traceability rules and one count of falsely describing food.</p>
<p><b>Andronicos Sideras</b> director of <b>Dinos &amp; sons</b>, City of London. <b>Ulrik Neilsen</b> of Gentofte, Denmark owner of the Danish Company Flexifoods and Alex Beech, manager at the Flexifoods plant in Hull, UK.<sup>xiv</sup></p>	<p>Sideras who has links to Cyprus was accused of a fraud / conspiracy in 2012 by passing off horsemeat as beef. Large shipments of poor quality 'trim' passed legally through various companies before being criminally adulterated to pass off as genuine beef. The prosecution proved a tissue of lies and deception motivated by greed. Falsified paperwork created a false provenance for the adulterated meat. During searches of Flexifoods premises in Denmark and the UK emails and documents proving the conspiracy to defraud were located which detailed how the paperwork was falsified. Sideras was found to have also created false paperwork and falsified health certificates, destroying emails to cover the deception. His fingerprints were found on falsified labels. Sideras pled not guilty claiming he was only storing the meat for Flexifoods and that the mislabeling was a genuine mistake after pallets of food were damaged in transit. This evidences the use of neutralization tactics. The official cost of the fraud was cited as £177,869 but it is estimated that it may have netted over a million £'s.</p>	<p>Neilsen and Beech pled guilty. Neilsen was convicted of one charge of conspiracy to defraud and sentenced to 3½ years. Beech received a short suspended sentence. Sideras pled not guilty but was convicted of one charge of conspiracy to defraud and sentenced to 4 and a half years imprisonment.</p>

**Table 2 - The individual micro-stories with case details.**

### **Understanding the scripted anatomy of the scandal.**

In addition, the press coverage led to a number of identifiable outcomes which we argue result from a scripted 'Amplification Spiral' (Cohen, 1972). Firstly, journalists express outrage and start a moral panic before moving on to other stories. Secondly, politicians get

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3 exposure and *sound bites* and vilify the perpetrators as shadowy criminals (not  
4 shady business figures), or the more astute commentators, for example in Ireland and  
5 Poland acknowledge flaws but distance their country from the scandal. As a result, outraged  
6 customers boycott products or supermarkets temporarily and take to social media. They  
7 quickly return to their original shopping habits. To counteract financial and reputational  
8 damage the supermarkets engage in damage limitation and issue apologies and denials of  
9 knowledge. They remove the product from the shelves or ban it whilst dropping the  
10 supplier from their lists and publically issue press releases citing financial and reputational  
11 damage and portraying themselves as victims. Most survive the scandal. Simultaneously,  
12 supply chain companies go into denial mode and issue disclaimers relating to practices or  
13 the more disreputable outright deny it until it blows over. If the scandal does not abate, the  
14 investigating authorities investigate invariably proceeding at a slow pace. Statistically, few  
15 court cases result. Whilst this script is unravelling the accused hide behind claims of bad  
16 record keeping, or claim to be poor businessmen. They blame a manager or themselves for  
17 not managing the business properly, claim mistakes and errors to distance themselves from  
18 blame or may cite personal or health issues for their lapse. International Investigations take  
19 years to complete and there is a high attrition rate. There are simply too many agencies  
20 involved with staff who possess different levels of investigatory skills. Few accused ever  
21 reach the courts and traditionally even less are convicted. Those that are usually receive  
22 low monetary fines, albeit this research has revealed that the thorough horsemeat  
23 investigations' and trials are reversing this trend with jail sentences being issued and higher  
24 monetary fines imposed. Journalists repeatedly revisit the scandal to report on  
25 developments Moreover, it is apparent that supermarkets and multi-national corporations  
26 use public relations techniques to survive scandals whilst genuine businessmen, caught up  
27 in scandals, may suffer reputational and financial loss. Many resign from the board and  
28 bankruptcy and ruination may follow on from an entrepreneurial exit (Smith and McElwee,  
29 2011). Conversely, 'Dodgy Businessmen' simply change the company name and register  
30 new directors conducting business as usual with a new trade name. This enables them to  
31 continue trading unabated whilst Mafia and organized crime remain scapegoats.

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53 It is evident that "Horsegate" was an international – Pan European Fraud thus proving  
54 media hypothesis 1. An analysis of the empirical material above reveals that far from being  
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3 a mafia inspired fraud it is organized criminal activity committed by businessmen and  
4 industry insiders (Lord et al, 2014). However, just because there is no evidence, we cannot  
5 discount the possibility. It also disproves media hypothesis 2. A lack of regulation,  
6 deregulation and cuts exacerbated the scandal proving media hypothesis 3. There is no  
7 evidence to substantiate media hypothesis 4 that the supermarkets were complicit, nor  
8 media hypothesis 6 that the UK customers were complicit. This points to an imbalance and  
9 power asymmetry between small and major companies as suggested by Madachie and  
10 Yamoah (2016). The stories evidence the complexity of the extended food supply chains.  
11 In all cases greed in the pursuit of profit was cited as the main feature of the prosecutions.  
12 The price differential between the low cost of horsemeat and the high cost of beef made  
13 the adulteration lucrative and ensured that those involved could compete better against  
14 more honest competitors. What can also be seen is that the financial costs of being  
15 successfully prosecuted to the defendants are comparatively very low. In all the cases the  
16 burden of proof in terms of the acts being fraudulent were met in that the accused all  
17 knowingly and dishonestly made a false representation to gain benefit for selves and others  
18 thus proving the empirical hypothesis *“That the criminal activities of the businessmen  
19 involved in the scandal are examples of fraudulent insider criminal activity and not  
20 predatory organized criminal activity committed by outsiders”*. Indeed, the frauds were  
21 committed within the meat industry by ostensibly otherwise trusted businessmen and with  
22 the exception of Fasan none of the individuals appear to have been on police, customs nor  
23 FSA databases. This makes detection difficult and points to a need for a more integrated  
24 approach to intelligence gathering in relation to business crime, particularly by insiders. It  
25 is also of significance that the crimes were committed through and facilitated by  
26 entrepreneurial business practices in the supply chain in contrast to extant supply chain  
27 theory and literature which normally treats crime as an exogenous event (Lord et al, 2014).  
28 This needs to change to reflect the presence of insider criminals.

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48 We argue that the term ‘scandal’ is over-used to describe and excuse criminal greed and  
49 poor management practices that pervade the food industry. Short-term outrage is often  
50 forgotten as the headlines move on. Journalists and academics ‘document’ it but move on  
51 to other stories. As the scandal unfolds it triggers the well-rehearsed actions of those  
52 involved and this initiates well scripted performance which must be challenged or accepted  
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3 by those involved. This iterative process sets up a socially constructed and enacted  
4 ‘Amplification Spiral’. However, it is more than a ‘scandal’ because it is an endemic aspect  
5 of criminal supply chain practice and also of the inevitable aspect of entrepreneurial  
6 cognition and behaviour whereby if there is money to be made then there will be a taker.  
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8 The above analysis and discussion also addresses the overarching research question –  
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10 “How can value chains be utilised to include illegal processes and develop a more nuanced  
11 understanding of illegal enterprise? It does so by considering illegal value streams and  
12 parallel illegal supply chain practices. Our main finding and takeaway message is that there  
13 is a need for a change in the way supply chain criminality is regarded and to challenge this  
14 by acknowledging the reality of supply chain criminality and malpractices. Our continuing  
15 academic interest lies in moving beyond documenting practices to better understand the  
16 business processes and practices involved.  
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24 From an operational supply chain perspective a deeper analysis of the synopsis, micro  
25 stories and the anecdotal evidence provided led us to articulate the following observations.  
26 All the micro-stories discussed above involve a moral as well as a legal element in that  
27 they involve the deliberate use of deception by lying and cheating (Green, 2006) across the  
28 supply chain at different nodal points and legal jurisdictions. Thus whilst much of the  
29 illegal horsemeat products used in the adulteration may have originated in Romania or  
30 other European countries the frauds were only made possible by the collusion or connivance  
31 of criminal businessmen and the lax nature of legal procedures adopted by otherwise legal  
32 food processing businesses. This invariably entailed the falsification of documentation and  
33 the collusion of owners and managers within otherwise respected processing businesses.  
34 At present no single Food Standards body or authority could have interceded at an earlier  
35 stage in the supply chain at each individual nodal point to stop the fraud. Only the inception  
36 of a European wide organisation adopting a multi-agency approach could achieve  
37 interdictions at an earlier stage of the process. Also, in all the scenarios the legal approach  
38 has always been retrospective and there is a pressing need for a more proactive approach  
39 to tackling the food fraud epidemic. An intelligence led proactive strategy is clearly  
40 required. The analysis and discussion above makes a contribution to the Operational  
41 Supply Chain management literature by considering illegal processes and the moral as well  
42 as illegal elements of food fraud and by the inclusion of a conceptual model which leads  
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3 to the further hypothesis that insider involvement is usually necessary for such a  
4 widespread fraud to be perpetuated.  
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7 Finally, in relation to the development of a theory of insider involvement in supply chain  
8 criminality the fact that such a factor was not even considered by the media and initially  
9 by the authorities mitigated against the development of a credible explanation – thus even  
10 adopting Whetton's (1989) framework of What and How could not have led to linking  
11 insider involvement to the crimes and in fact prevented the development of a credible and  
12 logical assumption from which the Why element could be addressed i.e. that one could  
13 build logical, credible and compelling arguments to fully explain the nature of the crimes.  
14 Had insider involvement been considered it is inevitable that insider involvement must  
15 have been present at the outset of the scandal. The fact that insider involvement was not  
16 considered prevented us from addressing Whetton's fourth element of Who, Where, and  
17 When – the contextual factors from being properly assessed at the time. It took patient  
18 investigation to understand the context that to commit the frauds one had to have insider  
19 knowledge. This allowed a full theoretical explanation to evolve over time. From a theory  
20 building perspective the new contextual evidence allows us to address the three pillars of  
21 Whetton's theory development process by elucidating what is new and addressing the so  
22 what and why so questions. The involvement of insiders provides a powerful theoretical  
23 explanation.  
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## 38 **6. Conclusions.**

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41 This study demonstrates international relevance and its global impact (Both  
42 theoretically and practically) whilst narrating a compelling story that will enable  
43 investigators to better understand illegal enterprise and food fraud from a supply chain  
44 perspective and more adequately address the concerns stated in the UK Fraud Act, 2006.  
45 This study extends supply chain knowledge beyond the usual dyadic perspective. The  
46 results demonstrate that illegal supply chain practices are a multi-faceted concept that  
47 requires an understanding of media driven scandals, scandal-scripts, as well as business  
48 practices and processes alongside a multi-agency approach to enterprise orientated crime.  
49 This study thus demonstrates how contemporary Supply Chain practices must be integrated  
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3 in nature and responsive to contemporary information driven issues and at the same time  
4 be proactive. Our approach suggests that supply chains can be analysed in order to  
5 understand illegal processes in addition to conventional legal processes. We illustrate  
6 examples of criminal-entrepreneurship which although productive and profitable for the  
7 criminal entrepreneurs exploiting food supply chains is nevertheless unproductive and  
8 potentially destructive to society in a Baumolian sense.<sup>xv</sup> We make an incremental  
9 contribution to theory (see Eisenhardt, 1991 and Eisenhardt and Graebner, 2007) by  
10 analysing, reflecting and theorising on the narratives of supply chain criminals and by  
11 challenging and extending existing knowledge (Whetton, 1987; Eisenhardt and Graebner,  
12 2007) and by building a descriptive explanatory model. We establish a contribution by  
13 virtue of the novelty and originality of our topic grounded in extant supply chain literature  
14 and because it extends upon accepted knowledge by including and recognising the  
15 importance of scandal scripts. Our work fills a gap in the extant literature by addressing an  
16 obvious lacuna in the literature in terms of both incompleteness and inadequacy (Locke  
17 and Golden-Biddle, 1997). In particular we contribute to an emergent theory of supply  
18 chain criminality by providing documentary evidence of its existence.

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31 We argue that one must work from the presumption that there will inevitably be illegal  
32 process involved in the food supply chain. It is only by understanding such illegal processes  
33 that work towards interdicting and excluding such illegal processes can be made. This work  
34 will be useful to European food standards agencies in that it furthers our understanding of  
35 entrepreneurial practice and morality in the food industry. Overall it helps to better  
36 understand the criminal entrepreneurial practices involved and how they are linked to  
37 business models. Business model frameworks can be adapted on a case-by-case basis  
38 depending on the type of fraud committed by different criminal actors, which can in turn  
39 be used as an investigative tool by the various agencies involved. These models can be  
40 used to help detect and potentially disrupt the criminal enterprises. The applied model  
41 synthesises practical knowledge thus facilitating the transfer of knowledge process  
42 between academia, the food industry and the investigative and regulatory agencies  
43 involved. It helps us collapse differential boundaries to knowledge sharing by mapping and  
44 authoring a shared knowledge base and lexicon, whilst also disseminating the  
45 transformative knowledge to the academic and practitioner communities. This study begins  
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3 the process of developing a theoretically informed conceptual ‘business model’ for  
4 understanding food-fraud whilst synthesising academic and practical knowledge.  
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8 From an academic perspective there are obvious implications. Firstly, there is still a  
9 dearth of academic research and there are few policy-related studies into the pernicious  
10 issue of food fraud. It may take fatal consequences for it to be given more serious  
11 consideration. Secondly, there is the difficulty in obtaining data because of access to such  
12 enterprises and entrepreneurs. Moreover, academics are still reliant on documentary  
13 sources of evidence and on journalistic investigative reporting and there are obvious legal  
14 implications of overstepping the boundaries of reporting the truth.  
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21 There are distinct policy implications from this work, in particular the need to legislate  
22 not only against international criminal conspiracies, but also the everyday ordinary  
23 organized food frauds perpetuated. Low penalties do little to prevent such crimes which  
24 need to be taken more seriously by the authorities, and in some instances treated as major  
25 crime. Moreover, in formulating food laws, rules and regulations, greater cognizance  
26 should be taken to consider how supply chains in the food industry could be better protected  
27 from predatory criminal actions. There are also practical implications and outputs, in  
28 particular our adaption and development of an investigative framework based to cover  
29 illegal business models.  
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37 What the research has shown is that the criminal activities of ostensibly legitimate  
38 business owners impact seriously on the industry but because they operate in a legitimate  
39 entrepreneurial arena can slip between the intelligence agencies and the police intelligence  
40 gathering apparatus. On this account there is a need for a greater intelligence gathering  
41 exercise to combat food fraud, whilst initiating greater and more coordinated multi-agency  
42 training in investigating organized food fraud. It is clear that the cases discussed constitute  
43 continuing criminal and entrepreneurial ventures committed by a small but significant  
44 number of criminals operating to illegally circumvent the legitimate supply chain and thus  
45 increase their profits. This makes it of interest to supply chain scholars and food industry  
46 practitioners. The repeated criminal acts of such industry insiders constitute a continuing  
47 conspiracy.  
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### End Notes.

<sup>i</sup> Including: Andronicos Sideras, Ulrike Neilsen, Alex Beech, Peter Boddy, David Moss, Dafydd Raw-Rees, Colin Patterson, Willy Selton, and Jan Fasen.

<sup>ii</sup> The findings of both inquiries call into question whether the UK's response is fit for purpose and whether a new investigative model is needed based on the Danish Food Standards Agency or the Dutch NVWA.

<sup>iii</sup> Operations Aberdeen and Fox related to wholesale adulterations of food products by factory owners who added condemned meat into the supply chain to maximize profits. The Eurovet scandal related to a businessman importing illegal veterinary items from the EU and selling them to UK farmers without the necessary approval.

<sup>iv</sup> This fits well with moralizing tone of the press and media debates in relation to hypotheses 2, 4 and 5.

<sup>v</sup> <http://business.inquirer.net/108689/europe-horsemeat-scandal-spreads-to-asia>; and [https://www.google.co.uk/search?site=&tbm=isch&source=hp&biw=1366&bih=638&q=Horse+meat+scandal+2013&oq=Horse+meat+scandal+2013&gs\\_l=img.3..0i30k1.2540.10677.0.11739.27.26.1.0.0.0.121.2136](https://www.google.co.uk/search?site=&tbm=isch&source=hp&biw=1366&bih=638&q=Horse+meat+scandal+2013&oq=Horse+meat+scandal+2013&gs_l=img.3..0i30k1.2540.10677.0.11739.27.26.1.0.0.0.121.2136).

<sup>vi</sup> See the report - Equine DNA & Mislabelling of Processed Beef Investigation". Agriculture.gov.ie. Retrieved 14.8.2017.

<sup>vii</sup> <https://www.bbc.co.uk/news/world-europe-32202995>

<sup>viii</sup> <http://worldanimalnews.com/noted-horse-meat-ringleader-jan-fasen-arrested-again-in-spain/> and <http://www.globalmeatnews.com/Industry-Markets/Dutch-business-charged-over-horse-meat-scandal>

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<sup>x</sup> See <https://www.theguardian.com/uk/horsemeat-scandal>

<sup>xi</sup> Paris court hands down convictions over 2013 horsemeat scandal <https://www.dw.com/en/paris-court-hands-down-convictions-over-2013-horsemeat-scandal/a-48359348>

<sup>xii</sup> <http://www.mirror.co.uk/news/uk-news/slaughterhouse-boss-could-first-person-5060023> and also [http://www.cps.gov.uk/news/latest\\_news/peter\\_boddy\\_and\\_david\\_moss\\_horsemeat\\_convictions/](http://www.cps.gov.uk/news/latest_news/peter_boddy_and_david_moss_horsemeat_convictions/)

<sup>xiii</sup> <http://www.walesonline.co.uk/news/wales-news/slaughterhouse-bosses-who-dressed-goat-9281407>

<sup>xiv</sup> <http://www.independent.co.uk/news/uk/home-news/horsemeat-beef-pass-off-two-men-jailed-andronicus-sideras-ulrik-nielsen-food-a7869396.html>

<sup>xv</sup> Baumol (1990) argues that entrepreneurship is productive (legal), unproductive (amoral/immoral) and destructive (criminal) and that the entrepreneur could conduct either one or all forms simultaneously.



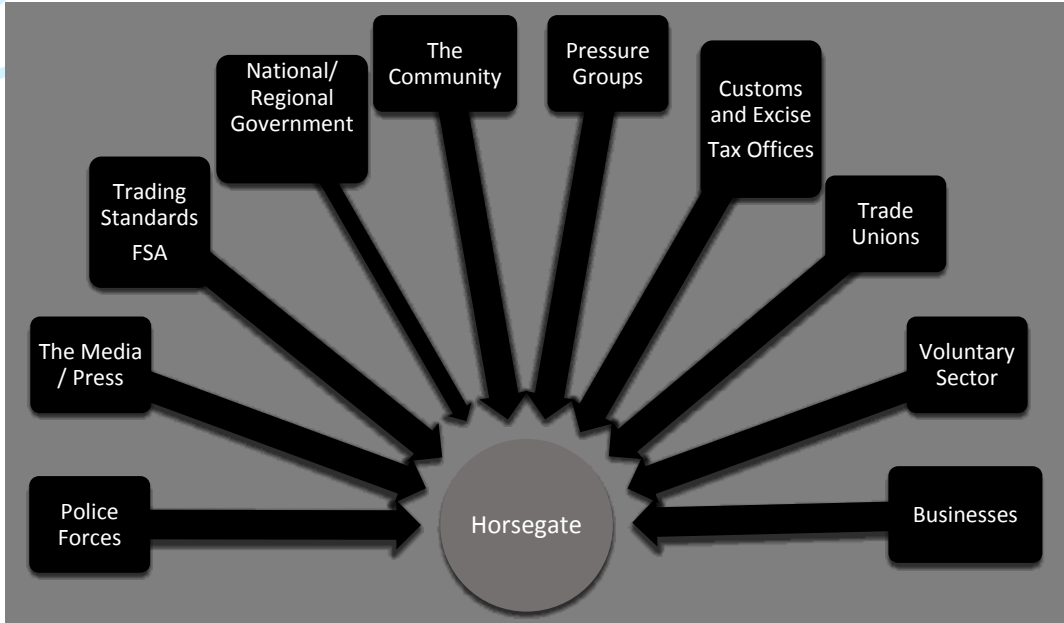


Figure 1 - Legitimate Stakeholders in the Horse-Gate Scandal.

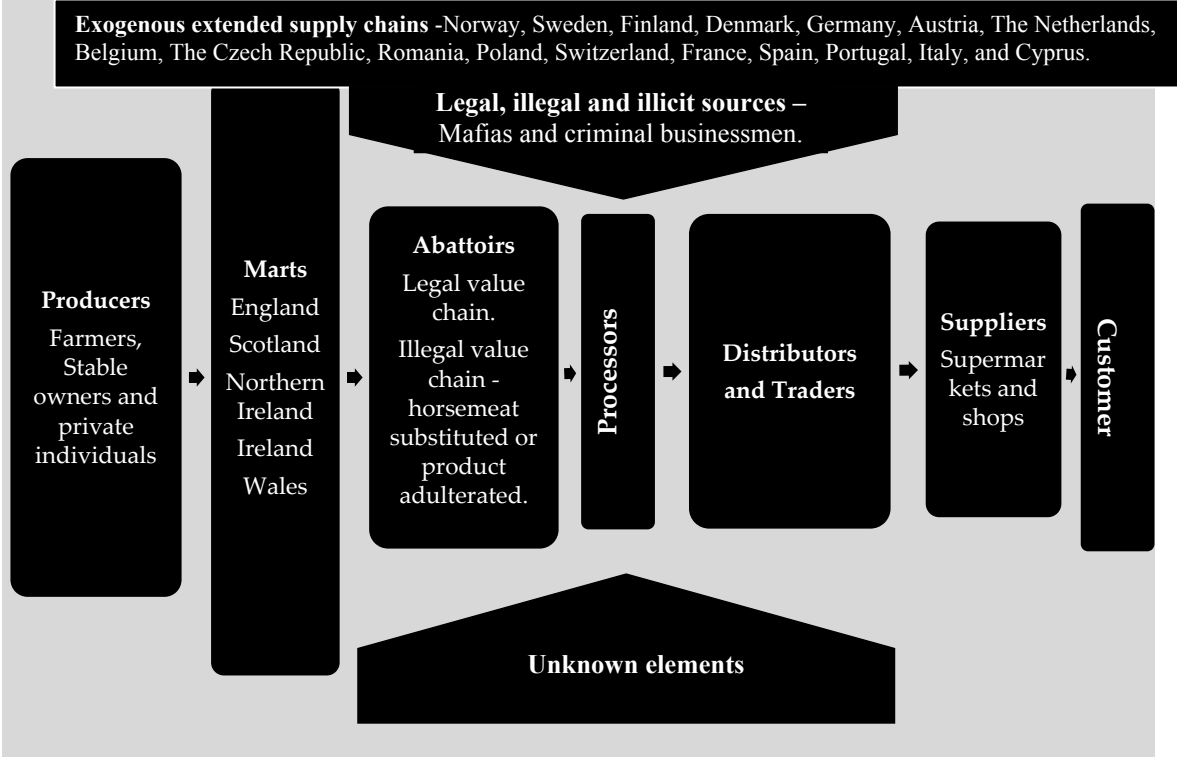


Figure 2 – The fraud illustrated taking cognisance of legal and illegal supply chain elements.

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