

**Farm Animal Welfare in the European Union
– a critical analysis**

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The candidate confirms that the work submitted is her own and that appropriate credit has been given where reference has been made to the work of others.

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Tillägnas mina föräldrar,
Inger och Fred

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Abstract

This thesis examines the causes behind why England and Sweden, as European Union (EU) Member States that share a higher concern for animal welfare, suffer similar financial drawbacks and a decrease of their farmers' competitive strength, in spite of their fundamentally different regulatory approaches to transposing EU law. This complex situation is investigated by tracing the issue to its origin: the inherent tension stemming from the dual classification of the animals in EU primary law as both sentient beings and tradable goods.

Farm animal welfare is regulated by minimum harmonising EU Directives, which permit Member States to implement stricter domestic regulatory standards. This thesis argues that these stricter standards, while being zoocentrally important in terms of enabling a higher level of farm animal welfare, also have a substantial negative economic impact upon the affected farmers, due to the higher input costs. The issue arising is that minimum Directives effectively negate the competitive strength of the farmers in 'stricter' Member States, as their domestic produce competes directly against imported products from Member States whose national legislation is closer to the minimum standard established by the EU Directives.

This thesis critiques this situation as untenable and submits that the farmers' competitive strength in stricter Member States can be improved by a shift in consumer purchasing behaviour, achieved by a programme that raises public awareness. The research outcome is a recommendation of the introduction of an EU-wide farm animal welfare labelling policy, one that would allow consumers to distinguish high-welfare products from low-welfare ones, where the elevated price commanded by the former would offset the higher costs incurred in their production. The benefits of this solution are that it facilitates increased competitiveness within the EU's internal market, while maintaining and promoting higher farm animal welfare standards.

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The Mutilations (Permitted Procedures) (England) (Amendment) Regulations 2010, SI 2010/3034

Introduction

In European Union (EU) law, farm animals are recognised as beings with feelings whose welfare matters. Meanwhile, EU law also classifies farm animals as ‘goods’¹ for trade and as such they are subjected to the legislation that regulates the Internal Market. These two simultaneously recognised states are inherently contradictory: farm animal welfare costs money to provide² (in general: the higher the welfare, the higher the cost). However, animals are also traded as goods with the ultimate aim of generating a profit. This contradiction is further complicated by the ‘type’ of goods they are – farm animals are reared for the purpose of becoming food for consumers. As a rule, consumers demand cheaper food, but at the same time they want to know animals live as natural lives as possible. This renders farm animal welfare a remarkably complicated issue, determined by many variables, including individuals’ moral and ethical beliefs. Due to this complexity, a selection of which variables to focus upon has to be made, as it is impossible to explore in full every variable within the scope of this thesis.

Initially, it should be emphasised that this thesis does not aim to turn you, the reader, into a vegetarian or a vegan. It aims neither to advocate animal rights nor to query the morality and ethics of meat consumption. Rather, the underlying premise of this research is that if we, humans, are to rear animals and consume animal produce, we need to take the appropriate measures to ensure these sentient beings wellbeing and minimising their suffering. The author of this thesis does not have a farming background nor any connection

¹ Annex I List referred to in Article 38 of the Treaty of the Functioning of the European Union [2012] OJ C326/331

² H. Hansson, C.J. Lagerkvist ‘Defining and measuring farmers’ attitudes to farm animal welfare’ (2014) 23 *Animal Welfare* 47,47-56; S.T. Millman, I.J.H. Duncan, M. Stauffacher, J.M. Stookey ‘The impact of applied ethologists and the International Society for Applied Ethology in improving animal welfare’ (2004) 86 *Applied Animal Behaviour Science* 299,303-304; H. Buller, C. Morris ‘Farm Animal Welfare: a New Repertoire of Nature-Society Relations or Modernism Re-embedded?’ (2003) 43(3) *Sociologia Ruralis* 216, 222

to any stakeholders within the food industry. Consequently, this research does not share the farmers' perspective nor advocates any stakeholders' interests, instead it puts, at its heart, the welfare of farm animals and its protection in law.

The idea of 'farm animal welfare' is founded on the –increasingly recognised by society at large– idea that animals are sentient beings with feelings, and thus capable not only of suffering, but also of faring well.³ This is reflected in EU primary law; Article 13 of the Treaty of the Foundation of the European Union (TFEU)⁴ states:

In formulating and implementing the Union's agriculture, fisheries, transport, internal market, research and technological development and space policies, *the Union and the Member States shall, since animals are sentient beings, pay full regard to the welfare requirements of animals*, while respecting the legislative or administrative provisions and customs of the Member States relating in particular to religious rites, cultural traditions and regional heritage.⁵

The context of Article 13 within the Treaty is also noteworthy, as it is found under *Title II Provisions having general application*, which indicates its significance. It is listed among other Articles concerning core principles of the EU, such as promoting gender equality,⁶ combat discrimination,⁷ environmental protection⁸ and consumer protection.⁹ Article 13 precedes

³ I.J.H. Duncan 'The changing concept of animal sentience' (2006) 100(1-2) *Applied Animal Behaviour Science* 11; J Turner, J D'Silva (eds), *Animals, Ethics and Trade The Challenge of Animals Sentience* (Earthscan 2006)

⁴ Consolidated version of the Treaty on the Functioning of the European Union [2008] OJ C115/47 (TFEU)

⁵ TFEU, Article 13 (Emphasis added)

⁶ TFEU, Article 8

⁷ TFEU, Article 10

⁸ TFEU, Article 11

Articles devoted to the promotion of good governance,¹⁰ personal data protection¹¹ and the Union's respect of religious associations' status in national law.¹² This prominent position within the Treaty underlines the significance attributed to the recognition of animals' sentience. Further, the placement under Title II rather than *Title III Agriculture and fisheries* is noteworthy, as it emphasises that Article 13 TFEU does not apply only to farm animals but rather to *all* animals.¹³ Arguably, the acknowledgement in EU primary law of the sentience of all animals reflects the increased emphasis attributed to the consideration of animals' feelings by society at large. However, since December 2009, when the TFEU entered into force, only one case has been brought before the Court of Justice of the European Union ('the Court') in which the Court explicitly referred to Article 13 in the judgement.¹⁴

One example of the consequence of not prioritising farm animal welfare is that apart from affecting the animals, it can affect humans too. There is an undeniable link between animal welfare (and health) and human health, as humans consume the animals. The BSE¹⁵ crisis highlighted this link, along with the practical consequences of mistreating animals and neglecting their health.¹⁶ Humans crossed nature's boundaries in the pursuit of economic profitability, when they turned herbivore cattle into omnivores and cannibals, by using body parts of other cattle in their feed. The use of cattle protein in cattle feed was an easy way to increase the (cheap) protein proportion in the food, aiming to increase the cattle's growth rate and the profit margin. However, the effect was the development of BSE in the concerned cattle. The BSE crisis triggered food safety concerns among European consumers

⁹ TFEU, Article 12

¹⁰ TFEU, Article 15

¹¹ TFEU, Article 16

¹² TFEU, Article 17

¹³ Paulsen M, 'Report on evaluation and assessment of the Animal Welfare Action Plan 2006-2010' (2009/2202(INI) Committee on Agriculture and Rural Development 2010)

¹⁴ C-424/13 Zuchtvieh-Export GmbH v Stadt Kempten, Landesrechtsanwaltschaft Bayern (2015) ECLI 259 at 35 of the judgement

¹⁵ *Bovine Spongiform Encephalopathy*

¹⁶ C MacMaolán 'EU Food Law' (Hart Publishing 2007), Chapter 5

in the 1990's,¹⁷ as BSE is transferable and deadly to humans,¹⁸ and increased awareness of the link between animal welfare and health and human health.¹⁹

Animal welfare has an unavoidably connection to farmers' finances, as in general, the higher the welfare level is, the more it costs to provide. As a result, the legislative requirements of the welfare level the farmers are obliged to comply with, have a direct impact on the financial side of commercial farming, as well as on the price the consumers have to pay for the produce. While the underlying argument of this thesis is that farm animals' wellbeing must be ensured and any suffering minimised, it must also be acknowledged that the farming profession in the EU today needs to remain financially viable. This causes an inherent tension between farm animal welfare and economics. Similarly, farm animal welfare results in a tension between farmers and consumers. The farmers must ensure that their animals fare well enough to be economically profitable –un-well animals reduce productivity levels– in an industry which operates on tight margins, while consumers want farm animals to live as naturally as possible, but also demand cheap food.

Both at EU level and in Member States, legislators addressed these tensions by introducing an array of legislation, much of which is the critique focus within this thesis. The legislators attempted to balance the increasing awareness and recognition of animals' feelings in Article 13 (TFEU) with the economic side of the dual status, by classifying farm animals as 'stock farming',²⁰ which in turn are classified as 'agricultural products'. Article 38(2) TFEU states that 'the rules laid down for the establishment of and the

¹⁷ Other crises that triggered similar concerns were a Foot and Mouth Disease outbreak and several toxic alarms, concerning dioxins. J Swinnen 'Political Economy of EU Agricultural and Food Policies and Its Role in Global Food Security' in RL Naylor (ed) *The Evolving Sphere of Food Security* (OUP 2014),141

¹⁸ Creutzfeldt–Jakob disease

¹⁹ S. Miles, L.J. Frewer 'Investigating specific concerns about different food hazards' (2001) 12 Food Quality and Preference 47

²⁰ Stock farming refers to a farm, where livestock is bred; TFEU, Article 38(1)

functioning of the internal market shall apply to agricultural products'. Therefore, of the Internal Market rules, it is the provisions about the Free Movement of Goods that are of particular interest to this thesis.

There is good reason why animals are classified as goods: they are bred and reared for the purpose of providing us with food, and they need to be legally classed as goods to enable their trade and ensure that this food reaches consumers. The details of the effect of the classification as goods and the Free Movement of Goods will be addressed in Chapter 2. The same chapter will also explore how the EU addressed the treatment of 'sentient beings' as 'goods' by utilising the competence granted to the EU in Article 114 TFEU to approximate laws for the establishment and functioning of the Internal Market²¹ by introducing a number of minimum harmonising Directives.²² The Directives in question regulate the Internal Market regarding specific goods, namely farm animals, by establishing the minimum welfare standard accepted and required, and thereby ensuring compliance with Article 13 TFEU.

In terms of animal welfare, the fact that the EU selected a *minimum* rather than a *maximum* harmonisation approach is vital from a zoocentric perspective. This is because it allows individual Member States to go 'above and beyond' the minimum standards laid down in the Directives, by the EU, within the Member States own territory by including explicit derogatory powers in the Directives. This can be seen, for example in the Pig Directive:

²¹ Article 114 TFEU confers the power of 'approximation of laws' upon the EU, concerning the establishment and functioning of the internal market.

²² Council Directive 1998/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes [1998] OJ L221/23 (Directive 98/58); Council Directive 1999/74/EC of 19 July laying down minimum standards for the protection of laying hens [1999] OJ L203/53 (Egg Directive); Council Directive 2007/43/EC of 28 June 2007 laying down minimum rules for the protection of chickens kept for meat production [2007] OJ L182/19 (Broiler Directive); Council Directive 2008/120/EC of 18 December 2008 laying down minimum standards for the protection of pigs (codified version) [2009] OJ L47/5 (Pig Directive)

Article 12

Member States may, in compliance with the general rules of the Treaty, maintain or apply within their territories stricter provisions for the protection of pigs than those laid down in this Directive. They shall inform the Commission of any such measures.

All the Directives analysed in this thesis include an Article which corresponds with this example.²³ Because of these explicit derogations, millions of animals are able to benefit from a standard of welfare higher than the minimum EU requirement. However, it is the very same derogation that causes financial problems for the farmers in those 'stricter' Member States who require a higher welfare standard, since it increases production costs. Different standards result in different production costs, and the farmers' competitive strength in stricter Member States' decreases in comparison with farmers of Member States that adhere to minimum standards. Therefore, 'competition' and 'competitiveness' within this thesis refer to the competitive strength of the farmers'. (As Article 42 TFEU states that EU competition law does not apply to agricultural produce, unless explicitly authorised by the EU legislation, this thesis will not engage with the substantial *acquis* of EU competition law.)

Despite the harmonisation's original aim to approximate the Member States' laws, and 'level the playing field', the very nature of minimum harmonisation allows for fundamental differences between the Member States to be maintained. In farm animal welfare legislation, these differences have had the unintended and undesired consequence that the competitive strength of the farmers in stricter Member States, such as Sweden and England,²⁴ is

²³ Directive 98/58, Article 10(2); Pig Directive, Article 12; Egg Directive Article 13(2); Broiler Directive Article 1(2).

²⁴ It is the United Kingdom (UK) that is the official MS and the UK is treated as one jurisdiction within the EU. However, as a result of devolution, England, Scotland, Wales, and Northern Ireland are becoming increasingly separate jurisdictions, where different approaches in the implementation of EU Directives are followed. Scotland maintained its independent legal system in the Acts of Union 1707. Additionally, while England and Wales

negated, as the Internal Market allows for imports of cheaper produce from Member States with lower animal welfare standards. As a result, domestic production levels are declining in both Sweden and England and self-sufficiency in food production is reduced. The long-term effect and risk of struggling farmers has a negative effect on food security, not only for individual Member States (which become increasingly dependent on imports to feed their citizens) but also ultimately for the entire EU,²⁵ as declining farm productivity levels jeopardise several Treaty aims. For example, under Title III, some of the EU's Common Agricultural Policy (CAP) aims are: to stabilise markets, to ensure the availability of supplies, and to ensure that supplies reach consumers at reasonable prices.²⁶ Indeed, in the EU's 2020 strategy, the Flagship Initiative: 'Resource Efficient Europe',²⁷ refers to EU's contribution to improving global food security.²⁸

Nonetheless, the minimum harmonising Directives and their implementation into national legislation in the chosen Member States are central to this thesis. To achieve an appropriate depth in the analysis, the selection has been limited to two Member States,²⁹ Sweden and England, which were selected due to a number of similarities and differences (which are explored further in Chapter 4). Key similarities are that both countries, despite differences in their regulatory approach, have high animal welfare standards. Sweden has adopted compelling and thorough legal requirements at a high

are commonly referred to together, agriculture is one of the devolved areas where Wales enjoys autonomy. Thus, the devolved nature of the UK means it is appropriate for the purposes of the study to isolate one jurisdiction (England). However for the sake of clarity, England will be considered a Member State throughout the thesis. Mentions of 'the UK' mean the UK as a whole, while England refers solely to the English jurisdiction.

²⁵ Steve Savage 'Should the World Keep Feeding Europe?' (30 May 2013 Science 2.0) http://www.science20.com/agricultural_realism/should_world_keep_feeding_europe-113562 accessed 15 January 2016; EurActiv.com 'Europe warned about looming food import surge' (24 March 2009) <http://www.euractiv.com/cap/europe-warned-looming-food-import-news-221507> accessed 15 January 2016

²⁶ TFEU, Article 39(c)-(e)

²⁷ European Commission 'Communication from the Commission Europe 2020 A strategy for smart, sustainable and inclusive growth' (2010) COM 2020 final, 15

²⁸ *ibid* 16

²⁹ It is not possible within the scope of this thesis to analyse every piece of legislation regarding farm animals nor is it possible to examine the national legislation in all twenty-eight Member States.

level, while England has chosen to legislate in line with the EU minimum requirements while allowing for voluntary measures to increase the level of animal welfare. Yet, despite the differences in implementing EU legislation, the results are in both countries similar: the farmers' competitive strength decreases, food production levels are in general decline and the Member States' self-sufficiency in affected products is decreasing too. The analysis aims to evaluate how two stricter Member States of the European Union, which have adopted fundamentally different regulatory approaches to transposing EU farm animal welfare legislation into domestic law, both find themselves with financially struggling farmers.³⁰

With *farm* animal welfare at the heart of this thesis, the legislative analysis focuses on the legislation applicable to those farm animals which are most frequently reared in intensive husbandry systems, in so called 'factory farms': pigs and poultry. Consequently, this thesis will analyse the comprehensive EU legislative framework which applies to pig and poultry farmers: the Pig Directive,³¹ the Egg Directive³² and the Broiler Directive.³³ Due to the intensive rearing methods, the implications of the husbandry system upon animal welfare is more pronounced compared to other, less intensively reared farm animals. Indeed, sheep and cattle (both beef and dairy) are merely covered by the general Directive 98/58,³⁴ which applies to *all* farmed animals. There is, however, a Veal Directive³⁵ with the sole aim of banning the usage of veal crates from veal production. While banning veal crates has a positive impact on calves' welfare, the Directive's single-purposed content makes it an ill fit among other comprehensive Directives, and will not be addressed further within this thesis. Furthermore, the welfare implications of transport and slaughter are deemed to be outside the scope of this thesis; not only are these topics so extensive that each could warrant

³⁰ P Marquer '*Pig farming in the EU, a changing sector*' (2010) Eurostat

³¹ Pig Directive (n. 22)

³² Egg Directive (n. 22)

³³ Broiler Directive (n. 22)

³⁴ Directive 98/58 (n. 22)

³⁵ Council Directive 2008/119/EEC of 18 December 2008 laying down minimum standards for the protection of calves [2009] OJ L10/7

a research in its own right,³⁶ but they concern welfare issues that generally³⁷ occur away from the farm. While these are important issues, their impact on the farmers' competitive strength is considerably lower than the ones caused by the implementation of particular animal welfare standards required for their entire lifespan spent on the farms. For this reason, this thesis focuses on the EU regulatory framework applicable to farm animal welfare *on the farm*.

The structure of the thesis is as follows: Chapter 1 is divided into two parts. The first explores the central concept of animal welfare, as there is neither a legal nor a scientific definition of (farm) animal welfare. The different scientific 'schools of thought' (physiological welfare, emotional welfare, natural behaviour and ethological needs) are explained and evaluated. Similarly, there is no standard method of measuring animal welfare for scientific research and it is inherently difficult to do so, regardless of the method adopted. The main methods for data collection can be categorised into either 'functioning-based' or 'feeling-based' methods and data can be collected either post-production or while the animals are alive. Despite the diversity in schools of thoughts and measuring methods, the common feature is their zoocentric focus, which prioritises animal welfare over other aspects, such as economics and farm management. This part of the chapter argues that a definition of farm animal welfare must encompass consideration of both the physiological and the emotional welfare of the animal, while also enabling those natural behaviours that derive from ethological needs, and these considerations must be assessed using both

³⁶ Therefore, the following pieces of legislation, important for the animal welfare and introduced post-Lisbon, are deemed to be outside the scope of this thesis: Council Regulation (EC) No 1/2005 of 22 December 2004 on the protection of animals during transport and related operations and amending Directives 64/432/EEC and 93/119/EC and Regulation (EC) No 1255/97 [2005] OJ L3/1; Council Regulation (EC) No 1099/2009 of 24 September 2009 on the protection of animals at the time of killing [2009] OJ L303/1; Commission Implementing Decision 2013/188/ EU of 18 April 2013 on annual reports on non-discriminatory inspections carried out pursuant to Council Regulation (EC) No 1/2005 on the protection of animals during transport and related operations and amending Directives 64/432/EEC and 93/119/EC and Regulation (EC) No 1255/97 (notified under document C(2013) 2098) [2013] OJ L111/107

³⁷ Loading the animals for transport is the only activity that takes place in the farm.

functioning- and feelings-centred approaches that collect data both when the animal is alive and post-production.

The second part of the first chapter applies this rounded definition of what farm animal welfare encompasses in order to identify those core needs that are associated with the welfare of pigs and poultry. As needs are inherited from their wild ancestry, these core needs differ between the species. Due to the selective breeding of poultry, two distinct kinds of commercial hybrids have been developed: those intended for egg-laying and those intended for meat (broilers). While they are essentially the same species (*Gallus gallus domesticus*), the selective breeding for specific commercial purposes has resulted in different welfare needs for the two hybrids. This difference is reflected in legislation, as they have one EU Directive each. However, as *Gallus gallus domesticus* varieties, their core welfare needs remain the same. Therefore, the poultry section initially addresses the joint welfare needs before identifying the key welfare needs for each specific hybrid. Biological and ethological research findings and studies provide the foundation for this animal-focused chapter, whose detail is crucial for an effective analysis of the EU and Member State legislation in Chapter 3 and 4.

Before an in-depth analysis of the legislation, the farm animal welfare is contextualised within the EU's regulatory framework (Chapter 2). While Article 13 TFEU has been introduced and discussed here, it is revisited and expanded in Chapter 2 due to its central role in regards to the duality discussed above, which causes the underlying tension between farm animals' welfare and their classification as goods intended for the Internal Market. A discussion of the Internal Market and its main principles pertaining to farm animal welfare follows, with particular attention to Article 36 TFEU and the Principle of Mutual Recognition. Article 36 TFEU provides justifications for trade barriers, which includes 'protection of health and life of ...animals.' However, this thesis argues that health and life of animals and animal welfare are distinct concepts, and therefore Article 36 TFEU does not

provide a justification for trade barriers for the purpose of protecting the higher farm animal welfare standards of stricter Member States.

The implications of the inapplicability of Article 36 TFEU to justify trade barriers on farm animal welfare grounds is further magnified by the Principle of Mutual Recognition (*Cassis de Dijon*),³⁸ which requires that any good, lawfully produced and marketed in one Member State, must be lawful in the other Member States. This Principle has a hugely detrimental effect upon the competitive strength of the farmers in the stricter Member States: produce from other Member States (which only adhere to EU's minimum standard) cannot be prevented from entering stricter Member States' domestic markets. Once such produce has entered the domestic market, there is little in its appearance to discern it from the domestic produce, which is more expensive as a result of the higher production costs.

The second subchapter in Chapter 2 analyses the regulatory approach adopted by the EU in regards to farm animal welfare: harmonisation through Directives. The mechanics of the harmonisation process are explained, with a focus on the minimum approach, as all farm animal welfare Directives are *minimum* Directives. In essence, minimum harmonisation is an agreement by the Member States to disagree. The Member States have only been able to subscribe to the same, bare minimum standards, and have agreed that they must be met, but a derogatory power is provided within the Directive. The derogatory power permits individual Member States to introduce or maintain stricter standards within their domestic territory, subject to compliance with the Treaty. This is the approach taken in regards to farm animal welfare, and consequently, Member States are permitted to impose higher standards on their domestic farmers. Due to Article 36 TFEU and the Principle of Mutual Recognition, the Member State using the derogation is unable to prohibit the import of produce from farmers of other Member States that only meet minimum standards. This problem has the potential of triggering a regulatory competition among Member States who do exceed

³⁸ 120/78 *Rewe-Zentral AG v Bundesmonopolverwaltung für Branntwein* [1979] ECR 64

the minimum standard, also known as Race to the Bottom, where Bottom is the harmonised 'floor'. The final part of this chapter discusses the risks of such a regulatory competition.

Building on the EU framework provisions presented in Chapter 2, Chapter 3 critically analyses the minimum harmonising Directives, commencing with the framework Directive (the Directive 98/58), which applies to all farmed animals. The Directive 98/58 is followed by the Pig Directive, before jointly addressing the provisions in the two commercial hybrid Directives, which are the same for both hybrids. The hybrid-specific details of the Egg Directive and the Broiler Directive are analysed next. The critique focuses on whether physiological and ethological needs are being adequately considered, and whether the welfare provisions are negated by economic motives, thus addressing the duality. A detailed analysis of the level at which the welfare standards are established provides the necessary baseline for a more effective critique of the transposition of the legislation by Member States in the following chapter.

The analysis finds that there is a general lack of core definitions throughout the Directives, besides that of 'animal welfare'. Further, all Directives have an economic focus rather than a zoocentric one, thus favouring the animals' status as 'goods' over that of 'sentient beings'. Additionally, there is an imbalance between physiological and ethological needs, with the latter almost neglected. This imbalance follows the economic nature of the Directives, and aims to ensure that the animals remain alive, grow and that their production levels are maintained. Last, the Pig and the two Poultry Directives, in regards to whether animals feel pain and from what age, all rely on outdated science,³⁹ despite provisions in the Directives⁴⁰ that

³⁹ For example; N. Jäggin, S. Gerber, U. Schatzmann 'General anaesthesia, analgesia and pain associated with the castration of new-born piglets' (2006) 48 *Acta Veterinaria Scandinavica* 12; M. Hay, A. Vulin, S. Genin, P. Sales, A. Prunier 'Assessment of pain induced by castration in piglets: behavioural and physiological responses over the subsequent 5 days' (2003) 82 *Applied Animal Behaviour Science* 201,201-218; M.J. Gentle 'Neuroma formation following partial beak amputation (beak-trimming) in the chicken' (1986) 41 *Research in Veterinary Science* 383,383-385

⁴⁰ Directive 98/58, Article 5(2); Pig Directive, Article 5, Recital (13); Egg Directive, Recital

emphasise the importance of keeping up to date with scientific progress. After evaluating the level of welfare established by the Directives, Chapter 4 is devoted to the domestic legislation of the selected two Member States.

The first section of the chapter justifies the selection of Sweden and England for the analysis of the transposition of EU Directives into domestic law. The main reasons for this selection lie in their similarities as much as in their differences. Both Sweden and England are affluent western countries with a long standing tradition of protecting animals' welfare through legislation, and similar social dynamics. However, their regulatory differences favoured this comparison, as Sweden adopted highly detailed and compelling legislation that establishes a high level of farm animal welfare, exceeding by far the minimum EU standard. In contrast, England legislated in line with the EU minimum, while allowing and encouraging measures to be taken to increase the level of animal welfare on a voluntary basis. Finally, current trends are discussed, as the two countries, despite their different approaches in implementing EU legislation, both face declining production due to the cheaper imports from other Member States.⁴¹

These analyses focus on the measures within the domestic legislations that go 'above and beyond' the minimum standards required by the EU, which is why the analysis of the preceding chapter is essential, as without carefully examining the EU legislation, it is impossible to identify the stricter measures. In the Swedish legislation, there is a multitude of stricter measures, predominantly contained in the (legally binding) Administrative Specifications. Contrastingly, the English legislation is a verbatim reproduction of the EU legislation, bar three measures which exceed the minimum: a statutory test determining whether suffering (by the animal) was unnecessary, a requirement of 'thorough inspections' rather than

(7); Broiler Directive, Recital (14)

⁴¹ GHK Consulting 'Final Report: Evaluation of the EU Policy on Animal Welfare & Possible Options for the Future' (Job No. J7296 DG SANCO 2010; Svenskt Kött 'Köttmarknadsutveckling för griskött i ton' available at <http://www.svensktkott.se/omkott/statistik/hur-mycket-kott-produceras/kottproduktion-gris-1/> accessed 2015-09-14; AHDB Pork 'EU Self-sufficiency' <<http://pork.ahdb.org.uk/prices-stats/consumption/eu-self-sufficiency/>> accessed 18 October 2015

'inspections', and a requirement of ensuring bedding material. In addition to these three measures, there is a set of highly detailed 'Codes of Practices' (CoPs). The detail in these provides a level of welfare far above the EU minimum, justifying their inclusion in this analysis, in spite of their not being legally binding. Establishing how far the domestic legislations exceed the EU minimum standards, enables an assessment of the impact these standards have on the domestic farmers' competitive strength, along with the impact of competition from farmers in other Member States, which only adhere to the minimum standards.

The fifth and final substantive chapter considers the role that could (and should) be played by consumers, as it is ultimately the consumers' choice of food to purchase that determines the competitive strength of the farmers. Why domestic farmers are struggling and self-sufficiency in food is declining when the consumption of meat and eggs is increasing? Three main reasons for this contradiction are explored and evaluated within this chapter: first, general information deficiency; second, the consumers' (un)willingness to pay more for ethically reared and slaughtered animal products/foodstuffs; and third, labelling problems. The consumers' information deficiency is multifaceted, as it is increasingly common that consumers have little awareness as to where food comes from.⁴² When this is combined with an increase in anthropomorphism (attributing human emotions to animals), some consumers even actively choose to remain ignorant to farming practices. However, there is also a lack of information available to consumers who actively seek it.⁴³ Studies of the economic behaviour of consumers often use the measurement of 'willingness to pay' (WTP) as an indicator of the market value of various products. The WTP approach contains numerous problems as to its reliability, but can nonetheless be used as a tool to assess the effectiveness of product differentiation. Product

⁴² F. Vanhonacker, W. Verbeke 'Public and Consumer Policies for Higher Welfare Food Products: Challenges and Opportunities' (2014) 27 *Journal of Agricultural and Environmental Ethics* 153,161; P.J. Eastwood 'Farm animal welfare, Europe and the meat manufacturer' (1995) 97 *British Food Journal* 4

⁴³ M. Binnekamp, P. Ingenbleek 'Market barriers for welfare product innovations' (2006) 54 *NJAS-Wageningen Journal of Life Sciences* 169; W. Verbeke 'Agriculture and food industry in the information age' (2005) 32 *European Review of Agricultural Economics* 347

differentiation is generally agreed to be best achieved through providing the consumers with information on the products' packaging, exhibiting what distinguishes this product from similar ones. Higher-welfare animal products can then command a price-premium, which has the potential of covering the higher production costs incurred by providing a higher welfare level.

Information and labelling upon the packaging of food stuff is regulated by the EU (existing legislation relates to product content and nutritional value). Currently, there is no harmonised legislation regarding labelling informative of farm animal welfare and the difference in standards. It has been left to the Member States discretion. Additionally, there are different types of labels which have their own benefits and disadvantages. The logo-type and the tiered system, the two most commonly used labelling systems on food types, are evaluated by drawing upon academic studies by experts in the field. While these studies focus on the nutritional content or the product content of the food stuff, the findings of their effectiveness can nonetheless be applied and evaluated as to which type of label may be most appropriate to a farm animal welfare labelling scheme.

Regardless of which type of label is used, consumers must understand what the label represents in order for it to have any effect. Consequently, to inform and educate the public, an information campaign in compliance with EU law is necessary. The relevant legal provisions of EU law are evaluated, and specifically Article 34 TFEU (prohibition of trade barriers), which renders it impossible for the authorities in Sweden and England to launch a campaign which proclaims 'Buy Swedish' or 'Buy English', as it would be overtly protectionist behaviour.⁴⁴ However, if a 'Buy Domestic' campaign is a wholly private initiative,⁴⁵ it would bypass Article 34 TFEU that only prohibits state measures. The complexity of a lawful 'Buy Domestic' campaign can be avoided if an EU-wide farm animal welfare label is introduced instead. If it only referred to the standard of welfare, and not to the national origin, such a label would not only be lawful, but also potentially eligible for financial

⁴⁴ 249/81 *Commission v Ireland* [1982] ECR 4005

⁴⁵ C-159/00 *Sapod Audic v Eco-Emballages SA* [2002] ECR I-5031

support from the EU,⁴⁶ which would be vital in the quest to inform EU consumers of what it represents.

This thesis argues that minimum harmonisation of farm animal welfare at an EU level, is directly associated with the financial hardship of farmers in Member States that require a higher level of welfare. While the Member States remain bound by the legislation regarding the Internal Market, the regulatory approach by which the Member States implement the minimum Directives is irrelevant, as the importance lies in the derogatory power to require stricter standards in their own territories. The stricter standards result in higher production costs for the farmers of those Member States, while legislation protecting the Free Movement of Goods within the Internal Market effectively hinders protectionist behaviour from the Member States that may wish to protect their domestic farmers against cheaper imports from other Member States (which only adhere to minimum standards). The stricter Member States are therefore left with a choice: they can either relax their regulatory standards to the EU minimum, so that the farmers can compete on price, or watch their farmers being priced out of the market by the cheaper imports.

As farm animal welfare is at the heart of this thesis, the idea of relaxing the standards in the stricter Member States is not advisable, as it would reduce the welfare standard for millions of animals. However, this leads to the question: what can be done within the current regulatory framework to improve the competitive strength of the farmers in the stricter Member States, while allowing for the legislative standard to remain high (which is desirable from a zoocentric perspective). This thesis identifies that it is the consumers and their behaviour that are key to improve the situation without any major legislative changes. However, unless the information deficit among the consumers is remedied by an increase of basic knowledge of the difference in welfare standards, they are unlikely to be willing to pay the premium necessary to make rearing animals at a high-welfare standard

⁴⁶ Council Regulation (EC) No. 3/2008 on information provision and promotion measures for agricultural products on the internal market and in third countries [2008] OJ L3/1

economically viable. This thesis therefore argues and concludes that an EU-wide labelling scheme, preferably in a tier system, is an appropriate initiative to promote a high standard of farm animal welfare.

1 Animal Welfare

1.1 Introduction

Farm animal welfare is the concept at the heart of this thesis and research, and there is a number of EU Directives devoted to its protection. Despite the significance of the concept, there is no definition in EU legislation as to what it actually *means*. The absence of a clear definition of animal welfare results in ambiguities that, causes more problems. Without a thorough understanding of the concept and a proper definition for it, it inherently difficult to evaluate the farm animal welfare legislation and whether it achieved effectiveness, coherence and consistency in the first place. As neither national nor European law provides a definition, non-legal sources need to be considered while formulating one for the purpose of this thesis.

No single widely accepted definition of ‘animal welfare’ exists, neither in law, nor in policy, nor in science. Rather, there is a multitude of definitions, theoretical approaches and methods of scientific measurements, upon which an assessment of animal welfare is based. These approaches are summarised in this chapter with a firm zoocentric¹ focus, which allows for an overview of the relevant scientific theories with an emphasis on how the animals perceive, interpret and respond to their environments.² The multiple and diverse of scientific approaches to animal welfare also highlight a fundamental problem with the EU legislation: to achieve its aims, it attempts to rely upon the concept of animal welfare, which –due to the lack of a widely accepted definition– does not really exist. Indeed, the variety of interpretations of the concept becomes problematic for farmers, scientists, policy-makers and lawyers as the legislation lacks clarity, coherence and consistency. Besides the various stakeholders mentioned, the public’s perception of ‘animal welfare’ also matters, as the public is the end consumer, whose perception of farm animal welfare is closely related to the individuals’ moral and ethical beliefs.³

¹ L Vilkkka, *The Intrinsic Value of Nature* (Rodopi 1997) 37

² S.T. Millman ‘Animal Welfare – Scientific Approaches to the Issues’ (2009) 12(2) *Journal of Applied Animal Welfare Science* 88,94

³ The relationship between farm animal welfare and the consumer public will be considered

This chapter commences by disambiguating animal welfare from animal rights, two terms often mistakenly used interchangeably. Next, the origin and presence of animal welfare in law is explored before turning to science in search of a definition, by explaining and evaluating the main ‘schools of thought’, as well as the different approaches for measuring and assessing animal welfare. This thesis argues that only a holistic definition of animal welfare truly satisfies the animals’ welfare needs. The second subchapter identifies fundamental welfare needs of the commonly intensively reared animals, pigs and poultry, in a holistic manner, by reference to both biological and ethological scientific findings. The identification of welfare needs will create the foundation for the legislative analysis in subsequent chapters.

1.2 Animal Welfare or Animal Rights

From the outset, it must be emphasised that this research focuses on animal *welfare* and not animal *rights*, as these are two separate concepts, often used interchangeably. This thesis will not engage in the animal welfare versus animal rights debate, and it will not judge the validity of the arguments of either side. To start with, both of these notions are based on the animals’ recognition as sentient beings – both by society at large and in law. However, animal welfare and animal right supporters hold fundamentally different beliefs as to what the recognition of sentience should constitute. It is therefore important for this research to clarify these core differences and establish the conceptual foundation for the thesis, as its focus is strictly on animal *welfare*.

While animals are widely recognised as sentient, the exact amount and type of feelings one attributes to the sentient being, depends on the person and the animal in question. Factors that determine the level of sentience attributed are both person-related, including whether one is a pet owner or

not⁴, a vegan or an omnivore, and of rural or urban background, and animal-related, depending on whether it is a mammal or a bird, and what amount of intelligence is attributed to the animal.⁵ For the purpose of distinguishing animal rights from animal welfare, it is not the degree of sentience that matters, only the acceptance of the premise that animals *have* feelings and these *must* be considered.

Animal rights' supporters claim that animal sentience requires an equal consideration as human sentience, thus refuting the idea of human exceptionalism and standing firmly against speciesism (discrimination of animals, often compared to racism and sexism).⁶ The equality of species ethos also rejects anthropomorphism, the attribution of human emotions to animals, as another form of speciesism. Contrastingly, welfare supporters' attribute basic feelings to the concept of sentience, such as hunger, pain, fear and joy, commonly also including (but not focusing on) anthropomorphic attributes. The more anthropomorphic feelings attributed to the animals, especially when combined with human empathy, the bigger the moral dilemma of eating sentient beings. Therefore, animal welfare supporters, often unknowingly, rely on a human/non-human divide, in regards to farm animals, to morally justify their socially accepted and culturally enshrined consumption of animal products.⁷ Speciesism also highlights an arbitrary side of consuming animal products. For instance, West-Europeans generally deem it morally acceptable to eat chicken, but recoil in horror at the idea of

⁴ H. Rothgerber, F. Mican 'Childhood pet ownership, attachment to pets, and subsequent meat avoidance. The mediating role of empathy toward animals' (2014) 79(1) *Appetite* 11

⁵ A.M. Wilkins, L.S. McCrae, E.A. McBride 'Factors affecting the Human Attribution of Emotions towards Animals' (2015) 28(3) *Anthrozoös* 357; M.A. Ashby, L.E. Rich 'Eating People Is Wrong... or How We Decide Morally What to Eat' (2013) 10 *Bioethical Inquiry* 129; S. Loughnan, B. Bastian, N. Haslam 'The Psychology of Eating Animals' (2014) 23(2) *Current Directions in Psychological Science* 104

⁶ G. Cook 'A pig is a person' or 'You can love a fox and hunt it': Innovation and tradition in the discursive representation of animals' 2015 26(5) *Discourse & Society* 587,591

⁷ H. Buller, C. Morris 'Farm Animal Welfare: a New Repertoire of Nature-Society Relations or Modernism Re-embedded?' (2003) 43(3) *Sociologia Ruralis* 216; J. Graça, M. Manuela Calherios, A. Oliveira 'Moral Disengagement in Harmful but Cherished Food Practices? An Exploration into the Case of Meat' (2014) 27(5) *Journal of Agricultural and Environmental Ethics* 749

eating dogs.⁸ This can be explained by the fact that the amount of mental capacity attributed to different animals is directly related to our willingness to eat them. Therefore, by attributing a lower mental capacity to, for example, chicken compared to dogs, it becomes acceptable to eat them.⁹

The human/non-human divide becomes possible due to the human exceptionalism and speciesism, traditionally embedded in social convention and law – for example, sentient farm animals are considered to be the property of humans.¹⁰ A disparate stance is taken by animal rights supporters, who wholly reject ownership as infringement of an animal's liberty.¹¹ Some of the more radical rights-supporters advocate for granting animals legal rights, such as protecting the privacy of animals from wildlife documentaries,¹² or recognising chimpanzees as having *habeas corpus* in order to give them legal standing to argue their cases in court.¹³ More moderate animal rights supporters champion the eradication of all kinds of animal exploitation, be it in the form of food, fur, leather, pet-ownership¹⁴ or animal-testing.¹⁵ As a result, veganism becomes the only acceptable lifestyle, as it requires the elimination of animal consumption to reduce animal suffering.

⁸ Ashby, Rich (n. 5)

⁹ B. Bastian, S. Loughnan, N. Haslam, H. R. M. Radke 'Don't Mind Meat? The Denial of Mind to Animals Used for Human Consumption' (2012) 38(2) *Personality and Social Psychology Bulletin* 247

¹⁰ Buller, Morris (n. 7)

¹¹ Cook (n. 6) 591; Buller, Morris (n. 7); SM Wise, *Rattling the Cage Toward Legal Rights for Animals* (De Capo Press 2014); J. Zeis, *The Rights of Pigs and Horses* (Blackwell Publishing Ltd 2012)

¹² B. Mills 'Television wildlife documentaries and animals' right to privacy' (2010) 24(4) *Continuum: Journal of Media & Cultural Studies* 193

¹³ The NONHUMAN RIGHTS PROJECT, Inc., on behalf of HERCULES and LEO v. SAMUEL L. STANLEY Jr. M.D. as President of State University of New York at Stony Brook University, Hon B Jaffe J.S.C. index no. 152736/2015 20th of April 2015, New York, available at <https://iapps.courts.state.ny.us/fbem/DocumentDisplayServlet?documentId=4D9287VfBil66TYZPi4P1w==&system=prod>

¹⁴ Pets can be seen as human species hubris and often results in anthromorphism. Buller, Morris (n. 7) 225; R Fox 'Animal behaviours, post-human lives: everyday negotiations of the animal-human divide in pet-keeping' (2006) 7(4) *Social & Cultural Geography* 525

¹⁵ R. Sollund, 'Expressions of speciesism: the effects of keeping companion animals on animal abuse, animal trafficking and species decline' (2011) 55 *Crime, Law and Social Change* 437; Buller, Morris (n. 7)

Ironically, while the vegan position reduces an individual's direct contribution to the suffering of farm animals, it does little to incentivise an increase in farm animal welfare standards. Further, veganism is unlikely to have an effect where it is needed, namely in the market, as rather than channelling their purchasing power towards high-welfare products –which would increase the demand for such products– vegans abstain from animal products altogether. Consequently, an opportunity to strengthen the incentive to produce more animal produce originating from high-welfare farms as opposed to 'factory farms' is missed.¹⁶ It is also debated whether the sentience of animals gives them a moral status. If animal sentience does not give them moral status, it cannot be morally objectionable to consume them, which is a core tenant of veganism.¹⁷ However, unless there is a worldwide vegan revolution, humans will continue to breed, raise, kill and eat farm animals, and the division between humans and non-humans will therefore remain.

The human/non-human division also mirrors an interdependence. Today's farm animals would be highly unlikely to survive if released into the wild, as they have been selectively bred and domesticated to suit human needs, and rely upon humans to care for them. In turn, humans rely upon them for food (and jobs), thus creating the state of interdependence.¹⁸ On the animal side, the dependence extends to the degree that a number of farm animal species would become extinct, were they not to be reared, traded and consumed by human omnivores.¹⁹ Animal rights supporters raise the counter-argument that non-existence is better for animals than a life of suffering and exploitation.

¹⁶ F Bailey Norwood, JL Lusk, *Compassion, by the Pound Economics of Farm Animal Welfare* (OUP 2011); MC Appleby 'Whom Should We Eat? Why Veal Can Be Better for Welfare than Chicken' in MC Appleby, DM Weary, P Sandøe (eds), *Dilemmas in Animal Welfare* (CABI International 2014) 6.3

¹⁷ T. Hsiao 'In Defence of Eating Meat' (2015) 28(2) *Journal of Agricultural and Environmental Ethics* 277; D. Hooley, N. Nobis 'A Moral Argument for Veganism' (2015) *Animal Agriculture, Food Choice, and Human Health*

¹⁸ Bailey Norwood, Lusk (n. 16)

¹⁹ *ibid*; N. Evans, R. Yarwood 'The politicisation of livestock: rare breeds and countryside conservation' (2000) 40(2) *Sociologia Ruralis* 228

It is by accepting that human animal consumption has deep roots in western society and will continue for the foreseeable future, that the concept of animal welfare finds its true potential. Animal welfare supporters do care about the negative effects of animal exploitation, and wholly oppose factory farming and its high-yield husbandry. Ultimately, factory farming is an economic enterprise, in which animals are mere resources to extract economic gains from. For animal welfare supporters, factory farming is unacceptable due to animal sentience and they advocate for humane treatment of the animals during their life and at the time of slaughter.²⁰

According to animal welfare advocates, it is morally acceptable to consume meat from animals reared in 'humane conditions', as opposed to consuming meat originating from factory farming systems, where animals suffer and their sentience is ignored. 'Welfarists' generally consider intensive husbandry systems inhumane, as animals are raised in high stocking density, in small individual spaces, in barren environments, unable to satisfy their basic physiological and ethological needs, and are systematically subjected to painful procedures, and they argue against such practices.

Contrastingly, animal rights supporters seek the elimination of all forms of animal exploitation, regardless of the husbandry systems used, because each animal has an intrinsic value,²¹ irrelevant to any extrinsic value it has for humans. On the other hand, welfare supporters recognise that farm animals are cared for in proportion to their extrinsic value. If the extrinsic value is higher when animals are reared in 'humane conditions' because of consumer demand, a financial incentive is created for animal welfare.²² Rather than advocating for the abolishment of animal exploitation, welfare supporters seek incremental systematic gains to treat farm animals 'better';²³ they aim to raise awareness about the morality of consuming animals raised 'humanely', compared to those raised in factory systems, and argue for the

²⁰ J Johnson 'Humanely Killed?' (2015) 5(2) Journal of Animal Ethics 123

²¹ Vilkka, (n. 1)

²² M. Cole 'From "Animal Machines" to "Happy Meat"? Foucault's Ideas of Disciplinary and Pastoral Power Applied to 'Animal-Centred' Welfare Discourse' (2011) 1 Animals 83,93-95

²³ Buller, Morris (n. 7) 218

eradication of factory farming. However, exactly what amounts to 'humane conditions' for animals remains unidentified. In short, welfarists recognise the historical interdependence for survival between humans and animals and honour it by aspiring to protect the welfare of animals. The remainder of this chapter will explore different approaches to animal welfare, to arrive at a definition.

1.3 Definition of Animal Welfare

The legal starting point in the quest of a definition in EU law is the Protocol on Protection and Welfare of Animals, annexed to the Treaty of Amsterdam (1997),²⁴ which states that:

THE HIGH CONTRACTING PARTIES, *DESIRING to ensure improved protection and respect for the welfare of animals as sentient beings*, HAVE AGREED UPON the following provision which shall be annexed to the Treaty establishing the European Community, In formulating and implementing the Community's agriculture, transport, internal market and research policies, *the Community and the Member States shall pay full regard to the welfare requirements of animals*, while respecting the legislative or administrative provisions and customs of the Member States relating in particular to religious rites, cultural traditions and regional heritage.²⁵

A sentient being is an animal which is aware of its surroundings, aware of what is happening to it, able to learn from experience and aware of sensations in their bodies, such as pain, heat, cold or hunger. A sentient being can also relate to other animals, including humans, and is able to distinguish and choose between different objects, animals and situations, thus showing an awareness of its environment. In other words, if an animal

²⁴ Treaty of Amsterdam Amending the Treaty on European Union, the Treaties Establishing the European Communities and certain related acts - Protocol on protection and welfare of animals [1997] Official Publications of the European Communities

²⁵ Emphasis added

is aware of how it feels, where it is, who it is with, and how it is treated, then that animal should be considered a sentient being.

Since the Treaty of Amsterdam, the protection for sentient beings has been strengthened as Article 13 of the Treaty of the Functioning of the European Union (TFEU) moved the relevant provisions into the main body of the Treaty text, and made it primary law. It is worth to reiterate the key point: Article 13 TFEU states that the EU and the Member States '*shall...pay full regards to the welfare requirements of the animals...*' but provides no further explanation or definition of 'animal welfare'.²⁶

While the Treaty of Amsterdam introduced animal welfare to the EU, the concern for animals in Europe can be traced back to the early 19th century England.²⁷ Despite the existence of early law in this area, it was not until the post-war era that significant legislative actions occurred.²⁸ The history of what we today would recognise as 'welfare concerns' only dates back to the latter half of the 20th century.

In 1965, the British Government launched an investigation into the welfare of farmed animals, and its findings resulted in a proposal by the Government that all animals should '*...have freedom to stand up, lie down, turn around, groom themselves and stretch their limbs*'.²⁹ The next significant link in the chain of events was in 1979, when the Farm Animal Welfare Council (FAWC) in the UK released a press notice containing the earliest written reference³⁰ to the 'Five Freedoms', which are:

²⁶ For the full text of Article 13 TFEU, see thesis introduction. For further discussion on the impact Article 13 TFEU has upon other aspects of EU law, see at 2.2.1.

²⁷ Cruel Treatment of Cattle Act 1822 (3 Geo IV c71). The history of animal welfare legislation in England is addressed in Chapter 4.4.

²⁸ R. Garner 'Animal Protection and Legislation in Britain and the United States' (1999) 5(2) *The Journal of Legislative Studies* 92,93-94

²⁹ J Vapnek, M Chapman, *Legislative and regulatory options for animal welfare* (Food and Agriculture Organisation of the United Nations 2010)1.3

³⁰ According to Department of Environment, Foods & Rural Affairs (DEFRA) best knowledge.

- Freedom from Hunger and Thirst
- Freedom from Discomfort
- Freedom from Pain, Injury or Disease
- Freedom to Express Normal Behaviour
- Freedom from Fear and Distress³¹

In 1993, the FAWC found that the Five Freedoms were too focused upon space requirements and on the animals' comfort-seeking behavioural aspects, without paying sufficient attention to other animal welfare elements, such as good food, good health and safety.³² As a result, the scope of each one of the Five Freedoms was expanded, moving away from a 'base threshold approach' phrased in negative terms, and towards a set of entitlements for the animals. Subsequently, the EU's Directorate General for Health and Food Safety (DG Santé)³³ expanded the freedoms to the following:

- Freedom from Hunger and Thirst requires that the animals have access to fresh water and a diet suited to maintain health and vigour.
- Freedom from Discomfort requires an appropriate environment with shelter and comfortable resting areas for the animals.
- Freedom from Pain, Injury or Disease requires preventative measures or rapid diagnosis and treatment should the need arise.
- Freedom to Express Normal Behaviour requires adequate space and facilities for the animal, and company of the animal's own kind.
- Freedom from Fear and Distress requires conditions for and treatment of the animal, which avoid mental suffering.³⁴

The Five Freedoms, in their expanded version, have spread far beyond the UK, and are now according to DG Santé '...widely recognised as defining

³¹ Farm Animal Welfare Committee 'Five freedoms' (DEFRA 31 March 2011) <<http://www.defra.gov.uk/fawc/about/five-freedoms/>> accessed on 21 November 2012

³² Vapnek, Chapman (n. 29) 1.3

³³ Previously DG SANCO, name change in 2015

³⁴ European Commission Health & Consumer Protection Directorate-General, 'Animal welfare factsheet' (2007)

ideal states of animal welfare, and form the basis of EU policy'.³⁵ While it is positive that DG Santé promotes the Five Freedoms, the phrase 'defining ideal states' is open to contestation, as such a phrase risks setting a maximum policy level, rather than treating them as basis for a policy. Indeed, the Five Freedoms are a good starting point to establish what animal welfare entails. Nonetheless, that is all they are: a starting point. This thesis argues that the Five Freedoms lack sufficient consideration of the animals' ethological needs, and consequently do not formulate a satisfactory definition of animal welfare per se. Satisfying basic needs is not equivalent to safeguarding welfare; it is possible to satisfy the basic needs of the animals to ensure their survival, while disregarding potential suffering. For example, an animal can survive in a barren environment, but will not have its ethological needs satisfied, as it cannot express its natural investigative behaviour. Therefore, while the (expanded) Five Freedoms can serve as a minimum checklist in policy-making to ensure that at least the animals' basic welfare needs are met during their entire lifespan, including in markets, during transport, in lairages³⁶ and slaughter,³⁷ a more rounded definition is required.

1.3.1 Different Schools of Thought

Scientists have diverse views on animal welfare, what it entails and what criteria or methodologies should be used when measured and assessed.³⁸ The different attitudes to animal welfare can be categorised into distinct approaches, or 'schools of thought', based on what animal welfare actually means.³⁹ None of these are without their flaws, nor is any of them more or less accurate, as each has its own merits. It would be beyond the scope of this thesis to take sides in this controversy among scientists and pass

³⁵ *ibid*

³⁶ Lairages (holding pens for animals awaiting slaughter)

³⁷ Vapnek, Chapman (n. 29) 1.3

³⁸ J.L. Barnett, P.H. Hemsworth, 'Welfare Monitoring Schemes; Using Research to Safeguard Welfare of Animals on the Farm' (2009) 12 *Journal of Applied Animal Welfare Science* 114,119

³⁹ Vapnek, Chapman (n. 29) 1.2

judgement on which approach to animal welfare is more suitable.⁴⁰ Rather, the purpose of the chapter is to provide a brief overview of the main schools of thought: physical welfare, emotional welfare, natural behaviour and ethological needs, to illustrate the complexity of the concept of animal welfare.

1.3.1.1 Physical Welfare

Physical welfare is the oldest approach to what animal welfare entails, and may be critiqued to be out-dated, as it focuses only on the physical being: the biological functioning of the animal and its physical environment.⁴¹ Broom defines the welfare of an individual animal as its state in regards to its attempts to cope with its environment.⁴² Barnett and Hemsworth break down and clarify the meaning of Broom's definition to:

1. How much has to be done in order to cope with the environment and includes responses such as the functioning of body repair system, immunological defences, physiological stress responses and a variety of behavioural responses; and
2. The extent to which coping attempts are succeeding; this refers to the lack of biological costs to the animal such as deterioration in growth efficiency, reproductive failure, poor health and increasing injuries.⁴³

Central to this approach is the idea that animals have a range of behavioural and physiological responses to cope with the environment they find themselves in.⁴⁴ Scientific research relying upon this approach often performs tests and monitors indicators such as endorphin and plasma cortisol levels, and heart rates. These indicators are used as a basis for an assessment of how the studied animal is 'coping' with its environment.

⁴⁰ Barnett, Hemsworth (n. 38) 119

⁴¹ Vapnek, Chapman (n. 29) 1.2

⁴² D.M. Broom 'Indicators of poor welfare' (1986) 142 *British Veterinary Journal* 524, 524-526

⁴³ Barnett, Hemsworth (n. 38) 119-120

⁴⁴ *ibid* 120

However, there are severe limitations in narrowing down the concept of welfare to the general physiological state of the animal's body alone. A combination of genetics and environment may result in 'false' data, indicating a state of physical 'welfare', even when the animal's mental state is compromised.⁴⁵ Mentally compromised states, such as anxiety or stress in the animal, would consequently be overlooked and not considered in an assessment. Additionally, there are other limitations to measuring physical welfare: for example, monitoring heart rates can be notoriously difficult to interpret, as the heart rate can increase due to positive excitement as well as negative experiences of the animal, such as fear or stress.⁴⁶

The physiological welfare approach developed alongside the intensification of farming animals and focuses on their 'biological fitness'.⁴⁷ It enabled selective breeding to maximise the economic efficiency of rearing the animals, as the results were used to achieve maximum production levels/growth for the minimum amount of feed. As such, the physiological approach with the biological fitness focus remains relevant when it comes to maximising productivity and financial gains in intensive husbandry systems. Therefore, ironically enough, this approach could be critiqued to not prioritise animal welfare. Nonetheless, physiological welfare is not without its merit, as it highlights the essentials the animals require to stay alive and grow, and it provides the tools to objectively measure and assess them.

1.3.1.2 Emotional Welfare

A core critique of the physical welfare approach is its disregard for the emotional needs of the animals. As animals are legally recognised as sentient,⁴⁸ their emotional welfare must also be considered, which renders a focus solely on their physique unsatisfactory. Indeed, it has even been

⁴⁵ C.J. Hewson 'What is animal welfare? Common definitions and their practical consequences' (2003) 44(6) *Canadian Veterinary Journal* 496,496-499

⁴⁶ *ibid*

⁴⁷ B. Bock and H. Buller 'Healthy, Happy and Humane: Evidence in Farm Animal Welfare Policy' (2013) 53(3) *Sociologia Ruralis* 390,394

⁴⁸ TFEU, Article 13

proposed that the animals' welfare depends entirely on feelings. The reasoning behind this argument is that the animals' feelings have evolved to protect their primary needs, which are necessary for ensuring their survival.⁴⁹ Duncan argues that animal welfare ultimately concerns the emotions of the animal as '...all living organisms have certain needs that have to be satisfied for the organism to survive, grow and reproduce; if these needs are not met, organisms will show symptoms of atrophy, ill health and stress, and may even die'.⁵⁰

However, just because all living organisms have needs necessary for their survival, it does not equate to feelings. Duncan distinguishes between all living organisms and higher organisms and argues that 'higher organisms have evolved "feelings" or subjective affective states to motivate behaviour to meet these needs'.⁵¹ In the negative state, the feelings of the higher organisms motivate the animals to perform certain behaviours in 'need situations' –which are necessary for their survival– while in their positive state, the feelings motivate the animals' behaviour along the line of 'opportunity situations'.⁵² Duncan's argument corresponds with the theory that animals' feelings evolved to ensure the survival of the animal, while simultaneously advancing it further, and acknowledges the nuances of different feelings and different 'levels' of feelings among different categories of organisms.

Within the emotional school of thought, the animals' welfare is typically assessed by measuring the behaviour of the animals in question, particularly by monitoring signs of fear or frustration.⁵³ Thus, the method of measuring emotional welfare is inherently subjective in its nature, as it relies on human observations, which can be compromised by potential anthropomorphism

⁴⁹ Hewson (n. 45) 496-499; I.J.H. Duncan 'Poultry welfare: science or subjectivity?' (2002) 43 *British Poultry Science* 643,643–652

⁵⁰ IJH Duncan, 'A concept of welfare based on feelings' in GJ Benson and BE Rollin (eds.), *The well-being of farm animals: challenges and solutions* (Blackwell 2004) 95–101

⁵¹ *ibid*

⁵² *ibid*

⁵³ Hewson (n. 45) 496-499; JC Petherick, J Rushen 'Behavioural restriction' in MC Appleby, BO Hughes (eds.) *Animal Welfare* (CABI Publishing 1997) 89–105

influences from the researchers' side – a stark contrast to the objective measurement of physiological welfare by biological data and readings. However, despite their differences in assessment and measurement, both the physiological and the emotional approach have the same fundamental flaw: the narrow scope. Apart from not considering each other, neither approach considers the natural behaviour of the animals.

1.3.1.3 Natural Behaviour

Before expanding on this approach, it is worth noting that 'natural' and 'normal' behaviour are two *separate* concepts. A behaviour can be deemed to be 'normal' without necessarily being 'natural'. For example, a pig biting on the pen fixtures is 'normal' when reared intensively in barren environments, as the pig needs an outlet for its frustration and boredom. However, there is nothing natural about such behaviour, as in an appropriate environment, the pig would root in the ground to satisfy the same need.

The natural behaviour theory of animal welfare operates on the premise that animals fare well when they can perform their full range of behaviours and live according to their nature.⁵⁴ Natural behaviour in this context refers to the observable actions and mannerisms of the animals *combined* with their environment.⁵⁵ This theory is commonly found (and used) in industrialised countries, particularly in relation to the promotion of 'welfare-friendly production systems'.⁵⁶ Indeed, the belief that it is important that animals are able to express their natural behaviour is especially strong among the general public living in industrialised countries.⁵⁷ As a result, intensive husbandry systems are severely criticised for making it impossible for animals to behave naturally.

⁵⁴ BE Rollin, *Animal Rights and Human Morality* (Prometheus Books 1981) ^{54–57}; M. Kiley Worthington 'Ecological, ethological and ethically sound environments for animals: towards symbiosis.' (1989) 2 *Journal of Agricultural Ethics* 323,^{323–247}

⁵⁵ WM Muir, H Wei Cheng 'Genetic Influences on the Behaviour of Chickens Associated with Welfare and Productivity' in T Garndin, MJ Deesing (eds.) *Genetics and the Behaviour of Domestic Animals* (Elsevier Inc. 2014) ³¹⁷

⁵⁶ Barnett, Hemsworth (n. 38) ¹²⁰

⁵⁷ Vapnek, Chapman (n. 29) 1.2; C.J. Savory 'Laying hen welfare standards: A classic case of power to the people' (2004) 13 *Animal Welfare* 153,153-158; Hewson (n. 45) 496-499

However, natural behaviour pertains to different things for each animal, due to the great variety between species. Based on this, it is only logical that observational findings of pigs' behaviour differ significantly from the ones of poultry's behaviour. The observations will even vary between different breeds of the same species, or between different stages of the animals' lives. The behaviour of a piglet or a chick is markedly different from the behaviour of a sow or a hen (see next subchapter). These differences make the natural behaviour approach incredibly complex. The complexity is further exacerbated if one includes the variety of effects the environment can have on animal behaviour, and the large amount of definitions for 'natural behaviour' which would be necessary. Apart from the complexity arising from the difference between species, there are also differences in priorities among the regulators. For example, access to natural elements (such as daylight and fresh air) for the animals is only sometimes taken into consideration by regulators as part of this approach.⁵⁸ When access to natural elements is not prioritised (and therefore not required), the concept of natural behaviour is effectively undermined. For instance, if animals are hindered from following the natural rhythm of daylight, as daylight influences their behaviour, the naturalness of their living conditions will be inevitably reduced.

Nonetheless, the complexity of the approach is not its only flaw. If one strictly applied the ethos of natural living and natural behaviour, then some cases of physical suffering, such as being cold in the winter or suffering mentally due to being preyed upon, would be acceptable as part of natural living.⁵⁹ The approach can be further pushed, as Dawkins recognises and highlights a major flaw: if natural behaviour were interpreted as the way animals behave in the wild, it would represent the daily life-and-death struggle the animal face to survive.⁶⁰ As many natural responses of the

⁵⁸ Vapnek, Chapman (n. 29) 1.2

⁵⁹ D M Boom 'Animal Welfare: An Aspect of Care, Sustainability, and Food Quality Required by the Public' (2010) 37(1) Journal of Veterinary Medical Education 83,86

⁶⁰ M Dawkins, *Animal suffering: The science of animal welfare* (Chapman and Hall 1980)

animals are evolutionary adaptations developed to cope with extremely adverse situations, exposing animals to similar situations to trigger the same natural responses, would be incompatible with the purpose of animal welfare. This argument is supported by research showing that all stimuli are not necessarily beneficial, due to the potential suffering they cause.⁶¹ Therefore, any stimuli provided for farm animals must be suitable for the animals' needs. For example, providing environmental enrichment to enable rooting behaviour among pigs is suitable, while providing pigs with perches is not.

While a bit of cold in the winter may not exactly amount to 'unnecessary suffering', the issue is where to draw the line. 'Naturalness' based upon the lives of wild ancestors would push the scope beyond what is acceptable for the domesticated descendants. The selectively bred domesticated animals have been 'engineered' to such an extent that they would not survive in the wild on their own, and it is therefore unrealistic to expect from the domesticated animals to fend for themselves the way their wild ancestors did.⁶² Consequently, placing domesticated animals in a 'wild' environment is likely to result in a fight for survival, which contradicts the idea of ensuring the animals' welfare. Thus, a strict interpretation of natural living and behaviour would not be appropriate for the purpose of safeguarding farm animals' welfare. Both positive and negative aspects of the approach in question are elegantly summarised by Muir and Cheng:

Life in general is a series of stressors, for humans and animals, in the quest for food, shelter, security and reproduction. In each of these basic quests, even in natural conditions, most animals experience periods of food deprivation, disease, predation, competition and stress. Our quest should not be to provide as natural

⁶¹ R.E. Doyle, R. Freire, A. Cowling, S.A. Knott, C. Lee 'Performance of sheep in spatial maze is impeded by negative stimuli' (2014) 151 Applied Animal Behaviour Science 36,36-42

⁶² Bailey Norwood, Lusk (n. 16); Cole (n. 22) 88

conditions as possible, lest we expose animals to the undesirable aspects of nature as well, but rather to protect animals from such natural stressors, while ensuring a safe healthy food supply, free of disease, for human consumption.⁶³

1.3.1.4 Ethological Needs

The field of applied ethology is a relatively young, still emerging, sub-discipline of Biology.⁶⁴ The development of the concept of 'ethological needs' is not only useful for understanding farm animal welfare legislation, since they are consistently referred to in it, but also it is important for the welfare of animals.⁶⁵ An animal's 'ethological needs' refers to its inherently complex need to perform a species-specific behaviour.⁶⁶ Due to the complexity, the most effective way of explaining the concept is by providing examples of what ethological needs are. Two examples are provided, commencing with the fundamental physiological need of feeding and how it amounts to an ethological need:

Contemporary farm animals descend from wild ancestors who spent the vast majority of their days foraging for food. Despite subjecting them to numerous generations of selective breeding, their core behavioural needs remain unchanged and pronounced. As a consequence of the ancestry,

⁶³ Muir, Wei Cheng, (n. 55) 319

⁶⁴ See further; S.T. Millman, I.J.H. Duncan, M. Stauffacher, J.M. Stookey 'The impact of applied ethologists and the International Society for Applied Ethology in improving animal welfare' (2004) 86 *Applied Animal Behaviour Science* 299; L. Désiré, A. Boissy, I. Veissier 'Emotions of farm animals: a new approach to animal welfare in applied ethology' (2002) 60(2) *Behavioural Processes* 165

⁶⁵ Council Directive 1998/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes [1998] OJ L221/23, Recitals, Article 4, Annex(7),(11); Council Directive 2008/120/EC of 18 December 2008 laying down minimum standards for the protection of pigs (codified version) [2009] OJ L47/5, Article 7(2)(d); Council Directive 1999/74/EC of 19 July laying down minimum standards for the protection of laying hens [1999] OJ L203/53, Recital (3), Article 2(2)(c), Article 10; Council Directive 2007/43/EC of 28 June 2007 laying down minimum rules for the protection of chickens kept for meat production [2007] OJ L182/19, Recital (2)

⁶⁶ G. Matheny, C. Leahy 'Farm-Animal Welfare, Legislation and Trade' (2007) 70(1) *Law and Contemporary Problems* 325,343; P Jensen, '*Hur får maten? Djurhållning och djurskydd i Sverige*' (Natur & Kultur 2012) 41

domesticated farm animals are highly motivated and have a compelling need to conduct the foraging behaviour, although food is readily available to them.⁶⁷ Even when the feed has been carefully composed to ensure that it satisfies all physiological needs of the animals, it is not enough; they will still forage.⁶⁸

The second example of an ethological need, is the need to move. The need for movement covers two different aspects: small-scale movements (always present) and large-scale locomotion, both of which need to be considered when assessing whether the needs are met.⁶⁹ Large-scale locomotion is related to foraging, as wild animals move across large areas to find sufficient quantities of food. Small-scale movements comprise small, species-specific comforting behaviours – for example, the need for birds to preen their plumage.

One way to satisfy movement needs is to provide environmental enrichment, like plenty of straw for pigs to forage in, or litter for poultry, to provide an outlet for their pecking behaviour. However, it is vital that enrichment is suitable for its specific purpose. As such, according to applied ethology, merely providing 'some' straw for sows does not satisfy their strong nesting need. Rather, the material must be suitable –and of a sufficient quantity– to make it possible for the sow to build something *she* would consider to be a nest.⁷⁰ When the ethological needs of the animals are not satisfied, the animals often develop stereotypical behaviour,⁷¹ such as chewing on the housing fittings, tail biting (pigs) and aggressive pecking (poultry).⁷²

⁶⁷ C.C. Croney, S.T. Millman 'BOARD-INVENTED REVIEW: The ethical and behavioural bases for farm animal welfare legislation' (2007) 85 *Journal of Animal Science* 556,561; Jensen (n. 66) 42

⁶⁸ Jensen (n. 66) 41

⁶⁹ MC Appleby, JA Mench, BO Hughes, *Poultry Behaviour and Welfare* (CABI Publishing 2004) 4.9

⁷⁰ Jensen (n. 66)

⁷¹ Stereotypical behaviour is an ethology term, defined as 'behavioural patterns performed repetitively in fixed order with no apparent function'. R Bergeron, M-C Meunier-Salaün, S Robert 'The welfare of pregnant and lactating sow' in L Faucitano and AL Schafer (eds.) *Welfare of pigs from birth to slaughter* (Wageningen Academic Publishers 2008) 2.1

⁷² Croney, Millman (n. 67) 560; GHK Consulting 'Final Report: Evaluation of the EU Policy

Additionally, research shows that hindering the performance of ethological needs leaves the animals emotionally distressed.⁷³

1.3.2 Difficulties of Measuring Animal Welfare

As outlined above, the concept of 'animal welfare' is complex and many theories have attempted a definition. The divergence of theories regarding the definition is not the only problem with animal welfare; regardless of the definition given, the issue of assessment and measurement of the welfare provided remains. For measuring animal welfare, commonly used are the 'functioning-based' and the 'feelings-based' approaches.⁷⁴

The functioning-based approach assesses the welfare of the animal on two levels: i) the magnitude of the behavioural and physiological responses; and ii) the cost(s) to biological fitness of these responses.⁷⁵ The central idea of this approach originates from the theory that in natural populations of the animal, the 'fitter' animals make a greater genetic contribution to subsequent generations, due to their abilities to survive, grow and reproduce more successfully, compared with their counterparts with a lower level of fitness.⁷⁶ As such, the functioning-based approach covers the physiological aspects of welfare. The contrasting feelings-based approach is founded on studies of animal preferences, based on two hypotheses: i) that these preferences are influenced by animals' emotions; and ii) that their emotions are prime determinants of their welfare.⁷⁷ The feelings-based approach thus assesses the emotional aspects of animal welfare.

on Animal Welfare & Possible Options for the Future' (Job No. J7296 DG SANCO 2010)
3.1.2

⁷³ Désiré, Boissy, Veissier (n. 64) 165-180; H.H. Sambras 'Applied ethology – it's task and limits in veterinary practice' (1998) 59 Applied Animal Behaviour Science 39

⁷⁴ Barnett, Hemsworth (n. 38) 121; D. Fraser, D. M. Weary, E. A. Pajor, B. N. Milligan 'A scientific conception of animal welfare that reflects ethical concerns' (1997) 6 Animal Welfare 187,191; Hewson (n. 45)

⁷⁵ Barnett, Hemsworth (n. 38) 121

⁷⁶ *ibid*; ER Pianka, *Evolutionary ecology* (Harper & Row 1974)

⁷⁷ Barnett, Hemsworth (n. 38) 121; I.J.H. Duncan, J.C. Petherick, 'The implications of cognitive processes for animal welfare' (1991) 69 Journal of Animal Science 5017

When these two contrasting approaches for the assessment of animal welfare are combined with the multitude of definitions for it, inconsistency in the results is inevitable. Differences will arise when scientists assess welfare data depending on their type, and on which theory the scientists subscribe to. When the scope is extended to include policy-makers (both governmental and non-governmental) and the drafting, implementation, and enforcement of animal welfare legislation, the differences will multiply. The EU legislation requires decisions on animal welfare to be taken in line with scientific knowledge.⁷⁸ However, as shown so far in this chapter, 'scientific knowledge' covers a wide range of approaches to animal welfare, which often are contradictory. Therefore, if policy-makers cannot find common ground in the interpretation of scientific knowledge, they will unavoidably disagree when setting animal welfare standards.⁷⁹

The importance of the selection of welfare theory and welfare measurement method that will be used can be highlighted with the example of the egg-layer and the benefits and drawbacks of caged husbandry systems. If the welfare assessment of the egg-layer focuses upon natural behaviour, then the welfare needs of the caged egg-layer cannot be met, as she cannot move freely or satisfy her ethological needs. This conclusion applies regardless of whether it is a conventional 'battery' cage (now outlawed) or a lawful, 'enriched' cage. Consequently, if the focus is on natural behaviour and ethological needs, the welfare level of caged egg-layers is legal, but unsatisfactory.

Contrastingly, in free-range systems there is a greater possibility for the natural behaviour and the ethological needs of the egg-layer to be satisfied, but when compared to a caged system, a free-range system carries an increased risk for illness and has a higher mortality rate. Therefore, if the welfare assessment has a physiological focus, the free-range system would be deemed as poorer welfare, due to the higher level of disease and

⁷⁸ Directive 98/58, Article 5(2)

⁷⁹ Barnett, Hemsworth (n. 38) 122

mortality.⁸⁰ A focus on the feelings and ethological needs of the animals would find any caged system wholly unacceptable, due to its restrictive nature. From this perspective, it would be preferable to use a cage-free system, despite the higher mortality rates, as it would benefit the ethological needs and emotional wellbeing of the egg-layers. Such diverse scientific findings make it problematic for legislators to rely on scientific knowledge when formulating the animal welfare legislation. Facing the decision of which scientific approach to follow, legislators can choose to be guided by public preference, as it is the public, the consumers, who ultimately purchase the produce. Savory notes that when the public assesses animal welfare in the EU, of the Five Freedoms, the Freedom to Behave Normally is often given more weight than the others.⁸¹ Based on Savory's observation and consumer guidance, the preference of free-range systems indicate that it is the ethological, feelings-based approach that is in line with public policy, and suggest that legislators should follow these scientific findings over the physiological, functioning-based ones.

A further variable to consider when assessing animal welfare is the timing of the assessment. A large proportion of the data collected for welfare assessment is 'post-production' data, gathered post-slaughter, with a physiological focus, like mortality rates, injuries and signs of poor health. Collecting non-physiological data, such as measuring pain, fear, disease rates and distress when the animals are still alive, is comparatively problematic and requires field-based data collection. The problem with post-production data, from an animal welfare perspective, is that regardless of the type of data and the method of collection, they can only provide retrospective indicators of animal welfare. Results from the analysis of post-production data can only be utilised to change practices for subsequent generations of animals; nothing can be done for the animals from which the data originated. If data on welfare indicators is gathered whilst the animal is

⁸⁰ *ibid* 123

⁸¹ C.J. Savory 'Laying hen welfare standards: A classic case of power to the people' (2004) 13 *Animal Welfare* 153; F. Vanhonacker, W. Verbeke, E. Van Poucke, F.A.M. Tuytens 'Do citizens and farmers interpret the concept of farm animal welfare differently?' (2008) 116 *Livestock Science* 126

still alive, regardless of whether it is physiologically orientated or not, then both corrective and preventative actions can be taken (where possible) to improve the welfare for the animals from which the data is collected, rather than only benefit subsequent generations.⁸²

Nonetheless, all these different approaches to animal welfare are zoocentric. The importance of maintaining the focus firmly upon the animals when discussing and defining the concept of animal welfare cannot be overestimated. Farming has developed into an industry with tight economic margins that provide an incentive to diverge from the zoocentric focus and resort to resource-based assessments of welfare.⁸³ Resource-based assessments examine factors like management, routine husbandry/housing, maximising productivity and stocking density, and they are likely to result in a move towards financial priorities. This can only be avoided if science, policy and legislation retain a zoocentric perspective to discourage farmers from putting financial goals over their animals' welfare.

1.3.3 Definition of 'Animal Welfare' within this Thesis

As outlined above, there is no widely accepted definition of what 'animal welfare' actually *means*. Instead, there is a multitude of definitions, theoretical approaches and measuring methods, presented as a basis for assessing animal welfare. However, not a single one of them is appropriate to base a definition upon, due to the flaws of varying severity that each of them has.

None of the individual, flawed approaches discussed above can fulfil the underlying premise, which is that we, humans, must ensure that the lives of sentient beings (such as farm animals) are worth living, by safeguarding their wellbeing and minimising any suffering. This thesis argues that a combination of the beneficial attributes of the existing approaches would cancel out their individual flaws and result in a workable, rounded definition

⁸² Barnett, Hemsworth (n. 38) 126

⁸³ *ibid* 125

of animal welfare, safeguarding the animals' wellbeing. This definition would consider the animal as a *whole* rather than focusing on specific aspects of its entity, avoiding the narrow focus of the *physiological* and *emotional* schools of thought by including them both; it would further recognise the importance of allowing *natural* animal behaviours deriving from *ethological* needs. A combination of the ethological approach with the natural behaviour approach would negate the more extreme aspects of the latter, as it would require a recognised ethological need to be associated with the natural behaviour in question. For example, exposing the animals to predators or to extreme weather conditions while they fend for themselves –both of which are acceptable as 'natural'– would be considered unacceptable, due to the lack of an ethological need for such situations. However, providing plentiful and suitable environmental enrichment would be in line with a rounded, holistic welfare approach, by benefitting the physiological and emotional wellbeing, while satisfying natural behaviours for which there is an established ethological need, such as rooting for pigs or perching for poultry.

This thesis further argues that a rounded welfare definition must be measured and assessed by both functioning-based and feelings-based methods. Otherwise, the careful balance of different approaches achieved within such definition will be disrupted. It is also necessary for welfare assessment to ensure that it relies upon data collected not only post-production but also while the animals are still alive, to enable welfare improvements for current animal generations and not just for subsequent ones.

To conclude, an appropriate legal definition of animal welfare considers physiological welfare (the animals' bodies), emotional welfare (the animals' mind), and all natural behaviours for which there is an ethological need and must be assessed with both functioning-based and feelings-based methods to avoid a skewed emphasis on physiological functioning.

1.4 Essential Welfare Needs for Pigs and Poultry

This subchapter is an overview of the essential welfare needs for pigs and poultry, and provides the foundation for the critique of the EU legislation (Chapter 3) and the Member States' legislation (Chapter 4). Identifying the welfare needs required for the animals to fare well is necessary before comparing them against the existing legal requirements. The welfare needs are identified by applying the rounded, holistic definition outlined above. To fully comprehend the complexity of the animals' needs, it is imperative to consider a range of aspects such as their wild ancestry, as well as selective breeding and husbandry practices. Due to the amount of vital detail needed, this overview is unavoidably descriptive in nature, to provide information integral to the subsequent legal analysis.

The animals are divided into two subsections by species: pigs and poultry, each commencing with an introduction of species-specific needs. For this subsection, the two commercial hybrids are considered jointly as, despite their differences, they are fundamentally the same species. These 'general needs' sections are followed by subsections, divided into different welfare requirements, by specific hybrid (poultry) or by the stage of their lives (pigs).

1.4.1 General Welfare Needs for Pigs

The domestic pig's ancestor, the wild boar, was domesticated about 10,000 years ago. Since domestication, humans have selected desired traits to create the breeds of pigs we have today.⁸⁴ In the wild, pigs are highly social animals and live in groups, comprising of several closely related sows and their piglets throughout their lives. Each group of sows has an established hierarchy. These groups are stable not only in numbers, but also in the established social hierarchy among them.⁸⁵ However, modern farming practices do not allow long-term stability for groups, which is natural for wild

⁸⁴ K.M.D. Rutherford, E.M. Baxter, R.B. D'Eath, S.P. Turner, G. Arnott, R. Roehe, B. Ask, A. Moustsen, F. Thorup, S.A. Edwards, P. Berg, A.B. Lawrence 'The welfare implications of large litter size in domestic pig I: biological factors' (2013) 22 *Animal Welfare* 199

⁸⁵ AK Johnson, JN Marchant-Forde 'Welfare of Pigs in the Farrowing Environment' in JN Marchant-Forde (ed) *The Welfare of Pigs* (Springer 2009) 5.3.5.; Bergeron, Meunier-Salaün, Robert (n. 71) 5.4

pigs. In group-rearing husbandry systems, the groups of pigs are frequently split up and re-arranged into new groups, as the pigs move through the different husbandry stages of rearing during their lifetime.⁸⁶ Every time a new group is created, it is highly stressful for the animals, as a new social hierarchy must be established, each time by expressing aggressive behaviour, as pigs seek to establish their dominance.⁸⁷ The aggression is further aggravated when new groups are housed in small spaces, which forces the pigs into close proximity and prevents them from escaping aggressors, as they would do in the wild. In essence, the smaller the space is, the higher the level of aggression.⁸⁸ Additionally, small housing spaces restrict their locomotion, and high-stocking density increases the aggressive behaviour.⁸⁹

In a natural environment, the pigs would spend three quarters of their active time foraging and rooting, in other words exploring their environment and surroundings with their snout in search for food and moving over large areas. Rooting and foraging are classified as 'compelling behaviours'⁹⁰ and are core ethological needs for pigs.⁹¹ However, the barren environment, in which intensively farmed pigs are reared, renders it impossible for the pigs to root, and leaves the need unsatisfied. Further, the way pigs are fed, and the speed of the feeding, leaves intensively reared pigs unoccupied for the majority of their time, with no stimuli, and with a strong compulsion to explore and forage. The lack of stimulus leaves their exploratory behavioural needs unsatisfied, and their only outlet for their need to explore in their

⁸⁶ RB D'Eath, SP Turner, 'The Natural Behaviour of the Pig' in JN Marchant-Forde (ed) *The Welfare of Pigs* (Springer 2009) 2.5.3

⁸⁷ *ibid* 2.5.3.; Bergeron, Meunier-Salaün, Robert (n. 71) 5.4,6

⁸⁸ JN Marchant-Forde, *The Welfare of Pigs* (Springer 2009) 118-119; R.C. Weng, S.A. Edwards, P.R. English 'Behaviour, social interactions and lesion scores of group-housed sows in relation to floor space allowance (1998) 59 *Applied Animal Behaviour Science* 307; P. Jensen, D.G.M. Wood-Gush 'Social interactions in a group of free-ranging sows' (1984) 12 *Applied Animal Behaviour Science* 327

⁸⁹ NE O'Connell 'Housing the Fattening Pig' in JN Marchant-Forde (ed) *The Welfare of Pigs* (Springer 2009) 193; D'Eath, Turner (n. 86) 2.5.2.

⁹⁰ *Compelling behaviour* is used in biology and ethology and refers to an innate behaviour of the animal, often linked to its wild ancestry (for farm animals). Compelling behaviours differ among species.

⁹¹ Jensen (n. 66) Chapter 11; O'Connell (n. 89) 196

barren environment is their surroundings, namely housing fixtures and each other. Consequently, the exploratory behaviour is often directed towards other pigs, resulting in undesirable vices like tail-biting, lesions, aggressiveness, stress and fear.⁹² Studies have shown that such undesirable behaviour can be countered by providing plentiful bedding material combined with greater space, which increase the pigs' level of play.⁹³ Further, studies have shown a clear preference by pigs to spend time in bedded environments.⁹⁴ For instance, environment enrichment with the use of straw as bedding material improves significantly the welfare of pigs, because it satisfies their ethological needs, provides physical comfort, and reduces the severity of injuries.⁹⁵

1.4.1.1 Welfare Needs for Sows

During the time leading up to farrowing, sows have specific welfare needs, such as privacy, need for nest building, increased hunger and an increase in activity levels. While wild sows generally live in family groups, a sow about to

⁹²EFSA Panel on Animal Health and Welfare, 'Scientific Opinion concerning a Multifactorial approach on the use of animal and non-animal-bases measures to assess the welfare on pigs' (2014) 12(5) EFSA Journal 3702; M.J.C. Hensing, A.M. Hagelsøm J.A.M. Van Beek, P.R. Wiepkema, W.G.P. Schouten, R. Krukow 'Individual behavioural characteristics in pigs' (1993) 37 Applied Animal Behaviour Science 285; B. Wechsler, R. Weber 'Loose farrowing systems; challenges and solutions' (2007) 16 Animal Welfare 296,298; F.H.De Jonge, E.A.M. Bokkers, W.G.P. Schouten, F.A. Helmond 'Rearing piglets in a poor environment: Developmental aspects of social stress in pigs' (1996) 60 Physiology & Behaviour 389; D.G.M Wood-Gush, K. Verstergaard, H.V. Petersen 'The significance of motivation and environment in the development of exploration in pigs' (1990) 15 Biology of Behaviour 39; K. Scott, D.J. Chennells, D. Armstrong, L. Taylor, B.P. Gill, S.A. Edwards 'The welfare of finishing pigs under different housing and feeding systems: liquid versus dry feeding in fully slatted and straw-based housing' (2007) 16 Animal Welfare 53,60; V.E. Beattie, N.E. O'Connell, D.J. Kilpatrick, B.W. Moss 'Influence of environmental enrichment on welfare related behaviour and physiological parameters in growing pigs.' (2002) 11 Animal Welfare 295; V. Petersen, H.B. Simonsen, L.G. Lawson 'The effect of environmental enrichment on the development of behaviours in pigs' (1995) 68 Applied Animal Behaviour Science 191

⁹³ JG Gentry, AK Johnson, JJ McGlone, 'The welfare of growing-finishing pigs' in JN Marchant Forde (ed) *The Welfare of Pigs* (Springer 2009) 4.2; D'Eath, Turner (n. 86) 2.5.2.; D. Fraser, P.A. Phillips, B.K. Thompson, T. Tennessee 'Effect of straw on the behaviour of growing pigs' (1991) 30 Applied Animal Behaviour Science 307; L Rydhmer, N Lundheim 'Breeding pigs for improved welfare' in JN Marchant-Forde (ed) *The Welfare of Pigs* (Springer 2009) 9; JC Petherick, 'A biological basis of the design of space in livestock housing' in SH Baxter, MR Baxter, JAD MacCormack (eds.) *Farm Animal Housing and Welfare* (Martinus Nijhoff Publishers 1983); O'Connell (n. 89) 6.2.1.1

⁹⁴ O'Connell (n. 89) 197; V.E. Beattie, N. Walker, I.A. Sneddon 'Preference testing of substrates by growing pigs' (1998) 7 Animal Welfare 27

⁹⁵ Marchant-Forde (n. 88) 110,119; S Baxter, *Intensive Pig Production: Environmental Management and Design* (Granada Publishing Ltd London 1984); Gentry, Johnson, McGlone (n. 93) 4

farrow withdraws from the family group in the days leading up to the farrowing. Once withdrawn, she builds a nest, farrows, and initially keeps her piglets separate from the other sows.⁹⁶ A common farming practice of moving the sows to individual housing in the days leading up to farrowing echoes this natural behaviour. Therefore, from an ethological point of view, the separation from the group of the farrowing sow is appropriate.

However, the farrowing sows are commonly housed in individual farrowing pens or gestation crates, which are –barring the privacy aspect– not appropriate for their welfare needs. Both farrowing pens and gestation crates are far too restrictive in space allowance and effectively hinder the sow from performing a range of important natural behaviours such as choosing a nesting site, satisfying her nest-building need, and establishing physical contact with her piglets, all of which are essential welfare needs.⁹⁷

Additionally, housing a sow in a gestation crate or a farrowing pen hinders the sow from moving around in the week leading up to the farrowing, a time during which the natural behaviour of a sow shows an increase in activity levels. Studies have confirmed that such a restriction of movement for the farrowing sow causes distress and has a negative impact on her welfare.⁹⁸

Sows have a strong desire for nest-building and they display this behaviour very intensely during the time leading up to the farrowing.⁹⁹ Lack of available

⁹⁶ P. Jensen 'Nest site choice and nest building of free-ranging domestic pigs due to farrow.' (1989) 22 *Applied Animal Behaviour Science* 13; Bergeron, Meunier-Salaün, Robert (n. 71) 5.4

⁹⁷ B. Wechsler, R. Weber 'Loose farrowing systems; challenges and solutions' (2007) 16 *Animal Welfare* 296; D.S. Arey 'Behavioural observations of peri-parturient sows and the development of alternative farrowing accommodation: A review' (1997) 6 *Animal Welfare* 217; Scientific Veterinary Committee 'The Welfare of Intensively Kept Pigs. Report to the Directorate General XXVI of the European Commission. Adopted 30th September 1997. Doc XXVI/ScVc/0005/97 (Scientific Veterinary Committee, Animal Welfare Section 1997); B.I. Damm 'Loose housing of sows – is this good welfare?' (2008) 50 *Acta Veterinaria Scandinavica* (Suppl I):S9; Bergeron, Meunier-Salaün, Robert (n. 71) 3.1

⁹⁸ S. Jarvis, R.B. D'Eath, S.K. Robson, A.B. Lawrence 'The effect of confinement during lactation on the hypothalamic-pituitary-adrenal axis and behaviour of primiparous sows' (2006) 87 *Physiology and Behaviour* 345; Bergeron, Meunier-Salaün, Robert (n. 71) 3.1,5.3; M.J. Haskell, G.D. Hutson, L.G. Dickenson. S. Palmer 'The pre-farrowing behaviour of sows with operant access to space for locomotion' (1997) 51 *Applied Animal Behaviour Science* 51

⁹⁹ Jensen (n. 96); R. Weber, N.M. Keil, M. Fehr, R. Horat 'Piglet mortality on farms using

nesting material does not hinder the sow from exhibiting nest building behaviour, even if it is limited to the pen (or crate) fittings.¹⁰⁰ However, when it is provided, it must not only be of suitable material, but it is essential that the material is of a *sufficient quantity*, to enable the sow to build something she would consider to be a nest to have an actual, positive impact on her welfare.¹⁰¹ Nesting material, as an environmental enrichment, is also important for the sow and piglet relationship. Studies have shown that an enriched environment around the time of the farrowing has positive effects on the sow's mothering skills, which improves the piglets' survival ratio, as a natural co-ordinated behaviour between the sow and her litter has been identified.¹⁰² The co-ordinated behaviour reduces the risk of piglet crushing, but is only effective if the sow has a sufficient amount of space available to her. Piglet mortality on farms using pens (compared to crates) shows no significant difference on the overall number of piglet mortality, provided that the farrowing space is at least 5m², the size required for the co-ordinated behaviour to be effective.¹⁰³

farrowing systems with or without crates' (2007) 16 *Animal Welfare* 277, 277

¹⁰⁰ S. Jarvis, B.J. Van der Vegt, A.B. Lawrence, K.A. McLean, L.A. Deans, J. Chirnside, S.K. Calvert 'The effect of parity and environmental restriction on behavioural and physiological responses of preparturient pigs.' (2001) 71 *Applied Animal Behaviour Science* 203; B.I. Damm, K.S. Verstergaard D.L. Schroder-Petersen, J. Ladevig 'The effects of branches on perpartum nest building in gilts with access to straw' (2000) 60 *Applied Animal Behaviour Science* 113; Weber, Keil, Fehr, Horat (n. 99) 277; Wechsler, Weber (97); G.J. Lammers, A. De Lange 'Pre- and post-farrowing behaviour in primiparous domesticated pigs (1989) 15 *Applied Animal Behaviour Science* 31; A.B. Lawrence, J.C. Petherick, K.A. McLean, L.A. Deans, J. Chirnside, A. Vaughan, E. Clutton, E.M.C. Terlouw 'The effect of environment on behaviour, plasma cortisol and prolactin in parturient sows' (1994) 39 *Applied Animal Behaviour Science* 313

¹⁰¹ Jensen (n. 66)

¹⁰² Wechsler, Weber (97); M.S. Herskin, K.H. Jensen, K. Thodberg 'Influence of environmental stimuli on maternal behaviour relating to bonding, reactivity and crushing of piglets in domestic sows' (1998) 58 *Applied Animal Behaviour Science* 241; Bergeron, Meunier-Salaün, Robert (n. 71) 5.3

¹⁰³ The farrowing pens had a higher level of losses due to crushing, but significantly fewer deaths from other causes, while gestation crates had fewer deaths due to crushing but significantly more deaths from other causes, both ending up with a similar amount of losses. Weber, Keil, Fehr, Horat (n. 99) 279; G.M. Cronin, B. Lefébure, S. McClintock 'A comparison of piglet production and survival in the Werribee Farrowing Pen and conventional farrowing crates at a commercial farm' (2000) 40 *Australian Journal of Experimental Agriculture* 17; J.K. Blackshaw, A.M. Hagelø 'Getting-up and lying-down behaviour of loose-housed sows and social contacts between sows and piglets during day 1 and day 8 after parturition (1990) 25 *Applied Animal Behaviour Science* 61; R Weber 'Alternative housing systems for farrowing and lactating sows' in HJ Blokhuis, ED Ekkel, B Wechsler (eds.) *Improving health and welfare in animal production* (Wageningen 2000)

1.4.1.2 Piglets' Welfare Issues

The main welfare issues for piglets are physical interventions: castration, teeth-clipping, and tail-docking. Before addressing these in detail, it is suitable to briefly address whether piglets feel pain. A long-standing, prevalent theory is that the pain-detecting neuro-anatomy in neonatal piglets is neither completely developed nor fully functioning yet.¹⁰⁴ Accordingly, piglets do not feel pain until their neuro-anatomy has developed. Based on this, if physical interventions are to be performed, they should be performed as early as possible, preferably on day-old piglets, as they cannot feel pain and no anaesthetics are required. However, more recent research findings question the validity of this theory and render it outdated. The newest findings, through modern approaches, have proved that piglets *do* feel pain from the time they are born. According to these, physical interventions cause distress and pain to the piglets, and are detrimental to their welfare, regardless of when they are performed.¹⁰⁵

The first of the main physical interventions relates to piglets' survival instincts. Piglets are wholly dependent on the sow for their survival: she is their source of heat and food, from the moment of birth until they are weaned, which varies between eight and nineteen weeks (depending on the sows' decision).¹⁰⁶ As piglets are in competition for teat access with their siblings, they are born with fully erupted corner teeth, also known as 'needle teeth'.¹⁰⁷ The needle teeth pose a risk of causing facial lacerations to their siblings and damaging the sow's teats. This problem is exacerbated by the breeding of larger litters, which increases the teat-rivalry among the piglets, as the number of teats remains unchanged.¹⁰⁸

¹⁰⁴ S Held, JJ Cooper, MT Mendl 'Advances in the Study of Cognition, Behavioural Priorities and Emotions' in JN Marchant-Forde (ed) *The Welfare of Pigs* (Springer 2009) 3.2.1.3

¹⁰⁵ B Puppe, M-C Meunier-Salaün, W Otten, P Orgeur, 'The welfare of piglets' in L Faucitano and AL Schafer (eds.) *Welfare of pigs from birth to slaughter* (Wageningen Academic Publishers 2008) 6.1

¹⁰⁶ D'Eath, Turner (n. 86) 2.4.9, 2.5.5

¹⁰⁷ D. Fraser, B.K. Thompson 'Armed sibling rivalry among suckling piglets' (1991) 29 *Behavioural Ecology and Sociobiology* 9

¹⁰⁸ Rutherford, Baxter, D'Eath, Turner, Arnott, Roehe, Ask, Moustsen, Thorup, Edwards,

Injuries caused by needle teeth are commonly prevented by teeth-clipping. Teeth-clipping is the practice of clipping or grinding of the corner teeth, which causes discomfort, pain, fear and distress¹⁰⁹ to the piglet. Teeth-clipping is undesirable for the *individual* piglet's welfare, as it is traumatic and causes (prolonged) pain. However, if the collective welfare of a litter as a whole is prioritised over the individual piglets' welfare, then the situation changes. If all piglets within a litter have their teeth clipped as a preventative measure against harming each other, then the *collective* welfare increases, as injuries are prevented. Further, teeth-clipping prevents damage to the sow's teats and saves her from discomfort, pain, and distress – if infected, the wounds can cause severe problems.¹¹⁰ Therefore, before deciding whether to clip or not, the benefits and disadvantages to the welfare of the piglets and the sow should be carefully considered.

Pigs may also be subjected to the practice of tail-docking, and due to legal restraints, docking is likely to be performed on piglets.¹¹¹ Tail-docking is the severance of the whole or part of the tail as a preventative measure to the vice of tail-biting. Tail-biting commonly occurs when pigs are reared in barren environments, as their innate investigatory behaviour must find an outlet, despite the lack of environmental enrichment.¹¹² Unless anaesthetics

Berg, Lawrence (n. 84); M. Baxter, K.M.D. Rutherford, R.B. D'Eath, G. Arnott, S.P. Turner, P. Sandøe, V.A. Moustsen, F. Thorup, S.A. Edwards, A.B. Lawrence 'The welfare implications of large litter size in the domestic pig II: management factors' (2013) 22 *Animal Welfare* 219

¹⁰⁹ Piglets finds the mere restraint of being picked up and handled distressing, and the teeth clipping procedure have resulted in the specific behaviour of teeth champing and head shaking. Puppe, Meunier-Salaün, Otten, Orgeur (n. 105) 6.1; G.J Noonan, J.S. Rand, J. Priest, J. Ainscow, J.K. Blackshaw; 'Behavioural observations of piglets undergoing tail docking, teeth clipping and ear notching.' (1994) 39 *Applied Animal Behaviour Science* 203; S Held, JJ Cooper, MT Mendl 'Advances in the Study of Cognition, Behavioural Priorities and Emotions' in JN Marchant-Forde (ed) *The Welfare of Pigs* (Springer 2009) 3.2.1.3.; J.S. Rand, G.J. Noonan, J. Priest, J. Ainscow, J.K. Blackshaw 'Oral administration of a 12% sucrose solution did not decrease behavioural indicators of distress in piglets undergoing tail docking, teeth clipping and ear notching'(2002) 11 *Animal Welfare* 395

¹¹⁰ Held, Cooper, Mendl (n. 109) 3.2.1.3

¹¹¹ It is lawful to dock tails before the age of seven days without anaesthetics, and therefore more economic to dock tails on piglets compared to older pigs, see at 3.3.3

¹¹² K. Breuer, M.E.M. Sutcliffe, J.T Mercer, K.A. Rance, N.E. O'Connell, I.A. Sneddon, S.A. Edwards 'Heritability of clinical tail-biting in pigs and its relation to performance traits.' (2005) 93 *Livestock Production Science* 87

are used, tail-docking is painful and distressing for the piglet and may lead to prolonged pain.¹¹³

Male piglets are also likely to be castrated, without any pain relief, before the age of seven days.¹¹⁴ There are two main reasons for castrating piglets: to control the aggressive behaviour towards other pigs (due to sexual development), and to reduce the prevalence of boar taint in meat.¹¹⁵ While a decrease in aggressive behaviour has inherent welfare benefits, the pain inflicted upon the piglets by castration makes it an important animal welfare issue, particularly when the expected diminishing effect on aggressive behaviour does not always occur.¹¹⁶

The scale of castration's welfare impact is enormous, as every year approximately 100 million piglets are castrated within the EU, and the majority of the castrations are performed without any form of anaesthesia.¹¹⁷ The most common castration method used is a surgical incision in the scrotum, in order to reveal the testicles, which are subsequently removed by tearing, cutting, or twisting of the spermatic cord.¹¹⁸ Numerous studies show that the piglets suffer considerable pain, especially at the time of cutting (or tearing) of the spermatic cord, and signs of pain have been recorded up to six days after castration, as well as an increase in mortality rates.¹¹⁹

¹¹³ Rand, Noonan, Priest, Ainscow, Blackshaw (n. 109); G.J Noonan, J.S. Rand, J. Priest, J. Ainscow, J.K. Blackshaw; 'Behavioural observations of piglets undergoing tail docking, teeth clipping and ear notching.' (1994) 39 Applied Animal Behaviour Science 203

¹¹⁴ See at 3.3

¹¹⁵ M. Hansson, N. Lundeheim, G. Nyman, G. Johansson 'Effect of local anaesthesia and/or analgesia on pain responses induced by piglet castration' (2011) 53 Acta Veterinaria Scandinavica 34; WJA Boersma, J Meulen, TA and Niewold 'Balance Between Porcine Disease and Welfare' in JN Marchant-Forde (ed) *The Welfare of Pigs* (Springer 2009) 8.5.3

¹¹⁶ EFSA, 'Welfare aspects of the castration of piglets' (2004) 91 EFSA Journal 1; Hansson, Lundeheim, Nyman, Johansson (n. 115)

¹¹⁷ EFSA 'Report on the Analysis of the baseline study on the prevalence of Salmonella in holdings of laying hen flocks of *Gallus gallus*' (2007) 97 EFSA Journal; R. Horgan 'Piglet castration and EU animal welfare legislation' (2006) 48 Acta Veterinaria Scandinavica 52; N. Jäggin, S. Gerber, U. Schatzmann 'General anaesthesia, analgesia and pain associated with the castration of newborn piglets' (2006) 48 Acta Veterinaria Scandinavica 12

¹¹⁸ Jäggin, Gerber, Schatzmann (n. 118)

¹¹⁹ J.J. McGlone, J.M. Hellman 'Local and general anaesthetic effects on behaviour and performance of two-, and seven-week-old castrated and uncastrated piglets' (1988) 66 Journal of Animal Science 3049; M. Hay, A. Vulin, S. Genin, P. Sales, A. Prunier

Alternative methods to conventional castration, such as immunocastration, have proved effective in inhibiting sexual development, while crucially reducing boar taint.¹²⁰ As immunocastration hinders sexual development, it would also have a diminishing impact on aggression levels, which is closely related to the sexual maturity of the pigs. Consequently, there is a huge potential for welfare improvements if immunocastration is promoted over conventional castration methods. Alternatively, research indicates that selective breeding for the purpose of reducing the prevalence of boar taint is possible,¹²¹ as technological advances can enable sows to only be inseminated with carefully gender-determined semen, to avoid male piglets from being born.¹²²

The core welfare needs of the pigs as summarised here, are in line with the holistic definition, which considers the pigs' physiological and emotional needs, as well as their natural, ethologically motivated needs. In order to have their needs met, pigs should ideally be housed in large, enriched spaces, which enable them to satisfy their locomotion and foraging needs. The pigs' welfare would further improve if they were kept in stable social groups, with as little mixing with unknown pigs as possible, for the entire duration of their lives, to reduce the prevalence of aggressive behaviour. If

'Assessment of pain induced by castration in piglets: behavioural and physiological responses over the subsequent 5 days' (2003) 82 *Applied Animal Behaviour Science* 201; Hansson, Lundeheim, Nyman, Johansson (n. 115); S. Llamas Moya, L.A. Boyle, B.P Lynch, S Arkins: 'Effect of surgical castration on the behavioural and acute phase responses of 5 days-old piglets.' (2008) 111 *Applied Animal Behaviour Science* 133; Ø.V. Sjaastad, K. Hove, O. Sand 'Physiology of Domestic Animals' (2003) Scandinavian Veterinary Press; Jäggin, Gerber, Schatzmann (n. 118)

¹²⁰ EFSA, 'Report and Opinion of the Scientific Panel, 'on Animal Health and Welfare on the request from the Commission related to welfare aspects of the castration of piglets.'(2004); Horgan (n. 117); Boersma, Meulen, Niewold (n. 115) 8.5.3; X.Y. Zeng, J.A. Turkstra, R.H. Meloen, X.Y. Liu, F.Q. Chen, W.M. Schaaper, H.B. Oonk, Z. Guo da, D.F. van de Wiel 'Active immunization against gonadotrophin releasing hormone in Chinese male pigs, effects of dose on antibody titer, hormone levels and sexual development (2002) 70 *Animal Reproduction Science* 223

¹²¹ Rydhmer, Lundheim (n. 93) 13; J. Babol, G. Zamaratskaia, R.K. Juneja, K. Lundström 'The effect of age on distribution of skatole and indole levels in entire male pigs in four breeds; Yorkshire, Landrace, Hampshire and Duroc (2004) 67 *Meat Science* 351

¹²² D. Rath, C.R. Long, J.R. Dobrinsky, G.R. Welch, L.L. Schreier, L.A. Johnson 'In vitro production of sexed embryos for gender preselection: high-speed sorting of X-chromosome bearing sperm to produce pigs after embryo transfer' (1999) 77 *Journal of Animal Science* 3346; S.R. Blecher, R. Howie, S. Li, J Detmar, L.M. Blahut 'A new approach to immunological sexing of sperm' (1999) 52 *Theriogenology* 1309; Boersma, Meulen, Niewold (n. 115) 8.5.3

any physically invasive procedure need to be performed at any point in the pigs' lives, anaesthetics and prolonged analgesia should be required and provided.

1.4.2 Welfare Needs for Commercial Hybrids

The Red Jungle Fowl (*Gallus gallus*) was domesticated early on, thousands of years ago. Ever since, the fowl has been bred into an array of different domestic breeds (*Gallus gallus domesticus*). During the last forty years, the commercial hybrids have been introduced and developed.¹²³ While all poultry breeding since domestication has been aimed towards moulding *Gallus gallus* according to human preference, the commercial hybrids take this to the extreme.¹²⁴ Two main types of hybrids have been developed to serve different purposes: birds for egg-laying (egg-layers) and birds intended for meat (broilers), each with several sub-varieties. The commercial hybrids were selectively bred to optimise efficiency: maximum output for minimum input (feed), but with different desired outputs: eggs and white breast meat.¹²⁵ The physiological specifics of the two hybrids will be addressed below, under their respective headings. Presently, it is important to clarify that in the subsequent chapters the term 'commercial hybrids' will be used when referring to *both* egg-layers and broilers jointly, while 'egg-layers' and 'broilers' refer to each hybrid separately. Also, referring to the fowls as 'commercial hybrids' does not intent to de-tract from their sentience by labelling them with a term which (arguably) reduces the birds to a commodity. Rather, 'commercial hybrids' is the accurate term for these specific varieties of *Gallus gallus domesticus*, and one should not read further into it. The remainder of this subsection will cover welfare aspects that applies to both hybrids, commencing at hatching.

Newly-hatched chicks are capable of surviving without assistance from a hen, as they do not suckle, but lack the innate ability to recognise food.

¹²³ Appleby, Mench, Hughes (n. 69) 1.3

¹²⁴ K. Davis 'Chicken-Human Relationships: From Procrustean Genocide to Empathic Anthropomorphism' in "Minding the Animal Psyche" (2010) 83 SPRING

¹²⁵ Appleby, Mench, Hughes (n. 69) 1.3

Therefore, chicks have an instinctive propensity to peck on small particles, among which they learn to identify food.¹²⁶ Similarly, the chicks must learn to drink water, an essential survival skill aided by their tendency to peck on shiny surfaces.¹²⁷ As chicks learn skills indispensable for their survival by pecking, an indication is provided of the importance which can be awarded to the instinctive behaviour of pecking for poultry. Indeed, given the opportunity, poultry spend much of their time foraging and eating by pecking, which can be identified as an ethological need. To satisfy the commercial hybrids' inherent need to peck, access to litter or other suitable material is essential.

Apart from pecking, ethological needs such as roosting and typical comforting behaviour, like preening their plumage, are also of high importance to poultry. In the wild, the birds roost during both night time (while sleeping) and for shorter periods during the day.¹²⁸ The opportunity to roost on perches, in close bodily contact, is a fundamental need for the fowls, especially at night. As flock animals, birds tend to copy the behaviour of their fellow birds, resulting in synchronised behaviour; for example, one roosting bird is joined by others. Similarly, they are compelled to feed in groups, as the sound or sight of one bird feeding triggers feeding in others.¹²⁹ Flock behaviour may cause problems in intensive husbandry systems, particularly in regards to feeding, in cases where insufficient space hinders the birds from simultaneous feeding. These problems can be exacerbated if the birds are on a restricted diet, as every bird then will react simultaneously to the arrival of food.¹³⁰

¹²⁶ *ibid* 3.5,4.2; J.A. Hogan 'Development of food recognition in young chicks. I. Maturation and nutrition' (1973) 83 *Journal of Comparative and Physiological Psychology* 355,355-356; J.A. Hogan 'The development of a hunger system for young chicks' (1971) 39 *Behaviour* 128

¹²⁷ *ibid* 355-356; Appleby, Mench, Hughes (n. 69) 3.5,4.3

¹²⁸ Appleby, Mench, Hughes (n. 69) 4.2

¹²⁹ B.O. Hughes 'Allelomimetic feeding in the domestic fowl' (1971) 12 *British Poultry Science* 359

¹³⁰ Appleby, Mench, Hughes (n. 69) 4.7,5.7

If either egg-layers or broilers are housed in a barren environment, the occurrence of undesirable vices such as cannibalism, aggressive pecking and feather pecking becomes more likely, and excessive pecking may lead to serious welfare problems. Feather pecking and aggressive pecking differ: the former primarily aims at pulling feathers from other birds in the flock, while aggressive pecking aims to inflict injury. However, both kinds of pecking are painful for the victim and can escalate into cannibalism, particularly if the pecking causes bleeding wounds.¹³¹

Other factors which may cause an outbreak of cannibalism or excessive pecking are crowding, social disturbance, social learning, insufficient levels of methionine, exposure to sunlight, and insufficient protein in the diet.¹³² Stress, boredom, large flock sizes or excessive egg size can also be triggering factors.¹³³ Poultry are sensitive animals and even the intensity of lighting may increase the occurrence of vices.¹³⁴ Cannibalism and excessive pecking can sometimes be prevented by providing more feed for the birds, as the pecking behaviour will be re-directed towards the food.¹³⁵ Dimming of the light may slow down or stop outbreaks of cannibalism.¹³⁶ A change in the feed quality or the feeding pattern can cause outbursts of vices, as birds are very sensitive to environmental changes, which makes poultry welfare a fine balancing act.¹³⁷ However, in a flock, pecking also has a social dimension, as pecking flock-mates during dust-bathing is a normal, harmless behaviour for

¹³¹ M.J. Gentle, L.N. Hunter 'Physiological and behavioural responses associated with feather removal in *Gallus gallus domesticus*' (1999) 50 *Research in Veterinary Science* 95; SH Gordon, DR Charles, '*Niche and Organic Chicken Production*' (Nottingham University Press 2002) 207

¹³² Appleby, Mench, Hughes (n. 69) 5.10; B.O Hughes, I.J.H Duncan 'The influence of strain and environmental factors upon feather pecking and cannibalism in fowls.' (1972) 13 *British Poultry Science* 525 in B O Hughes and C J Savory 'Behaviour welfare' (2010) *British Poultry Science* Volume 51, Supplement 1 13-14

¹³³ C Ekstrand 'Inhynsningsssystem: Många alternative' (1996) *Forskningsnytt om Ækologiskt landbruk i Norden* 4,9-11; S H Gordon and D R Charles '*Niche and Organic Chicken Production*' (20002) Nottingham University Press,207

¹³⁴ Hughes, Duncan (n. 132); Gordon, Charles (n. 131) 206

¹³⁵ Appleby, Mench, Hughes (n. 69) 4.6

¹³⁶ D Sainsbury, *Poultry Health and Management* (4th ed. Blackwell Science Ltd Oxford 2000) 55

¹³⁷ AF Fraser, DM Broom '*Farm Animal Behaviour and Welfare*' (3rd ed. CABI Publishing 1997) 325-326

the birds.¹³⁸ Pecking is also the way the dominant bird(s) assert authority over the submissive ones.¹³⁹ The establishment and lasting effects of social dominance is particularly obvious in caged egg-layers, as the small colony of birds within each cage establishes a social hierarchy.

Aggressive pecking and cannibalism are all detrimental to the welfare of hybrids, and beak trimming is used to counter these vices. There are two different ways of trimming chicks' beaks. The beak can be put into a cutter which cuts off about a third to half of the upper and lower mandibles, usually by a heated blade, while simultaneously cauterising the stump.¹⁴⁰ Alternatively, an infrared beam can cut a hole in the beak, which causes the beak to drop off several days later.¹⁴¹ Usually, no pain-relief is administered, as the prevalent theory is that the beak is made of horny material and does not contain any nerves, making it impossible for the chick to feel any pain.¹⁴² However, studies have shown that the beak *does* contain sensor receptors and trimming causes not only prolonged periods (weeks) of pain but also a loss of touch and temperature sensitivity for the chick.¹⁴³ Despite the research findings that the beak is a sensitive part of the chicks, anaesthetics are still not administered. Additionally, if the trimming is crude, the mandibles may end up being cut so unevenly that it hinders the bird from feeding properly, causing it to starve to death.

¹³⁸ Gordon, Charles (n. 131) 206

¹³⁹ Hughes, Duncan (n. 132) 14

¹⁴⁰ Fraser, Broom (n. 137) 383

¹⁴¹ Appleby, Mench, Hughes (n. 69) 5.10

¹⁴² Although it is now recognised that it is not only the horny beak that is cut, but also underlying tissue may be as well. *ibid*; Fraser, Broom (n. 137) 383

¹⁴³ Fraser, Broom (n. 137) 383; DB Wilkins, *Animal Welfare in Europe, European Legislation and Concerns* (Kluwer Law International 1997) 24; Fraser, Broom (n. 137) 383; M.J. Gentle 'Neuroma formation following partial beak amputation (beak-trimming) in the chicken' (1986) 41 *Research in Veterinary Science* 383,383-385; M.J. Gentle, E. Seawright 'The effects of partial beak amputation on circulating leucocytes in the domestic fowl' (1988) 16 *Medical Science Research* 145,145-146; J. Breward, M.J. Gentle 'neuroma formation and abnormal afferent nerve discharges after partial beak amputation (beak trimming) in poultry' (1985) 41 *Experientia* 1132; Muir, Wei Cheng (n. 55) 330; J.V. Craig, W.M. Muir 'Selection for reduction of beak-inflicted injuries among caged hens' (1993) 72 *Poultry Science* 411; J.V. Craig, W.M Muir. 'Group selection for adaptation to multiple-hen cages: beak related mortality, feathering, and body weight responses' (1996) 75 *Poultry Science* 294

There are several effects of beak trimming. In regards to pecking, trimming reduces the beak's sharpness and the accuracy of the peck, which may increase the pecking frequency, as more pecks are required to achieve the same amount of feed intake. Pecking of other birds tends to be reduced as a result of beak trimming, as pecking hard becomes painful. However, the frequency at which the aggressive birds tend to peck subordinate birds may increase, as the bluntness of the beak causes a reduced level of reaction from the victim.¹⁴⁴

Beak trimming affects other aspects of the birds' welfare too: the birds' capability to preen and maintain their plumage decreases, as the beak is their 'preening-tool'.¹⁴⁵ When a bird with untrimmed beak preens, it also removes (and consumes) parasites found amongst its feathers.¹⁴⁶ Additionally, preening is considered to be a comforting behaviour for the hybrids, and a healthy, well-preened plumage is a sign of welfare, while incomplete preening may indicate welfare problems.¹⁴⁷ To conclude, although beaks are trimmed to reduce the prevalence of welfare-issues like cannibalism and pecking, they trigger a whole new set of welfare-issues: considerable pain and restriction of important ethological needs of the birds, thereby giving rise to criticism of the practice of beak-trimming.¹⁴⁸

1.4.2.1 Egg-laying Hybrid's Welfare Issues

The breeding process has resulted in two main types of egg-laying hybrids, referred to as 'light' and 'medium'. The main difference is their body size, the medium hybrid being slightly larger. The selective breeding for creating the egg-laying hybrids from domesticated hens reduced their body sizes and minimised the food intake, while increasing the size and number of eggs they lay (approximately 320 per year) and reducing the prevalence of

¹⁴⁴ Appleby, Mench, Hughes (n. 69) 5.10

¹⁴⁵ *ibid* Fig 4.11

¹⁴⁶ R.S. Ostfeld, D.N. Lewis 'Experimental studies of interactions between wild turkeys and black legged ticks' (1999) 24 *Journal of Vector Ecology* 182

¹⁴⁷ Appleby, Mench, Hughes (n. 69) 4.11

¹⁴⁸ *ibid* 5.10

broodiness.¹⁴⁹ The normal lifespan of egg-laying hybrids in intensive farming systems is around seventy-eight to eighty weeks, after which their egg-laying rate declines and they stop being profitable. The lifespan of the egg-layers is long enough for them to reach sexual maturity, which enables the hens to lay eggs. The hormones related to sexual maturity in hens are known to increase the prevalence of undesirable vices, particularly aggressive behaviour.¹⁵⁰

The large number of eggs puts a physical strain on the bird, as egg production requires a lot of calcium to form eggshells. Before beginning to lay eggs, the calcium used for eggshells is stored in the birds' bones.¹⁵¹ Consequently, unless dietary calcium is added to the feed every day, egg-laying will result in severe calcium depletion and the bird will develop osteoporosis. The birds' femurs are especially prone to osteoporosis, thereby increasing the risk for leg-fractures in egg-layers.¹⁵² In addition to supplementing their diet, encouraging the egg-layers to move around, preferably from a young age, helps strengthening their bones, particularly if the egg-layers move in three-dimensions to use perches.¹⁵³

While caged egg-layers suffer breakages more frequently, egg-layers housed in percheries are at risk of breaking their legs throughout their (considerably longer) lives.¹⁵⁴ Research shows that egg-layers in enriched cages or percheries have stronger bones compared to egg-layers in conventional cages, which supports the theory that perching improves the birds' bone-strength.¹⁵⁵ In regards to the breakages occurring in percheries,

¹⁴⁹ Appleby, Mench, Hughes (n. 69)1.3,2.1; Sainsbury (n. 136) 5

¹⁵⁰ Broilers never reach sexual maturity unlike egg layers. Hughes, Duncan (n. 132) 15

¹⁵¹ Appleby, Mench, Hughes (n. 69) 2.9

¹⁵² N.G. Gregory, L.J. Wilkins, S.D. Eleperuma, A.J. Ballantyne, N.D. Overfield 'Broken bones in domestic fowls: effect of husbandry system and stunning method in end-of-lay hens.' (1990) 31 British Poultry Science 59; B.O Hughes, C.J Savory 'Behaviour welfare' (2010) British Poultry Science Volume 51, Supplement 1 13,17

¹⁵³ H. Wall, R. Tauson, K. Elwinger 'Pop hole passages and welfare in furnished cages for laying hens' (2004) 45(1) British Poultry Science 20,20

¹⁵⁴ Gregory, Wilkins, Eleperuma, Ballantyne, Overfield (n. 152); Hughes, Savory (n. 152) 17,18

¹⁵⁵ R. Freire, A. Cowling 'The welfare of laying hens in conventional cages and alternative

research indicates that a major contributing factor is the horizontal movement between perches, if they are too far apart.¹⁵⁶ The egg-laying hybrids' physique makes them clumsier than their wild ancestors, and accurate landing becomes a constant struggle. Especially when perches are further than fifty centimetres apart, in the case of a misjudged landing, the force of the impact with the perch is sufficient to break bones.¹⁵⁷ Therefore, it is important that the perches are not placed too far apart when designing the housing.

Further, for egg-layers in multi-story housing, it is vital to ensure that the levels for the birds are arranged so that droppings do not fall on the birds below, as droppings in the plumage encourage pecking from other birds.¹⁵⁸ Non-caged egg-layers are also affected by the group size, as they are commonly housed in vast numbers, which make social hierarchy difficult to be established.¹⁵⁹ One way of reducing aggression levels in percherries is to house roosters with the egg-laying hens, as roosters have a calming influence upon them, by asserting social dominance over the dominant hens.¹⁶⁰

Contrary to common belief, caged systems have some positive effects on commercial hybrids' welfare. Unlike the egg-layers in vast percherries, egg-layers of the same cage create a small group, in which the birds establish a hierarchy among themselves (or accept equal status). An established hierarchy comes with the welfare benefit of a generally lower frequency of aggression within the cage group.¹⁶¹ While some pecking is unavoidable, as

systems: first steps towards a quantitative comparison' (2013) 22 *Animal Welfare* 57,61-63; P.Y. Hester 'The effect of perches installed in cages on laying hens' (2014) 70(2) *World's Poultry Science Journal* 247

¹⁵⁶ C. Moniard, P. Statham, P.R. Green 'Control of landing flight by laying hens: implications for the design of extensive housing systems' (2004) 45 *British Poultry Science* 578

¹⁵⁷ *ibid*; Hughes, Savory (n. 152) 18

¹⁵⁸ Egg Directive, Article 4(1)(3)(a)(iv); Appleby, Mench, Hughes (n. 69) 5.9; T.M. McAdie, L.J. Keeling 'Effects of manipulating feathers of laying hens on the incidence of feather pecking and cannibalism' (2000) 68 *Applied Animal Behaviour Science* 215

¹⁵⁹ Hughes, Duncan (n. 132) 14

¹⁶⁰ Appleby, Mench, Hughes (n. 69) 5.5

¹⁶¹ *ibid*

hierarchy establishment relies upon it, aggression levels are still comparatively lower than in percherries and other non-caged systems.¹⁶² Cages offer additional welfare advantages such as higher hygiene levels, good environmental control (which leads to less respiratory problems for hens¹⁶³) and no problems with litter.¹⁶⁴ Higher hygienic levels reduce the occurrence of infectious diseases, which may spread rapidly in non-caged systems and in worst-case scenarios kill a large percentage of egg-layers.¹⁶⁵ However, these advantages must be weighed against the disadvantages; even if the cages are 'enriched' with nests, litter and perches, the space constraints have a severe impact on the overall welfare of egg-layers and their ability to behave naturally and satisfy their ethological needs.

1.4.2.2 Broiler Hybrid's Welfare Issues

Apart from the welfare issues which apply to both hybrids (see above), the broiler –bred for chicken meat– has its own set of issues, the majority of which can be traced to selective breeding. The broiler has been bred for its high growth rate, meat yield, proportion of white meat, meat colour and high food conversion efficiency.¹⁶⁶ The sought-after white meat is in the pectoral muscles of the bird and, through genetic selection, the broiler hybrids have eight times more breast meat than a comparable egg-layer and grow four times faster.¹⁶⁷ The broilers have been bred to have an increased appetite, which aids their rapid growth rate.¹⁶⁸ The lifespan of broilers is relatively short, as they reach slaughter-weight at around forty days.¹⁶⁹

While rapid growth is desirable for the meat producers, selective breeding comes with considerable welfare drawbacks: metabolic disorders,

¹⁶² Hughes, Duncan (n. 132) 14

¹⁶³ Hester (n. 155)

¹⁶⁴ Freire, Cowling (n. 155) 57; I.J.H. Duncan 'The pros and cons of cages' (2001) 57 *World Poultry Science Journal* 381

¹⁶⁵ *ibid*

¹⁶⁶ Appleby, Mench, Hughes (n. 69) 1.3; Sainsbury (n. 136) 5

¹⁶⁷ Appleby, Mench, Hughes (n. 69) 2.9

¹⁶⁸ Muir, Wei Cheng, (n. 55) 332-334

¹⁶⁹ P Stevenson, 'EU Directive on the welfare of meat chickens' (Compassion in World Farming 2007)

musculoskeletal dysfunction and reduced mobility.¹⁷⁰ The growth rate causes physiological problems as their muscles grow far quicker than the bones, especially the legs. The consequence is an imbalance between muscle and bones, which is so severe that it makes it impossible for the broiler to support its own bodyweight.¹⁷¹ Tens of millions of broilers are estimated to suffer from a variety of leg disorders annually.¹⁷² In husbandry systems where broilers are fed *ad libitum*, they frequently develop *tibial dyschondroplasia* (TD).¹⁷³ TD affects the broilers' ability to walk, and in severe cases, the broiler is effectively lame and cannot eat or drink.¹⁷⁴ While some evidence shows that TD is reducible by selective breeding, weight-control (by restricted feeding) is the usual way of addressing the issue.¹⁷⁵ Another way of attempting to reduce leg problems for broilers is to extend the periods of darkness, especially in the early weeks of their lives. As broilers do not eat in darkness, extending the dark periods reduces the food intake and slows their growth rate, thereby reducing the imbalance between bones and muscle in the legs, which effectively improves the leg-health.¹⁷⁶

A broiler's growth rate may also cause problems to its heart and lungs. In these cases, the vital organs, which struggle to support the oversized body,

¹⁷⁰ Appleby, Mench, Hughes (n. 69) 2.1

¹⁷¹ Fraser, Broom (n. 137) 382

¹⁷² Stevenson (n. 169)

¹⁷³ TD is a skeletal abnormality commonly affecting rapid growing avian species that concern the avascular transition zone in the tibia of the bird. A lesion grows in this zone which renders the blood supply insufficient and due to hypoxia the cells inside the lesion die, while appearing normal on the outside. Research suggests that TD is linked to genetics, but rapid growth rate, copper, autophagy-ER stress and vitamin D can influence the occurrence. R.M. Leach Jr., E. Monson-Oman 'Tibial Dyschondroplasia 40 Years Later' (2007) 86 Poultry Science 2053; Muir, Wei Cheng, (n. 55) 334

¹⁷⁴ Leach Monson-Oman (n. 173); C.C. Whitehead 'Dyschondroplasia in poultry' (1997) 56 The Proceedings of the Nutrition Society 957

¹⁷⁵ R.B. Shirley, A.J. Davis, M.M. Compton, W.D. Berry 'The expression of calbindin in chicks that are divergently selected for low or high incidence for tibial dyschondroplasia' (2003) 82 Poultry Science 1965; A.K. Sheridan, C.R. Howlett, R.W. Burton 'The inheritance of tibial dyschondroplasia in broilers' (1978) 19 British Poultry Science 491; Muir, Wei Cheng, (n. 55) 334

¹⁷⁶ A. Sheppard, S. Edge 'Economic and Operational Impacts of the Proposed EU Directive laying down Minimum Standards for the Protection of Chickens kept for Meat Production' (2005) University of Exeter Centre for Rural Research, 35-36

fail and the broilers die.¹⁷⁷ Other common issues are hock burns and breast blisters, two conditions often occurring jointly, as they appear when the broiler is unable to stand and is forced to sit or squat in the litter. During the lifetime of a generation of broilers, the litter is never changed, despite the accumulation of faeces, which usually cover the litter completely.¹⁷⁸ The faeces and their breakdown compounds have a corrosive effect on skin, so when broilers sit on them for prolonged periods, they develop breast blisters and hock burns, which are likely to cause them pain.¹⁷⁹ TD, lameness, hock burns and breast blisters undoubtedly cause physical suffering and pain to the broilers, and are all direct results of the selective breeding that has pushed the birds to the edges of what is physiologically possible. Additionally, the breeding has also reduced the ability of broilers to satisfy ethological needs such as pecking, dust-bathing, and preening, as the broilers' small-scale movements are severely restricted.

Apart from the welfare issues arising from the physiological effects caused by the selective breeding, the primary welfare issue for broilers is the stocking density. The common husbandry practice in intensive farming is to rear broilers in densely stocked buildings.¹⁸⁰ Crowding inevitably restricts the behaviour of the birds, and extreme density impacts their overall welfare, as the crowded conditions further reduce the birds' ability to move.¹⁸¹ Indeed, research shows that, if given the opportunity, broilers move about extensively, especially if nearby areas contain enrichment such as dust-bathing substrates.¹⁸² Nonetheless, the heavier the birds get, the less they

¹⁷⁷ Stevenson (n. 169)

¹⁷⁸ C. Hall, V. Sandilands 'Public attitudes to the welfare of broiler chicken' (2007) *Animal Welfare* 499,499-500; DB Wilkins, *Animal Welfare in Europe, European Legislation and Concerns* (Kluwer Law International 1997) 26; Fraser, Broom (n. 137) 382

¹⁷⁹ Fraser, Broom (n. 137) 382

¹⁸⁰ *ibid* 370; Sainsbury (n. 136) 1

¹⁸¹ Appleby, Mench, Hughes (n. 69) 4.9; JA Mench, LJ Keeling 'The social behaviour of domestic birds' in LJ Keeling and HW Gonyou, (eds) *Social Behaviour of Farm Animals* (CABI 2009) 191-203; Sainsbury (n. 136) 20; C.A. Weeks, B.D. Danbury, H.C. Davies, P. Hunt, S.C. Kestin 'The behaviour of broiler chickens and its modification by lameness' (2000) 67 *Applied Animal Behaviour Science* 111

¹⁸² Dust bathing is important for the birds in order to maintain their plumage condition, and they are strongly motivated to dust bath. Appleby, Mench, Hughes (n. 69) 4.9,4.12; R.C. Newberry 'Exploratory behaviour of young domestic fowl' (1999) 63 *Applied Animal*

move. Importantly, the restriction of locomotion is often joined by restrictions on small-scale movement, due to the crowded stocking density.¹⁸³ Additionally, there is the risk of an outbreak of sudden fright and hysteria in huge groups of broilers, which may lead to a large number of birds being crushed to death.¹⁸⁴

In summary, beyond the Five Freedoms, ideal welfare conditions for hybrids require large, enriched spaces with a stocking density that never allows overcrowding. Enrichment, litter and perches, is highly important, to satisfy their ethological needs to peck and roost. Further, dust-bathing should be enabled, as it aids the birds to maintain their plumage. Locomotion in hybrids should be encouraged where possible, particularly when they are young, to strengthen their bones. Stronger bones, particularly in the legs, would provide an improvement in welfare for both hybrids: egg-layers would avoid breakages and broilers would be enabled to remain active and improve their ability to support their own body-weight. However, for broilers, selecting lines with a slower growth-rate is likely to be the biggest welfare improvement of all.

1.5 Chapter Conclusion

If scientists keep debating the definition of animal welfare, how can legislators and policy makers settle upon one? Still, this thesis argues that it is necessary to define the concept of animal welfare in order for any legislation which aims to protect animal welfare to be effective. For this reason, this chapter discussed the main scientific approaches to animal welfare, and concluded that while all have their merits, they also have flaws.

Based on the discussion of the different schools of thought, the conclusion arises that a legal definition of animal welfare should be rounded and holistic, considering the animal as *a whole*. As such, the concept of animal welfare must consider the physiological and emotional needs, while enabling

those natural behaviours for which there is a recognised ethological need. These factors must be measured with both functioning-based and feelings-based methods, to provide due attention to all factors. Similarly, both post-production data and pre-slaughter data must be collected and analysed or important aspects and indicators of poor welfare may be overlooked.

For pigs, a holistic definition of animal welfare begins before farrowing, by separating the farrowing sows from each other (natural behaviour), and housing the sows individually in large spaces, where there is plenty of straw and environmental enrichment. There must be sufficient amount of straw for the sow to be able to build something she would consider a nest, in order for her compelling ethological need for nesting to be satisfied. The piglets should not be subjected to any physical interventions, as the underlying causes can be prevented either by environmental enrichment to satisfy the ethological rooting need (tail-biting) or by breeding smaller litters, or by letting the piglets suckle in shifts (teeth-clipping) – otherwise piglets are guaranteed to suffer physiological pain and emotional distress. Castration of piglets should be banned on welfare grounds as it causes (prolonged) pain and emotional distress; alternatively, anaesthetics should be mandatory. Castration cannot be justified by the risk of boar taint, as it can be avoided by immunocastration. In general, pigs should always be housed in large, enriched spaces to allow them to satisfy their ethological need for locomotion and foraging. The pigs' natural social behaviour is best satisfied if pigs are kept in stable social groups, with as little mixing with unknown pigs as possible, for the entire duration of their lives.

Despite the physiological differences of commercial hybrids, fundamentally they are the same species. Therefore, the ethological needs of the hybrids are the same, and can be improved for both if their needs for pecking, roosting, preening and dust-bathing are satisfied. Similarly, both hybrids' physiological welfare would benefit from increased activity levels, preferably in three dimensions (enabled by perches) to strengthen the bones in their legs (in combination with feed supplement for egg-layers). As flock animals, a vital part of their welfare is to ensure there is sufficient space and facilities

for flock behaviour, which satisfies emotional, ethological and natural needs. Both hybrids would also benefit from being raised in smaller groups, to enable them to establish a social hierarchy. Once a social hierarchy is established, the aggression levels are generally reduced and all four major welfare aspects are benefitted: physiological (reduced pecking, reduced risk for injury), emotional (reduced stress, fear and pain) and a natural social hierarchy, which stems from a recognised ethological need.

In summary, this thesis argues that, from a zoocentric perspective, the most effective way to ensure that all crucial animal welfare variables are taken into account when drafting, passing and implementing law, is to use a holistic definition for farm animal welfare. It is only with such a definition that the legislation produced will effectively achieve the aim of ensuring animal welfare.

2 EU regulatory framework and farm animal welfare

2.1 Introduction

This chapter considers the EU's regulatory framework and farm animal welfare's place therein, and revisits Article 13 of the Treaty of the Functioning of the European Union (TFEU), due to its importance for the dual classification of animals for the Internal Market as not only sentient beings, but also tradable goods. From the vast body of legislation, case law and academic literature concerning the workings of the Internal Market, this chapter will only focus on the aspects pertaining to animal welfare. Particular emphasis will therefore be on Article 36 TFEU and the Principle of Mutual Recognition.

Article 36 TFEU provides justifications for trade barriers (which are prohibited in Article 34 TFEU) and includes a justification for the purpose of 'protection of health and life of (...) animals'. However, this chapter argues that 'health and life of animals' and 'animal welfare' are –although intertwined– distinct concepts. Therefore, Member States cannot use Article 36 to justify protectionist measures to support their domestic farmers' competitive strength on grounds of protecting farm animal welfare standards'. The effect of the inapplicability of Article 36 TFEU is further enhanced by the Principle of Mutual Recognition,¹ which facilitates the free movement of tradable goods. In the domestic markets of Member States that go above the minimum animal welfare standards, this results in an influx of cheaper produce, imported from Member States that only adhere to the minimum ones; inevitably, this has a detrimental effect for the competitive strength of farmers' in 'stricter' Member States.

¹ 120/78 *Rewe-Zentral AG v Bundesmonopolverwaltung für Branntwein (Cassis de Dijon)* [1979] ECR 64

This chapter also elaborates on the function of harmonising legislation in the EU, with a special interest in minimum harmonisation Directives, which is the EU's chosen legislative tool for farm animal welfare. The minimum harmonisation approach along with the Principle of Mutual Recognition and the Article 36 TFEU render Member States with stricter national animal welfare laws unable to shield the competitive strength of their domestic farmers, for instance by prohibiting the import of cheaper produce from Member States that only adhere to the minimum standards, and may even trigger a regulatory competition among the former Member States. This potential race to the harmonised 'floor' is the final discussion point of this chapter.

2.2 EU regulatory framework

Before an in-depth critique of the relevant Directives, an examination of farm animal welfare's place within the overall EU regulatory framework is appropriate, to clarify the interaction between Treaty provisions, the Directives, and the Internal Market. This is important due to the dual characterisation of farm animals in EU law, as they are not only recognised as sentient beings, but also classified as 'goods' intended for trade within the Internal Market. However, it is beyond this thesis' scope to fully evaluate the vast literature concerning the Internal Market.¹ Rather, this chapter aims to clarify the interaction of all aspects of the EU's regulatory framework that directly impact farm animal welfare.

2.2.1 Article 13 TFEU

Article 13 TFEU² is central for the argument of the animals' dual classification in law, as it establishes that animals are sentient and that the

¹ I Maletić, *The Law and Policy of Harmonisation in Europe's Internal Market* (Edward Elgar Publishing 2013); P Caro de Sousa, *The European Fundamental Freedoms A Contextual Approach* (OUP 2015); N de Sadeleer, *EU Environmental Law and the Internal Market* (OUP 2014); N Nic Shuibhne, *The Coherence of EU Free Movement Law Constitutional Responsibility and the Court of Justice* (OUP 2013); F Weiss, C Kaupa, *European Union Internal Market Law* (Cambridge University Press 2014)

² Consolidated version of the Treaty on the Functioning of the European Union [2008] OJ C115/47 (TFEU)

EU and the Member States shall pay full regards to their welfare requirements. Its inclusion in Title II (Generally Applicable Provisions) rather than Title III (Agriculture and Fisheries) supports the argument that Article 13 TFEU applies to *all* animals, and not only to farm animals.³ In addition, as a Title II Article, it places the welfare of sentient animals firmly among the core principles of the EU, ensuring that it should be awarded the same weight as the other Title II Articles when balanced against other EU interests, such as the Internal Market and the Free Movement of Goods provisions.⁴

However, it remains unknown how this balancing act is exactly achieved, as Article 13 TFEU has not been central to any case's outcome so far. There is a limited number of cases suggestive of how the Court would weigh animal welfare against other EU interests, the most prominent being the case of *Jippes*.⁵

While *Jippes* predates Article 13 TFEU, it arguably indicates the importance (or lack thereof) the Court would place to Article 13 TFEU. Animal welfare post-Lisbon is recognised in full in a Treaty article, and its importance has therefore been enhanced since *Jippes*. However, due to the Court's emphasis upon the wording of the animal welfare provisions in law pre-Article 13 TFEU in the judgement, it provides an important indication as to the Court's stance towards animal welfare.

In *Jippes*, the Court ruled –by adopting a textual approach– that despite the annexation of Protocol on Protection and Welfare of Animals, animal welfare

³ M Paulsen, 'Report on evaluation and assessment of the Animal Welfare Action Plan 2006-2010' (2009/2202(INI) Committee on Agriculture and Rural Development 2010); GHK Consulting 'Final Report: Evaluation of the EU Policy on Animal Welfare & Possible Options for the Future' (Job No. J7296 DG SANCO 2010) 3.1.3.3.

⁴ GHK Consulting (n. 4) 3.1.3.3.; D. Ryland, A. Nurse 'Mainstreaming after Lisbon: Advancing Animal Welfare in the EU Internal Market' (2013) 11 European Energy and Environmental Law Review 101, 109-110

⁵ C-189/01 H. *Jippes*, *Afdeling Groningen van de Nederlandse Vereniging tot Bescherming van Dieren*, *Afdeling Assen en omstreken van de Nederlandse Vereniging tot Bescherming van Dieren v. Minister van Landbouw, Natuurbeheer en Visserij* [2001] ECR I-5689

protection is not a general principle of Community law but a 'mere interest'.⁶ The reasoning centred upon the wording of the Protocol, which limits its scope to four areas of Community law, while placing restrictions on these areas, by requiring that differences between Member States must be respected.⁷ At the time of this ruling (2001) there was no mention of animal welfare within any of the Treaties, nor in the CAP objectives.⁸ As a result, the Court held that it is apparent from the Protocol's '...very wording that it does not lay down any well-defined general principle of Community law'.⁹

Additionally, the Court held that, following the judgement in *R v CIWF*, the European Convention on the Protection of Animals kept for Farming Purposes does not '...impose any clear, precisely defined and unqualified obligation'.¹⁰ The Court went as far as stating that '... although there exist various provisions of secondary legislation referring to animal welfare, they likewise contain no indication that the need to ensure animal welfare is to be regarded as a general principle of Community law'.¹¹

It is not implausible that the Court may adopt a similar approach in future litigation, as the reasoning in *Jippes* was echoed in *Andibel*¹² and *Viamex*¹³ (also pre-Article 13 TFEU). While Article 13 TFEU is yet to be central to any cases before the Court, the approach has been reiterated by the Court in *Schaible*¹⁴ –post-Article 13 TFEU–, in which animal welfare goals were said to 'constitute legitimate objectives in the public interest pursued by European

⁶ O'Gorman R 'Of eggs, and seals and leghold traps: Internal and external public morality as a factor in European Union animal welfare legislation' in McMahon JA, Cardwell MN (eds) *Research handbook on EU Agricultural Law* (Elgar 2015) 335

⁷ C-189/01 *Jippes* (n. 6) 73; O'Gorman (n. 7) 335

⁸ E. Spaventa 'C-189/01, *H. Jippes*' (2002) 39 *Common Market Law Review* 1159, 1161

⁹ C-189/01 *Jippes* (n. 6) 73

¹⁰ *ibid* 74

¹¹ *ibid* 76

¹² C-219/07 *Nationale Raad van Dierenkwekers en Liefhebbers VZW and Andibel VZW v Belgische Staat* [2008] ECR I- 004475, 27

¹³ *Joined Cases C-37/06 and C-58/06 Viamex Agrar Handels GmbH and Zuchtvieh-Kontor GmbH (ZVK) v Hauptzollamt Hamburg-Jonas* [2008] ECLI 118, 22

¹⁴ C-101/12 *Herbert Schaible v Land Baden-Württemberg* [2013] ECLI 661

Union legislation¹⁵ and in *Zuchtvieh*,¹⁶ from 2015, in which the Court similarly stated that ‘...the protection of animal welfare is a legitimate objective in the public interest’.¹⁷ This therefore indicates that the Court may well continue to consider animal welfare as a legitimate objective based on public interest, rather than a general principle of EU law.

2.2.2 Title III Agriculture and Fisheries¹⁸

Article 38 TFEU in Title III firmly places ‘agricultural products’ within the Internal Market and subjects them to the Internal Market legislation, while explicitly categorising farm animals as agricultural products. Article 39 TFEU establishes the financial objectives of the Common Agricultural Policy (CAP): markets’ stability, supply’s availability, increased productivity, and reasonable pricing of agricultural produce for consumers. Indeed, Title III explicitly recognises the importance of the agricultural sector for the economy of many Member States.¹⁹ In such Member States, the financial impact of a weakened agricultural sector would be devastating, due to agriculture’s contribution to the domestic economy, the employment opportunities and rural development.

Priority to the economic aspects of agriculture is not a novel concept. From the outset, EU legislation on agricultural matters was motivated by the establishment and functioning of the Internal Market, and oriented towards ensuring and promoting productivity, which was of outmost importance in the post-war Europe.²⁰ With the introduction of Directives, the economic focus remains, specifically in regards to animals. The objective was to level the playing field by establishing a harmonised welfare standard, as pre-existing

¹⁵ *ibid* 35 (emphasis added)

¹⁶ C-424/13 *Zuchtvieh-Export GmbH v Stadt Kempten, Landesrechtsanwaltschaft Bayern* [2015] ECLI 259

¹⁷ *ibid* 35 (emphasis added)

¹⁸ TFEU, Title III, Article 38-44

¹⁹ TFEU, Article 39(2)(c)

²⁰ I. Veissier, A. Butterworth, B. Bock, E. Roe ‘European approach to ensure good animal welfare’ (2008) 113 *Applied Animal Behaviour Science* 297,282; T Judt, *Postwar – a history of Europe since 1945* (Vintage 2005)

different production standards adversely affected the proper functioning of the Internal Market, since different production standards incurred different production costs.²¹ While Article 13 TFEU champions the sentience of animals and their welfare, Title III entirely omits it, revealing the Janus-faced scope of the Treaty. Therefore, while Article 13 TFEU is pivotal in the strengthening of animal welfare as a core principle, the main focus of Title III is on the financial aspects of agriculture.²²

Although the CAP's policy direction is revised on a regular basis, the Commission has affirmed that managing market mechanisms are vital for CAP's future directions, thereby ensuring that agriculture's financial aspects will remain central to its policy direction.²³ Besides emphasising finances, the only Commission mention of farm animal welfare was referring to it as a 'cross-compliance provision'.²⁴ While animal welfare would benefit from more attention in general when new policy directions of the CAP are envisaged, its linkage with cross-compliance is nonetheless important. The CAP reform agreement from 2013 links the farmers' receipt of CAP support payments with a set of basic rules that relates to public expectations on environment, public and animal health, and *animal welfare*.²⁵

Therefore, if inspectors are not satisfied and a farmer is deemed to be non-compliant with the required animal welfare standards, cross-compliance may result in financial penalties and sanctions: the loss of all or of a large

²¹ J. Scott 'On Kith and Kine (and Crustaceans): Trade and Environment in the EU and WTO' (1999) Jean Monnet Paper; H. Buller, C. Morris 'Farm Animal Welfare: a New Repertoire of Nature-Society Relations or Modernism Re-embedded?' (2003) 43(3) *Sociologia Ruralis* 216,220

²² S. Brooman, D. Legge 'Animal welfare vs free trade – free trade wins: an examination of the animal welfare implications of R v Ministry of Agriculture, Fisheries and Food ex p Compassion In World Farming (1998)' (2000) 9 *Animal Welfare* 81,84; GHK Consulting (n. 4) 1.1.9.

²³ Commission, 'Agreement reached on new direction for CAP' (Press Release) IP/13/613 and MEMO/13/621 (2013) 3-5

²⁴ *ibid* 3

²⁵ European Commission, 'Cross-compliance' (*Agriculture and Rural Development* 2015) <http://ec.europa.eu/agriculture/direct-support/cross-compliance/index_en.htm> accessed 14 January 2016

proportion of that individual farmer's EU-subsidies.²⁶ Such a result would have a devastating impact on the concerned farmer, thereby creating a financial incentive to ensure compliance.

Since 1992, the CAP's policy direction has moved from supporting agricultural prices towards decoupled income payments (DIP). DIPs and cross-compliance with statutory management requirements were introduced in the Mid-Term Review 2003, which explicitly included animal welfare standards as cross-compliance criteria with the purpose of ensuring enforcement of good farming practises, which must be satisfied in order to obtain the DIP. This movement has increased the financial importance of ensuring animal welfare, as failing to do so would result in a DIP reduction, and depending on the severity of the non-compliance, may ultimately result in the farmer's exclusion from the system.²⁷

However, it must be emphasised that only three of the EU animal welfare Directives are included in the specified statutory management requirements in regards to cross-compliance, namely the Calves Directive,²⁸ the Pig Directive²⁹ and Directive 98/58.^{30 31} Thus, the two Poultry Directives³² are not

²⁶ R. Horgan, A. Gavinelli 'The expanding role of animal welfare within EU legislation and beyond' (2006) 103 *Livestock Science* 303,306; I. Anneberg, M. Vaarst, J.T. Sørensen, 'The experience of animal welfare inspections as perceived by Danish livestock farmers: A qualitative research approach' (2012) 147 *Livestock Science* 49; S. Severini, A. Tantari 'Which factors affect the distribution of direct payments among farmers in the EU Member States?' (2014) *Empirica* 1573; N. Beard, A. Swinbank 'Decoupled payments to facilitate CAP reform' (2001) 26 *Food Policy* 121,130-131,142; H. Bennett, B. Osterburg, H. Nitsch, L. Kristenssen, J. Primdahl, G. Verschuur 'Strengths and Weaknesses of Cross-compliance within the CAP' (2006) 5(2) *Euro Choices* 50

²⁷ McMahon JA *EU Agricultural Law* (OUP 2007) 5.46

²⁸ Council Directive 2008/119/EEC of 18 December 2008 laying down minimum standards for the protection of calves [2009] OJ L 10/7 (Calves Directive)

²⁹ Council Directive 2008/120/EC of 18 December 2008 laying down minimum standards for the protection of pigs (codified version) [2009] OJ L 47/5 (Pig Directive)

³⁰ Council Directive 1998/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes [1998] OJ L 221/23 (Directive 98/58)

³¹ Regulation (EU) No. 1306/2013 of the European Parliament and of the Council on the financing, management and monitoring of the common agricultural policy and repealing Council Regulations (EEC) No. 352/78, (EC) No. 165/94, (EC) No. 2799/98, (EC) No. 814/2000, (EC) No. 1290/2005 and (EC) No. 485/2008 (2013) OJL 347/549 Annex II

³² Council Directive 1999/74/EC of 19 July laying down minimum standards for the

included, and therefore direct payments can also be received by poultry farmers not adhering to the relevant EU minimum legislative standards.³³

Under the CAP's rural development policy, funding is available to promote animal welfare. 'Animal welfare payments' (AWPs) are available for those farmers who, on a voluntary basis, undertake one or more animal welfare commitments that exceed the relevant mandatory standards and requirements.³⁴ Such a commitment must be undertaken for a renewable period of one to seven years, and is paid on an annual basis. The AWPs shall compensate farmers for all, or part of, the additional costs and forgone income resulting from the welfare commitment, to a maximum of €500 per annum per livestock unit.³⁵ ³⁶ During 2014-2020, Member States have the opportunity of making up to 15% of their national annual direct payment available to supporting measures related to their rural development programmes.³⁷

However, the effectiveness of AWPs under the CAP's rural development programme has been questioned. During the 2007-2013 CAP period, only 0.1% of the CAP budget was spent on animal welfare, which is unlikely to translate into real improvements in farm animal welfare throughout the EU.³⁸

protection of laying hens [1999] OJ L 203/53 (Egg Directive); Council Directive 2007/43/EC of 28 June 2007 laying down minimum rules for the protection of chickens kept for meat production [2007] OJ L 182/19 (Broiler Directive)

³³ D. Ryland 'Animal welfare in the reformed Common Agricultural Policy: wherefore art thou?' (2015) 17 Environmental Law Review 22, 35

³⁴ Regulation (EU) No 1305/2013 of the European Parliament and of the Council of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005 (2013) OJ L 347/487 Article 33 (1), (2); Horgan, Gavinelli (n. 26) 306

³⁵ 'LU The Livestock unit (LU) is a unit used to compare or aggregate numbers of animals of different species or categories. Equivalences based on the food requirements of the animals are defined. By definition, a cow weighing 600 kg and producing 3000 litres of milk per year = 1 LU, a calf for slaughter = 0.45 LU, ... a sow = 0.5 LU ...'
European Commission 'Acronyms and definitions' <http://ec.europa.eu/agriculture/envir/report/en/lex_en/report_en.htm#Notice> accessed 15 July 2016

³⁶ Regulation No 1305/2013 (n. 34) Article 33 (2), (3), Annex II

³⁷ Ryland (n. 33) 33

³⁸ O. Kikou, CIWF 'CAP and animal welfare: Simply incompatible' (*EurActiv.com* 22 February 2016) <<https://www.euractiv.com/section/agriculture-food/opinion/cap-and-animal-welfare-simply-incompatible/>> accessed 15 July 2016

Similarly, in CAP 2014-2020, nearly half of the Member States do not have any rural development programmes qualifying for AWP, and those who do, provide only a small amount of the overall budget available to them.³⁹ Consequently, the AWP, have, so far, failed to achieve their potential to increase animal welfare standards in a significant way across the EU. This is partially due to the reform of the Rural Development rules; previously, the AWP were a general rule between five and seven years.⁴⁰ This has been relaxed substantially. While it has always been a voluntary commitment, previously under Regulation 1698/2005 the commitment was generally for a period of five to seven years, now the commitment is may be for as little as one year. This relaxation to an annual character and the lack of a specific budget allowance for AWP caused the Eurogroup for Animals '... to question the political willingness to achieve animal welfare improvement through this measure'.⁴¹

However, it is not only the political willingness at an EU level that must be questioned; a further contributing factor to the lack of success in improving animal welfare is that AWP also rely on the individual Member States' political willingness to include animal welfare commitments within their rural development programmes, where animal welfare is not always a priority. Additionally, a Member State which chooses to include AWP in its rural development programmes is required to commit to co-financing it, and some Member States prioritise other areas for funding.⁴² Thus, despite the inclusion of Article 13 TFEU, the interests related to the Internal Market are

³⁹ *ibid*; O. Kikou 'Rural Development plans and Animal Welfare' (CIWF 8 February 2016) <<http://www.eeb.org/index.cfm?LinkServID=F5D9D6CE-5056-B741-DB6C7F6E990CEC7C>> accessed 15 July 2016

⁴⁰ Council Regulation (EC) No. 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) (2005) OJ L 227 Article 40

⁴¹ Ryland (n. 33) 37; Eurogroup for Animals, 'Overview of the animal welfare payment measure in EU Member States' rural development programmes 2007–2013 (July 2010) <http://eurogroupforanimals.org/files/policies/downloads/77/capwelfaremeasuresaug2010.pdf>; R. Ludwig, R. O'Gorman, 'A Cock and Bull Story? – Problems with the Protection of Animal Welfare in EU Law and Some Proposed Solutions' (2008) 20(3) *Journal of Environmental Law* 363

⁴² Regulation No 1305/2013 (n. 34) Article 40; Ryland (n. 33) 29

still prioritised, even within the CAP Treaty provisions, and animal welfare in most cases is overlooked.

2.3 Internal Market

The Internal Market is a fundamental part of EU's *raison d'être* and is listed as one of the European Commission's ten priorities.⁴³ The Commission considers the Internal Market as one of Europe's major achievements and 'its best asset in times of increasing globalisation'.⁴⁴ It comprises of the combined area of the twenty-eight Member States, consisting of over 500 million consumers.⁴⁵ It was created by removing internal frontiers as Article 34 TFEU prohibits all Quantitative Restrictions (QRs) on imports and all Measures with Equivalent Effect to Quantitative Restrictions (MEEQRs), while also creating a customs union.⁴⁶ The Internal Market is underpinned by the four cornerstones: Free Movement of Goods, Free Movement of Persons, Free Movement of Services, and Free Movement of Capital.⁴⁷

For the purpose of this thesis, it is the Free Movement of Goods provisions which are of relevance: farm animals are categorised as products of 'stock farming', in turn considered to be 'agricultural products'⁴⁸, subsequently classified as 'goods',⁴⁹ and therefore subjected to the Free Movement of Goods provisions.⁵⁰ The Treaty grants EU the competence of approximating (ie harmonising) laws to ensure the establishment and function of the

⁴³ European Commission 'Priorities 10 Priorities'
<http://ec.europa.eu/priorities/index_en.htm> accessed 8 December 2015

⁴⁴ European Commission 'Commission Priority Internal Market A deeper and fairer internal market' <http://ec.europa.eu/priorities/internal-market/index_en.htm> accessed 8 December 2015

⁴⁵ European Commission 'Single Market for Goods' (2015)
<http://ec.europa.eu/growth/single-market/goods/index_en.htm> accessed 8 December 2015

⁴⁶ TFEU, Article 30-33

⁴⁷ TFEU, Article 26(2)

⁴⁸ TFEU, Article 38

⁴⁹ *7/68 Commission v Italy (Art Treasures)* [1968] ECLI 51

⁵⁰ TFEU, Article 26,38,114

Internal Market.⁵¹ The introduction of harmonising legislation aims at ensuring that the Internal Market is a 'competitive economy', which also applies for agriculture.⁵²

One effect of Article 34 TFEU is that any measure deemed as protectionist on behalf of a Member State –for the benefit of its domestic farmers in this case– is prohibited.⁵³ Before the creation of the Internal Market (or before a country's EU membership), the authorities had the power to introduce tariffs on imports to protect domestic producers. The authorities were also able to freely pay out state subsidies to support domestic producers facing difficulties to ensure the production. This is no longer possible, as the core ethos of the Internal Market is the free intra-Member State movement of goods, services, people and capital – a fundamental principle which is unlikely to be dislodged on animal welfare grounds. However, there is a limited number of justifications to the prohibition of trade barriers in Article 34 TFEU, which are contained in Article 36 TFEU.

While the economies of scale enabled by the Internal Market have caused significant problems for farmers in Member States that impose stricter animal welfare standards than the EU minimum, this research asserts that they can be compensated by improving and securing these farmers' competitive strength. The Internal Market has the potential to enable the export of high-welfare produce (niche-products) and reach consumer segments in other Member States. Consequently, the market for such products can be many times larger due to the Internal Market.

⁵¹ TFEU, Article 3,26,114. Consolidated version of the Treaty on the European Union [2010] OJ C 83/13 (TEU) Article 3(3)

⁵² Directive 1998/58 (n. 30) Recitals; Pig Directive (n. 29) Recital (6),(7); Egg Directive (n. 32) Recital (7); Broiler Directive (n. 32) Recital (6),(7); S. Weatherill 'The Limits of Legislative Harmonization Ten Years after *Tobacco Advertising*: How the Court's Case Law has become a "Drafting Guide"' (2011) 12(3) German Law Journal 827,834

⁵³ 40/82 *Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland* [1984] ECR 285

2.3.1 Article 36 TFEU

Article 36 TFEU provides justifications for QRs and MEEQRs on the grounds of:

public morality, public policy or public security; *the protection of health and life of humans, animals or plants*; the protection of national treasures possessing artistic, historic or archaeological value; or the protection of industrial and commercial property.⁵⁴

'Animal health and life' as mentioned in the Article 36 are distinct (albeit related) to animal welfare: it is fully possible to sustain an animal's health enough to keep it alive, while disregarding its welfare, as before the advent of animal welfare, this was the common practice of intensive farming.⁵⁵ Therefore, Member States are not able to rely on Article 36 TFEU to justify trade barriers on animal welfare grounds. This is supported by the following two cases, which illustrate the tension between Free Movement of Goods and animal welfare.

The first case is *Compassion in World Farming (R v CIWF)*,⁵⁶ which concerned calf rearing. The case centres on the (now repealed) Directive 91/629/EEC.⁵⁷ The Directive contained a derogation enabling Member States to apply, or maintain, stricter provisions within their territory than those provided by the Directive⁵⁸ – the exact same phrase is still used in the current minimum Directives on pigs and poultry. This derogation was used and veal crate husbandry system was prohibited in the United Kingdom

⁵⁴ TFEU, Article 36 (emphasis added)

⁵⁵ R Harrison, '*Animal machines*' (Vincent Stuart 1964); P Lymberly, I Oakeshott, *Farmageddon The true cost of cheap meat* (Bloomsbury Publishing Plc 2014); A. Woods 'From cruelty to welfare: The emergence of farm animal welfare in Britain, 1964-71' (2011) 36(1) *Endeavour* 14

⁵⁶ C-1/96 *R v. Minister of Agriculture, Fisheries and Food, ex parte Compassion in World Farming* [1998] ECR I-1251

⁵⁷ Calves Directive (n. 28)

⁵⁸ *ibid* Article 11(2); M. Dougan 'Minimum Harmonization and the Internal Market' (2000) 37 *Common Market Law Review* 853

(UK). However, over 500,000 calves were annually exported to other Member States, where they were reared in the veal crates. The question arose whether the UK had the power to ban exports of calves to other Member States, where the calves would be reared in the veal crates. The preliminary reference question asked whether the ban might be a QR, to which the UK would enjoy a justification of its derogation by relying on what is now Article 36 TFEU.⁵⁹ While the Court recognised the derogatory power,⁶⁰ its limitations were highlighted, as the Court held that two conditions had to be met: first, the derogation was limited to the territorial boundaries of the Member State in question;⁶¹ and second, the derogations must comply with all Treaty provisions. Thus, a ban of exporting calves to other Member States went beyond the scope of the derogation.⁶² Indeed, the Court stated that such a ban 'would strike at the harmonisation achieved by the Directive'.⁶³ In this case, minimum requirements would consequently become the *de facto* maximum level attainable if the calves some time during their lifespan were to be exported to other Member States.⁶⁴

The outcome of *R v CIWF* is in line with the earlier case of *Hedley Lomas*,⁶⁵ which concerned a UK ban of export of live animals to Spain, as Spain did not (in the UK's opinion) comply with the old Slaughter Directive (74/577/EEC).⁶⁶ The Court held that the Treaty justification for a trade barrier cannot be relied upon where a Directive harmonises measures necessary to achieve a specific objective.⁶⁷ Neither long transitional periods (sixteen

⁵⁹ ex Article 30 EC

⁶⁰ *McMahon* (n. 27) 6.58

⁶¹ The Territorial aspect was reinforced in *C-341/05 Laval un Partneri Ltd v Svenska Byggnadsarbetareförbundet, Svenska Byggnadsarbetareförbundets avd. 1, Byggettan, Svenska Elektrikerförbundet* [2007] ECR I-11767

⁶² G.V. Calster 'Export restrictions – a watershed for Article 30' (2000) 25(4) *European Law Review* 335,342

⁶³ *C-1/96 R v CIWF* (n. 57) 62

⁶⁴ *Calster* (n. 63) 342

⁶⁵ *C-5/94 R v. Ministry of Agriculture, Fisheries and Food, ex parte: Hedley Lomas (Ireland) Ltd.* [1996] ECR I-2553

⁶⁶ Council Directive 74/577/EEC of 18 November 1974 on stunning of animals before slaughter [1974] OJ L316/10

⁶⁷ Thus indicating that Article 36 TFEU only applies where there is no harmonisation. *C-5/94*

years), nor a Directive's failure to comply with the European Convention for the Protection of Animals kept for Farming Purposes (hereinafter 'the Convention') can be used as grounds to rely on Article 36 TFEU.⁶⁸ As such, it is unlikely that Member States may rely on Article 36 TFEU when attempting to introduce restrictions on export and/or import of animals or animal produce on animal welfare grounds. It should be noted that these cases, among others,⁶⁹ predate Article 13 TFEU. However, it is unlikely that the introduction of Article 13 TFEU will alter the application of Article 36 TFEU, as the list of justifications in Article 36 TFEU is exhaustive and the Court has been consistent in ruling that exceptions to a fundamental Treaty principle must be interpreted strictly.⁷⁰

The discussed case law clearly shows that export bans cannot be justified on *animal welfare* grounds by (now) Article 36 TFEU. The justifications explicitly include 'health and life of humans, animals or plants'⁷¹ and entirely omit 'welfare'. This thesis concludes that since welfare is a distinct concept from 'health and life', the justifications in Article 36 TFEU cannot be relied upon in regards to welfare, and that attempts to do so are likely to be deemed as protectionist behaviour and therefore unlawful under Article 34 TFEU.

However, as we consume the animals, an undeniable link between their health and ours is established and it becomes dangerous to disregard their welfare. This link was highlighted in the BSE⁷² and the FMD⁷³ crises in the

(n. 66) 18; European Commission (n. 45)

⁶⁸ C-1/96 *R v CWF* (n. 57); G.V. Calster, 'Case Law Case C-1/96 The Queen and Minister of Agriculture, Fisheries and Food, ex parte Compassion in World Farming Limited' [1998] ECR I-1251 (2000) 6 Columbia Journal of European Law 115; European Convention for the Protection of Animals kept for Farming Purposes [1976] Council of Europe

⁶⁹ Case 190/87 *Oberkreisdirektor v Moormann BV* [1988] ECR 4689; Case 5/77 *Tedeschi Denkavit* [1977] ECR 1555

⁷⁰ 46/76 *W.J.G. Bauhuis v. The Netherlands State* [1977] ECR 5; Case 72/83 *Campus Oil* [1984] ECR 2727

⁷¹ TFEU, Article 36

⁷² *Bovine Spongiform Encephalopathy*

⁷³ Foot and Mouth Disease; C-189/01 *Jippes* (n. 6); C-101/12 *Schaible* (n. 14)

UK.⁷⁴ Both outbreaks showcased what impact they may have on the Internal Market, as the former resulted in a ten year ban on export and import of beef cattle from the UK.⁷⁵ The BSE outbreak is also an example of when Article 36 TFEU can be relied upon as a justification for export bans in regards to farm animals, as BSE is a serious threat not only to cattle's health and life, but also to humans: BSE is transferable to humans (Creutzfeldt-Jakob disease) and fatal.⁷⁶

Contrastingly, *Commission v UK*⁷⁷ concerned preventative measures against the spread of Newcastle disease,⁷⁸ and the Court held that the measures could not be justified by Article 36 TFEU. Newcastle disease is a serious problem for farmers, due to its rapid spread and devastating impact on their poultry; however, the damage is predominantly financial. While Newcastle disease is transferable to humans, it only causes conjunctivitis, which usually does not require treatment, unlike the fatal Creutzfeldt-Jakob disease. Consequently, it can be argued that in *Commission v UK*, the Court prioritised the Free Movement of Goods over the health and life of the animals, as Free Movement was given priority over hindering the spread of Newcastle disease. The fact that Newcastle disease poses no real threat to

⁷⁴ W. Grant 'Agricultural Policy, Food Policy and Communicable Disease Policy' (2012) 37(6) *Journal of Health Politics, Policy and Law* 1031,1032; A. Szajkowska 'The Impact of the Definition of the Precautionary Principle in EU Food Law' (2010) 47 *Common Market Law Review* 173

⁷⁵ BBC 'Timeline: British beef ban' (8 March 2006) <<http://news.bbc.co.uk/1/hi/uk/4785610.stm>> accessed 9 August 2015; Centre for Food Safety 'Timeline of Mad Cow Disease Outbreaks' <<http://www.centerforfoodsafety.org/issues/1040/mad-cow-disease/timeline-mad-cow-disease-outbreaks>> accessed 9 August 2015

⁷⁶ T-304/01 *Abad Pérez and Others v Council and Commission* [2006] ECLI II-4861; P. Brown 'Bovine spongiform encephalopathy and variant Creutzfeldt-Jakob disease' (2001) 322 *The BMJ* (formerly the *British Medical Journal*) 841; M.J. Maloni, M.E. Brown 'Corporate Social Responsibility in the Supply Chain: An Application in the Food Industry' (2006) 68 *Journal of Business Ethics* 35,36; W. Grant 'Economic patriotism in European agriculture' (2012) 19(3) *Journal of European Public Policy* 420,429

⁷⁷ 40/82 *Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland* [1984] ECR 283: contrasting with 74/82 *Commission of the European Communities v Ireland* [1984] ECR 317 where a total ban on poultry carcasses, meat and eggs could not be upheld to protect the Irish poultry from Newcastle disease, but a licencing system was approved for imports due to the exceptionally high health standards of poultry in Ireland (which the British flocks could not match).

⁷⁸ *Paramyxovirus 1*

human health and life and is merely a treat to human financial interests, is likely to have contributed to this case's outcome.

It is noteworthy that in connection to the BSE crisis, the interaction between Article 36 TFEU and the Principle of Mutual Recognition (see next section) became clearer: Free Movement of Goods only encompasses products that are not hazardous to the consumer, a principle extended in the Defective Product Directive⁷⁹ to cover agricultural products.⁸⁰ Therefore, the harmonisation of farm animal welfare legislation by the EU can be seen as an attempt by the EU to pre-empt potential disruptions to the Internal Market, an attempt motivated by financial reasons rather than ensuring animal welfare.

2.3.2 Principle of Mutual Recognition and Mandatory Requirements

The prohibition of trade barriers in the form of QR and MEEQRs in Article 34 TFEU ensures the proper functioning of the Internal Market.⁸¹ However, free trade within the Internal Market is not an unconditional Treaty right.⁸² Rather, trade on the Internal Market is of conditional nature, clearly exemplified by the Principle of Mutual Recognition (*Cassis de Dijon*).⁸³ The Principle

⁷⁹ Council Directive 1999/34/EC of the European Parliament and of the Council of 10 May 1999 amending Council Directive 85/374/EEC on the approximation of the laws, regulations and administrative provisions of the Member States concerning liability for defective products [1999] OJ L141/20

⁸⁰ K Purnhagen 'The Virtue of Cassis the Dijon 25 Years Later – It Is Not Dead, It Just Smells Funny' in K Purnhagen, P Rott (eds.) *Varieties of European Economic Law and Regulation* (Springer 2014)

⁸¹ Some cases on MEEQRs in relation to foodstuff: 178/84 *Commission v Germany (Reinheitsgebot)* [1987] ECR 1227; 261/81 *Walter Rau Lebensmittelwerke v De Smedt PVBA* [1982] ECR 3961; C-470/93 *Verein gegen Unwesen in Handel und Gewerbe Köln e.V. v Mars GmbH* [1995] ECR I-1923

⁸² S Weatherill 'Why There is No 'Principle of Mutual Recognition' in EU Law (and Why that Matters to Consumer Lawyers)' in K Purnhagen, P Rott (eds.) *Varieties of European Economic Law and Regulation* (Springer 2014) 19.4

⁸³ 120/78 *Cassis* (n. 1)

guarantees that any product lawfully sold in one Member State can be sold in all other Member States,⁸⁴ unless a ban can be justified.

To decide whether it is justifiable, a two-stage test must be passed: the trade barrier must be identified, after which the Court can assess whether it is justifiable by a 'mandatory requirement' or satisfies Article 36 TFEU. If an identified barrier cannot be justified, then the good in question is allowed to be sold in other Member States. When the two-stage test is applied, the burden of proof to justify the barrier rests on the regulator,⁸⁵ and it has successfully been proven by referring to mandatory requirements.⁸⁶

Mandatory requirements are exceptions to Free Movement and exist alongside and in addition to Treaty exceptions, and are therefore separate from Article 36 TFEU. They cover a wider range of interests, and are a non-exhaustive⁸⁷ 'list' which includes: protection of the environment,⁸⁸ pluralism of the press,⁸⁹ opening hours⁹⁰ and road safety.⁹¹ Consequently, mandatory requirements are more extensive in their scope than Article 36 TFEU, while simultaneously narrower, as they only apply to equally applicable⁹² measures,⁹³ where harmonising legislation is absent.

⁸⁴ European Commission 'Mutual recognition' (2015) <http://ec.europa.eu/growth/single-market/goods/free-movement-sectors/mutual-recognition/index_en.htm> accessed 16 December 2015

⁸⁵ 227/82 *Van Bennekom* [1983] ECR 3883; C-14/02 *ATRALSA* [2003] ECR I-4431

⁸⁶ C-434/04 *Ahokainen and Leppik* [2006] ECR I-9171; C-262/02 *Commission v France* [2004] ECR I-6569; C-429/02 *Bacardi v TFI* [2004] ECR I-6613; C-53/89 *Eyssen* [1981] ECR 4091

⁸⁷ 120/78 *Cassis* (n. 1) 8

⁸⁸ C-379/98 *PreussenElektra AG v Schleswag AG* [2001] ECR I-2099; C-309/02 *Radlberger Getränkegesellschaft mbH and Co and Spitz KG v Land Baden-Württemberg* [2004] ECR I 11763; C-142/05 *Åklagaren v Percy Mickelsson and Joakim Roos* [2009] ECR I-04273; C 524/07 *Commission v Austria* [2008] ECR I-187

⁸⁹ C-368/95 *Vereinigte Familienpress Zeitungsverlags- und vertriebs GmbH v Heinrich Bauer Verlag* [1997] ECR I-368

⁹⁰ 145/88 *Torfaen* [1989] ECR 3851

⁹¹ C-110/05 *Commission v Italy* [2009] ECR I-00519

⁹² Equally applicable measures are measures that apply equally to both domestic and imported products.

⁹³ 788/1979 '*Criminal proceedings against Gilli and Andres*' [1980] ECR 2071; C-123/00 *Criminal Proceedings Against Bellamy and English Shop Wholesale* [2001] ECR I-2795

By providing the opportunity to Member States to justify trade barriers, the EU legislature allows for a degree of regulatory autonomy for the Member States, and provides opportunities to introduce harmonisation measures.⁹⁴ Once harmonising legislation has been introduced, it becomes increasingly difficult for a Member State to justify trade barriers against products subject to harmonising measures from other Member States, even if the products are not produced to the domestic standard, which is the case with farm animal products.⁹⁵

Case law indicates that regarding matters of quality and preference of foodstuffs, bans are not necessary, and therefore not justifiable.⁹⁶ Such issues can be addressed by labelling rules and by providing the '*reasonably well-informed and reasonably observant and circumspect*' consumers⁹⁷ with information to enable them to make their own choices. This approach makes it impossible for any Member State to justify a trade barrier by arguing a mandatory requirement of 'protecting the quality of goods'.⁹⁸ As a result, quality of foodstuff cannot justify an import ban against other Member States, not even as an attempt to improve the competitive strength and productivity of domestic farmers in stricter Member States, and protect the higher animal welfare standards in the process.

The association between farm animal welfare standards and the potentially serious effects the Principle of Mutual Recognition has on the farmers'

⁹⁴ Weatherill (n. 83) 19.4

⁹⁵ C-1/96 *R v CIWF* (n. 57); C-5/94 *Hedley Lomas* (n. 66); C-169/89 *Gourmetterie Van den Burg* [1990] ECR I-02143. For further discussion see: Brooman, Legge (n. 22) 82; C Janssens, *The Principle of Mutual Recognition in EU Law* (OUP 2013) Chapter 2; Calster (n. 63) 342

⁹⁶ 261/81 *Ran v De Schmedt* [1982] ECR 3961; 407/85 *Deri Glocken* [1988] ECR 4233; 788/1979 *Gilli* (n. 94); joined cases C-158/04 and C-159/04 *Alva Vita v Elliniko Dimosio and Nomarchiaki Aftodioikisi Ioanninon* [2006] ECR I-8135

⁹⁷ Yardstick of a consumer since C-210/96 *Gut Springenheide and Tusky v Oberkreisdirektion Steinfurt* [1998] ECR I-4657

⁹⁸ C-161/09 *Kakavetsos-Fragkopoulos* [2011] ECR I-915; C-158/04 and C-159/04 *Alva Vita* (n. 97)

competitive strength is well illustrated by a parallel to the *Cassis* case.⁹⁹ In *Cassis*, the Court held that the rule of a minimum of 25% of alcohol in liqueurs was only problematic when applied to imports, thus allowing Germany to continue to apply the rule on domestic producers. However, this would cause a distinct disadvantage for German producers: as alcohol is a major input cost in producing the liqueurs, foreign liqueurs, with a lower percentage of alcohol, would be cheaper to produce. If the German authorities chose to abandon the rule for domestic producers, the stricter 'standard' would be lowered. Alternatively, if they chose to maintain the rule, the risk would be that domestic producers would be priced out of the market. Further, there is a risk that the lowest standard would become the *de facto* standard of the Union, as goods produced to the lowest standards will be the cheapest union-wide.¹⁰⁰ If other Member States follow, by abandoning their own rules to apply the *de facto* standard, a regulatory race to the *de facto* bottom will be triggered.¹⁰¹

This thesis has identified a parallel in facts and potential effects between the *Cassis* case and farm animal welfare. A Member State requiring animal welfare standards stricter than EU's minimum harmonised standard, finds itself in a similar position as the German authorities in *Cassis*. Just as alcohol is a main cost for the German producers, higher animal welfare standards increase farming production costs. Therefore, farmers in stricter Member States have a similar cost disadvantage as the German producers in *Cassis*. The stricter Member State faces the same dilemma as the German authorities in *Cassis*: they can either lower their domestic animal welfare standards, to improve the competitive strength of their farmers against cheaper imports produced to a lower standard, or maintain their stricter standards and watch their domestic farmers being priced out of the market. In the latter case, it becomes financially non-viable to farm and the farmers would eventually go out of business. Meanwhile, the competitive

⁹⁹ 120/78 *Cassis* (n. 1)

¹⁰⁰ *ibid* 14; Purnhagen (n. 81) 322

¹⁰¹ Purnhagen (n. 81) 324

strength of farmers with lower standards and cheaper produce would increase. Such a scenario could easily incentivise Member States to lower their domestic standards in a bid to improve the competitive strength of their farmers, thus inducing a regulatory 'Race to the Bottom', at the expense of the animals. There is, however, a noteworthy difference: at the time when *Cassis* was decided, unlike animal welfare, alcohol law was not harmonised. Although the regulatory race to the bottom cannot go lower than the minimum harmonised standards, it remains a hazard for animal welfare, as a race to the minimum standard risks reducing the welfare standard for millions of animals, particularly as the minimum standard notoriously lack clear definitions.

2.4 Harmonisation

Since animal welfare legislation is in the form of harmonising Directives, it is necessary for this analysis to establish the contours, benefits, and drawbacks of harmonisation, before any analysis of the Directives' content. The aim of this examination is not only to clarify the boundaries and parameters of the EU's chosen legislative approach, but to draw attention to the difficulties of relying on the terminology of 'harmonisation', which is used by scholars in a variety of ways. Indeed, 'harmonisation' is often used interchangeably¹⁰² with other terms, such as 'convergence',¹⁰³ 'unification',¹⁰⁴

¹⁰² J Malinauskaite, 'International Competition Law Harmonisation and the WTO; Past, Present and Future' in M Andenas and C Baasch Andersen (eds), *Theory and Practice of Harmonisation* (Edward Elgar Publishing Ltd 2011), Chapter 8,9

¹⁰³ G. Falkner 'Policy networks in a multi-level system: Convergence towards moderate diversity?' (2000) 23(4) *West European Politics* 94; Z. Vernadaki, 'Consumer protection and the reform of European consumer *aquis*' (2010) 21(9) *International Company and Commercial Law Review* 316,321; S Andreadakis, 'Regulatory competition or harmonisation; the dilemma, the alternatives and the prospect of reflexive harmonisation' in M Andenas and C Baasch Andersen (eds), *Theory and Practice of Harmonisation* (Edward Elgar Publishing Ltd 2011), 60-62; F. Gomez, J.J. Ganuza 'How to build European Private Law: an economic analysis of the lawmaking and the harmonization dimensions in European private law' (2012) 33(3) *European Journal of Law & Economics* 481,484

¹⁰⁴ 'Unification means the creation of something identical' M Andenas, C Baasch Andersen, R Ashcroft, 'Towards a theory of harmonisation' in M Andenas and C Baasch Andersen (eds), *Theory and Practice of Harmonisation* (Edward Elgar Publishing Ltd 2011) 576-577; P.J. Slot 'Harmonisation' (1996) 21(5) *European Law Review* 378,379; C. Barnard 'Social dumping and the race to the bottom; some lessons for the European Union from Delaware?' (2000) 25(1) *European Law Review* 57,77

and ‘legal integration’,¹⁰⁵ effectively blurring the clarity and the theoretical stance of each of these terms. For the purposes of this thesis, harmonisation ‘...means minimizing the degree of variation and reducing the number of significant underlying differences in order to achieve *similarity* between the systems’.¹⁰⁶ Consequently, ‘unification’, ‘convergence’ and ‘legal integration’ are not suitable synonyms. Indeed, the purpose of unification is the introduction and adoption of the same law throughout the EU.¹⁰⁷ Therefore, harmonisation cannot be equated with unification.¹⁰⁸

Harmonisation in the EU is commonly achieved by the introduction of legislation, usually by implementing Directives, often with reference to the core purpose of the establishment and the functioning of the Internal Market.¹⁰⁹ A Directive establishes harmonised aims, while leaving it up to the Member States as to how to achieve these aims.¹¹⁰ Smits illustrates the outcome of a Directive as ‘a law of uniform results’, but where the relevant rules that achieve this uniform result are national in their character.¹¹¹ Thus, the Directive, as a legislative tool, achieves a degree of similarity between the systems, by reducing the underlying differences, whilst leaving the exact details to the Member States.

Prima facie, this is contrary to achieving similarity, as harmonisation by Directives still allows for a great variety in the domestic legislation of the

¹⁰⁵ W. Wagner ‘Negative and Positive Integration in EU Criminal Law Co-operation’ (2011) 15 European Integration Online Papers; F Scharpf, *Governing in Europe, Effective and Democratic?* (OUP 1999); JM Smits ‘Convergence of Private Law in Europe: Towards a New *Ius Commune?*’ in E Örüçü and D Nelken (eds.) *Comparative Law a handbook* (Hart 2007) 220

¹⁰⁶ Emphasis added. Andreadakis (n. 104) 57

¹⁰⁷ Slot (n. 105) 379

¹⁰⁸ *ibid*

¹⁰⁹ TFEU, Article 114, 115 (ex Article 93 TEC); V. Rodriguez ‘From national to supranational enforcement in the European patent system’ (2012) 34(6) *European Intellectual Property Review* 401; C. Monaghan ‘Voluntary harmonisation of sales law? The Common European Sales Law and the effect it will have on cross-border transactions’ (2012) 33(4) *Company Lawyer* 111; H. Wagner ‘Is harmonization of legal rules an appropriate target? Lessons from the global financial crisis’ (2012) 33(3) *European Journal of Law & Economics* 541

¹¹⁰ TFEU, Article 288

¹¹¹ Smits (n. 106) 224

twenty-eight Member States. However, harmonisation by Directives establishes the similarity to be achieved when the aim is realised, regardless of which domestic legal system each of the twenty-eight Member States uses. This is the strength of a harmonising Directive when it applies to a multitude of jurisdictions, as the aims laid down become possible to realise across all Member States, in spite of their legal diversity. Thus, harmonising Directives respect and maintain the diversity¹¹² between the Member States, in accordance with Treaty obligations,¹¹³ while reducing underlying differences.

A Directive's aim is more likely to be realised in an effective manner if the Member States are free to incorporate legal changes into their national legal systems in a manner, which allows the changes brought about by the Directive, to blend with the rest of the domestic laws, by using national terminology.¹¹⁴ Harmonising Directives, therefore, contribute towards founding the Internal Market upon a common, EU-wide, core of shared rules and general principles, while allowing for adaptation and accommodation of the large variety of legal systems.¹¹⁵

Similarity, as the fundamental aim of harmonisation, becomes difficult to achieve when there is a lack of direction as to what it should be. The animal welfare Directives have a general lack of definitions of key concepts. For example, no definition is provided within the Directives as to what the core concept of 'animal welfare' actually *means*. By not clearly defining animal welfare, it is left to the national legislators to interpret the concept, inevitably

¹¹² H Thue 'Norwegian Private International Law at the End of the XXth century: Progress or Regress', in S Symeonides (ed.), *XVth Congress of the International Academy of Comparative Law* (Kluwer 2000) 319 A. Fiorini, 'The Codification of Private International Law in Europe: Could the Community Learn from the Experience of Mixed Jurisdictions?' (2008) 12(1) *Electronic Journal of Comparative Law*; H Patrick Glenn, 'Com-paring' in E Örucü and D Nelken (eds.) *Comparative Law a handbook* (Hart 2007)91-108; D Nelken 'Comparative Law and Comparative Studies' in E Örucü and D Nelken (eds.) *Comparative Law a handbook* (Hart 2007) 31,36

¹¹³ TEU, Article 3; TFEU, Article 151,152,165,167

¹¹⁴ Smits (n. 106) 224

¹¹⁵ B. Kurcz 'Harmonisation by means of Directives – never-ending story?' (2001) *European Business Law Review* 287,288

resulting in different interpretations on Member State level. As a result, a common criticism against harmonising Directives, as voiced by some scholars, is that they create more diversity of law than harmony.¹¹⁶ However, this diversity of law due to lack of proper definitions could be countered by the formulation and inclusion of clear definitions of the key concepts. In regards to animal welfare specifically, concepts within the Directives such as 'animal welfare', (unnecessary) 'suffering', 'ethological needs', and 'environmental enrichment' would benefit from definitions at an EU level, to ensure a more coherent application of the law in the Member States. This would still allow for a harmonising rather than a unifying approach, as it would still be in the Member States' discretion how to implement the defined concepts into their national legislation, while simultaneously contributing to the clarity of what is actually required.

2.4.1 Harmonisation procedure

Directives have an implementation period, which often spans over several years, to allow for a gradual introduction of new concepts, and give time to Member States and their affected domestic parties to adjust to the new requirements. In terms of animal welfare and the development of new housing systems, the implementation period is of particular importance to their development. For example, when the Egg Directive¹¹⁷ was introduced, concerning a ban on battery cages, there was no viable alternative for the egg producers. The long implementation period allowed for alternative systems to be developed, and allowed for the cost of necessary investments to be spread, as the old cages had to be replaced. Indeed, as Sefton-Green observes, the whole idea behind minimum harmonisation is that it takes a certain time to achieve its goal,¹¹⁸ and the Egg Directive provides an example

¹¹⁶ R. Sefton-Green 'Multiculturalism, Europhilia and Harmonization; harmony or disharmony?' (2010) 6(3) Utrecht Law Review; G. Teubner, 'Legal Irritants: Good Faith in British Law or How Unifying Law Ends Up in New Divergences' (1998) 61(1) The Modern Law Review Limited 13

¹¹⁷ Egg Directive (n. 32)

¹¹⁸ Sefton-Green (n. 117) 57; G. Falkner, O. Treib 'Three Worlds of Compliance or Four? The EU-15 Compared to New Member States' (2008) 46(2) Journal of Common Market Studies 293

of a situation where the lengthy implementation period is not necessarily problematic.

Ironically, long implementation periods are also a major flaw of harmonisation through Directives. To cite the same example, the implementation period for the battery cage ban was thirteen years. While some time was necessary to develop alternative housing systems, thirteen years equate to the lifespan of around eight generations¹¹⁹ of egg-layers, which is rather excessive. While the length of the period itself is an issue, there is a further connected issue concerning the harmonisation aspects of the Directive: while the Egg Directive contained a fixed date, after which battery cages would be unlawful, the Member States remained free to choose an earlier 'deadline' within their domestic legislation to implement the system change, whenever they saw fit during the thirteen year long period, provided that it was no later than the fixed date. This led to significant differences between the Member States. For example, Sweden banned battery cages before the Egg Directive was introduced in 1997, while other Member States, like England, met the deadline, and thirteen Member States¹²⁰ were reprimanded for not enforcing the rule.¹²¹ Notably, the Commission brought Italy¹²² and Greece¹²³ before the Court for their failure to enforce the ban. The difference among the implementation of legislative changes distorts the playing field for the farmers. Farmers from Member States with early implementation had to compete against farmers from Member States with late implementation, which had lower production costs, due to the ongoing usage of battery cages and the postponing of the

¹¹⁹ The generations of egg-layers can be calculated: 52 (weeks) x13 (years) = 676 weeks. 676 weeks / 79 (average lifespan in weeks) = 8,556 generations.

¹²⁰ Hungary, Italy, Latvia, Spain, Greece, Belgium, Bulgaria, Cyprus, Poland, Portugal, Romania, Slovakia and the Netherlands; James Andrews 'European Union Bans Battery Cages for Egg-Laying Hens' *Food Safety News* (19 January 2012) <http://www.foodsafetynews.com/2012/01/european-union-bans-battery-cages-for-egg-laying-hens/#.VSe1RfmG_sY> accessed 10 April 2015

¹²¹ Commission 'Animal welfare: Commission refers Greece and Italy to Court for failure to enforce ban on cages for laying hens' (Press Release, 25 April 2013) http://europa.eu/rapid/press-release_IP-13-366_en.htm accessed 5 December 2015

¹²² C-339/13 *European Commission v Italian Republic* [2014] OJ C 253/15

¹²³ C-351/13 *European Commission v Hellenic Republic* [2014] ECLI 2150

investment costs to change production system.¹²⁴ Thus, the input costs for the farmers in the different Member States varied significantly, effectively negating some of the intended goals of harmonisation.

2.4.2 Maximum harmonisation

While there are several types of harmonisation¹²⁵ by Directives, there are two main paradigms: maximum or minimum harmonisation. Maximum harmonisation establishes explicit provisions that become the absolute level, meaning that Member States cannot exceed them by introducing 'stricter' domestic provisions.¹²⁶ There is no room for derogation from the provisions in the maximum Directives, apart from safeguard measures,¹²⁷ so maximum harmonisation forms a *de facto* legislative ceiling. The 'ceiling' metaphor is commonly used to describe the effects maximum harmonisation has on the Member States' legislative discretion. Although the 'ceiling' label is used when referring to maximum harmonisation, it is important to remember that any harmonisation by Directives must occur within the boundaries of the EU's Treaty based competences. As such, the ultimate limit for any EU harmonisation is regulated by Treaty provisions.¹²⁸

The rigid nature of maximum harmonisation makes it most suitable for areas of law where pre-existing national laws are absent, and where a supranational issue needs to be regulated, such as environment protection. While maximum harmonisation has its merits, it is not a suitable legislative

¹²⁴ M.C. Appleby, 'The European Union Ban on Conventional Cages for Laying Hens: History and Prospects' (2003) 6(2) *Journal of Applied Animal Welfare Science* 103; R. Wolffarm, J. Simons, A. Giebel, R. Bongaerts, 'Impacts of stricter legal standards in the EU for keeping laying hens in battery cages' (2003) 29(1) *Agricultural Economics* 85; A.W. Walker, 'An economic analysis of a modified, enriched cage egg production system' (1998) 39 *British Poultry Science* 14

¹²⁵ Harmonisation might also be partial, full, progressive, optional and alternative, all with their own special characteristics. However, none of these versions of harmonisation are present in the legislation relating to animal welfare issues.

¹²⁶ Kurcz (n. 116) 295; 5/77 *Denkavit* (n. 70)

¹²⁷ Slot (n. 105) 382

¹²⁸ S. Weatherill, 'Beyond pre-emption? Shared competence and constitutional change in the European community' in O'Keffee and Twomey (eds), *Legal issues of the Maastricht Treaty* (Wiley London 1994) 25

tool for regulating farm animal welfare, partially due to pre-existing national legislations, but also due to the issue's lack of a supranational dimension. This is supported by EU's choice of legislative tool, as the Directives concerning farm animal welfare are all minimum harmonisation Directives.

2.4.3 Minimum harmonisation – an agreement to disagree¹²⁹

If maximum harmonisation is a 'ceiling', minimum harmonisation is a 'floor', as it sets a minimum acceptable standard. The minimum standard must be implemented into the Member States' national legislation and adhered to. Provided that the minimum is adhered to, the Member States are free to exceed the standard by implementing stricter provisions in their own jurisdictions,¹³⁰ as long as they comply with Treaty provisions. Another characteristic of the minimum Directives is the general nature of the wording within them (the lack of definitions), as they only set the minimum rules that are seen as essential for the functioning of the Internal Market.¹³¹ Despite being referred to as 'minimum harmonisation', it is worth highlighting that it does not mean that it is 'minimalist' in the scope of its provisions. 'Minimum' in minimum harmonisation translates as 'minimum requirements' and nothing else.¹³²

Minimum harmonisation allows Member States to push standards in an upward trajectory in their national jurisdiction by introducing new stricter measures,¹³³ which may eventually cause an upward push in the EU legislation itself. For instance, in farm animal welfare terms, stricter provisions may include a legal requirement for a minimum space allocation for pigs, which is considerably bigger than the minimum required by the Pig Directive, or a reduction of the maximum permitted stocking density per square metre in regards to broilers. Alternatively, minimum harmonisation

¹²⁹ *ibid*; Weatherill (n. 53)

¹³⁰ Gomez, Ganuza (n. 104) 493

¹³¹ Andreadakis (n. 104) 58

¹³² C-84/94 *UK v. Council* [1996] ECR I-5755,17,56; Kurcz (n. 116)

¹³³ C-11/92 *R. v. Secretary of State for Health, ex P. Gallaher Ltd* [1993] ECR I-3545

also allows each Member State to maintain previously higher standards, set before the issuing of the Directives or the country's EU membership. Therefore, from a zoocentric perspective, minimum harmonisation is desirable, as it permits the Member States to go beyond the minimum floor, within the Treaty limits.¹³⁴

However, there are adverse aspects of minimum harmonisation too. By allowing Member States to retain previous high standards, or move in an upward trajectory in their national legislation, fundamental imbalances between the Member States are maintained, and even encouraged to a degree. Such imbalances are harmful at both ends of the spectrum: higher standards increase the input costs for the farmers in those Member States, while in Member States with minimum compliance animals have a lower quality of life compared to their counterparts. The playing field for the farmers is distorted, as stricter Member States legally require higher standards, while the Internal Market, due to the Principle of Mutual Recognition, requires from these farmers to compete against cheaper produce, imported from Member States that only adhere to the minimum. As farmers in the latter Member States have lower input costs, the stricter Member States' domestic produce can never effectively compete against their cheaper produce, when imported. While farmers in stricter Member States may encounter financial difficulties, the minimum farmers have little incentive to voluntarily exceed 'floor' requirements to improve local animal welfare. Even in the case of trading between two Member States of similar standards, the divergent legislative approaches in the two may deter farmers or companies from attempting to export their produce.¹³⁵ Thus, the imbalances, which may remain or occur as a result of minimum harmonisation, counter a prime goal of the European policy that encouraged harmonisation in the first place: to maintain the functioning of the Internal Market.¹³⁶

¹³⁴ Weatherill, (n. 129) 25; Kurcz (n. 116)

¹³⁵ Smits (n. 106) 225

¹³⁶ P de Cruz, *Comparative Law in a Changing World* (3rd ed. Routledge Cavendish 2007)

2.4.4 Enforcement of harmonising Directives

The intended effect of harmonisation reaches the Member State level through the transposition and the implementation of the Directives, before they are enforced. Any problems in achieving the Directives' desired effect can be traced to flaws in their transposition or implementation. Alternatively, the harmonised standard may be significantly undermined by a lack of effective enforcement of the legislation. The harmonising Directives introduced by the EU legislator are independent to a Member State's inability or unwillingness to enforce them. The lack of compliance and enforcement is a failure to realise the aim of the legislation. In regards to animal welfare legislation, even though Italy admitted to non-compliance to the Court, the consequences amounted to a ruling of non-compliance and an order that Italy should cover the cost of the proceedings, which is essentially little more than 'a slap on the wrist'.¹³⁷

Problems with the enforcement of (minimum) harmonisation Directives impact the effectiveness of the objective to harmonise an EU-wide standard of farm animal welfare, particularly when combined with the semantic ambiguity of the Directives, when definitions of concepts are omitted.¹³⁸ Apart from the differences in enforcement caused by the lack of definitions, there are several additional problems in the enforcement of farm animal welfare legislation. For example, to ensure compliance with the Directives, inspectors have to physically inspect the farms, but it is the individual Member States who are obliged to finance the inspectors in their territory, as the EU does not contribute to enforcement costs.¹³⁹

Another example is that legislation around animal welfare standards requires exact specifications to facilitate enforcement. However, this is something

¹³⁷ C-339/13 *Commission v Italy* (n. 123)

¹³⁸ GHK Consulting (n. 4) 1.1.1.,1.1.8,3.2.1; Buller, Morris (n. 21) 232

¹³⁹ *ibid* 1.1.1

scientists cannot deliver independently,¹⁴⁰ as multiple factors from several disciplines need to be considered. For instance, ethologists will emphasise importance of satisfying the animals' ethological needs, while the biologists focus on physical indicators of stress. Therefore, a difference in emphasis derives from the continuous issue of how to measure and assess animal welfare.¹⁴¹

A third example is the lack of consistent training for the inspectors responsible for ensuring that welfare requirements are met: inspectors, who are not even required to be veterinarians, may come from a variety of backgrounds. Even if one had to narrow it down and examine the inspectors with a veterinarian background within one Member State, they would discover many differences in training, education, experience and personal priorities, which would undoubtedly result in different and inconsistent findings.¹⁴² Indeed, critics argue that the intensive farming industry tends to reward the veterinarian-inspectors who base their assessment of the farm compliance with the legislation on how well the animals produce, rather than their welfare per se,¹⁴³ or mainly focus upon the hygiene and cleanliness of the farm.¹⁴⁴ Thus, on an EU-wide scale, the outcomes of farm inspections vary greatly.

Due to these issues, the most effective way to improve the overall level of farm animal welfare for millions of animals within the EU would be to put a greater emphasis upon enforcement. Uniformity in the enforcement can be achieved to some extent, first, by co-financing the inspections between the

¹⁴⁰ S.T. Millman, I.J.H. Duncan, M. Stauffacher, J.M. Stookey 'The impact of applied ethologists and the International Society for Applied Ethology in improving animal welfare' (2004) 86 *Applied Animal Behaviour Science* 299,306; H.H. Sambras 'Applied ethology it's task and limits in veterinary practice' (1998) 59 *Applied Animal Behaviour Science* 39,46

¹⁴¹ See at 1.3

¹⁴² I. Anneberg, M. Vaarst, J.T. Sørensen, 'The experience of animal welfare inspections as perceived by Danish livestock farmers: A qualitative research approach' (2012) 147 *Livestock Science* 49,39-41

¹⁴³ Lymberly, Oakenshott (n. 56) 121

¹⁴⁴ Anneberg, Vaarst, Sørensen (n. 143); Sambras (n. 141)

EU and the Member States, second, by ensuring that the enforcement agents are appropriately trained, and, third, by not neglecting the animals' ethological needs in their assessments.

2.4.5 Minimum harmonisation's impact on animal welfare

The derogatory power in the Directives allows Member States to exceed the minimum requirements within their national territories, but inevitably causes differences in animal welfare standards. Some Member States will use the power and require stricter domestic standards for animal welfare than the ones described as minimum in the Directives. As the level of welfare is directly linked to the cost of providing it –the higher the standard of animal welfare, the more it costs¹⁴⁵ – the 'floor' standard also harmonises the welfare's 'price-tag'. Therefore, the farmers in stricter Member States have higher production costs compared to those who only adhere to the harmonised level. While the cost of each component increasing the welfare level may be small, improvements have a cumulative effect to the cost. Consequently, the higher costs due to stricter standards damage the competitive strength of the concerned farmers. The farmers, having to comply with stricter domestic standards that cost more, need to identify some 'added value', such as an 'animal-friendly' brand or an increase in productivity, to be financially sustainable.¹⁴⁶ The added values are vital for the farmers' financial balance,¹⁴⁷ as the combined 'welfare-cost' may well bring them over the economic tipping point and resulting in bankruptcy.

A welfare improvement with an identified 'added value', such as better meat quality, provides a clear economic motivation for the farming industry to

¹⁴⁵ H. Hansson, C.J. Lagerkvist 'Defining and measuring farmers' attitudes to farm animal welfare' (2014) 23 *Animal Welfare* 47; Millman, Duncan, Stauffacher, Stookey (n. 141) 303,304; Buller, Morris (n. 21) 222

¹⁴⁶ Hansson, Lagerkvist (n. 146); H. Hansson, C.J. Lagerkvist 'Identifying use and non-use values in animal welfare: Evidence from Swedish dairy agriculture' (2015) 50 *Food Policy* 35

¹⁴⁷ Hansson, Lagerkvist (n. 146); C.J. Lagerkvist, H. Hansson, S. Hess, R. Hoffman 'Provision of Farm Animal Welfare: Integrating Productivity and Non-Use Values' (2011) 33(4) *Applied Economic Perspectives and Policy* 484

choose to adopt it, over an improvement without one.¹⁴⁸ Apart from a higher remuneration for their produce, farmers may receive other financial benefits to compensate for the costs, in the form of additional subsidies for ensuring higher welfare.¹⁴⁹ However, as a rule, individual farmers choose between providing a high level of animal welfare or rearing the animals in the most cost-efficient manner.¹⁵⁰ The importance of cost-efficiency is exemplified by the common practice of mass killing of healthy farm animals, such as male dairy calves¹⁵¹ and male chicks of egg laying hybrids:¹⁵² they have no economic value, there is no market for them, and keeping them alive will only incur costs which cannot be recouped.

Before a country joins the EU, its farmers mainly compete with each other, and the state may adopt protectionist actions like quantitative restrictions to support domestic production if it is needed. Upon joining the EU, such protectionist behaviour by the state in favour of domestic farmers becomes unlawful, and the previously restricted and protected market must be opened to imports. This impacts on the competitive strength of the domestic farmers, whose produce must compete against the large quantity of produce from farmers from all the other Member States. Thus, the sheer size of the Internal Market reduces the competitive strength of individual farmers, due to

¹⁴⁸ Millman, Duncan, Stauffacher, Stookey (n. 141) 303-304

¹⁴⁹ Buller, Morris (n. 21) 222

¹⁵⁰ Hansson, Lagerkvist (n. 146)

¹⁵¹ RSPCA 'Almost 100,000 British calves killed and 11,000 shipped abroad' (*RSPCA* 25 May 2012) <<http://www.politics.co.uk/opinion-formers/rspca-royal-society-for-the-prevention-of-cruelty-to-animals/article/rspca-almost-100-000-british-calves-killed-on-farm-and-11-00>> accessed on 1 March 2014; Clive Aslet 'Hard-pressed British dairy farmers can't afford to be compassionate about killing calves' *Daily Mail* (31 May 2012) <<http://www.dailymail.co.uk/debate/article-2152608/Baby-calves-shot-C4-documentary-People-right-complain-dont-inform-food.html>> accessed on 1 March 2014

¹⁵² F Bailey Norwood, JL Lusk, *Compassion, by the Pound Economics of Farm Animal Welfare* (OUP 2011) 115; Sean Poulter 'The disturbing conveyor belt of death where male chicks are picked off and killed so you can have fresh eggs' *Daily Mail* (4 November 2010) <<http://www.dailymail.co.uk/news/article-1326168/Secret-footage-shows-millions-British-chicks-killed-year.html>> accessed on 1 March 2014; Louise Gray '40 million chicks on conveyor belt to death' *The Telegraph* (4 November 2010) <<http://www.telegraph.co.uk/earth/earthnews/8107957/40-million-chicks-on-conveyor-belt-to-death.html>> accessed on 1 March 2014; CBC News Network 'Male chicks ground up alive at egg hatcheries' *CBC News* (1 September 2009) <<http://www.cbc.ca/news/male-chicks-ground-up-alive-at-egg-hatcheries-1.823644>> accessed on 1 March 2014

the competitors' numbers. If such a country requires stricter domestic standards (as the Directive enables them to be maintained), then the farmers' competitive strength diminishes further, as they must compete cheaper produce, of lower production standards. Price-sensitive consumers are likely to favour the cheaper, lower welfare-standard produce in the grocery stores, rather than paying the higher price for the higher level produce.¹⁵³

When minimum harmonisation is combined with the Principle of Mutual Recognition, the competitive strength of the farmers and their products is reduced further, because, as discussed above, it is near impossible for Member States to stop agricultural imports in their domestic market, even if they are not produced to domestic standards.¹⁵⁴ This highlights a situation where the different levels of additional welfare in *some* Member States have a significant negative impact on their farmers' competitive strength, while benefiting farmers from other Member States.

2.5 Harmonisation of animal welfare under Directive 98/58

The Recitals of Directive 98/58 state that differences in welfare requirements of animals may interfere with the smooth running of and the organisation of the Internal Market, thus necessitating establishment of common minimum standards to ensure the rational development and organisation of the Market.¹⁵⁵ The intent of the legislators to streamline welfare requirements, by implementing the Convention¹⁵⁶ into EU law through Directive 98/58, in order to ensure completion of the Internal Market, is clear. Nonetheless, if a conflict arises between animal welfare provisions and Internal Market

¹⁵³ T. Grandin 'Animal welfare and society concerns finding the missing link' (2014) 98 Meat Science 461,3.4; F. Vanhonacker, W. Verbeke, E. Van Poucke, F.A.M. Tuytens 'Do citizens and farmers interpret the concept of farm animal welfare differently?' (2008) 116 Livestock Science 126

¹⁵⁴ C-1/96 *R v CIWF* (n. 57); C-5/94 *Hedley Lomas* (n. 66); C-169/89 *Gourmetterie* (n. 96). For further discussion see: Brooman, Legge (n. 22) 82; Janssens (n. 96); Calster (n. 63) 342

¹⁵⁵ Directive 98/58 Recitals, Article 1, 19 (2); GHK Consulting (n. 4)3.2.2.

¹⁵⁶ Convention (n. 69)

provisions, then –as discussed above–the Internal Market provisions triumph, as the Court prioritises the Internal Market (*R v CIWF*).¹⁵⁷ Consequently the legal protection of animal welfare is undermined, and the standards laid down in Directive 98/58 effectively harmonises the Internal Market, rather than addressing animal welfare concerns.

The focus on the Internal Market is noticeable in the Directive, as the phrase ‘uniform application’ is throughout utilised to ensure that the welfare requirements are applied in all Member States. However, Directives hardly aim to ensuring uniformity, as they inevitably leave room for interpretation, and transposition into national law can vary. Therefore, the repeated aim of ensuring uniform application of the Convention and the Directive within the EU is bewildering. If ‘uniform application’ were an important aim, a Regulation would be more suitable to ensure it, due to its automatic legally binding nature. Nevertheless, from a zoocentric point of view, this thesis argues that the usage of a Directive remains the preferred legislative tool. Despite the occurring differences and the resulting problems, the minimum harmonising approach by Directives greatly benefits millions of animals whose welfare standard is higher, due to its flexibility.

Further evidence of the Directive’s focus on the Internal Market can be found in the definition of the enforcer as the ‘competent authority’. The competent authority is the authority which carries out the veterinary and zootechnical checks applicable to ‘*intra-Community trade*’ in certain live animals and products ‘*with a view to the completion of the Internal Market*’.¹⁵⁸ This provision prioritises the Internal Market over ensuring animal welfare, thereby countering other welfare-orientated provisions within the Directive. It is noteworthy that a literal interpretation of this definition’s wording shows that the competent authority is only concerned with ‘*intra-Community trade*’ aspects, with the aim of the ‘*completion of the Internal Market*’.

¹⁵⁷ C-1/96 *R v CIWF* (n. 57)

¹⁵⁸ Directive 98/58, Article 2(3)

Consequently, only live animals traded cross-border (between Member States) are within the competent authority's scope of veterinary and zootechnical checks. Cattle would be an obvious candidate animal for checks due to the BSE crisis.¹⁵⁹ However, if the literal interpretation is followed, one may question why checks (especially the veterinary ones) would only apply to certain animals and not all animals.

Perhaps the answer to the selectiveness of a literal approach, as to which animals should be subject to inspections, is found in the latter part of the sub-paragraph: '*...with the view to the completion of the Internal Market*'. If constant veterinary and zootechnical checks were to be applied to all live animals traded and transported cross-border within the EU, the costs of such transports, and the end product (food) would undoubtedly increase. This increase would be detrimental to any cross-border trade, as that additional cost would be avoided, if business were contained within each Member State. This would be at odds with the European Union's aim to establish, complete and maintain the functioning of an Internal Market within the Union. Nevertheless, from an animal welfare point of view, a literal approach is highly concerning, as all animals and products kept within the border of one Member State would be exempted. Additionally, the phrasing: '*...with a view to the completion of the Internal Market*' implies that the aim of these veterinary and zootechnical checks is not to ensure the welfare of the concerned animals, but to complete the Internal Market of the EU, thus prioritising financial aspects.

2.6 Examples of harmonisation problems related to the Pig and Commercial Hybrids Directives

The Egg Directive's Recitals state that the protection of egg-layers is a matter of EU competence, and differences in the protection may impact the smooth running of the Market. The Broiler Directive contains corresponding

¹⁵⁹ Szajkowska (n. 75)

Recitals, indicating envisaged problems that affect the Internal Market in a similar way.¹⁶⁰ However, the Broiler Directive differs: the Recitals state that in order to comply with the principle of proportionality,¹⁶¹ only minimum rules are laid down in the Directive; therefore, the Directive does not go beyond 'what is necessary in order to achieve the objectives pursued'.¹⁶² This phrasing emphasises that the Broiler Directive is a Directive in the true sense, and focuses solely on the envisaged aim and grants the Member States discretion as to how the aims are achieved. Contrastingly, the Egg Directive does not refer to the principle of proportionality. A contributing reason for this difference is likely to be time, as nearly ten years separates the Directives, and during this time the art of drafting Directives has been fine-tuned by the EU legislators.¹⁶³ Nonetheless, both Directives contain the same minimum provision, which permits stricter domestic laws in Member States.¹⁶⁴

While minimum harmonisation aims to create a level playing field within the Internal Market, the very nature of Directives inevitably causes a degree of differentiation between Member States as an (unintended) consequence. In the Pig Directive, the relevant provision is Article 12, which provides the derogatory power to the Member States, and creates the possibility of different standards of pig welfare in the Member States. However, from an animal welfare perspective, Article 12 is arguably the most important in the entire Pig Directive, as it permits stricter measures, such as a tail-docking ban or bigger space requirements for each animal, which increase the welfare level for millions of pigs in the EU. While harmonisation has overall increased the level of standards, especially in new Member States,¹⁶⁵ the inclusion of Article 12 will inevitably lead to some pigs faring better than others.

¹⁶⁰ Egg Directive(n. 32) Recital (5),(6); Broiler Directive (n. 32) Recital (6)

¹⁶¹ The principle of proportionality requires that actions of the EU must be limited to what is necessary in order to achieve the Treaty objectives.

¹⁶² Broiler Directive (n. 32) Recital (7)

¹⁶³ Weatherill (n. 53)

¹⁶⁴ Egg Directive (n. 32), Article 13(2); Broiler Directive (n. 32) Article 1(2)

¹⁶⁵ GHK Consulting (n. 4) 3.2.3.1

Without proper enforcement of the Directives, the required standards are rendered meaningless. As discussed above, enforcement faces numerous issues, and the competitive nature of the Internal Market only adds to them. The effect of different welfare standards, and the different extents to which legislation is enforced, can be enough to affect patterns of production and trade within the Internal Market. For instance, regarding the Pig Directive, the early banning of sow stalls in the United Kingdom (UK) in 1999 led to a decreased production and a decline of self-sufficiency in pork from 84% in 1998, to 50% in 2006, as well as an increase of imports from Member States without said ban.¹⁶⁶

It also matters *when* the provisions in the Directives are enforced, as they often contain lengthy phasing-in/out periods. For example, the Pig Directive had a phasing-in period of ten years,¹⁶⁷ which, from an Internal Market aspect, showcases the need for compromises when legislating on EU level, as different Member States prefer different amount of time to adjust to the change in standards. However, quicker Member States' whose farmers adapt to the new standards face a competitive disadvantage. It is generally agreed that more space and better facilities inevitably increase the cost of rearing the pigs,¹⁶⁸ thus the meat will need to retail at a higher price or the farmers will lose money. Expensive meat has a competitive disadvantage within the Internal Market next to cheaper meat from farms yet to adapt to the new standards.¹⁶⁹ Additionally, as there are many different husbandry systems for pig rearing, with different production costs each, it is not only the produce from different Member States competing on the Internal Market, but also that from different husbandry systems.

¹⁶⁶ *ibid*

¹⁶⁷ Pig Directive (n. 29) Article 3

¹⁶⁸ GHK Consulting (n. 4) 1.1.10

¹⁶⁹ *ibid* 3.2.3.2

2.7 Regulatory competition

After evaluating the effects of harmonisation and thoroughly discussing its combined effect with the Internal Market, Article 36 TFEU and the Principle of Mutual Recognition, there has already been mention of the risk of a regulatory competition. Regulatory competition is an undesired and unintended consequence of minimum harmonisation of farm animal welfare, which may be triggered if the stricter Member States decide to start lowering their domestic standards as a way to support their farmers and improve their competitive strength.

Regulatory competition was conceptualised by Cary in 1974¹⁷⁰ in the United States (the US), and may develop in a situation where multiple jurisdictions, commonly under supranational systems, compete on the same 'market' and the jurisdictions make changes to their regulations to achieve a competitive edge over their competitors. These situations require a supranational legal order consisting of a multitude of jurisdictions, a description suitable for the EU.¹⁷¹ However, unlike the US, where the competing jurisdictions are all Common Law based, the situation in the EU is different, as it would be a competition between different legal systems.¹⁷²

As regulatory competition pre-supposes free mobility of the subjects of the law, corporate law is the main focus for regulatory competition. Corporations, particularly those who adhere to the incorporation principle¹⁷³ (common in the US), can easily move between jurisdictions and relocate to the jurisdiction

¹⁷⁰ A.M. Sachdeva 'Regulatory competition in European company law' (2010) 30 European Journal of Law and Economics 137,142

¹⁷¹ Barnard (n. 105); M. Trebilcock, R. Howse 'Trade Liberalization and Regulatory Diversity: Reconciling Competitive Markets with Competitive Politics' (1998) 6 European Journal of Law and Economics 5,9

¹⁷² K. Heine, W. Kerber 'European Corporate Laws, Regulatory Competition and Path Dependence' (2002) 13 European Journal of Law and Economics 47,61; S. Deakin 'Legal Diversity and Regulatory Competition: Which Model for Europe?' (2006) 12(2) European Law Journal 440,447

¹⁷³ Z. Fluck, C. Mayer 'Race to the top or bottom? Corporate governance, freedom of reincorporation and competition in law' (2005) 1 Annals of Finance 349,350; Barnard (n. 105)

whose legislation appeals the most, ie 'voting with their feet'.¹⁷⁴ Such mobile elements would allow regulatory arbitrage by the corporations, which, in turn, develops into regulatory competition as the different jurisdictions would compete to attract the corporations.¹⁷⁵ However, the situation is different for farmers who heavily depend on physical assets, such as land, buildings, equipment and livestock, which give farming and rearing animals a landed and immobile nature. Therefore, the notion of 'voting with their feet' (by leaving the jurisdiction) is not viable. While it is not impossible for a farmer to sell their land, livestock and business in one Member State and re-locate to another with more favourable legislation and set up their farming business there, it is far more complicated than re-locating corporations with more easily movable assets.¹⁷⁶ Therefore, regulatory competition, as applied in corporate law, is not a suitable analogy for legal standards of farming. A more appropriate analogy of regulatory competition with a similar lack of mobility can be drawn between animal welfare and environmental law.¹⁷⁷

The overall level of complexity in the legal problems and the multitude of variables affecting regulatory competition further support of the usage of environmental law as an analogy to animal welfare legislation. For instance, in environmental law, problems arise from interstate externalities: when a country sends its pollution¹⁷⁸ downwind to another country, but enjoys the labour and fiscal benefits from the economic activity that generated the pollution, it effectively avoids the environmental cost.¹⁷⁹ By the same token, importing cheaper products from animals farmed in Member States with 'minimum' welfare, means importing the 'benefit' of cheap products from

¹⁷⁴ Barnard (n. 105) 57-78

¹⁷⁵ Sachdeva (n. 171) 138; C.M. Radaelli 'The Puzzle of Regulatory Competition' (2004) 24(1) *Journal of Public Policy*, 7-8

¹⁷⁶ S Davidova, K Thomson 'Family Farming in Europe: Challenges and Prospects' (Directorate General for Internal Policies 2014)

¹⁷⁷ RL Revesz, 'Federalism and Regulation: Some Generalizations' in DC Esty, D Gerdin (eds.) *Regulatory Competition and Economic Integration* (OUP 2001) 27

¹⁷⁸ The convention is to write that it is the *country* which pollutes, while in fact it is the *enterprises within the country* that cause the pollution with the permission of the country's government by the nature of their lax legislation.

¹⁷⁹ Revesz (n. 180) 3

another Member State, while the 'cost' to animal welfare remains in the exporting Member State, thus ensuring the welfare conditions are kept 'out of sight and out of mind' for the importing country.

Another issue originating in regulatory competition is the potential of supranational intervention, illustrated particularly well in the field of environmental law: if a supranational law is introduced to deal with one aspect of the problems occurring due to interstate externalities, the states subject to that law can compete in other regulatory areas to attract their business instead.¹⁸⁰ This hazard is a risk in the EU due to the patchy nature of harmonisation by Directives, and applies to farm animal welfare as well.

While a harmonising Directive creates a minimum 'floor' of the acceptable farm animal welfare standard, other variables, affecting the farmers' finances can remain unrestricted.¹⁸¹ While a Directive would limit the regulatory competition in one area, Member States would remain free to relax the law in other, non-harmonised areas to compete. Therefore, regulatory competition affecting multiple variables risks developing simultaneously.¹⁸² However, the minimum floor ensures that a potential regulatory competition in the farm animal welfare standard is not 'bottomless'¹⁸³ and concerns only Member States with measures that go 'above and beyond' the minimum.

It should also be emphasised that harmonisation of *all* cost variables related to farming and farm animal welfare would be required to completely level the playing field. Full harmonisation of all cost variables EU-wide is unlikely, unrealistic and arguably impossible. Differences in territorial size, population size and economic strength of the Member States are examples of variables impossible to harmonise, yet likely to distort the regulatory competition in

¹⁸⁰ Supranationalism is, in regards to this argument, interchangeable with federalism. *ibid* 5

¹⁸¹ *ibid*

¹⁸² Sachdeva (n. 171) 164-165; Revesz (n. 180) 5; J.H. Adler, 'Interstate Competition and the Race to the Top' (2012) 35 *Harvard Journal of Law & Public Policy* 89,97

¹⁸³ Barnard (n. 105) 68

favour of the larger Member States.¹⁸⁴ Furthermore, if all variables relevant to farming were harmonised, it would eradicate diversity (contrary to Treaty objectives)¹⁸⁵, and consequently hamper legal innovation.¹⁸⁶

There is an inherent risk that the jurisdictions participating in regulatory competition may ultimately end up worse off¹⁸⁷ than if they had co-ordinated their policies from the outset, as the regulatory completion may result in a significantly lower standard. As already discussed, this risk is negated by the minimum harmonising Directives. Nonetheless, the co-ordination that led to the harmonisation in the first place, may be seen as an acknowledgement of this risk of ending up 'worse off'.¹⁸⁸

Lastly, the supranational regulation may become the *de facto* ceiling of what the affected countries aspire to.¹⁸⁹ This is a particular risk with harmonising legislation in the EU, because if Member States avoid using the derogatory power in order to protect domestic farmers' business from the disadvantages of stricter legislation, the minimum intended 'floor' set by the Directives will turn into a 'ceiling'.

2.8 Chapter conclusion

This chapter contextualised farm animal welfare in the EU regulatory framework and analysed its interaction with other core EU principles. Article 13 TFEU requires that the EU and the Member States pay full regard to the welfare of animals, while Title III categorises farm animals as 'goods' and subjects them to the Internal Market provisions. This dual characterisation,

¹⁸⁴ Heine, Kerber (n. 173) 62

¹⁸⁵ TEU, Article 3; TEFU, Article 151, 152, 165, 167

¹⁸⁶ Deakin (n. 173) 444; Adler (n. 183) 94-96; Sachdeva (n. 171) 158; Revesz (n. 180) 28

¹⁸⁷ E. Carbonara, F. Parisi 'Choice of law and legal evolution: rethinking the market for legal rules' (2009) 139 Public Choice 461, 476; Sachdeva (n. 171) 143

¹⁸⁸ Sachdeva (n. 171)

¹⁸⁹ Adler (n. 183) 98

the welfare consideration of sentient beings that are also economic assets intended for trade and consumption, is complex. The EU approached it by introducing minimum harmonising legislation to establish a welfare standard that must be complied with. By requiring a specific standard of welfare, Article 13 TFEU is arguably 'satisfied', while choosing a minimum harmonisation Directive aids the establishment and functioning of the Internal Market.

However, this thesis argues that the cumulative effect of Article 13 TFEU, the minimum harmonisation approach, Article 36 TFEU and the Principle of Mutual Recognition places a considerable amount of farmers in the EU in a precarious situation. It is especially due to the minimum harmonisation, as the Directives permit the individual Member States to impose stricter requirements within their own domestic territories. The analogy with the facts of the *Cassis* case outlines this problem: stricter domestic requirements expose the domestic farmers to the effects of cheaper imports from other Member States with lower (or the minimum) standards, thus reduced production costs. The stricter Member State then faces the choice of either maintaining their higher standards and watching as their farmers are priced out of the market by the imports, or lowering their standards to the same level (ie the minimum harmonised standard). While lowering their standards would benefit the competitive strength of their farmers, the effect would have a detrimental impact on the welfare of the concerned farm animals.

The peril of being priced out of the market becomes more imminent for farmers in Member States that use the Directives' derogatory power, due to the conditional Principle of Mutual Recognition and Article 36 TFEU. As outlined in this chapter, this thesis concludes that Article 36 TFEU is essentially irrelevant to farm animal welfare, as a ban justification can only be evoked for the protection of animal health and life, which is different from welfare. However, even if animal health and life are at stake, as in the case of Newcastle disease, the Court is unwilling to accept a justification under Article 36 TFEU. It is concluded that this is because Newcastle disease does

not pose a serious health threat to humans, unlike BSE, in which case an export and import ban is justifiable in connection to BSE outbreaks.

Additionally, this chapter highlighted the continued emphasis of the financial aspects of the CAP, exemplified by the flawed inclusion of animal welfare, as a cross-compliance requirement, as a condition to receive the decoupled income payment (DIP). While linking compliance of statutory mandatory requirements as a condition to receive the payment is a positive incentive to comply with the EU legislation, it is deemed highly problematic that only three out of five Directives are included, as it wholly disregards poultry welfare. Indeed, as EU Directives are only minimum Directives, the above exclusion increases the likelihood of individual farmers' non-compliance, as their decoupled income payment is not threatened.

This chapter's contribution to the thesis is the detection of reasons-in-law as to why farmers in the stricter Member States face financial difficulties. By explaining the legal context in detail, the complexity of the problem becomes clear. It must be emphasised that while minimum harmonisation is a main contributor to the problem, as the inherent imbalance in legal requirements between Member States can be maintained to a degree, it is also indispensable from an animal welfare perspective. Minimum harmonisation allows millions of farm animals to live their lives at a standard of welfare established far above the minimum standard. As farm animal welfare is at the heart of this thesis, the answer to improving the farmers' competitive strength should not be to reduce the standards in the stricter Member States. Before moving to what *can* and *should* be done instead, the exact levels of minimum standards as required by the EU need to be established. For this reason, the next chapter will analyse and evaluate the farm animal welfare Directives.

3 EU legislation

3.1 Introduction

This chapter closely analyses and evaluates EU legislation to establish the minimum animal welfare standards required. This process will establish the legal benchmark against which the individual Member States' domestic legislations will be measured in the next chapter. As EU legislation makes no mention to animals' emotional needs, and explicitly refers only to physiological and ethological needs, the object of the evaluation can only be the extent to which the latter are satisfied. The analysis also considers whether the welfare provisions are negated by the economic motives within the Directives, as the link between welfare and economics is simple: improved welfare increases production costs.¹

The Directives are analysed and critiqued in the following order: Directive 98/58² is addressed first, followed by the Pig Directive;³ last, the Egg Directive⁴ and the Broiler Directive⁵ are critiqued simultaneously, both concerning poultry. The joint analysis of these two Directives, allows a comparison of their treatment in law, which illustrates that although egg-layers and broilers are essentially the same species, their welfare needs are addressed differently. This order of addressing the Directives optimises the efficiency of the legislative analysis, as Directive 98/58 is a framework

¹ H. Hansson, C.J. Lagerkvist 'Defining and measuring farmers' attitudes to farm animal welfare' (2014) 23 *Animal Welfare* 47; S.T. Millman, I.J.H. Duncan, M. Stauffacher, J.M. Stookey 'The impact of applied ethologists and the International Society for Applied Ethology in improving animal welfare' (2004) 86 *Applied Animal Behaviour Science* 299,303-304; H. Buller, C. Morris 'Farm Animal Welfare: a New Repertoire of Nature Society Relations or Modernism Re-embedded?' (2003) 43(3) *Sociologia Ruralis* 216,222

² Council Directive 1998/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes [1998] OJ L221/23 (Directive 98/58)

³ Council Directive 2001/88/EC of 23 October 2001 amending Directive 91/630/EEC laying down minimum standards for the protection of pigs [2001] OJ L316/1 (Pig Directive); Commission Directive 2001/93/EC of 9 November 2001 amending Directive 91/630/EEC laying down minimum standards for the protection of pigs [2001] OJ L316/36

⁴ Council Directive 1999/74/EC of 19 July laying down minimum standards for the protection of laying hens [1999] OJ L203/53 (Egg Directive)

⁵ Council Directive 2007/43/EC of 28 June 2007 laying down minimum rules for the protection of chickens kept for meat production [2007] OJ L182/19 (Broiler Directive)

Directive consisting of general provisions, which the other Directives build upon, while providing highly detailed provisions adapted for each species. The economic motives are considered in separate sub-headings to each Directive.

3.2 Directive 98/58/EC on protection of animals kept for farming purposes

The foundation of the animal welfare legislation in the EU is established in a framework Directive 98/58/EC, henceforth 'Directive 98/58'.⁶ Directive 98/58 is an inclusive piece of legislation, which applies to all animals kept for farming purposes within the EU, avoiding the problem of defining (and listing) a large number of different animals within the Directive. All farm animals are covered by this Directive, as long as they are not explicitly included in the list of exceptions: wild animals, invertebrate animals, experimental or laboratory animals or animals intended for competitions, shows, cultural or sporting events or activities.⁷ It should be emphasised that the Directive does expressly cover fish, reptiles or amphibians bred (or kept) for the purpose of food, wool, skin, fur or other farming purposes.⁸

Directive 98/58 aims to ensure the uniform application of the European Convention for the Protection of Animals Kept for Farming Purposes, hereinafter 'the Convention',⁹ and that all animal welfare requirements are

⁶ Directive 98/58 (n. 2)

⁷ This exception effectively means that bull fighting and the toro jubilo festival in Spain remain legal, despite the obvious violations to the core ethos of animal welfare those events result in. J. Zeis, *The Rights of Pigs and Horses* (Blackwell Publishing Ltd 2012); Daily Mail Reporter 'Pictured: Grotesque Spanish bull-burning festival where baying crowd straps flaming wooden horns to terrified animal...in the name of entertainment' *Daily Mail Online* (13 November 2012) <<http://www.dailymail.co.uk/news/article-2232031/Toro-Jubilo-The-grotesque-Spanish-bull-burning-festival-animal-rights-campaigners-want-banned.html>> accessed on 28 February 2014; Tom Worden 'Bull is set on fire and tortured for entertainment in Spanish tradition' *Sunday Express* (12 November 2012) <<http://www.express.co.uk/news/world/357709/Bull-is-set-on-fire-and-tortured-for-entertainment-in-Spanish-tradition>> accessed on 28 February 2014

⁸ Directive 98/58 (n. 2), Article 1, Article 2

⁹ Directive 98/58 (n. 2), The Recitals, Article 5

fully considered when drafting and implementing EU legislation. Effectively, the Directive transposes the Convention into EU law,¹⁰ and restates all of the core aims of the Convention, the only difference being that the Convention also emphasises its application ‘in particular to animals in modern intensive stock-farming systems’.¹¹ The Convention, therefore, unlike Directive 98/58, highlights the need to protect the animals in intensive farming. The provisions in both the Directive and the Convention are general in their nature and lay down the overall aims of animal protection measure, without any detail regarding the aims’ achievement, thereby determining the goals but not the methods. The descriptions of the aims reveal the influence of the Five Freedoms,¹² which were utilised as a ‘minimum basis’ upon which the legislation was built.¹³

As discussed in the previous chapter, when aiming for a ‘uniform’ implementation, the use of a Directive as a legislative tool is an interesting choice. One may query how the legislators reached this decision, as an automatically legally binding Regulation would ensure uniformity more effectively. By its very nature, a Directive inevitably leaves room for interpretation, as it only defines aims that are binding, but the means of achieving them are left to the discretion of the individual Member States. As twenty-eight Member States are likely to have different approaches as to how the aims are to be achieved, uniform application of the Convention is quite an ambitious goal. However, as argued in Chapter 2, this thesis is wholly in favour of the legislative approach used, as –from a zoocentric perspective– the *minimum* harmonising Directives benefit millions of animals annually.

¹⁰ I. Veissier, A. Butterworth, B. Bock, E. Roe ‘European approach to ensure good animal welfare’ (2008) 113 Applied Animal Behaviour Science 297, 281-282; GHK Consulting ‘Final Report: Evaluation of the EU Policy on Animal Welfare & Possible Options for the Future’ (Job No. J7296 DG SANCO 2010) 2.5.1

¹¹ European Convention for the Protection of Animals kept for Farming Purposes [1976], Article 1

¹² See at 1.3

¹³ European Commission, ‘Animal Welfare on the Farm’ (*DG Health and Consumer*) <http://ec.europa.eu/food/animal/welfare/farm/index_en.htm> accessed 12 March 2014

Besides the aim of uniform application of the Convention,¹⁴ the Directive also aims to ensure the smooth running and the organisation of the market in animals. As the Convention's provisions focus on animal welfare, the aim of uniform application is in conflict with 'market in animals' aim, due to its economic motivation. The link between welfare and its production cost renders these two aims inherently contradictory and conflicts are likely to arise.¹⁵ In the event of such a conflict, the cases of *R v CIWF*¹⁶ and *Hedley Lomas*¹⁷ indicate that the Internal Market provisions would triumph over the welfare provisions. If the Court follows its own precedent, an outcome of such a conflict is likely to favour the economic motives and the Internal Market over the animal welfare aims, as the Court seeks to avoid undermining harmonising legislation.¹⁸ Consequently, the aim to ensure the conditions of the market in animals is considered to be of greater importance than ensuring the application of the Convention by the Court.

3.2.1 Articles

None of the Articles in Directive 98/58 provide a definition of the concept of animal welfare; the difficulties of settling upon a definition and the implications of the ambiguity were addressed in Chapter 1. Chapter 1 concluded that an appropriate legal definition of animal welfare must follow a rounded, holistic approach and consider the animal as a whole. A holistic approach would require considering ethological, physiological, emotional and natural needs. However, Directive 98/58 only contains references to ethological and physiological needs¹⁹ and disregards the important welfare components of emotional and natural needs. The significance of the omission is enhanced by the lack of a definition, as the effect may be that the omitted aspects are neglected.

¹⁴ Directive 98/58 (n. 2), the Recitals; Veissier, Butterworth, Bock, Roe (n. 10) 281; GHK Consulting (n. 10) 2.5.1

¹⁵ see at 2.3.1

¹⁶ C-1/96 *R v. Minister of Agriculture Fisheries and Food ex parte Compassion in World Farming* [1998] ECR I-1251

¹⁷ C-5/94 *R v. Ministry of Agriculture, Fisheries and Food, ex parte: Hedley Lomas (Ireland) Ltd.* [1996] ECR I-2553

¹⁸ See at 2.4

¹⁹ Directive 98/58 (n. 2) Article 4, Annex 7,11

However, the Directive does contain some definitions: an 'owner' or 'keeper' is any natural or legal person/s responsible for/or in charge of the animals, either on a permanent basis or temporarily.²⁰ This definition significantly impacts on animal welfare, as it includes both natural and legal persons, and, consequently, creates liability for the individual farmer, businesses *and* any staff members. The importance of this cannot be overestimated, as modern intensive farming is increasingly controlled by profit-driven businesses.²¹ The effect of creating a dual liability covers any potential loophole: a natural person cannot 'hide' behind the legal person to escape liability if they failed to comply with Directive 98/58, and vice versa. Accordingly, the definition of an owner or keeper within the Directive ensures the animals' protection, as both individuals and businesses are accountable if they fail to comply with the provisions.

Member States are required to ensure that owners/keepers of the animals take 'all reasonable steps' to ensure their animals' welfare and to avoid 'any unnecessary pain, suffering or injury'.²² This phrasing raises the question whether pain, suffering or injury of the animals can ever be deemed 'necessary'. It can be argued that this Article has been phrased in an anthropocentric manner: the legislators deem that it is sometimes necessary for animals to experience pain, suffer or injury for human benefit. However, there is no guidance in the Directive as to when suffering is 'necessary'. From a zoocentric perspective, the only kind of 'necessary' pain, suffering or injury would be as a direct result of medical treatment, with the purpose of restoring the animal's health. Additionally, such pain would be acceptable only if it were proportionate to the severity of the medical issue, and should not cause considerably more pain or suffering than the original ailment.²³

²⁰ *ibid* Article 2

²¹ J. Nilsson, C. Liljenstolpe, L.W. Lind, S. Liang 'A farmer-controlled business from a farmer perspective' (2014) 14(3) *Journal on Chain and Network Science* 201

²² Directive 98/58 (n. 2) Article 3

²³ M. Radford "'Unnecessary Suffering": the cornerstone of animal protection legislation considered' (1999) *Criminal Law Review* 702,705

Decision on what levels of suffering or pain are 'acceptable' can only be founded on value-based judgements,²⁴ not scientific facts. Scientific data can prove that animals experience pain, however, the degree of pain or suffering and whether it is acceptable cannot be supported by data, and the decision will vary greatly depending on the person. As judgement call is an imprecise exercise, lack of guidance in the Directive as to how to decide when pain, suffering or injury is 'necessary' will likely result in a considerable variety of interpretations throughout the twenty-eight Member States.

While the inclusive scope of the Directive is an encouraging start, it transpires that only two of twelve Articles expressly concern animal welfare.²⁵ Article 4 requires Member States to ensure that animals are '*bred or kept, having regard to their species and to their degree of development, adaptation and domestication, and to their physiological and ethological needs*' in accordance with scientific knowledge, while complying with the Annex provisions.²⁶ It is noteworthy that this Article recognises that different species have different needs, and that the same species will have different needs at different stages of their lives. This is essential to ensure that measures aimed at providing welfare for animals vary according to the animal in question. However, while the acknowledgement of physiological and ethological needs is positive, it is unfortunate that emotional needs are not considered, as they would further improve the animals' welfare. The main body of Directive 98/58 contains no details as to how the content of Article 4 is to be achieved.

The second Article expressly referring to animal welfare is Article 10(2), which grants the Member States a derogatory power to maintain or apply stricter provisions than those described in the Directive, for the protection of farming animals within their own territories, providing that those stricter provisions are Treaty-compliant and the Commission is informed. This

²⁴ Millman, Duncan, Stauffacher, Stookey (n. 1) 306

²⁵ The remainder of the Articles in the Directive concern: ensuring scientific advancement, the continued supply of reports to the Commission and enforcement procedures. None of these aspects are of relevance to the scope of this thesis.

²⁶ Directive 98/58 (n. 2), Article 4

provision is of the *highest* importance when it comes to animal welfare within the EU, as it allows Member States to exceed the harmonised minimum standards of the Directive in their territory, if they wish to.

3.2.2 Annex Provisions

Proceeding to the more detailed Annex provisions, the issues surrounding ‘unnecessary suffering’ require some additional attention. Several of the Annex provisions focus on methods that may prevent or reduce suffering. Some of these provisions concern management: the animals must be inspected at least daily,²⁷ and an injured or ill animal must be treated ‘without delay’.²⁸ The management must also ensure that the animals can move in such a way that it does not cause ‘unnecessary suffering or injury’²⁹ and that the animals have access to water and are fed a wholesome and appropriate diet.³⁰ The Annex provisions specify requirements for animal housing buildings: no sharp edges, as they may cause injuries,³¹ no unsafe materials in the construction,³² sufficient lighting,³³ and air quality not harmful for the animals.³⁴ While most of the Annex provisions contribute, in varying degree, to avoiding or reducing animal suffering, one provision does the opposite, by explicitly permitting physically invasive procedures to animals.³⁵ Presently, it is sufficient to ascertain that these procedures are lawful, despite the pain, suffering and injury they cause, because they are deemed necessary.

²⁷ *ibid* Annex 2

²⁸ *ibid* Annex 4

²⁹ *ibid* Annex 7

³⁰ *ibid* Annex 14-18 – possibly added on the aftermath of the BSE crisis; A. Szajkowska ‘The Impact of the Definition of the Precautionary Principle in EU Food Law’ (2010) 47 *Common Market Law Review* 173

³¹ Directive 98/58 (n. 2), Annex 9

³² *ibid* Annex 8

³³ *ibid* Annex 11; P. Chemineau, B. Malpoux, J.A. Delgadillo, Y. Guérin, J.P. Ravault, J. Thimonier, J. Pelletier ‘Control of sheep and goat reproduction: Use of light and melatonin’ (1992) 30 *Animal Reproduction Science* Volume 157; M.K. Griffith, J.E. Minton ‘Effect of light intensity on circadian profiles of melatonin, prolactin, ACTH, and cortisol in pigs.’ (1992) 17(2) *Journal of Animal Science* 492

³⁴ Directive 98/58 (n. 2) Annex 10

³⁵ The detailed rules regarding physically invasive procedures, and when they are considered lawful, are located in the various species-specific Directives, making it more appropriate to discuss it in the relevant subchapter.

For animals reared outdoors, Provision 12 requires that they are given protection from weather conditions, predators, and risks to their health, where necessary *and* possible.³⁶ It is noteworthy that it is not enough that it is necessary to provide shelter from weather, it must also be possible, and vice versa. Like with other provisions in the Directive, there is no guidance as to how to determine whether it is necessary and possible. Additionally, even when, in normal conditions, it would be unnecessary to provide protection, extreme weather can hit unpredictably with devastating consequences, like when over 20,000 sheep were killed in a blizzard in 2013.³⁷

While Provision 12 may seem like a small detail, it is ideal for illustrating the impact of a single provision. The Annex provision refers to the physiological risks associated with the absence of shelter against adverse conditions, which can interfere with the animals' physical health. However, it also indirectly addresses ethological needs, as weather shelter protects the animals from the elements, while also sheltering them against predators. The presence or threat of a predator causes fear and distress among the animals. As fear of predators is part of natural behaviour, it is not in conflict with ethological needs. However, the naturalness of being preyed upon does not mean it is acceptable in regards to ensuring animal welfare, and would amount to 'unnecessary' suffering. In addition, Provision 12 also has an indirect economic impact for the farmer. If it is deemed possible *and* necessary to provide shelter and no natural option is present, the farmer must build appropriate shelter, thus incurring costs. However, it is important that animals kept outdoors are cared for properly, which is likely to be a reason for this provisions existence in the first place.

³⁶ Directive 98/58 (n. 2) Annex 12

³⁷ BBC News, 'Snow storm: Sheep death toll reaches 20,000' *BBC News* (16 April 2013) <<http://www.bbc.co.uk/news/uk-northern-ireland-22170773>> accessed 1 March 2014; Vicky Hawthorne 'Northern Ireland: Farm Sheep Buried in Snow' *Sky News* (29 March 2013) <<http://news.sky.com/story/1071452/northern-ireland-farm-sheep-buried-in-snow>> accessed 1 March 2014

By examining the Annex provisions, it is evident that there is a clear focus on the physiological needs of the animals. Although not entirely omitted, the ethological needs are only mentioned as criteria to be met in two occurrences, always next to the physiological ones: in Provision 7, which states that if the animals are tethered or confined regularly, the allocated space must give them adequate freedom of movement,³⁸ and in Provision 11, within the 'Buildings and accommodation' section, which states that lighting, natural or artificial, must be sufficient.³⁹ While only two references to ethological needs in the Annex are not enough from a zoocentric point of view, at least they indicate the legislators' awareness and recognition that ethological needs are important for the animals' welfare. However, as this general Directive sets the tone for the species-specific Directives, there is a definite emphasis on the physiological over the ethological needs. This is unfortunate, as a better balance would provide a stronger legal incentive to satisfy the animals' ethological needs in the species-specific Directives too.

Nonetheless, one can argue that if the literal meaning of 'ethological needs' were applied in regards to Provision 7 and combined with the content of Article 4 (*'animals being reared in regards to their species and to their physiological and ethological needs'*), then a radical change to intensive farming would be required to fulfil the legislative requirements of Directive 98/58. If ethological needs were protected in law to the same extent as the physiological ones, intensive farming in the EU would be unlawful, due to the farmers' economic inability to provide the required amount of space to satisfy these needs. Further, if one considers all provisions, then intensive farming becomes legally impossible. However, such a strict interpretation would devastate the food production within the EU. While there is no expressed self-sufficiency policy in regards to food within the EU, it would seriously jeopardize the EU's food security and obliterate a large sector of the Internal Market and the CAP would fail.⁴⁰ It is therefore unlikely that the drafters of

³⁸ Directive 98/58 (n. 2) Annex 7

³⁹ *ibid* Annex 11

⁴⁰ Consolidated version of the Treaty on the Functioning of the European Union [2008] OJ C115/47, Article 39

the legislation intended for a literal interpretation of the Directive, or that the Court would endorse such an interpretation.⁴¹

Nevertheless, if a more liberal interpretation is adopted, it is still beyond doubt that intensive husbandry systems, such as battery cages and sow stalls, are still wholly incompatible with the Directive, due to their very restrictive nature.⁴² The recent bans of battery cages and sow stalls are beneficial for the overall animal welfare standard.⁴³ Despite the recent bans, there are other husbandry systems whose practices are highly questionable, even with a less literal interpretation of Provision 7 and Article 4. For example, the physiological and ethological needs of broilers cannot be satisfied when they are reared in densely crowded conditions where the lack of space renders the broilers essentially immobile.⁴⁴ Similarly, the 'enriched cages' for egg-layers are not necessarily satisfactory, as 'cage enrichment' can simply mean the presence of a wooden perch.⁴⁵ From the way it is worded, Provision 7 seems to aim to ensure that the animals have freedom of movement enough not only to avoid physiological harm but also to satisfy basic ethological needs. While banning battery cages and sow stalls are encouraging steps towards achieving that, considerable reforms are required before the average farm animal's ethological needs are met throughout Europe.

⁴¹ R. Ludwig, R. O'Gorman, 'A Cock and Bull Story? – Problems with the Protection of Animal Welfare in EU Law and Some Proposed Solutions' (2008) 20(3) *Journal of Environmental Law* 363,369,371; C-189/01 *H. Jippes, Afdeling Groningen van de Nederlandse Vereniging tot Berscherming van Dieren, Afdeling Assen en omstreken van de Nederlandse Vereniging tot Bercherming van Dieren v Minister van Landbouw, Natuurbeheer en Visserij* [2001] ECR I-5689; E. Spaventa 'C-189/01, *H. Jippes*' (2002) 39 *Common Market Law Review* 1159,1163

⁴² N Amos, R Sullivan, 'Farm Animal Welfare 2012 Report' (Business Benchmark on Farm Animal Welfare 2013) 26

⁴³ See at 3.3 and 3.4

⁴⁴ See at 1.4.2.2

⁴⁵ P Lymberly, I Oakeshott, *Farmageddon The true cost of cheap meat* (Bloomsbury Publishing Plc 2014) 28,33

3.3 The Directive 2008/120/EC for the protection of Pigs

Before analysing the Pig Directive,⁴⁶ it is important to reiterate that Directive 98/58 applies to all pigs reared, for breeding or meat, within the whole of the EU. However, as there is a high prevalence of intensive pig farms within the EU⁴⁷ a Directive with specific minimum standards and detailed provisions regarding intensively reared pigs was introduced, as differences in the rules could interfere with the smooth running and organisation of the Internal Market in pigs and pig produce.⁴⁸

Indeed, Recital 12 states that ‘...a balance should be kept between the various aspects to be taken into consideration, as regarding welfare including health, economic and social considerations, and also environmental impact’.⁴⁹ Recital 12 summarises the problems and the implications of intensive farming, as there must be a balance among the welfare and health of animals, and the economic, social and environmental considerations. The farmer must carefully calculate the rearing cost against the income the pigs bring, often operating with tight margins and no guaranteed profit. Therefore, cost-effectiveness is important and raises the query whether the pigs’ welfare is negated by the economic aspects. Nonetheless, some of the Recitals contain statements regarding the pigs’ needs, such as foraging and socialising with other pigs.⁵⁰

Before delving into the details, Article 2 requires attention, as it creates eight different terms⁵¹ for pigs within the Directive, and one overall term: ‘pigs’. The different terms are used throughout this thesis to enable proper

⁴⁶ Pig Directive (n. 3)

⁴⁷ Commission, ‘Reference Document on Best Available Techniques for Intensive Rearing of Poultry and Pigs’ (Integrated Pollution Prevention and Control) (2003) (ii),(iii)

⁴⁸ Pig Directive (n. 3), Recitals 6,7

⁴⁹ *ibid* Recital 12

⁵⁰ *ibid* Recitals 8-10

⁵¹ The terms in Pig Directive Article 2 are: *boar* (male pigs after puberty), *gilt* (female pig after puberty before farrowing), *sow* (female pig after first farrowing), *farrowing sow* (female pig between perinatal period and weaning of the piglets), *dry pregnant sow* (sow between weaning of piglets and perinatal period), *piglet* (age from birth to weaning), *weaner* (from weaning until the age of 10 weeks), and *rearing pig* (from 10 weeks until slaughter or service)

understanding of the Directive. Thus, 'pigs' refers to 'animals of the porcine species of any age, kept for either breeding or fattening purposes', while any other term refers to the particular sub-group of pigs. By establishing different terms within the Directive, the clarity of the provisions increases, while acknowledging that pigs, at different stages in their lives, have different welfare requirements. For example, the physical and ethological needs of a rearing pig differs from those of a farrowing sow. Thus, the specified sub-groups allow for welfare requirements to be 'individualised', ensuring that the right welfare requirements are satisfied for different sub-groups of pigs.

The following critique and analysis of the Pig Directive regards pigs' welfare (both ethological and physiological) and how it is balanced with the economic aspects of farming. The provisions of the Directive have been organised depending on their scope rather than a numerical order, commencing with all provisions concerning the buildings the pigs are housed in.

3.3.1 General housing provisions

Building requirements are thoroughly described: the width of the concrete slates and the gaps between them are detailed down to the millimetre;⁵² floor surfaces must be rigid, even, stable and non-slippery if no litter is provided;⁵³ it must be possible for all pigs to lay down simultaneously;⁵⁴ the noise level must be less than eighty-five decibel and the pigs must have at least eight hours of light.⁵⁵ Additionally, they must have continuous access to fresh water, they must be fed at least once a day, and all pigs must be able to eat at the same time.⁵⁶ The minimum amount of unobstructed floor space required for each pig depends on the weight of the pig, detailed in a table in Article 3, spanning from 0,15m² for pigs weighing less than ten kilograms up to one square metre for pigs weighing 110 kg or more. While minimum

⁵² Pig Directive (n. 3) Article 3(2)

⁵³ *ibid* Annex I chapter I(5)

⁵⁴ *ibid* 1,3

⁵⁵ *ibid* 2; Artificial light, at least 40 lux.

⁵⁶ *ibid* 6,7

space requirements are better for the pigs than no minimum standards, it must be emphasised that their welfare is from another point neglected. Pigs have strong, innate locomotion needs, which are restricted in these conditions. However, the line between space efficiency and insufficient space is fine: one square metre for a pig heavier than 110 kilograms is only enough for the most basic of physiological needs.⁵⁷ Indeed, all these provisions primarily focus upon *physical* needs for the pigs, with the possible exception of lighting requirements. Nonetheless, the minimum requirement is 40 lux (the equivalent of eight hours of sunset/sunrise), which is unlikely to satisfy ethological needs of the pigs.

The pig section in Chapter 1 established that pigs are social and active in their natural environment, spending the majority of their days foraging and investigating their surroundings. While pigs' basic physiological needs (necessary for their survival) can be satisfied in crowded and barren housing, their ethological needs cannot, and it can be argued that they do not fare well. The quality of space the pigs live in is important for their welfare; environmental enrichment is essential. The Directive requires that all pigs have permanent access to material suitable for foraging activities in sufficient quantities.⁵⁸ There are no specifications about what amounts to 'sufficient quantities'. However, the Directive does specify that the enrichment material does not have to be straw. It can be anything the pigs can use as toys or other bedding. Environmental enrichment also reduces aggression levels amongst group-reared pigs, where aggressive behaviour can become a serious welfare issue.⁵⁹

⁵⁷ NE O'Connell 'Housing the Fattening Pig' in JN Marchant-Forde (ed) *The Welfare of Pigs* (Springer 2009) 192

⁵⁸ Pig Directive (n. 3) Annex I chapter I(4)

⁵⁹ JG Gentry, AK Johnson, JJ McGlone, 'The welfare of growing-finishing pigs' in L Faucitano and AL Schafer (eds.) *Welfare of pigs from birth to slaughter* (Wageningen Academic Publishers 2008) 4.1; M.J.C. Hessing, A.M. Hagelsøm J.A.M. Van Beek, P.R. Wiepkema, W.G.P. Schouten, R. Krukow 'Individual behavioural characteristics in pigs' (1993) 37 *Applied Animal Behaviour Science* 285; B. Wechsler, R. Weber 'Loose farrowing systems; challenges and solutions' (2007) 16 *Animal Welfare* 296,298; F.H.De Jonge, E.A.M. Bokkers, W.G.P. Schouten, F.A. Helmond 'Rearing piglets in a poor environment: Developmental aspects of social stress in pigs' (1996) 60 *Physiology & Behaviour* 389; V.E. Beattie, N. Walker, I.A. Sneddon 'Preference testing of substrates by growing pigs' (1998) 7 *Animal Welfare* 27

While there are several provisions in the Directive that refer, explicitly or indirectly, to group housing of pigs, by addressing concerns such as competing for food,⁶⁰ aggressive behaviour,⁶¹ and the need to lay down simultaneously,⁶² there is no specific provision explicitly forbidding pigs from being confined in individual spaces. On the contrary, the Annex contains the phrase '*when pigs are kept in groups...*'⁶³ which does not indicate that the pigs *must* be kept in groups, rather that it is optional. Further, a Recital contains the phrasing '*when pigs are kept in groups...*'⁶⁴ and, as an interpretive guide, the Recital indicates that group housing is not a requirement. Further, both provisions which refer to boars and pigs in general require the accommodation to be constructed in such a way that they can '*...see other pigs*'⁶⁵ - thus indicating that it may be lawful to house pigs individually. Applied ethology has established that living in social groups is natural for pigs and they have developed ways of establishing social hierarchies, indicating that it is a core ethological need of pigs to be in company of other pigs. Therefore, it is unlikely that only *seeing* other pigs is sufficient to fulfil their ethological needs.

3.3.2 Special sow provisions

For the housing of sows and gilts, the Directive has special provisions that require different flooring and a bigger space.⁶⁶ Unlike general pigs, whose entitlement to foraging material is only covered in the Annex, sows and gilts have entitlements covered in the main body of the Directive. Sows and gilts must have permanent access to manipulable material and the Annex provisions are a minimum of what is acceptable.⁶⁷ All dry pregnant sows and

⁶⁰ Pig Directive (n. 3) Annex I chapter I(6)

⁶¹ *ibid* Article 3(8), Article 7(2)(c)

⁶² *ibid* Annex I chapter I(3)

⁶³ *ibid* Annex I chapter II(1)

⁶⁴ Pig Directive (n. 3) Recital 9

⁶⁵ *ibid* Annex I Chapter II(A), Article 7(2)(e), Annex I chapter I(3), Article 3(8)

⁶⁶ *ibid* Article 3(1)(b),(2)(a),(2)(b),(5), Annex I Chapter I(4)

⁶⁷ *ibid* Article 3(5), Annex I Chapter I(4)

gilts must be given bulky and high-fibre food, as well as high-energy food, to satisfy their increased appetite and need to chew.⁶⁸

Traditionally, tethering sows was seen as a space-efficient way of rearing pigs. However, the detriment to the sows' welfare has now been recognised, and the confinement of sows in 'sow stalls' during the *entire* pregnancy was outlawed in 2013.⁶⁹ From four weeks after service until approximately one week before the expected farrowing, sows and gilts must be kept in groups,⁷⁰ which enables them to socialise during their pregnancy. This is in line with their ethological needs, as sows choose to live in groups, but withdraw from the groups in time for the farrowing.⁷¹ The withdrawal is echoed in the practice of separating sows in time for the expected farrowing. In line with ethological needs, when moved to farrowing pens or gestation crates, the sows must be supplied with suitable nesting material in sufficient quantity.

However, there is an exception: it is not necessary to provide the nesting material if the slurry system makes it technically unfeasible.⁷² This exception disregards the ethological needs of the sows, as they have a strong desire to nest-build and they display this behaviour intensively during the time leading up to farrowing.⁷³ The lack of nesting material does not hinder her the sow from exhibiting nest building behaviour, even if it is limited to the pen (or crate) fittings.⁷⁴ As a result, this thesis argues that the law ought to require

⁶⁸ *ibid* Article 3(7)

⁶⁹ *ibid* Article 3(9)

⁷⁰ Which sides are all greater than 2,8 metre in length. *ibid* Article 3(4)

⁷¹ P. Jensen, D.G.M. Wood-Gush 'Social interactions in a group of free-ranging sows' (1984) 12 *Applied Animal Behaviour Science* 327

⁷² Pig Directive (n. 3) Article 3 Annex I chapter II(B3)

⁷³ P. Jensen 'Nest site choice and nest building of free-ranging domestic pigs due to farrow.' (1989) 22 *Applied Animal Behaviour Science* 13; R. Weber, N.M. Keil, M. Fehr, R. Horat 'Piglet mortality on farms using farrowing systems with or without crates' (2007) 16 *Animal Welfare* 277,277

⁷⁴ S. Jarvis, B.J. Van der Vegt, A.B. Lawrence, K.A. McLean, L.A. Deans, J. Chirnside, S.K. Calvert 'The effect of parity and environmental restriction on behavioural and physiological responses of preparturient pigs.' (2001) 71 *Applied Animal Behaviour Science* 203; B.I. Damm, K.S. Verstergaard D.L. Schroder-Petersen, J. Ladevig 'The effects of branches on perpartum nest building in gilts with access to straw' (2000) 60 *Applied Animal Behaviour Science* 113; Weber, Keil, Fehr, Horat (n. 73) 277; Wechsler, Weber (n. 59); G.J. Lammers, A. De Lange 'Pre- and post-farrowing behaviour in primiparous domesticated pigs (1989) 15

that the slurry system is constructed in such a way that nesting material is *a/ways* possible. Additionally, the nesting material must not only be suitable but –ethological experts would argue that– there also has to be enough of the material available to the sow to be able to build something *she* would consider to be a nest in order to have a positive impact on her welfare.⁷⁵

Housing a sow in a farrowing pen means that the sow is loose, but in a confined space. The law requires protection for piglets to be in place, commonly farrowing rails,⁷⁶ to reduce the risk of crushing. However, the effectiveness of the rails can be questioned, as studies have shown that sows tend to lay down along the other walls of the pens, rather than the ones with the farrowing rails.⁷⁷ Therefore, farrowing rails mostly restrict the already limited space further, and have a detrimental effect to the sows' welfare. Nonetheless, gestation crates outnumber farrowing pens in regards to intensive pig rearing.⁷⁸ When compared to pens, crates are far more restrictive on the sows' ability to move, which may lead to locomotion issues,⁷⁹ and make it impossible for the sow to satisfy a range of ethological needs connected to farrowing.⁸⁰ Additionally, gestation crates, like pens, hinder sows from moving around in the week leading up to the farrowing, when they have a strong ethological need to increase their activity levels,

Applied Animal Behaviour Science 31; A.B. Lawrence, J.C. Petherick, K.A. McLean, L.A. Deans, J. Chirside, A. Vaughan, E. Clutton, E.M.C. Terlouw 'The effect of environment on behaviour, plasma cortisol and prolactin in parturient sows' (1994) 39 Applied Animal Behaviour Science 313

⁷⁵ See at 1.4.2.1

⁷⁶ Directive 98/58 (n. 2) Article 3, Annex I chapter II(B5)

⁷⁷ Wechsler, Weber (n. 59) 301; B.I. Damm, V. Moustén, E. Jørgensen, L.J. Pedersen, T. Heiskanen, B. Forkman 'Sow preferences for walls to lean against when lying down' (2006) 99 Applied Animal Behaviour Science 53

⁷⁸ B.I. Damm 'Loose housing of sows – is this good welfare?' (2008) 50 Acta Veterinaria Scandinavica (Suppl I):S9

⁷⁹ R Bergeron, M-C Meunier-Salaün, S Robert 'The welfare of pregnant and lactating sow' in L Faucitano and AL Schafer (eds.) *Welfare of pigs from birth to slaughter* (Wageningen Academic Publishers 2008) 4.1, 5.2

⁸⁰ Wechsler, Weber (n. 59); D.S. Arey 'Behavioural observations of peri-parturient sows and the development of alternative farrowing accommodation: A review' (1997) 6 Animal Welfare 217; Scientific Veterinary Committee 'The Welfare of Intensively Kept Pigs. Report to the Directorate General XXVI of the European Commission. Adopted 30th September 1997. Doc XXVI/ScVc/0005/97 (Scientific Veterinary Committee, Animal Welfare Section 1997); Damm (n. 78); Bergeron, Meunier-Salaün, Robert (n. 79) 3.1

causing distress to the sow⁸¹ and negatively impacting her welfare.⁸² While the law requires sufficient space for the piglets to suckle easily,⁸³ it does not consider any other welfare aspects in regards with crates, such as the locomotion restraint and the lack of environmental enrichment, which is a serious flaw in the law.

3.3.3 Physical intervention

Physical interventions for therapeutic, diagnostic or identification⁸⁴ purposes are permitted, while any interventions resulting in damage or loss of a sensitive body part or alteration to the bone structure are prohibited.⁸⁵ However there are exceptions: teeth clipping of piglets, reduction of boars' tusks, nose-ringing, tail-docking and castration of male piglets.⁸⁶ Nose-ringing, the placement of a metal ring in the pig's snout, is permitted in outdoor husbandry systems, with the purpose to limit pasture damage caused by rooting, if national legislation permits it. Nose-ringing discourages pigs from the innate behaviour of rooting, as the nose-ring causes discomfort.⁸⁷ The pigs are effectively punished for behaving as pigs, and from ethological perspective it is regrettable that it is permitted at all.

The sub-group of pigs most subjected to physical intervention are piglets. As discussed in chapter 1, there are divergent theories as to whether piglets feel pain. The prevalent theory is that they do not, as their neuro-anatomy is

⁸¹ Wechsler, Weber (n. 59); M.J. Haskell, G.D. Hutson, L.G. Dickenson. S. Palmer 'The pre farrowing behaviour of sows with operant access to space for locomotion' (1997) 51 *Applied Animal Behaviour Science* 51; Bergeron, Meunier-Salaün, Robert (n. 79) 5.3

⁸² Wechsler, Weber (n. 59); S. Jarvis, R.B. D'Eath, S.K. Robson, A.B. Lawrence 'The effect of confinement during lactation on the hypothalamic-pituitary-adrenal axis and behaviour of primiparous sows (2006) 87 *Physiology and Behaviour* 345; Bergeron, Meunier-Salaün, Robert (n. 79) 3.1

⁸³ Pig Directive (n. 3) Article 3, Annex I chapter II(C2)

⁸⁴ A common way of identifying the pigs are ear notching, which is likely to cause fear, stress and potential pain. B Puppe, M-C Meunier-Salaün, W Otten, P Orgeur, 'The welfare of piglets' in L Faucitano and AL Schafer (eds.) *Welfare of pigs from birth to slaughter* (Wageningen Academic Publishers 2008) 6.1

⁸⁵ Pig Directive (n. 3) Annex I chapter I(8)

⁸⁶ *ibid*

⁸⁷ A Bassett, 'Technical paper No. 16' (Animal Welfare Approved 2011); Bergeron, Meunier Salaün, Robert (n. 79) 4.4

not fully developed. However, this theory has been labelled as outdated, as modern research has clearly shown that piglets do feel pain.⁸⁸ Nonetheless, the EU's animal welfare legislation relies on the former theory: the Pig Directive establishes a period of seven days after the piglet's birth as an acceptable limit to perform physical interventions before starting to use pain relief.⁸⁹ Contrastingly, Recital 11 explicitly states that physical interventions are likely to cause immediate pain to the piglet and some prolonged pain, which are therefore detrimental to the welfare of pigs and call for rules to be laid down to ensure better practices.

The welfare benefits and drawbacks of teeth-clipping on piglets have also been discussed in Chapter 1, and the legal constraints on teeth-clipping are the following: before the seventh day of the piglets' life, it is permitted to reduce the piglets' corner teeth, by grinding or clipping them, in a uniform manner, leaving a smooth surface. Teeth-clipping shall only be performed by a veterinarian or a person who has been trained in and is experienced in performing the techniques. Further, appropriate tools must be used and it should occur under hygienic conditions. Teeth-clipping may not be carried out as a routine, and is only permissible where there is evidence of injuries to the sow's teats or injuries to fellow piglets. Before teeth-clipping is allowed, other measures must first be taken to prevent the undesirable behaviours, such as improving the general environment (by enrichment) and/or addressing the stocking density. If such measures do not improve the situation, then teeth-clipping is permissible.⁹⁰

Similarly to teeth-clipping, tail-docking is performed because piglets may bite and cause injuries to each other's tails, and only a part of the tail is allowed to be docked. Tail-docking is not permitted to be performed routinely, but requires presence of evidence of injuries to tails and failure of other preventative measures (same as those for teeth-clipping).⁹¹ When pigs are

⁸⁸ Puppe, Meunier-Salaün, Otten, Orgeur (n. 84) 6.1

⁸⁹ Pig Directive (n. 3) Annex I Chapter 1(8)

⁹⁰ *ibid*

⁹¹ *ibid*

under-stimulated, due to their barren environment and/or crowded conditions, tail-biting may occur.⁹² While tail-biting causes pain, the practice of tail-docking is likely to cause pain too.⁹³

Castration of male piglets is permissible by law, provided that the castration is not performed by tearing of tissues.⁹⁴ Despite it being unlawful, deliberate tearing of tissues occurs.⁹⁵ The majority of the piglets are castrated before the seventh day, without any anaesthetic, as if the piglets are older, the castration must be performed by a veterinarian, under anaesthesia and with additional prolonged analgesia.⁹⁶ As a castration without pain-relief is considerably cheaper than one with anaesthetics, there is a financial incentive to castrate the piglets before the seven-day mark to avoid the anaesthetics' cost.

3.3.4 Is the pigs' welfare negated by the farmers' economic motives?

Intensively farmed pigs are reared in large buildings, which are expensive to operate and maintain, and any alteration to the layout of such buildings incurs further costs and takes time to carry out. This is recognised indirectly in the Directive by a ten-year phasing-in time before changes become compulsory, which even includes important welfare improvements, such as

⁹² see at 1.4.1.2

⁹³ L Rydhmer, N Lundheim 'Breeding pigs for improved welfare' in JN Marchant-Forde (ed) *The Welfare of Pigs* (Springer 2009) 9; H.B. Simonsen, L. Linken, E. Bindseil 'Histopathology of intact and docked pig tails.' (1991) 147 *British Veterinary Journal* 407; K. Breuer, M.E.M. Sutcliffe, J.T Mercer, K.A. Rance, N.E. O'Connell, I.A. Sneddon, S.A. Edwards 'Heritability of clinical tail-biting in pigs and its relation to performance traits.' (2005) 93 *Livestock Production Science* 87; P Jensen, '*Hur mår maten? Djurhållning och djurskydd i Sverige*' (Natur & Kultur 2012) 42

⁹⁴ Pig Directive (n. 3) Annex 1 Chapter 1(8)

⁹⁵ P Stevenson, 'Investor briefing No 1 – Farm Animal Welfare: The Regulatory and Policy Landscape' (Business Benchmark on Farm Animal Welfare 2011) 6; EFSA, 'Report and Opinion of the Scientific Panel on Animal Health and Welfare on the request from the Commission related to welfare aspects of the castration of piglets.' (2004); R. Horgan 'Piglet castration and EU animal welfare legislation' (2006) 48 *Acta Veterinaria Scandinavica* 52; N. Jäggin, S. Gerber, U. Schatzmann 'General anaesthesia, analgesia and pain associated with the castration of newborn piglets' (2006) 48 *Acta Veterinaria Scandinavica* 12

⁹⁶ Pig Directive (n. 3) Annex 1 Chapter 1(8)

prohibiting the continuous tethering of sows.⁹⁷ While the phasing-in period is far too long from a zoocentric perspective, it must be recognised that farmers must have time to raise funds to implement major structural changes.

Continuous tethering of sows throughout the gestation period is effectively banned. However, gestation crates and farrowing pens are still permitted, and the Pig Directive fails to set a minimum size requirement for them. This omission, due to the crates' restrictive nature, is a serious flaw as it impacts on the sows' ethological and physiological welfare. There are two main reasons for using pens and crates: they are highly space-efficient and safeguard the piglets by reducing the risk of a sow accidentally crushing her piglets. As every crushed piglet is income lost, it is financially important to avoid it. Therefore, the sow endures poor welfare conditions, so that farmers lose less piglets.⁹⁸ However, research has shown that there are other ways to increase piglet survival rates, while also enabling the sow to move around.⁹⁹ The problem is that it requires a farrowing pen of at least five metre square for each sow and litter, which is sufficient space for two crates and costs considerably more.¹⁰⁰ Additionally, for the five metre square pen to improve survival ratio, environmental enrichment is required, which further increases the costs.

Providing enrichment by manipulable material has numerous benefits for the pigs' welfare. Manipulable material in sufficient amounts satisfies the pigs' ethological compulsion of rooting and keeps the pigs stimulated, which is an effective way to reduce undesirable aggressive behaviour among the pigs. Indeed, the benefit of environmental enrichment is recognised throughout

⁹⁷ Weber, Keil, Fehr, Horat (n. 73) 279. Results obtained confirmed by; G.M. Cronin, B. Lefébure, S. McClintock 'A comparison of piglet production and survival in the Werribee Farrowing Pen and conventional farrowing crates at a commercial farm' (2000) 40 *Australian Journal of Experimental Agriculture* 17; R Weber 'Alternative housing systems for farrowing and lactating sows' in HJ Blokhuis, ED Ekkel, B Wechsler (eds.) *Improving health and welfare in animal production* (Wageningen 2000)

⁹⁸ Weber (n. 97); Damm (n. 78) 2; Wechsler, Weber (n. 59); Bergeron, Meunier-Salaün, Robert (n. 79) 6.1; JN Marchant-Forde, *The Welfare of Pigs* (Springer 2009) 4.1

⁹⁹ see at 1.4

¹⁰⁰ Weber, Keil, Fehr, Horat (n. 73) 279; Cronin, Lefébure, McClintock (n. 97)

the Pig Directive.¹⁰¹ However, providing manipulable materials costs money, and is therefore not a priority when optimising cost-effective pig productions. Not only does the material itself costs money, but it also has to be changed frequently, which increases labour demands. In reality, simply suspending a chain into the area where pigs are housed or providing a handful of shredded paper might seem enough to satisfy the legal requirements,¹⁰² particularly when the enforcement and the interpretation of the legislation by the enforcer vary greatly throughout the Member States.¹⁰³

Indeed, there is even an explicit 'excuse' for not providing sows in the week leading up to the farrowing with nesting material: the slurry system.¹⁰⁴ This exception is wholly unacceptable from an ethological perspective, due to the sows' compelling need to nest in the week leading up to farrowing. This exception should never have been included in the Pig Directive in the first place. On the contrary, this thesis argues that it ought to be a legal requirement that the slurry system always has to be designed in a way which allows for the presence of manipulable material, particularly for a sow near farrowing.

This thesis further argues that the idea of a general ban of physical intervention on pigs loses its edge, due to the extensive exceptions in the Pig Directive, which are flawed from an animal welfare viewpoint. A fundamental flaw has been identified, relating to a lack of understanding of the 'law in practice': in order to discourage the undesirable behaviour, before any of the exempted physical interventions were permitted to be performed,

¹⁰¹ Pig Directive (n. 3) Annex I Chapter I(8), Chapter II(D1),(3), Recital 8, Article 3(5), Article 7(d)

¹⁰² DC Lay Jr, JN Marchant-Forde 'Future Perspectives of the Welfare of Pigs' in JN Marchant-Forde (ed) *The Welfare of Pigs* (Springer 2009) 339; DEFRA 'Pigs code of recommendation for the welfare of livestock' (DEFRA Publications 2003) 81

¹⁰³ Compassion in World Farming, 'EU Pig sector behaves as if it's above the law' (28 October 2013)

http://www.ciwf.org.uk/news/pig_farming/eu_pig_sector_behaves_as_if_its_above_the_law.aspx accessed on 9 November 2013; I. Anneberg, M. Vaarst, J.T. Sørensen, 'The experience of animal welfare inspections as perceived by Danish livestock farmers: A qualitative research approach' (2012) 147 *Livestock Science* 49; H.H. Sambraus 'Applied ethology – it's task and limits in veterinary practice' (1998) 59 *Applied Animal Behaviour Science* 39,39-41; Lymberly, Oakeshott (n. 45) 121

¹⁰⁴ Pig Directive (n. 3) Annex I Chapter II(B3)

other preventative measures should be taken, such as changing the environment or the stocking density. However, this flexible approach in the provisions becomes unrealistic when it is contextualised. Ultimately, intensive pig rearing is a business, operating on very tight margins. The flexible approach required by the Directive, by suggesting to change the environment and/or the stocking density, is likely to require fundamental structural changes to where pigs are housed. Further, the cost of rearing the piglets' increases when stocking density is decreased, and enrichment material must be grown or bought. The enrichment material must be changed, which requires more labour – therefore, staffing costs increase, while any profit decreases. As a result, upon contextualising the flexible measures required by the Directive with the realities of intensive pig rearing, it is unlikely that the flexible measures are carried out to the extent the Directive requires before the interventions are performed. The fundamental flaw within the Directive, due to a failure of understanding the law in practice, is therefore likely to negate the effectiveness of several of its provisions, which are intended to promote animal welfare by reducing the 'need' for physical interventions.

The second major flaw in the Directive which has been identified in this analysis, is the scientific basis upon which the physical intervention provisions are based. Despite the fact that numerous studies have disproved the theory that piglets' neuro-anatomy does not develop until the seventh day, and although the legislators are aware of the pain caused by interventions,¹⁰⁵ the provisions on physical intervention still rely on this outdated theory. By setting the legal limit at seven days, the Directive permits (and causes) needless suffering. However, a legislative change to the seven-day rule would impact on the farmers' finances, due to the cost of anaesthetics and analgesia. Consequently, the seven-day rule is a clear example of animal welfare negated by economic incentives. While tail-docking and teeth-clipping cause pain, the pain caused by castration is likely

¹⁰⁵ *ibid* Recital 11

to be prolonged.¹⁰⁶ The suffering contributed to castration can be avoided, by legally requiring *all* castrations (regardless of the pig's age) to be performed by a veterinarian with anaesthetics and prolonged analgesia, and ensuring enforcement throughout the EU. Nonetheless, such a legislative change would also meet resistance, due to the resulting increased costs. However, as the Pig Directive is a minimum Directive,¹⁰⁷ it allows Member States to legislate to a higher welfare standard in their own territories, and require all castrations (and other physical interventions) performed within their national borders must be with anaesthetics.

3.3.4.1 Boar taint – an economic problem and a welfare problem

When it comes to castration, there is an additional economic motive for castrating male piglets: to reduce the risk of boar-tainted meat.¹⁰⁸ Boar-tainted meat is an undesirable and largely unsellable product, which lacks appeal to the majority of consumers, due to its distinct flavour and odour.¹⁰⁹ Boar-tainted meat is perceived as a major problem, and is specifically regulated in Directive 64/433/EEC¹¹⁰ regarding fresh meat intended for cross-border trade, with the purpose of detecting boar-tainted meat.¹¹¹ If the taint is detected, the fresh meat is deemed unfit for human consumption and destroyed or returned to be processed.¹¹² Therefore, for economic reasons, it is vital to reduce the prevalence of boar-tainted meat.¹¹³

¹⁰⁶ *ibid* (see at 1.4.1.2)

¹⁰⁷ *ibid* Article 1

¹⁰⁸ M. Hansson, N. Lundeheim, G. Nyman, G. Johansson 'Effect of local anaesthesia and/or analgesia on pain responses induced by piglet castration' (2011) 53 *Acta Veterinaria Scandinavica* 34; WJA Boersma, J Meulen, TA and Niewold 'Balance Between Porcine Disease and Welfare' in JN Marchant-Forde (ed) *The Welfare of Pigs* (Springer 2009) 8.5.3

¹⁰⁹ Boersma, Meulen, Niewold (n. 108) 8.5.3; Jäggin, Gerber, Schatzmann (n. 95)

¹¹⁰ Directive 64/433/EEC of 26 June 1964 in health problems affecting intra-community trade in fresh meat (1964) Official Journal P121 as re-enacted by Directive 91/497, and under Directive 89/662

¹¹¹ C-102/96 *Commission of the European Communities v Federal Republic of Germany* [1998] ECR I-06871; C-445/06 *Danske slagterier v Bundesrepublik Deutschland* [2009] ECR I-02119; Jäggin, Gerber, Schatzmann (n. 95)

¹¹² C-102/96 *ibid*; C-445/06 *ibid*; Directive 64/433/EEC (n. 119); J.L. Xue, G.D. Dial 'Raising intact male pigs for meat: Detecting and preventing boar taint' (1997) 5(4) *Swine Health and Production* 151,155

¹¹³ Hansson, Lundeheim, Nyman, Johansson (n. 108); Boersma, Meulen, Niewold (n. 108) 8.5.3; Jäggin, Gerber, Schatzmann (n. 95)

Apart from the meat being unsellable, boar taint is further problematic as it is uncertain what causes it. Boar taint may be caused by genetics and breed variations¹¹⁴ or there may be a link between aggression among pigs and the development of boar taint and, while castration can prevent both, it is not always successful.¹¹⁵ Indeed, Member States differ in opinion whether the presence of skatole and/or androstenone in the meat causes boar taint, and has resulted in litigation.¹¹⁶ However, as both skatole and androstenone presence in intact boars can be prevented by slaughtering the boars before they reach puberty (when they are still at a lower weight), EU law only requires carcasses from intact boars, in excess of eighty kilograms,¹¹⁷ to be tested for boar taint.¹¹⁸ Meanwhile, alternatives to conventional castration are being developed¹¹⁹ and some already exist, such as immunocastration¹²⁰ and chemical castration injection.¹²¹ Nevertheless, presently, the most cost-effective prevention of boar taint is to castrate the male piglets, which before the seventh day will not even incur a veterinary bill.

¹¹⁴ Rydhmer, Lundeheim (n. 93)13,14; J J. Babol, G. Zamaratskaia, R.K. Juneja, K. Lundström 'The effect of age on distribution of skatole and indole levels in entire male pigs in four breeds; Yorkshire, Landrace, Hampshire and Duroc (2004) 67 Meat Science 351; Xue, Dial (n. 112) 152

¹¹⁵ Studies show that taint can be detected in barrows as well, in one study as many as 31% of the barrows were tainted. Xue, Dial (n. 112) 154; C.A. Cowan, R.L. Joseph 'Production and quality of boar and castrate bacon. 2. Consumer and panel response to bacon and fat samples.' (1981) 15 Iranian Journal of Food Science and Technology 105

¹¹⁶ C-102/96 (n. 111); C-445/06 (n. 111); Xue, Dial (n. 112) 154

¹¹⁷ Science suggests that the taint is particularly prominent in the growth period of 100-130 Kg, thus making the requirement of testing carcasses 80 kg and above cautious approach. Xue, Dial (n. 112) 153

¹¹⁸ Directive 64/433/EEC (n. 119) Article 6(1)(b)(iii)

¹¹⁹ Boersma, Meulen, Niewold (n. 108) 8.5.3; X.Y. Zeng, J.A. Turkstra, R.H. Meloen, X.Y. Liu, F.Q. Chen, W.M. Schaaper, H.B. Oonk, Z. Guo da, D.F. van de Wiel 'Active immunization against gonadotrophin releasing hormone in Chinese male pigs, effects of dose on antibody titer, hormone levels and sexual development (2002) 70 Animal Reproduction Science 223; D. Rath, C.R. Long, J.R. Dobrinsky, G.R. Welch, L.L. Schreier, L.A. Johnson 'In vitro production of sexed embryos for gender preselection: high-speed sorting of X-chromosome-bearing sperm to produce pigs after embryo transfer' (1999) 77 Journal of Animal Science 3346; S.R. Blecher, R. Howie, S. Li, J Detmar, L.M. Blahut 'A new approach to immunological sexing of sperm' (1999) 52 Theriogenology 1309; Xue, Dial (n. 112)

¹²⁰ EFSA, 'Report and Opinion of the Scientific Panel on Animal Health and Welfare on the request from the Commission related to welfare aspects of the castration of piglets.'(2004); Horgan (n. 95); T. Grandin 'Animal welfare and society concerns finding the missing link' (2014) 98 Meat Science 461,466

¹²¹ Xue, Dial (n. 112) 155

The case law regarding boar taint highlights an interesting paradox from an economic point of view. As established, farmers resort to castration to avoid boar-tainted meat and the income loss associated with it. Quite ironically, in *Danske Slagterier v Bundesrepublik Deutschland*,¹²² the Danish pig farmers sued Germany for 280 million German Deutsche Marks, which was estimated to be the additional cost incurred to pig rearing after the re-introduction of castration, due to the German legal requirements imposed on fresh imported pig meat. Accordingly, the economic incentive of piglet castration loses its edge, as it leads to increased costs.¹²³

3.3.5 Is the pigs' welfare negated by Internal Market motives?

Pigs –like all other farm animals– are subject to the Free Movement of Goods provisions and all Internal Market legislation. While minimum harmonisation aims to level the playing field in the Internal Market, the very nature of Directives inevitably causes a degree of differentiation among Member States as an (unintended) consequence. This differentiation exists in relation to the Pig Directive too, largely due to the derogatory power in Article 12 of the Pig Directive, which permits stricter domestic legislation. From an animal welfare perspective, Article 12 is arguably *the most important* in the entire Pig Directive, as stricter measures may significantly increase the welfare level for the concerned pigs, for instance by entirely banning tail-docking, by requiring anaesthetics when castrating, or by having bigger space requirements for each pig. While harmonisation of the standards has overall increased the level of standards, especially in regards to new Member States,¹²⁴ the inclusion of Article 12 will inevitably lead to the fact that some pigs will be better cared for than others.

¹²² C-445/06 (n. 111)

¹²³ Costs such as man power and reduced growth in the piglets (a scalpel and iodine bears no substantial cost)

¹²⁴ GHK Consulting (n. 10) 3.2.3.1

Other differences among Member States arising from the Pig Directive relate to the phasing-in periods, which allows for a ten-year adaptation period.¹²⁵ From an Internal Market aspect, a phasing-in period of such length showcases the need for compromise when legislating on EU level. Different Member States prefer different amounts of time to adjust to a change in standards. However, the competitive strength of farmers in Member States that are faster to implement new standards, when compared to other Member States, will be diminished, as it is generally agreed that more space and better facilities inevitably increase the cost of rearing the pigs.¹²⁶ Accordingly, the meat will need to be sold at a higher price or these farmers lose money. As a result, the expensive meat will be at a competitive disadvantage within the Internal Market, when compared to the meat which comes from the holdings of pigs which are yet to adapt to the new, stricter standards.¹²⁷ The complexity of this is further increased by the fact that there are different systems of rearing pigs, and the produce of these different rearing systems are competing against each other in the Internal Market.

Nevertheless, the standards laid down in this Directive are meaningless unless they are enforced. The level of detail in the Pig Directive benefits the animals, as it makes it clearer and easier to enforce. However, some provisions in the Directive lack clarity, allow for different interpretations, and complicate enforcement. Any problems that hinder uniform enforcement severely affect the pursuit of higher animal welfare standards within the EU. The competitive nature of the Internal Market intensifies the issue of enforcement, as the effect of different welfare standards, and the varying degrees of enforcement, can be enough to affect patterns of production and trade within the Internal Market. An example of this relates to the early banning of sow stalls in the United Kingdom (UK) in 1999, which decreased the domestic production, and the self-sufficiency of pork in the UK fell from

¹²⁵ Pig Directive (n. 3) Article 3

¹²⁶ GHK Consulting (n. 10) 1.1.10

¹²⁷ *ibid* 3.2.3.2

84% in 1998 to 50% in 2006, and led to an increase of imports from Member States without said ban.¹²⁸

3.4 Legislation on Commercial hybrids

The commercial hybrids are two different strands of *Gallus gallus domesticus*, selectively bred to create distinct differences in their physique suiting the human interests: to produce eggs and chicken meat. Despite their differences in physique, they are the same species, and their ethological needs remain the same.¹²⁹ However, their different commercial purposes have resulted in separate treatment of the hybrids in law, with one Directive devoted to the egg-layers (the Egg Directive)¹³⁰ and one for the broilers (meat chickens) (the Broiler Directive).¹³¹ This analysis will consider them jointly, as a comparison of their content will illustrate the emphasis difference on the welfare needs within the two Directives. The analysis, first, will identify whether the ethological needs are also considered within the Directives alongside the physiological ones, and second, whether the welfare provisions are negated by economic motives.

The scope of both Directives covers birds of the *Gallus gallus* species, specifying two hybrids: those reared for meat production (broilers) and those kept for production of eggs (egg-layers) that are not intended for hatching.¹³² The addition 'not intended for hatching' is important, as it effectively removes all egg-layers used for breeding from the scope of the Egg Directive. Similarly, the broiler breeders are exempted from the Broiler Directive.¹³³

Consequently, the 'hybrid parents' receive a lower level of protection and are only covered by Directive 98/58 and suffer disproportionately due to their

¹²⁸ *ibid*

¹²⁹ Discussed at 1.4.2

¹³⁰ Egg Directive (n. 4)

¹³¹ Broiler Directive (n. 5)

¹³² *ibid* Article 2(1)(e); Egg Directive Article 1(2)(a)

¹³³ Broiler Directive Article 1(1)(b)

specific welfare issues being unregulated.¹³⁴ The Broiler Directive also excludes: hatcheries,¹³⁵ all broilers reared in line with provisions of Regulation 1538/91¹³⁶ and all broilers reared to 'EU-organic standard'.¹³⁷ There are further exceptions: the Egg Directive excludes egg-layers in holdings that have fewer than 350 egg-layers,¹³⁸ and holdings of fewer than 500 broilers are outside the scope of the Broiler Directive.¹³⁹ The smaller holdings are therefore only covered by Directive 98/58. Overall, these extensive exceptions severely undermine the effective level of protection for the hybrids by the two Directives, and clearly indicate that the Directives are directed towards 'intensive farming', rather than small holders.

3.4.1 Physiological and ethological needs in the Hybrid Directives

The extent to which physiological and ethological needs of the commercial hybrids are addressed within the Directives differs significantly. The only occurrence of 'ethological needs' in the Broiler Directive is in the Recital which summarises the content of Directive 98/58.¹⁴⁰ While the Egg Directive contains an identical Recital,¹⁴¹ ethological needs are also referred to in main body of the Egg Directive.¹⁴² As a result, the ethological needs of egg-layers are given stronger protection compared to those of broilers. The difference between the Directives cannot be explained as an increase of the public's

¹³⁴ Grandin (n. 120) 466

¹³⁵ Broiler Directive (n. 5) Article 1(c)

¹³⁶ These exceptions remove all broilers reared in conditions which allow for the meat to be labelled with any of the following: "(b) *'Extensive indoor' ('barn reared')*, (c) *Free range*, (d) *The 'Traditional free or (e) Free-rang (SIC! Free-range) – total freedom'*" Commission Regulation (EEC) No 1538/91 of 5 June 1991 introducing detailed rules for implementing Regulation (EEC) No 1906/90 on certain marketing standards for poultrymeat [1991] OJ L143/11, amended by Commission Regulation (ECC) No 2891/93 of 21 October 1993 Annex IV

¹³⁷ Council Regulation (EEC) No 2092/92 of 24 June 1991 on organic production of agricultural products and indications referring thereto on agricultural products and foods stuffs [1991] OJ L198/1. Regulation as last amended by Commission Regulation (EC) No 394/2007 [2007] OJ L98/3

¹³⁸ Egg Directive (n. 4) Article 1(2)

¹³⁹ Broiler Directive (n. 5) Article 1(a)

¹⁴⁰ *ibid* Recital (2)

¹⁴¹ Egg Directive (n. 4) Recital (3)

¹⁴² *ibid* Article 2(2) (c), Article 10

awareness for animal welfare, since the Egg Directive is from 1999, while the Broiler Directive is from 2007. A more probable reason is that the caged egg-layers have become a symbol for poor animal welfare amongst consumers, while there is widespread ignorance about the conditions in which broilers are reared.¹⁴³

There is no definition of 'welfare' within the Directives, despite the importance of the concept in regards to the hybrids' physiological and ethological needs. However, there are plenty of other definitions that contribute to their welfare by providing some clarity. In the Broiler Directive, 'usable area', 'stocking density',¹⁴⁴ 'daily mortality rate'¹⁴⁵ and 'cumulative mortality rate'¹⁴⁶ are given precise definitions. 'Usable area' is defined to mean a littered area that broilers have access to at any time.¹⁴⁷ Defining broiler stocking density is of high importance due to its impact on broilers' welfare.¹⁴⁸ The daily mortality rates are vital tools for assessing the health of the flock, as a sudden increase in mortality is a clear sign that something is wrong, and specifying in the Directive how the rates are calculated ensures that the rates are calculated in the same manner throughout the EU. Contrastingly, the Egg Directive contains no definition regarding stocking density, but defines 'nest', 'litter' and 'usable area'.¹⁴⁹ The usable area is defined in a high degree of detail, and expressly excludes the nest space;¹⁵⁰ the nest is defined as a separate space for egg laying, either for an individual egg-layer or groups.¹⁵¹ The different housing aspects described in the two Directives may partly be due to the differences in rearing the birds.

¹⁴³ C. Hall, V. Sandilands 'Public attitudes to the welfare of broiler chicken' (2007) *Animal Welfare* 499,500

¹⁴⁴ The total live weight of broilers simultaneously present in the house per square metre of usable area; Broiler Directive (n. 5) Article 2(1)(i)

¹⁴⁵ 'Daily mortality rate' is the number of chickens which have died in a house on the same day, including those that have been culled (due to disease, among other reasons), divided by the number of chickens present in the house on that day, multiplied by 100; *ibid* Article 2(1)(k)

¹⁴⁶ 'Cumulative daily mortality rate' means the sum of daily mortality rates: *ibid* Article 2(1)(l)

¹⁴⁷ *ibid* Article 2(1)(h)

¹⁴⁸ Discussed at 1.4.2.2

¹⁴⁹ Egg Directive (n. 4) Article 2(2)(b)-(d)

¹⁵⁰ *ibid* Article 2(2)(d)

¹⁵¹ *ibid* 2(b)

Broilers are commonly reared in a vast open space, and while egg-layers may be reared in big spaces, they may include several tiered levels. Alternatively, the egg-layers may be confined to (enriched) cages.

3.4.1.1 Housing requirements

The differences in housing of the hybrids are further emphasised by the provisions concerning litter. Litter, for egg-layers, is any friable material that enables them to satisfy their ethological needs.¹⁵² While the ethological needs are not specified, pecking and dust bathing are needs likely to be satisfied by the presence of litter. Comparatively, for broilers, there is no reference to ethological needs in regards to litter. While access to litter is required,¹⁵³ litter serves another function, as it is the surface broilers spend their entire lives on. While a well-functioning litter will help to keep broilers warm, a badly managed litter will cause them suffering; for instance, wet litter will induce foot dermatitis and hock burns.¹⁵⁴ As both egg-layers and broilers are fundamentally *Gallus gallus domesticus*, with the same ethological need to dust bath and peck, the differences in legal requirements are unlikely to be due to scientific reasons.

Both Directives are concerned with the supply of water and feed.¹⁵⁵ For broilers, the emphasis is on minimising any water spillage to achieve better litter quality,¹⁵⁶ as well as ensuring constant food availability or meal fed.¹⁵⁷ Contrastingly, for egg-layers, the emphasis is on ensuring sufficient space for each bird to eat and drink.¹⁵⁸ It is noteworthy that there is no reference to the suitability of the feed for either hybrid, although feed deficiencies may result in welfare issues, such as abnormal pecking behaviour or cannibalism

¹⁵² Egg Directive (n. 4) Article 2(2)(c), Article 6(1)(c)

¹⁵³ Broiler Directive (n. 5) Annex 1(3)

¹⁵⁴ see at 1.4.2.2.

¹⁵⁵ Broiler Directive (n. 5) Annex I(1),(2); Egg Directive (n. 4) Article 1(1)(a)-(b),4(1)(1)(a)-(b),(3)(a)(iii),5(1)(2)-(3),6(2),(3)

¹⁵⁶ Broiler Directive (n. 5) Annex I(1); D Sainsbury, *Poultry Health and Management* (4th ed. Blackwell Science Ltd Oxford 2000) 18-20

¹⁵⁷ Broiler Directive (n. 5) Annex 1(2)

¹⁵⁸ Egg Directive (n. 4) Article 1(1)(a),(b),4(1)(1)(a),(b),(3)(a)(iii),5(1)(2)-(3),6(2),(3)

in both hybrids, and lack of calcium for egg-layers can cause broken bones.¹⁵⁹

The level of noise permitted is regulated in both Directives by Annex provisions with identical wordings, the only difference being an addition in the Egg Directive that 'constant or sudden noise shall be avoided'.¹⁶⁰ Generally, for both hybrids, sound levels should be kept at a minimum. Ventilation fans, feeding machinery, and so forth, must be constructed, placed, operated, and maintained at the lowest amount of noise possible.¹⁶¹ Low noise levels are important as the hybrids are easily frightened. A sudden noise can lead to outbreaks of mass hysteria.¹⁶² When broilers are reared with a higher stocking density (more than thirty-three kilograms per metre square) there are additional demands in form of environmental parameters and the ventilation systems must be designed accordingly.¹⁶³

Both Directives also require thorough cleaning and disinfection of everything that has been in contact with the hybrids after each depopulation, before a new flock is introduced to the house.¹⁶⁴ Regarding broilers, after depopulation, the litter must be removed and replaced with fresh litter for the new birds.¹⁶⁵ For egg-layers, everything they come into contact with must be cleaned regularly – not only at the event of depopulation. A possible reason for the different approach is the two hybrids' different lifespan. The broilers typically live for less than two months while egg-layers live over a year.

The housing differences between the two hybrids necessitate differences in the conduction of inspections, and the amount of requirements expected in each. However, there is no scientific reason why the required number of inspections varies between the different hybrids (broilers at least twice/day,

¹⁵⁹ Chapter 1

¹⁶⁰ Egg Directive (n. 4) Annex 2

¹⁶¹ *ibid*; Broiler Directive (n. 5) Annex I(5)

¹⁶² Chapter 1

¹⁶³ Broiler Directive Annex II (3)

¹⁶⁴ Egg Directive (n. 4) Annex (4); Broiler Directive (n. 5) Annex I(10)

¹⁶⁵ Broiler Directive (n. 5) Annex I(10)

egg-layers at least once/day). For broilers, attention should be paid to signs indicating poor animal health or welfare reduction, and if a broiler is seriously injured or ill, it must be treated or culled immediately.¹⁶⁶ If egg-layers are housed in stacked cages, all tiers of caged egg-layers must be inspected daily, and if dead birds are found, they have to be removed on a daily basis.¹⁶⁷ Additionally, the cages must be designed to be escape-proof, while enabling removal of an adult bird without unnecessary suffering or causing the bird injuries.¹⁶⁸

3.4.1.2 Physical interventions

The most prevalent physical intervention inflicted upon hybrids, and the only one addressed within the Directives, is beak trimming. The Directives only permit beak trimming where domestic legislation permits it. If permitted, beak trimming may be performed to reduce the prevalence of feather pecking and cannibalism.¹⁶⁹ Before beak trimming is permitted on broilers, other preventative measures must have failed, and a veterinarian must be consulted. It must be performed by qualified staff, and on chicks younger than ten days.¹⁷⁰ Contrastingly, the Egg Directive does not list preventative measures or veterinary consulting as prerequisites before permitting beak trimming.¹⁷¹ While preventative measures are not detailed within the Broiler Directive, examples of measures are: reduced light, less nutritious food in larger quantities, which occupy the birds with feeding for a longer time, and reduced stocking density.

The main problems beak trimming aims to prevent is feather pecking and cannibalism, which cause serious welfare problems for both hybrids. Beak trimming is an effective against them, particularly if preventative measures have failed. However, beak trimming per se causes serious welfare issues

¹⁶⁶ *ibid* (8),(9)

¹⁶⁷ Egg Directive (n. 4) Annex (1),(4)(6)

¹⁶⁸ Egg Directive (n. 4) Annex (5),(7)

¹⁶⁹ Broiler Directive (n. 5) Annex I(12); Egg Directive (n. 4) Annex (8); MC Appleby, JA Mench, BO Hughes, *Poultry Behaviour and Welfare* (CABI Publishing 2004) 5.10

¹⁷⁰ Broiler Directive (n. 5) Annex I(12)

¹⁷¹ Egg Directive (n. 4) Annex (8)

too. It may deprive birds from satisfying basic physiological and ethological needs, such as feeding, pecking and preening. Indeed, if beak trimming is performed badly, the bird can starve to death.

Beak trimming also causes significant pain to the birds, yet there is no reference to pain-relief or anaesthetics in either Directive. Rather, there is a ten-day limit, after which beak trimming is banned; until then, it is allowed, without a requirement for anaesthetics. This ten-day limit specified in the hybrid Directives is founded on a problematic scientific theory, which is disproven, as is the case with the Pig Directive's seven-day limit. Research has shown that the beak –although made of horny material– does contain sensor receptors and trimming causes loss of touch, change in temperature sensitivity, and prolonged pain.¹⁷² Yet, the Directives rely on the original, disproven theory, which results in pain when beaks are trimmed.

3.4.2 Is the hybrids' welfare negated by the farmers' economic motives?

The Recitals in both Directives state that there is a need for balance between animal welfare and health, and economic and social considerations.¹⁷³ The focus of the Directives is on intensive farming and smallholdings are exempted. Having fewer legal requirements to comply with is to the benefit of the human smallholders, but to the detriment of the birds

¹⁷² DB Wilkins, *Animal Welfare in Europe, European Legislation and Concerns* (Kluwer Law International 1997) 24; M.J. Gentle 'Neuroma formation following partial beak amputation (beak-trimming) in the chicken' (1986) 41 *Research in Veterinary Science* 383; M.J. Gentle, E. Seawright 'The effects of partial beak amputation on circulating leucocytes in the domestic fowl' (1988) 16 *Medical Science Research* 145; J. Breward, M.J. Gentle 'neuroma formation and abnormal afferent nerve discharges after partial beak amputation (beak trimming) in poultry' (1985) 41 *Experientia* 1132; WM Muir, H Wei Cheng 'Genetic Influences on the Behaviour of Chickens Associated with Welfare and Productivity' in T Garndin, MJ Deesing (eds.) *Genetics and the Behaviour of Domestic Animals* (Elsevier Inc. 2014) 330; J.V. Craig, W.M. Muir 'Selection for reduction of beak-inflicted injuries among caged hens' (1993) 72 *Poultry Science* 411; J.V. Craig, W.M Muir. 'Group selection for adaptation to multiple-hen cages: beak related mortality, feathering, and body weight responses' (1996) 75 *Poultry Science* 294

¹⁷³ Broiler Directive (n. 5) Recital (10); Egg Directive (n. 4) Recital (10); D. Moran, A. McVittie 'Estimation of the value the public places on regulations to improve broiler welfare' (2008) 17 *Animal Welfare* 43,43

in the smallholdings, as they lose the species-specific provisions within the Directives.¹⁷⁴

The economy around broilers is of significant size. Over five billion broilers are reared every year within the EU¹⁷⁵ and in 2002 the chicken meat market in the UK alone was worth over two billion pounds sterling.¹⁷⁶ Similarly, the economy around egg production is of a considerable size. Rearing animals can be profitable enterprises, however, the margins are very tight. For instance, in 2005, the cost of rearing one broiler in the UK was 122.0 pence and the average return was 123.9 pence, thus leaving a margin of 1.9 pence.¹⁷⁷ This 1.9 pence profit margin predates the Broiler Directive, which introduced new requirements and further increased the rearing costs. In addition to cost increases due to legislation, factors such as electricity and the cost of the feed (from the volatile global market) further affect the expenses of rearing hybrids. These increases in cost must be balanced with the increasing price consciousness of consumers. Consumers are pressing the prices down, and further impact the remuneration the farmers receive.¹⁷⁸

As the farms operate on such tight margins, cost-efficiency is a primary priority. As such, although high stocking densities can deteriorate hybrid welfare, by causing excessive feather-pecking, crushing, cannibalism and disease,¹⁷⁹ they remain common practice because they are cost-efficient. General costs covered by the Directives and encountered by farmers in both broiler and egg production, are: providing and removal of litter, cleaning, and

¹⁷⁴ Broiler Directive (n. 5) Recital (8), Article 1(1)(a); Egg Directive (n. 4) Article 1(2)

¹⁷⁵ P Stevenson, 'EU Directive on the welfare of meat chickens' (Compassion in World Farming 2007)

¹⁷⁶ Moran, McVittie (n. 173) 51

¹⁷⁷ A. Sheppard, S. Edge 'Economic and Operational Impacts of the Proposed EU Directive laying down Minimum Standards for the Protection of Chickens kept for Meat Production' (2005) University of Exeter Centre for Rural Research, 7

¹⁷⁸ Moran, McVittie (n. 173); F. Vanhonacker, W. Verbeke, E. Van Poucke, F.A.M. Tuytens 'Do citizens and farmers interpret the concept of farm animal welfare differently?' (2008) 116 Livestock Science 126

¹⁷⁹ AF Fraser, DM Broom '*Farm Animal Behaviour and Welfare*' (3rd ed. CABI Publishing 1997) 325-326,382; Appleby, Mench, Hughes (n. 196) 4.9; JA Mench, LJ Keeling 'The social behaviour of domestic birds' in LJ Keeling and HW Gonyou, (eds) *Social Behaviour of Farm Animals* (CABI 2009) 191; Sainsbury (n. 156) 20

disinfecting the entire building after the depopulation of either hybrid. These are all jobs which are very labour-intensive. Further, ventilation costs money to install, maintain and operate (the criteria are more onerous in regards to broilers). Feed is a considerable production cost in proportion to the other outlays. Indeed, while lighting is expensive to provide, the main cost advantage of the six-hour long period of darkness is not electricity saving, but feed saving, as by creating six hours of darkness, the birds will not be feeding during the 'night'.¹⁸⁰ Similarly, excessive feather-pecking not only can cause income loss, due to cannibalism and increased mortality rates, but it can also cause cost increase, as poor feather cover requires more energy for the bird to keep warm, which in turn consumes more –expensive– feed.¹⁸¹

For egg production, caged systems remain the most cost-effective, despite the ban on battery cages and the reduced profitability of the enriched cages, as larger space in the cages and more enrichment increase the cost.¹⁸²

There are different kinds of enriched cages, and it is likely that several different ones are used within the same Member State. Consequently, the competitiveness of the individual farmer compared to other farmers in the same Member State may be affected by which kind of enriched cages they select to use, even though they must comply with the same domestic legislation.

3.4.2.1 Stocking density

The higher the density, the lower the cost for each individual bird, particularly in regards to rearing broilers. The Broiler Directives contain specific Annexes, with additional requirements for high stocking densities. While Broiler Annex II lists an administratively onerous set of requirements for the increase of stocking density from thirty-three to thirty-nine kilograms per

¹⁸⁰ Appleby, Mench, Hughes (n. 196) 4.6

¹⁸¹ H. Wall, R. Tauson, K. Elwinger 'Pop hole passages and welfare in furnished cages for laying hens' (2004) 45(1) *British Poultry Science* 20,21; R. Tauson, S.A. Svensson 'Influence of plumage condition on the hen's feed requirement.' (1980) 10 *Swedish Journal of Agricultural Research* 35; A. Peguri, C. Coon 'Effect of feather coverage and temperature on layer performance.' (1993) 72 *Poultry Science* 1318

¹⁸² Wilkins (n.172) 24-25

square, the ones needed for a further increase of three kilograms per square metre are quite insignificant. The main hurdle which must be overcome for the highest broiler density to be permitted is that inspections by the authorities for the preceding two years cannot have detected any flaws in the management of the animals. As the permission to increase the stocking density to forty-two kilograms per metre square centres around the inspections by the local authorities¹⁸³ the main burden required for the highest stocking density is effectively placed on the authorities. If additional inspections are necessary, the cost involved is substantial.¹⁸⁴

For egg-layers, the stocking density is regulated by a minimum amount of space for each egg-layer and the recent ban of battery cages increased the minimum size. However, there is no upper limit controlling the number of birds housed in one cage, provided that each egg-layer has the minimum amount of space. This is problematic as large colonies of birds in cages can lead to outbreaks of pecking, particularly if there is insufficient enrichment and escape opportunities. Nevertheless, large colony cages remain unregulated in the Directive.

Apart from providing more space, the most effective way of improving the hybrids' welfare is to provide ample of suitable environmental enrichment, such as perches and litter, which allow the hybrids satisfy their ethological needs. However, environmental enrichment is expensive, as is a stocking density reduction. Just a small change in stocking density for either hybrid quickly amounts to large sums of money. The issue is not the individual cost of a small amount of more space per egg-layer; it is the sheer volume of egg-layers (thousands per holding) that escalates the cost. Similarly, the cost of one perch is trivial, but providing thousands of them is a significant expense. Therefore, it is the fact that every single little welfare improvement costs money, which adds up and reduces the margin of the farmers' net

¹⁸³ Depending on each Member State's legislation and the kind of inspection required, some farmers may have to pay its costs. However, it is possible that what farmers pay far from covers the whole cost of the inspection.

¹⁸⁴ Moran, McVittie (n. 173) 51

profit. Finally, the rising prices of feed and electricity, which are beyond the farmers' control, as well as consumers' price consciousness, are additional contributing factors that make the balancing act between welfare and economics treacherous.

3.4.3 Is the hybrids' welfare negated by Internal Market motives?

The Egg Directive's Recitals state that the protection of egg-layers is a matter of EU competence, and differences in the protection may impact on the smooth running of the Market. The Broiler Directive contains Recitals, which indicate envisaged problems affecting the Internal Market in a similar way.¹⁸⁵ However, the Broiler Directive goes further: the Recitals state that, to comply with the principle of proportionality, only minimum rules are laid down in the Directive and they do not go beyond 'what is necessary in order to achieve the objectives pursued'.¹⁸⁶ In other words, it emphasises that the Broiler Directive focuses solely on the envisaged aim, while leaving discretion to the Member States regarding the aim's achievement. Contrastingly, the Egg Directive does not refer to the principle of proportionality. A contributing reason for this difference is likely to be time, as nearly ten years separate the two Directives, and during this time the art of drafting Directives has been fine-tuned by the EU legislators.¹⁸⁷ Nonetheless, both Directives contain minimum provisions, permitting the Member States to go beyond and require a higher level of welfare within their territories.¹⁸⁸

The Egg Directive has a number of implementation 'deadlines', regarding slowly phasing-out battery cages, as well as complying with stocking density

¹⁸⁵ Egg Directive (n. 4) Recital (5),(6); Broiler Directive (n. 5) Recital (6)

¹⁸⁶ Broiler Directive (n. 5) Recital (7)

¹⁸⁷ S. Weatherill 'The Limits of Legislative Harmonization Ten Years after *Tobacco Advertising*: How the Court's Case Law has become a "Drafting Guide"' (2011) 12(3) German Law Journal 827

¹⁸⁸ Egg Directive (n. 4) Article 13(2); Broiler Directive (n. 5) Article 1(2)

limits and minimum housing requirements.¹⁸⁹ In regards to market stability, these dates are of high importance, as they herald the starting or ending point of different standards, which the producers must adhere to. If these deadlines are not met by all Member States, the result would alter the competitive conditions and consequently the running of the Market. This is because if Member States A, B, C and D ignore the schedule and continue to permit battery cages, while all the other Member States comply and introduce the ban, then farmers in A,B,C and D are at a competitive advantage, as they continue the cheaper production of eggs. Alternatively, if the dates are complied with, the stability of the market benefits as the increase in production costs can be pre-empted.

However, regarding implementation periods, the Egg Directive does not specify a 'no earlier than' date, which has an unfortunate effect on welfare. If Member States X, Y and Z decide to implement the Directive earlier and, for example, ban the battery cages in 2002, their egg producers would be at a competitive disadvantage against all egg producers in Member States who still allowed battery cages, because the final deadline in the Directive is not until 2012. For these Member States, swift implementation may affect egg producers by forcing them to reduce their production, or even go out of business when they face the competition from imported battery eggs. Meanwhile, the egg producers in Member States with late implementation are allowed to increase their production, thus housing even more egg-layers in battery cages (permitted until 2003),¹⁹⁰ as their business is booming. This leads to an overall reduced welfare standard for many egg-layers.

In regards to the Broiler Directive, there are similar issues with implementation deadlines, since Member States had three years to transpose the Directive. However, the length of time is not as extensive in the Broiler Directive as it is in the Egg Directive. Of the provisions in the

¹⁸⁹ Egg Directive (n. 4) Article 4(4),5(2),6

¹⁹⁰ *ibid* Article 5(2)

Broiler Directive, it is the provisions regarding stocking density which, due to inconsistency in implementation, have the most significant impact on the market. The Directive states that: 'Member States shall put in place appropriate procedures for determining the stocking density'.¹⁹¹ Derogating how to determine the stocking density to the Member States, consequently, enables twenty-eight different interpretations on what the actual stocking density is (will be) during inspections of broiler-rearing facilities. With a potential of twenty-eight different methods throughout the Union to determine the maximum stocking densities, inevitably will lead to inconsistencies in inspections and enforcing the maximum stocking density limit between the different Member States. Consequently, the Directive's aim of ensuring broiler welfare is therefore undermined by the derogation. Additionally, the inconsistencies in determining stocking densities have a detrimental impact on the stability and smooth running of the Internal Market. As broiler farmers operate on tight margins, the slightest difference in the amount of chickens permitted per square metre provides a cost advantage or disadvantage for the concerned farmers, depending on the manner competitors among the Member States determine stocking densities.

3.5 Chapter conclusion

The purpose of this chapter was twofold: first, it evaluated EU legislation, as to whether the Directives applicable to farm welfare go beyond mere physiological needs to consider ethological needs as well; second, it critiqued whether the economic interests of the Internal Market and its farmers –interlinked, yet, separate–, have negated effectiveness of the provisions intended to ensure the farm animals welfare.

Do the Directives go beyond the mere physiological needs by considering and indeed satisfying the ethological needs of the farm animals? The answer is complex: yes, the Directives do consider the ethological needs of the animals, but do not go far enough to ensure these needs are satisfied, despite the recognition of animals as sentient beings in the Article 13 TFEU.

¹⁹¹ Broiler Directive (n. 5) Article 1

It is also noteworthy that the Directives only refer to physiological and ethological welfare, thereby omitting emotional welfare and natural needs, which were identified in Chapter 1 as vital components of a rounded, holistic definition.

The problem commences with Directive 98/58 and its role as a framework Directive. Directive 98/58 lays down the general principles and essentially incorporates the Convention into the EU legislation, but leaves core concepts undefined. The lack of definitions invariably results in differences in interpretation of the concepts and their enforcement throughout the twenty-eight Member States. It is therefore concluded that providing definitions would increase the degree of coherence in the application of the Directive in the Member States. However, the fundamental problem with Directive 98/58 is its emphasis on physiological needs, at the expense of ethological needs, combined with its role as a framework Directive for the detailed species-specific Directives, as all species-specific provisions echo this imbalance.

Nevertheless, the ethological needs are not completely ignored, as Directive 98/58 enacts the Convention, which is notably influenced by the Five Freedoms. The Five Freedoms in turn include both physiological and ethological needs, which can be traced in Directive 98/58. The Five Freedoms' heritage becomes even more prominent in the species-specific Directives. However, while the inclusion of non-physical aspects of animal welfare is positive, especially since they are notoriously difficult to measure and assess, the focus remains upon the physical aspects.

While the species-specific Directives are more 'individualised' in their content, the above analysis of the detailed provisions showed that there are some common themes: an emphasis on physiological over ethological needs, general lack of space, lack of environmental enrichment, permitted physical intervention and an outdated scientific foundation, although Article 5 of Directive 98/58 requires reports on scientific developments every fifth year.

Concrete examples of welfare provisions which 'nod' towards ethological needs but do not go far enough to ensure them are found in all of the species-specific Directives. A recurring issue is the failure to specify requirements of environmental enrichment. The Pig Directive requires manipulable material to satisfy the foraging need, and recognises the specific needs for sows close to farrowing. However, the provisions do not go far enough, as to satisfy the pigs' ethological needs, plenty of manipulable materials must be available to *all pigs, at all times*. For caged egg-layers, the banning of battery cages improved their environment, as cages now are required to contain perches, nests and dust baths, thus providing *some* enrichment in the highly confined space. Non-caged husbandry systems have corresponding requirements and provide a greater possibility for the egg-layers to move about and perform the behaviour dictated by their ethological needs. Contrasted to egg-layers, broilers are treated differently in law: there are no provisions regarding environmental enrichment in their Directive. The different legal approaches to providing enrichment cannot be explained by biology, because despite their differences, the two hybrids are still essentially the same species, with the same ethological needs. Therefore, it is concluded that the complete disregard of broilers' ethological needs is a serious flaw of the Broiler Directive. In general, none of the Directives go far enough in their consideration of the animals' ethological needs, as none of the attempts to satisfy the ethological needs are adequate.

A core issue with satisfying ethological needs is the impact they have on the economic interests' of the farmers, as providing environmental enrichment costs money and affects the profit margins for the financially struggling farmers. Providing straw for one pig or a perch for a single egg-layer amounts to trivial costs, but the animals are reared in large numbers, consequently the costs accumulate. Additionally, apart from the enrichment cost per se, the manual labour required for its frequent replacement, and the potential building modifications needed, will amount to considerable costs. Still, if combined with lower stocking densities, the potential welfare benefits of environmental enrichment are clear. For instance, providing more space

for each pig and providing plenty of straw satisfies ethological needs, while improving the physiological welfare by reducing aggression between the pigs, also reducing the risk of injuries and the 'need' for tail-docking. However, these simple, yet effective, measures would contribute to a notable increase in production cost, undesirable to the average farmer.

Indeed, the concern for the farmers' financial issues is prominent in the species-specific Directives. The minimum space requirements for pigs and poultry are *truly minimum*, as it would be nearly impossible to house these animals on a smaller surface. The minimal amount of space available for sows in gestation crates and for egg-layers in enriched cages must be reviewed, as the mobility of these animals is severely restricted, rendering basic ethological needs impossible to perform. Similarly, the minimum space for broilers is insufficient for their needs, particularly since the space decreases as birds become bigger. A stocking density of thirty-three kilograms liveweight per square metre results in overcrowding, but fades in comparison to the maximum permitted: forty-two kilograms per square metre. In such severe overcrowding, it is impossible for broilers to move, causing considerable suffering, and often resulting in birds being trampled to death.

The physical intervention provisions in the species-specific Directives have arguably the most serious impact on animal welfare, and the problems are twofold. First, the Articles on physical interventions are based on outdated science. They only require pain-relief for piglets older than seven days and permit beak-trimming, without pain-relief, on commercial hybrids up to the age of ten days. The time limits are due to the theories which claim that the piglets' neuro-anatomy is yet to be completely developed and fully functioning, and that the hybrids' beaks are made of insensitive horn material. Studies have disproven these theories, and clearly show that both new-born piglets and newly-hatched chicks experience pain when subjected to these currently lawful interventions. However, despite being disproven, the Directives continue to rely on and be based upon old theories, to the

detriment of the animals' welfare, and to the benefit of the farmers' finances, as pain-relief costs money.

The second problem in regards to physical interventions is the condition the Directives set: physical interventions should be a last resort, when other preventative measures such as enrichment and adjusting the stocking density have failed. Nevertheless, there are problems with this: the short time limits and the impracticality of the preventative measures suggested. The limits of seven days for piglets and ten days for chicks leave precious little time for any measures to give effect, particularly since the undesirable behaviours like pecking and tail-biting often are not apparent until they are older than seven or ten days.

Further, the flexible measures, which require a change in stocking density and enrichment, are unrealistic in the world of intensive farming, due to their impracticalities and increased costs. While performing physical interventions par routine is prohibited, non-compliance to the routine ban is not followed by repercussions. The lack of repercussions, combined with the cost-effectiveness of physical interventions, compared to the increased costs of providing enriched and flexible housing to farm animals, makes physical intervention an attractive solution for the financially struggling farmers. The welfare impact of tail-docking, teeth-clipping, castration and beak-trimming can be debated, as it can be both beneficial and detrimental. However, this thesis argues that the systematic infliction of pain upon animals is unacceptable from a zoocentric viewpoint, particularly when it is purely for financial gain. Therefore, it is argued that pain-relief should be an EU-wide legal requirement, in order for any physical interventions to be permitted. While such a requirement inevitably would increase the costs of rearing the animals, if it is EU-wide and properly enforced, the EU market balance would not be disrupted.

Nonetheless, when changes are made, the phasing-in periods of the new laws are often unreasonably slow, to the detriment of the animals. The underlying reason for adopting long phasing in periods of improvements is

economic: the industry prefers a long phasing-in times to ensure that farmers have sufficient time to adapt, invest in new facilities and technology, and re-model or build new buildings. However, if there is a clear economic advantage to motivate the farmers, the changes are often realised in a timelier manner. This indicates that unless there is an economic motivation for implementing welfare upgrades, then these will inevitably have a negative impact upon the farmer's overall financial situation. Therefore, if there is not a clear economic advantage the welfare improvement is less likely to happen.

Unfortunately, while all of the Directives go beyond the physiological needs and consider ethological needs as well, the imbalance remains with a focus on the former. None of the Directives go far enough to ensure the satisfaction of ethological needs and welfare of the sentient beings, and emotional welfare is entirely omitted. The welfare of both hybrids would improve if there was a greater focus upon ethological needs and environmental enrichment, particularly for broilers, as their Directive currently requires no enrichment at all. Comparatively, the Pig Directive does consider the pigs' welfare beyond mere physiological provisions, but there is room for improvement, by ensuring availability of enrichment for all pigs at all times, and by requiring the use of anaesthetics to avoid suffering at all times.

The welfare of the animals subject to the Directives is not the primary –or indeed the only– priority of their provisions. A substantial amount of the provisions focuses upon economic interests: on micro-economic level, the individual farmer is considered, whose livelihood depends on balancing the books; and on macro-economic level, the proper functioning of the Internal Market is ensured, which is a primary concern. As such, within the Directives, it is the farm animals' status as 'goods' that is emphasised, over the obligation to pay full regard to their welfare as 'sentient beings'. This emphasis is evident by the imbalance between physiological and ethological needs, as the focus of physiological needs relates to those aspects which are essential to ensure that the animals' growth and production levels are maintained. Additionally, the lack of definitions of core concepts, particularly

in Directive 98/58, has a further detrimental impact on animal welfare due to the resulting ambiguity. Therefore, this chapter reaches the following conclusion: although ethological needs are considered, none of the EU Directives go far enough to ensure them, and the welfare of farm animals, pigs and hybrids, is negated to the benefit of the Internal Market's and the farmers' economic interests.

4 Sweden and England

4.1 Introduction

This chapter is an in-depth analysis and critique of how two Member States implemented the EU legislation on farm animal welfare. The first section will justify the selection of Sweden and England, placing a particular emphasis on the two Member States' regulatory differences. The ensuing analysis of the legislation is performed separately, divided by countries, commencing with Sweden. It should be noted that, as Sweden and England are Member States, their respective domestic legislations are *de facto* compliant with the EU minimum legislation discussed in the preceding chapter. However, where appropriate, the EU provisions will be revisited to illustrate by comparison the differences between the Member States' legislation and EU's minimum standard. After identifying those measures that go above and beyond the standard, in a similar fashion to the previous chapter, the analysis will explore whether the animals' ethological needs are considered alongside their physiological ones, and whether the welfare provisions' effectiveness is negated by economic factors.

It is important to analyse and identify the Member States' welfare requirement levels, as it is vital not to negate the achieved welfare standards they correspond to, when researching solutions for the domestic farmers' economic disadvantage due to the cost to implement them. The cost of rearing animals increases in line with the increase of animal welfare standard. If the increased –due to the higher standards–costs do not reflect in the price the farmers receive for the animals or animal produce, the economic consequences for the farmers can be severe and even result in financial ruin. Contrastingly, higher welfare can also be a lifeline for the farm,

as it allows for development of niche-products, with a higher standard of animal welfare, which can be sold at a premium.¹

However, the farmers' financial situation is also affected by their countries' EU membership, due to the Internal Market and the provisions that regulate it. The Internal Market's impact on the farmers' economy can be both positive and negative. The positive impact stems from Internal Market's size, as it is a huge market with hundreds of millions of consumers and potential buyers for their produce. Farmers that wish to develop niche-products –for instance, 'animal friendly' produce from animals reared with high welfare standards– are not limited by their domestic markets and can make their business viable, by exporting and reaching consumers, who have similar priorities –in this case, animal welfare– and are ready to pay the 'right' price the higher production value. Nonetheless, the Internal Market also exposes farmers to competition. This can have a disproportionate impact on the farmers in stricter Member States, as the minimum harmonisation Directives allow stricter domestic requirements. Stricter domestic requirements and higher welfare standards raise the production costs for local farmers, who lose their competitive edge against farmers from Member States with lower or minimum standards.

Sweden's and England's subchapters have different structures, due to the differences in their legal systems. Sweden's subchapter commences with the species-specific legislation: first, the pigs, followed by the commercial hybrids. The one on England begins by critiquing the legislation applicable to farm animals in general, before proceeding to the species-specific provisions. Each legislative analysis is followed by a discussion on the impact of the specific welfare standard on the domestic farmers' competitive strength against imports from other EU Member States. The subsection that

¹ J Moynagh, "EU Regulation And Consumer Demand For Animal Welfare' (2000) 3(2&3) *The Journal of Agrobiotechnology Management & Economics* 107; G. Nocella, L. Hubbard, R. Scarpa 'Farm Animal Welfare, Consumer Willingness to Pay, and Trust: Results of a Cross-National Survey' (2010) 32(2) *Applied Economic Perspectives and Policy* 275

follows explores whether there are any indicators of regulatory competition² occurring, whether the legislation in either or both Member States is moving in an upward or downward trajectory. In order to find evidence for this, it is necessary to consult information from older legislation, as merely analysing the current legal status quo does not provide any evidence of regulatory movement. Therefore, older provisions need to be identified and compared with current corresponding ones, where available, to observe any regulatory movement. The findings of each country are then summarised and evaluated in each subchapter's conclusion. After England's subchapter, there is an overall comparative conclusion which highlights and contrasts the findings of the respective countries.

4.2 Selection of Member States

As there are twenty-eight Member States, a selection must be made to enable a comparison of appropriate depth and rigour.³ This section justifies the selection of Sweden and England for the analysis of their domestic legislations and the comparative discussion on their impact on local farmers.

The predominant reason for selecting Sweden and England is the extent to which they are perceived to exceed the minimum welfare standard requested by EU legislation. As all Member States are required to comply with the requirements outlined in the minimum harmonisation legislation, it is futile to examine the legislation of a Member State which only adheres to minimum standards, as no Member States can go below this level. Consequently, it is necessary to identify Member States which use their derogatory power to exceed it. Sweden often promotes itself to have the best animal welfare legislation in the world,⁴ and England is the country of

² Regulatory competition in this context refers to any Member State competing against all others, not Sweden and England competing against each other.

³ K Zweigert and H Kötz, *An Introduction to Comparative Law* (Tony Weir tr, 3rd edn, OUP 1998, Reprint 2011) 41

⁴ Lantbrukarnas Riksförbund 'Lång tradition av djuromsorg'
<<http://www.lrf.se/Medlem/LRFs-arbete-for-hallbar-tillvaxt1/Ny-svensk-mat-med->

origin of the Five Freedoms,⁵ which have been pivotal to the development and the protection of animal welfare within the EU and beyond.⁶

Further, from a comparative theory perspective, it is important to compare domestic legal systems from Member States of different 'groups'.⁷ While there is little consensus among scholars as what to call these groups, or which variables to include in the sorting criteria,⁸ groupings are nonetheless invaluable to a comparative project, as they reduce the risk of selecting two systems too similar. Regardless of which sorting criteria one adopts, Sweden and England end up in separate European subgroups. England is always in the Common Law group, whilst Sweden is grouped with the other Scandinavian legal systems, or, more generally, within the Civil Law group or tradition. When selecting jurisdictions for comparative studies, it is appropriate to focus on the 'parent system', whenever possible. England is the natural choice in regards to the Common Law system. While the 'Scandinavian' group does not have a similar 'parent system', Sweden is one of the strongest and most influential systems in it.⁹

Whether comparative law should include a *praesumptio similitudinis* or a *praesumptio disimilitudinis* is a contested issue. A comparative project with an underlying presumption of similarities risks focusing on finding similarities from which a 'better law' can be identified. Since the research focus of this thesis is not aiming to identify a 'better law', an underlying presumption of similarities is not an appropriate epistemological foundation. Rather, an approach with an underlying presumption of differences, which measures

[livsmedelsstrategin-/Argument-for-svensk-mat/Djur-som-har-det-bra/Lang-tradition-av-djuromsorg/](#)> accessed 25 June 2014

⁵ See at 1.3

⁶ A Woods 'From cruelty to welfare: The emergence of farm animal welfare in Britain, 1964-71' (2011) 36(1) *Endeavour* 14, 19

⁷ R. Michaels 'The Functional Method of Comparative Law' (2005) Duke Law School Faculty Scholarship Series 3; G Samuel, *An Introduction to Comparative Law Theory and Method* (Hart 2014) 50; HP Glenn, 'Comparative Legal Families and comparative Legal Traditions' in M Reimann and R Zimmermann (eds.) *The Oxford Handbook of Comparative Law* (OUP 2006)

⁸ Zweigert says 'legal families', Nelken says 'legal cultures' and not families, Smits says 'legal groups'.

⁹ Zweigert, Kötz (n. 3) IV

the differences between the two systems, is more appropriate. Indeed, the positioning of Sweden and England in different legal groupings supports differences rather than similarities, not only regarding their selection, but also in the approach to answering the research question.

4.2.1 *Praesumptio disimilitudinis*

There are multiple differences between Sweden and England, the most striking being the ideology behind each legal system, with fundamentally different approaches to legislative process, legal culture and legal enforcement.¹⁰ One example is the model of public-private interactions in regards to the implementation and transposition of EU legislation into the Member States' legal systems.¹¹ Sweden is classed as a corporatist system due to the tradition of influential trade unions.¹² Contrastingly, England is arguably¹³ classed as a statist¹⁴ or a pluralist¹⁵ system (depending on the weight one gives to the influence of lobbyist organisations). Indeed, these

¹⁰ J.H. Merryman 'Comparative Law Scholarship' (1997-1998) 21 *Hastings International and Comparative Law Review* 771,775-777

¹¹ G. Falkner 'Policy networks in a multi-level system: Convergence towards moderate diversity?' (2000) 23(4) *West European Politics* 94,95

¹² Corporatist systems are those, where a few, privileged interest groups –usually associations of labour and industry—are incorporated in public decision-making as decisive co-actors. *ibid* 95; G Falkner, O Treib, M Hartlapp and S Leiber 'Beyond policy change: convergence of national public-private relations?' in G Falkner, O Treib, M Hartlapp and S Leiber *'Complying with Europe; EU Harmonisation and Soft Law in the Member States'* (Cambridge University Press 2005) 229

¹³ Falkner (n. 11) 95; A Cawson, 'Introduction: Varieties of Corporatism: The Importance of Meso-Level Interest Intermediation' in A Cawson (Ed.), *Organized Interests and the state. Studies in Meso-Corporatism*, (Sage 1989) 8; V. Schmidt, 'Loosening the Ties that Bind; The Impact of European Integration on French Government and its Relationship to Business' (1996) 34 *Journal of Common Market Studies* 224; V. Schmidt, 'European Integration and Democracy: The Differences among Member States' (1997) 4 *Journal for European Public Policy* 128; B Kohler-Koch, 'The Evolution and Transformation of European Governance' in B Kohler-Koch, R Eising (eds.) *The Transformation of Governance in the European Union* (Routledge 1999) 26; S.S. Andersen, K.A. Eliassen, 'European Community Lobbying' (1992) 20 *European Journal of Political Research* 173; Falkner, Treib, Hartlapp, Leiber (n. 12) 234 MG Cowles, 'The Transatlantic Business Dialogue and Domestic Business-Government Relations' in MG Cowles, J Caporaso and T Risse (eds.), *Transforming Europe: Europeanization and Domestic Change* (Cornell University Press 2001) 165

¹⁴ 'Statist' refers to a model in which private interests have no significant role in public decision-making. Falkner (n. 11) 95

¹⁵ Pluralist politics are the ones with many interest groups that lobby individually to express their views in an effort to influence the politicians who actually take the decisions. *ibid* 95; Cowles (n. 13) 165

fundamental differences in the legal systems and the role of the state in each jurisdiction need to be considered. A function regulated by official 'state law' in one country, may be regulated in a different manner in the other,¹⁶ therefore one needs to be mindful of such differences within the comparison. It should also be noted that the comparison within this thesis is limited to the law and legal rules pertaining to farm animal welfare and not the entire legal systems.¹⁷ While both countries value farm animal welfare,¹⁸ the attitudes and perceptions differ fundamentally, with the Swedish public prioritising animal welfare aspects, whilst the public in England is arguably more driven by cost-efficiency.

It is also noteworthy that the EU legislation scope allows for different approaches on how to ensure the welfare of the animals, namely a proactive and/or a reactive approach. Examples of a reactive approach to farm animal welfare are the practices of beak-trimming and tail-docking, which aim to minimise the consequences of aggressive pecking and tail-biting, instead of providing an outlet for the animals' ethological needs to be satisfied. The proactive approach, however, entails investing in enriched environments for the animals and working in a preventative manner, by taking every possibility to avoid tail-biting from occurring. Sweden's approach can be classified as a clear example of the proactive approach,¹⁹ while England's is a mixture.

4.2.2 *Praesumptio similitudinis*

Apart from differences, a fruitful comparison also pre-supposes a certain degree of similarity.²⁰ While both Sweden and England are EU Member States, they joined the EU at different stages of the EU project. Furthermore,

¹⁶ M Adams, J Bomhoff 'Comparing law, practice and theory' in M Adams and J Bomhoff (eds), *Practice and Theory in Comparative Law* (Cambridge University Press 2012) 8

¹⁷ Merryman (n. 10) 773-774

¹⁸ Nocella, Hubbard, Scarpa (n. 1) 275

¹⁹ Lantbrukarnas Riksförbund 'Mat på lika villkor' (Stockholm 2013) <<http://www.lrf.se/Medlem/Politik--Paverkan/Aktuella-fragor/Nyheter/Mat-pa-lika-villkor/>> accessed 7 August 2014, 8-9

²⁰ D Nelken 'Comparative Law and Comparative Studies' in E Örucü and D Nelken (eds.) *Comparative Law a handbook* (Hart 2007) 27; Samuel (n. 7) 53-57

both nations are considered to belong to the 'western' group of Member States, and both are affluent societies with a similar tradition of pursuing non-economic values through public policies, for instance, high levels of farm animal welfare. Farm animal welfare is deemed as important by many sectors within both societies, ranging from farmers and food manufacturers to politicians and the consumers. Additionally, in both Member States, farmers are currently facing financial hardship.

It would be a mistake for this comparison to dismiss outright either the *praesumptio similitudinis* due to the Member States' differences, or the *praesumptio disimilitudinis* due to their similarities in the pursuit of non-economic values. Consequently, this thesis will not pursue either presumption single-mindedly, but will take into account both differences and similarities.

4.2.3 Regulatory approaches - Sweden

Initially, it must be emphasised that the Swedish farm animal welfare legislation is a minimum legislation, which allows farmers to exceed it and improve the welfare conditions for their animals.²¹ The Swedish legislation consists of several levels of legal documents: the Animal Welfare Legislation (1988:534),²² the Animal Welfare Regulation (1988:539),²³ and the highly detailed, legally binding Administrative Specifications (L100 and L41).²⁴ The Administrative Specifications are complimented by non-legally binding General Advice, contained in the Administrative Specifications themselves.²⁵

²¹ Jordbruksverket 'Grisar'
<<http://www.jordbruksverket.se/amnesomraden/djur/olikaslagsdjur/grisar.4.1cb85c4511eca55276c80001285.html>> accessed 26 June 2014

²² Djurskyddslagen (1988:534)

²³ Djurskyddsförordningen (1988:539)

²⁴ SJVFS 2010:15, Saknr L100, SJVFS 2013:41, Saknr D 8, Saknr L41 etc.

²⁵ For example: SJVFS 2010:15, Saknr L100, kap 3 18§, allmänna råd till 4§ djurskyddslagen

The current Swedish legislation was introduced in 1988 and it was revolutionary for its time, as it firmly recognised the animals' ethological needs. The emphasis on ethological needs of the animals remained an integral part of the animal welfare legislation in Sweden ever since.²⁶ It is noteworthy that the overall level of detail in the Swedish legislation is higher than the EU legislation and dictates the enforcement of the provisions more precisely. Additionally, due to the high level of detail within the legislation, there is no 'general provisions' for all farm animals, rather everything is detailed at a species-specific level. Consequently, Sweden's subchapter will immediately begin with an analysis of the provisions applying to pigs, as there are no general provisions.

4.2.4 Regulatory approaches - England

Before proceeding with its details, it is important to note that English legislation also has minimum nature, as it allows farmers to apply a higher standard of welfare to their animals. Indeed, many farmers do so, as they are part of private voluntary labelling schemes (such as 'the Red Tractor', RSPCA Assured and the Lion Quality).²⁷ Farmers can adopt these schemes and label their produce accordingly, provided that they comply with the specific requirements each scheme protects.

The English law concerning animal welfare consists of a number of documents: the Animal Welfare Act 2006 (AWA2006), which is the statutory instrument, and a number of Regulations, with more detailed provisions. The Regulations are complimented by highly detailed recommendations in the Codes of Practice (CoPs).²⁸ Articles in the AWA2006 are general in their scope and application, with a focus on non-farm animals. Nonetheless,

²⁶ P Jensen, *'Hur mår maten? Djurhållning och djurskydd i Sverige'* (Natur & Kultur 2012) 69; Djurskyddslagen (1988:534) 4§; H Loxbo, S Ekman 'Byggkostnader för lammkött – och nötköttsprouducenter – en jämförelse med Irland och Tyskland' (Jordbruksverket Rapport 13 2014) 3.1.2.

²⁷ Chapter 5

²⁸ The legislation says 'Code of Practice' whilst DEFRA and the actual documents say 'Code of Recommendations'. Due to clarity, Code of Practice will be used within this thesis. However, the different names should be noted and that it is the same documents but with two names.

despite its focus, the AWA2006 *does* apply to farm animals and contains references to the importance of adhering to the Five Freedoms.²⁹ The legislation which specifically applies to farm animals and their welfare, is contained in Regulation No. 2078.³⁰

The CoPs are issued by the Department of Environment, Food, and Rural Affairs (DEFRA) under the Agricultural (Miscellaneous Provisions) Act 1968, which states that the CoPs are not statutory obligations, but may be used as evidence for prosecution, where the defendant has failed to comply with their content.³¹ Additionally, there is a requirement that any person responsible for the animals and their employees must not attend to the animals, unless they are acquainted and familiar with and have access to the content of the relevant CoPs.³² DEFRA's aim is to encourage the farmers in England, through the existence of the numerous CoPs,³³ to adopt high animal husbandry standards,³⁴ which go above and beyond the EU minimum, but without the legal obligation to do so.

4.3 Sweden

The Swedish public sphere is full of claims that Sweden has the best farm animal welfare legislation in the world, both in regards to its comprehensiveness and the level the legislation is established at.³⁵

²⁹ Animal Welfare Act 2006 (AWA 2006) Article 2 (a)-(c), Article 9, Article 62(5)

³⁰ The Welfare of Farmed Animals (England) Regulations 2007 No. 2078

³¹ Agricultural (Miscellaneous Provisions) Act 1968 Chapter 34, Eliz 2 Part 1 Welfare of Livestock Article 3

³² Regulations No. 2078 (n. 30) Article 6

³³ There are a large number of Codes of Practise, but for this thesis, the relevant ones are; laying hens, meat chickens and breeding chickens, and pigs. All of which are available at DEFRA's webpage, the date on the pdf documents are 2002 and 2003, however DEFRA *insist* that they are continuously updated, and the dates on the webpage would corroborate this. Nonetheless, it is contradictory.

³⁴ DEFRA 'Pigs code of recommendation for the welfare of livestock' (DEFRA Publications 2003) (Pig CoP); DEFRA 'Laying hens code of recommendation for the welfare of livestock' (DEFRA Publications 2002) (Egg CoP); DEFRA 'Meat chickens and breeding chickens code of recommendation for the welfare of livestock' (DEFRA Publications 2002) (Broiler CoP)

³⁵ Mille C, Frejadotter Diesen E 'Världens bästa djurskydd – Myten om Sverige granskas'

Particular emphasis is commonly placed upon the Swedish legislation compared to the EU legislation, with claims originating from organisations such as the National Farmers' Association (the LRF).³⁶ Both the LRF and the Swedish Department of Agriculture acknowledge a long history of ethical and cultural values in regards to animals' rights and welfare.³⁷ The LRF and the dairy sector emphasise the legal requirement for dairy cows to graze outdoors in the summer months,³⁸ and use it to promote Swedish dairy.³⁹ Releasing cows to graze during spring, has become a major event over the last decade, drawing large crowds of spectators.⁴⁰ Aided by advert campaigns, Swedish dairy products have been associated with the image of the grazing cows.⁴¹ During the EU election of 2014, Swedish politicians used the un-docked curly tail on the pigs (as an indication of 'happy pigs')⁴² to rally voters, and a furore about imported pork (mainly Danish) from 'unhappy'

(*Djurens Rätt* 2009)

³⁶ Lantbrukarnas Riksförbund 'Svenskt djurskydd är unikt' <<http://www.lrf.se/Mat/Fordelar-med-svensk-mat/Unikt-djurskydd/>> accessed on 27 June 2014; Lantbrukarnas Riksförbund 'Grishållning i världsklass' <<http://www.lrf.se/Medlem/LRFs-arbete-for-hallbar-tillvaxt1/Ny-svensk-mat-med-livsmedelsstrategin-/Argument-for-svensk-mat/Djur-som-har-det-bra/Grishallning-i-varldsklass/>> accessed 27 June 2014

³⁷ Jordbruksverket 'Djuren ska ha det bra' <<http://www.jordbruksverket.se/amnesomraden/konsument/djur/djurenskahadetbra.4.5125de613acf69a0f680001227.html>> accessed on 25 June 2014; Lantbrukarnas Riksförbund 'Lång tradition av djuromsorg' <<http://www.lrf.se/Medlem/LRFs-arbete-for-hallbar-tillvaxt1/Ny-svensk-mat-med-livsmedelsstrategin-/Argument-for-svensk-mat/Djur-som-har-det-bra/Lang-tradition-av-djuromsorg/>> accessed 25 June 2014

³⁸ Djurskyddslagen (1988:534) 6§; Djurskyddsförordningen (19988:539) 3§, 10§, 11§, 13a§; SJVFS 2010:15 Saknr L100 Kap 2 25§-30§

³⁹ Lantbrukarnas Riksförbund 'Svenska kor får beta' <<http://www.lrf.se/Medlem/LRFs-arbete-for-hallbar-tillvaxt1/Ny-svensk-mat-med-livsmedelsstrategin-/Argument-for-svensk-mat/Djur-som-har-det-bra/Kor-som-ar-garanterade-sommarbete/>> accessed on 13 August 2014; Lantbrukarnas Riksförbund (n. 19) 10; Arla '10 år med Arlas kosläpp – intresset är större än någonsin' (29 April 2014) <<http://nyheter.arla.se/2014/04/29/10-ar-med-arlas-koslapp-intresset-ar-storre-an-nagonsin/>> accessed 13 August 2014

⁴⁰ Arla *ibid*

⁴¹ The butter company Bregott's advertising campaign shows the 'Bregott factory', in which cows are shown in idyllic outdoor surroundings with different story lines. This article refers to one particular advertisement, which showed a calf suckling a cow and was reported to the Consumer Ombudsman for false marketing, as calves are taken from their mothers a day after being born. Erik Wisterberg 'Bregott försvarar sin KO-anmälda reklam' *DAGENS MEDIA* (Stockholm, 8 March 2013) <<http://www.dagensmedia.se/nyheter/kampanjer/article3653319.ece>> accessed 13 August 2014

⁴² J. Lassen, P. Sandøe, B. Forkman 'Happy pigs are dirty! – conflicting perspectives on animal welfare' (2006) 103 *Livestock Science* 221,226-228

pigs –compared to Swedish pork from ‘happy’ pigs– raged in the media, ultimately making it a key election issue.⁴³

The publicised images of cows grazing in the fields, happy pigs with curly tails rolling around in the mud, and free-range egg-laying hens pecking on the ground, all support the claim that animal welfare legislation in Sweden is the best in the world. However, it is the food corporations and other stakeholders who portray this image and aim to sell Swedish farm animal produce. Therefore, its authenticity must be questioned. The Swedish Animal Rights organisation (Djurens Rätt) questions the images’ accuracy in a thorough report, comparing and grading the domestic legislation with other countries both EU and non-EU countries.⁴⁴ In its report, Sweden is placed fourth of twenty-two compared countries. Since 2009, when the report was written, there have been changes in the legislation: bestiality was outlawed (2014)⁴⁵ as well as piglet castration without anaesthetics (January 2016). Although Djurens Rätt is an organisation advocating the animal rights, their findings on animal welfare standard remain valid, and they do have a point: Swedish legislation provides a high level of farm animal welfare, but it is not beyond criticism, as will become evident in the analysis of the species-specific legislation which follows.

⁴³ Mats J Larsson ‘Grisar präglade EU-debatt’ Dagens Nyheter (Stockholm, 23 May 2014) <<http://www.dn.se/valet-2014/grisar-praglade-eu-debatt/>> accessed 13 August 2014; Ebba Busch Thor ‘EU måst ta djurrätten på ett större allvar’ *Expressen* (Stockholm, 21 April 2014) <<http://www.expressen.se/debatt/eu-maste-ta-djurratten-pa-ett-storre-allvar/>> accessed on 13 August 2014; K Kielos ‘Det är vi som har makten’ *Aftonbladet* 2014-05-24 available at <<http://www.aftonbladet.se/ledare/ledarkronika/katrinekielos/article18948511.ab>> accessed 13 August 2014 Helena Joansson ‘Dags för handling’ *Corren* (Linköping, 27 June 2014) <<http://www.corren.se/asikter/debatt/dags-for-handling-7099213.aspx>> accessed 13 August 2014; Centerpartiet ‘Ta ställning för grisen’ (2014) <<http://www.centerpartiet.se/radda-grisknorren/>> accessed 13 August 2014

⁴⁴ Mille, Frejadotter Diesen (n. 35)

⁴⁵ Lag (2014:112) om ändring i djurskyddslagen (1988:534)

4.3.1 Pigs

In the Swedish legislation on pigs, there are a few areas where the differences between the Swedish and the EU provisions are most notable: housing requirements, space requirements, and physical interventions.

4.3.1.1 Housing requirements

Unlike the EU legislation, Swedish legislation requires that pigs must be 'housed loosely',⁴⁶ either in pairs or groups.⁴⁷ The buildings that house pigs must be designed so that the pigs can behave naturally⁴⁸ and move unhindered.⁴⁹ These requirements are in stark contrast with EU minimum, which still permits restriction of movements for sows during a considerable part of their lives, despite the ban on sow stalls.⁵⁰ Only temporary restrictions to a pig's mobility are permitted in Sweden,⁵¹ provided there is aggressive or abnormal behaviour that obviously endangers the piglets, other pigs, or the farmer.⁵² These stricter requirements as to when restrictions are permitted give pigs a greater freedom of movement, compared to the pigs in a country which only adheres to EU's minimum standards. Freedom of movement satisfies the pigs' physiological and ethological needs, as pigs are highly active.⁵³

Although moving around is beneficial to their welfare, the quality and design of the space the pigs are housed in, will have an impact on their welfare degree. Some of the Swedish requirements that improve the quality of the space are technical details, related to the design and construction of the pig houses: a requirement of windows admitting daylight (<20,000 lux on a

⁴⁶ Djurskyddsförordningen (1988:539) 14§

⁴⁷ SJVFS 2010:15, Saknr L100, kap 3 1§

⁴⁸ Djurskyddslagen (1988:534) 4§

⁴⁹ Djurskyddsförordningen (1988:539) 1b§

⁵⁰ Chapter 3

⁵¹ Djurskyddsförordningen (1988:539) 15§

⁵² SJVFS 2010:15, Saknr L100, kap 3 2§,3§

⁵³ Chapter 1

sunny day),⁵⁴ which is in stark contrast with the EU minimum of eight hours of 40 lux a day,⁵⁵ and strict air-quality rules. Swedish legislation requires ventilation systems and imposes strict limits for ammonia, carbon dioxide, hydrogen sulphide and organic dust, as well as limits for the moisture content in the air,⁵⁶ all of which are absent in the Pig Directive. Additionally, the working environment for the people who handle the pigs increases considerably with a better air quality. Apart from the air quality, the temperature must be suitable for pigs, with a shower system to cool them in the summer months, and heat them during winter.⁵⁷ As pigs are unable to regulate their body temperature, and lack sweat glands,⁵⁸ these requirements do benefit their welfare, particularly as outdoor temperature in Sweden varies significantly throughout the year. All these technical requirements not only do they increase base costs, compared to buildings constructed in Member States with requirements close or equal to the EU minimum, but also incur additional, running and maintenance costs, thus reducing the farmers' profit margin per pig.

The requirements regarding feeding in Sweden also exceed the EU minimum standard. If pigs in Sweden are fed in stalls, each stall must have protection at the back, thereby hindering other pigs from injuring the feeding pig. There are details specifying the minimum amount of accessible space for each pig during feeding, as well as a maximum number of pigs to each water source.⁵⁹ Contrastingly, the Pig Directive allows simultaneous feeding, only requiring that all pigs have access to fresh water. While Swedish requirements may *prima facie* appear as insignificant details, they are in fact essential to ensure that aggressive behaviour due to food competition among pigs is reduced.

⁵⁴ Djurskyddsförordning (1988: 539) 2§, SJVFS 2010:15, Saknr L100, kap 1 16§, SJVFS 2010:15, Saknr L100, kap 1 24§, 25§

⁵⁵ Equivalent to sunset/sunrise

⁵⁶ SJVFS 2010:15, Saknr L100, kap 1 21§

⁵⁷ SJVFS 2010:15, Saknr L100, kap 3 Allmänna råd till 1 Kap. 19§

⁵⁸ M.B.M. Bracke 'Review of wallowing in pigs: Description of the behaviour and its motivational basis' (2011) 132 Applied Animal Behaviour Science 1

⁵⁹ SJVFS 2010:15, Saknr L100, kap 3 22§ Tabell 10, 24§ Tabell 12, kap 3 24§ Tabell 12

Breeding pigs in Sweden should be housed outdoors whenever possible, provided that the ground and terrain are suitable for pigs. They must have access to a mud bath and protection against the elements (eg a shed with a clean and dry laying area).⁶⁰ However, for pigs to be classified as 'outdoor reared', which would command a premium retail price for pork, they need to be outside during the winter too. Shelter against the elements in the winter requires a far more sturdy structure than summer shelter, and is therefore more expensive.

While all the provisions covered above notably increase the pigs' welfare standard, it is the requirement for environmental enrichment that greatly impacts their welfare. As pigs have a strong and compelling need to forage and root, it is essential to be provided with manipulable material and environmental enrichment. There is a stark difference between the relevant EU provisions and Swedish legislation, as the Pig Directive only requires that general 'manipulable material' is available for pigs, not necessarily straw. The Swedish legislation takes a fundamentally different approach to environmental enrichment, by requiring that dry and clean straw must be provided,⁶¹ and emphasising in the animal welfare regulation the extra importance of straw for piglets, as a preventative measure against aggressive behaviour against each other.

A further difference, closely linked to straw requirements, is that the EU legislation allows for fully-slatted flooring for the pigs, while the Swedish one requires that at least two-thirds of the total floor space must be solid flooring.⁶² The requirement for solid flooring ensures that all pigs have a dry and clean resting area, which is impossible on a fully-slatted floor. Indeed, a

⁶⁰ Djurskyddsförordningen (1988: 539) 12 §, SJVFS 2010:15, Saknr L100, kap 3 18§, allmänna råd till 4§ djurskyddslagen; Jordbruksverket 'Utevistelse för dina grisar' <http://www.jordbruksverket.se/amnesomraden/djur/olikaslagsdjur/grisar/utevistelse.4.6bea_b0f111fb74e78a780001394.html>accessed 27 June 2014

⁶¹ SJVFS 2010:15, Saknr L100, kap 1 31§

⁶² Lantbrukarnas Riksförbund (n. 19) 12-13

fully-slatted floor also means that straw is not ideal as manipulable material, as it will disappear through the gaps, thus leaving the pigs in Member States adhering only to minimum standards without straw and potentially in a wholly barren environment. While these detailed requirements may appear as over-regulation and unnecessary, the combined effects of these small, but important details ensure an overall improved quality of the housing for the pigs, which leads to increased welfare.

4.3.1.2 Space requirements

Compared to the minimum space requirements in the Pig Directive, the Swedish legislation requires significantly larger space for sows and weaners, while the requirements for boars and gilts are in line with the EU minimum.⁶³ For boars and gilts, welfare benefits come from the *quality* of their space, rather than the *size* of the space. Nonetheless, where the size requirements differ, the difference is substantial, particularly in regards to sows.

The minimum EU requirements permit close confinement for sows and piglets, despite the ban of sow stalls. Contrastingly, in Sweden, where all pigs are housed loosely, the sow and her piglets must have a minimum space of six metre square if housed in a laying box, of which at least four metre square must be bedded with straw.⁶⁴ Alternatively, the sow and piglets can be housed in a deep straw box of at least seven metre square.⁶⁵ These size requirements are in line with the study discussed in Chapter 1, which shows that sows need a space of at least five metre square and plenty of nesting material to tend to their piglets and reduce the numbers of crushed piglets. As such, the deep straw box is particularly beneficial, as it is two square metres bigger than the minimum space the study found enough for welfare improvement, and contains plenty of nesting material. Additionally, as piglets are weaned nearly a fortnight later in Sweden (on average at

⁶³ SJVFS 2010:15, Saknr L100, kap 3 19§ Tabell 7, 20§ Tabell 8

⁶⁴ Further, there are detailed requirements on how such a laying box is to be shaped and which flooring must be used; SJVFS 2010:15, Saknr L100, kap 3 19§ Tabell 7

⁶⁵ SJVFS 2010:15, Saknr L100, kap 3 19§ Tabell 7

thirty-three days old compared to the twenty-one days the EU law permits),⁶⁶ they grow bigger before weaning and therefore require more space.

In regards to weaners, the minimum space requirements is calculated by the pigs' weight in both Swedish and EU legislation. For example, a pig which weighs thirty-five kilograms should have at least 0.44m² of total space available to it in a *straw-bedded laying box*, a space allocation which is 10% bigger than the corresponding space requirement in the Pig Directive for a pig of the same weight.⁶⁷ However, if the pig is housed in a *deep straw box*, then the minimum space is 0.616m², ie 35% bigger than the EU minimum.⁶⁸ The difference in space for a pig at that weight is significant, but it becomes more pronounced the larger the pig grows. When the pig weighs ninety-three kilograms, the difference in space allowance has increased to 26% in the straw-bedded laying box and to 50% in a deep straw box compared to the EU minimum.⁶⁹ Thus, if a pig is kept in a deep straw box in Sweden, the minimum space it is allowed to have at ninety-three kilograms, is substantially larger than a pig of the same weight in a Member State which adheres to the EU minimum.

In regards to the size of pig holdings, there is an upper limit of the number of pigs in Sweden: 200 pigs in each section of the building, or 400 per section if the pigs are reared in batches from different holdings.⁷⁰ Contrastingly, in EU legislation, there is no limit to the amount of pigs held in one section. This may appear to be a minor detail. However, the lack of an upper limit in the Pig Directive means that thousands of pigs can be kept together in one vast building, making it more difficult to be inspected for signs of poor health and provided with manipulable materials. Further, the larger amount of animals kept together, the higher is the risk for the spreading of diseases, which

⁶⁶ Lantbrukarnas Riksförbund (n. 19) 12

⁶⁷ SJVFS 2010:15, Saknr L100, kap 3 21§ Tabell 9

⁶⁸ *ibid*

⁶⁹ *ibid*

⁷⁰ SJVFS 2010:15, Saknr L100, kap 3 17§

compromise the welfare of the animals and may result in high mortality rates. Although a limit on the number of pigs per holding is beneficial from a welfare point of view, from an economic perspective, more buildings must be constructed in order to rear a larger amount of pigs, which considerably increases the costs.

4.3.1.3 Physical intervention

In Sweden, for the promotion of high welfare standards for pigs, the image of the curly tail has been widely used, as mentioned above, frequently alongside statements that it is illegal to dock the tails of pigs in Sweden.⁷¹ This statement is often contrasted to other Member States, where tail-docking is commonly performed, despite the ban on routine tail-docking by the Pig Directive.⁷² Despite the impression created in the public sphere, scrutiny of the relevant Administrative Specification (L41) reveals that tail-docking is not explicitly forbidden. Rather, the legislation lists the physically invasive procedures which are permitted, thereby prohibiting all other invasive procedures. Consequently, tail-docking is only *inexplicitly* forbidden. Similarly, nose-ringing is *inexplicitly* prohibited.

By law, all operative invasive procedures must be performed by a veterinarian, and only due to medical necessity.⁷³ The pigs' hooves are allowed to be trimmed, which causes them distress, but is necessary for their welfare, as their limited locomotion means that the hooves are not worn down naturally by movement. It is also permitted to mark the pigs for identification purposes,⁷⁴ which is vital for disease control, as it enables tracking of pigs when moved between farms, in the event of a disease outbreak. Identification marking on pigs is also important in regards to food security: it ensures that pigs can be tracked, both to the farm and to individual pigs, and can be matched with their own journals containing

⁷¹ Lantbrukarnas Riksförbund 'Glada grisar ger gott kött' <<http://www.lrf.se/Garden/Djur/Gris/>> accessed 29 June 2014

⁷² B Dahlén, H Kättström 'Sveriges första femton år som medlem i EU Djurskydd' (Jordbruksverket Rapport 28 2012) 2.2.

⁷³ SJVFS 2013:41, Saknr D 8, Saknr L41 kap 5 2§

⁷⁴ SJVFS 2013:41, Saknr D 8, Saknr L41 kap 4 18§, kap 5 5§

information about any medication administered to them – both necessary if there is concern for disease.

Further, while teeth-clipping is banned in Sweden,⁷⁵ the grinding of teeth is permitted,⁷⁶ although not par routine.⁷⁷ The text in both the Swedish and the English language of the Pig Directive explicitly states that teeth clipping/grinding is not permitted par routine, but only when *there is evidence of injuries* on the sow's teat or on other pigs' ears or tails. However, the corresponding text in L41 says that 'the grinding of teeth is not allowed to happen par routine, but only when *by experience has been proven* that damages have been occurring on other animals and it is done before the animal is a week old'.⁷⁸ There is a substantial difference between 'evidence of injuries' and 'by experience has been proven'. The former is likely to confine the burden of proof to the specific litter of piglets. The latter, on the other hand, can extend the scope of proof not only to all the current litters on the entire farm, but also going back to previous generations. While there is no evidence that there is a difference in how the law regarding grinding is interpreted between the Pig Directive and L41, despite the difference in phrasing, it is nevertheless worth highlighting, as it could have a potential negative effect upon the piglet welfare in Sweden.

The castration of male piglets without anaesthetics became illegal in Sweden in January 2016, and the law now requires that all pigs must be given local anaesthetics when castrated.⁷⁹ This requirement of anaesthetics

⁷⁵ SJVFS 2013:41, Saknr D 8, Saknr L41 Kap 5 4§ 1; Lantbrukarnas Riksförbund (n. 19) 13

⁷⁶ SJVFS 2013:41, Saknr D 8, Saknr L41 Kap 5 4§ 1

⁷⁷ *ibid*

⁷⁸ Freely translated

⁷⁹ SJVFS 2013:41, Saknr D 8, Saknr L41 Kap 5 6§; Förordning om ändring i djurskyddsförordningen (1988:539); Maurit Paulsen, Johan Beck-Friis 'Vaccin gör obedövad griskastering onödig' *Svenska Dagbladet* (Stockholm, 28 April 2011) <http://www.svd.se/opinion/brannpunkt/vaccin-gor-obedovad-griskastrering-onodigt_6123481.svd> accessed 19 September 2014; K Lundström, G Zamaratskaia, C Brunius 'Effekt av tidig immunokastrering på ornelukt, produktion och beteende hos hangrisar – sammanfattning av slutrapport' (Dnr 31-3727/09 Jordbruksverket 2010); J Morrel 'Alternativ till kirurgisk kastrering av gris' (Jordbruksverket Slutrapport)

has been phased-in since the beginning of 2012, by providing some financial aid for farmers to cover some of the additional costs attributed to the local anaesthetic. All male piglets in Sweden will now be spared the pain caused by castration – a single, yet important change in the law, which improves their welfare significantly.

While electric shock is not a strictly physically invasive procedure, it causes stress and pain for the pigs. Therefore, the Swedish prohibition of electric shocks, as a control method for pigs,⁸⁰ is beneficial for their physiological welfare. Banning electric shocks is further beneficial in regards to ethological needs, as the pigs cannot be conditioned with electric shocks for ‘undesirable behaviour’. The usage of electrical droves when pigs are being moved is also unlawful, at the extra benefit of the pigs.⁸¹ In Sweden, the majority of sows are part of sow pools and satellite-systems⁸² and are therefore moved between different farms within a satellite-system numerous times during their lifespan. Moving involves loading and unloading them on transportation vehicles and herding the sows in and out of buildings. Piglets are also moved around to different areas of the farm at various stages of their lives, as they grow bigger. Consequently, pigs are generally herded several times during their lives, for which the usage of electric droves could be a useful tool, as naturally inquisitive pigs may not always want to take the route intended. However, electrical droves cause pain, stress and suffering, and their ban is highly beneficial to pigs’ welfare. Unfortunately, these provisions do not have any corresponding requirements in the EU legislation, which effectively means that pigs will be moved with the aid of electrical droves in Member States that allow them.

⁸⁰ SJVFS 2010:15, Saknr L100, kap 1 10§

⁸¹ *ibid* 38§

⁸² P Jensen (n. 26) 149,153

4.3.1.4 Summary

Overall, the pigs enjoy a considerably higher welfare standard in Sweden compared to pigs in Member States which only require that the minimum requirements established by the Pig Directive. The analysis unveiled distinct differences in the legislation which concerns pigs' welfare. The most fundamental difference is that the Swedish legislation requires loose housing of the pigs at all times, unlike the Pig Directive, which allows close confinements for sows for long periods, despite the ban on sow stalls. Housing requirements for pigs are far more detailed in the Swedish legislation, and established at a higher standard than the EU equivalent.

Further, in regards to ethological needs, apart from being housed loosely, the most significant difference is the considerable emphasis upon ensuring that manipulable materials are provided to the pigs, to enable their foraging behaviour. The manipulable material becomes even more effective as it is combined with the larger surface requirement per pig. These requirements allow the pig to behave more naturally. Additionally, there are fewer physiological interventions permitted, and most importantly, anaesthetics are explicitly required for castration.

The approach taken to animal welfare overall, with a multi-levelled legislative framework, where general goals are underpinned by the highly-detailed, legally binding Administrative Specifications, is what essentially raises Sweden's standards. Further, when the Administrative Specifications are combined with the General Advice, they provide comprehensive rules and guidance for farmers, including practical advice on how to achieve the welfare standard required by law. As a result, the overall level of pig welfare is higher in Sweden than the EU level requires.

4.3.2 Commercial Hybrids

This section addresses the legislation applicable to the two major strands of commercial poultry hybrids (egg-layers and broilers), both of which are

Gallus gallus domesticus. As such, there are some provisions in the legislation which apply to *both* hybrids. These common provisions are addressed first, followed by the respective hybrid-specific provisions applicable to egg-layers and broilers.

4.3.2.1 Provisions applicable to both hybrids

Compared to the EU standards, the Swedish legislation, which applies to both hybrids, places greater emphasis on allowing the birds to express their natural behaviour. This is evident in the requirements concerning the design of the poultry houses.

Poultry houses must have windows or other means of letting daylight in,⁸³ while ensuring that it is spread evenly throughout the building. The even spread of light is essential to avoid 'sunny spots', which can become overcrowded and considerably increase the risk of birds being trampled and suffocated.⁸⁴ On the contrary, there is no requirement of daylight in either the Broiler or the Egg Directive. Additionally, young birds of both hybrids must have access to perches⁸⁵ with a carefully regulated minimum size per bird,⁸⁶ with no corresponding requirement in either of the Directives.

Swedish legislation contains highly detailed provisions for air pollution limits in the poultry houses. The Broiler Directive contains a limit of CO₂, set at the same level as the Swedish one. However, the limit in the Broiler Directive only applies to broilers, and only when the additional provisions for higher stocking densities apply, whereas the Swedish limit applies to both hybrids, regardless of the stocking density. Therefore, in EU legislation, the CO₂ limit has an extremely limited scope, which is also the case with the regulation of

⁸³ SJVFS 2010:15, Saknr L100, kap 1 24§, 25§

⁸⁴ Jordbruksverket 'Stallmiljö för fjäderfän'
<<http://www.jordbruksverket.se/amnesomraden/djur/olikaslagsdjur/fjaderfan/stallmiljo.4.6beab0f111fb74e78a780001734.html>> accessed 7 July 2014

⁸⁵ SJVFS 2010:15, Saknr L100, kap 6 6§

⁸⁶ SJVFS 2010:15, Saknr L100, kap 6 23§ Tabell 21

the ammoniac level (20ppm). The Swedish legislation has a far lower limit for ammoniac level (10ppm) and applies to both hybrids.⁸⁷ Additionally, hydrogen sulphide and organic dust levels are regulated in Sweden, both of which are completely unregulated at the EU level. These regulations ensure a significantly better air quality for commercial hybrids reared in Sweden, compared to the birds reared to the EU minimum. The remaining housing provisions are hybrid-specific, and will be addressed in their separate sections later on.

Physical invasive procedures are also jointly regulated for both hybrids. There are only two types of procedures permitted in Sweden: marking for identification⁸⁸ and cutting the back 'toe' of male broiler chicks intended for breeding.⁸⁹ The back 'toe' is cut to protect the hen when mating, and it must be cut within twenty-four hours of hatching. Neither identification marking nor toe-cutting necessitates anaesthetics according to the Swedish law. As physically invasive procedures for hybrids are regulated by the same Administrative Specifications (L41) as for pigs, the same approach was taken by the legislators. L41 explicitly lists the procedures permitted, consequently rendering all other physically invasive procedures, such as beak-trimming, illegal.

4.3.2.2 Egg-layers

Sweden played an important role in the ban of unenriched cages, and this section commences with a short introduction on this Member State's contribution to the legal development of housing requirements, which is followed by an analysis of its domestic provisions that exceed the Egg Directive's minimum requirements.

⁸⁷ Jordbruksverket (n. 85)

⁸⁸ SJVFS 2013:41, Saknr D 8, Saknr L41kap 5 4§ 7

⁸⁹ *ibid* 8

Unenriched cages, commonly known as 'battery cages', were outlawed for egg-layers in Sweden as early as 1997. The ban was initiated even earlier, in the Animal Welfare Regulation in 1988, which states that 'egg-laying hens for commercial egg productions are not allowed to be housed in housing systems other than those which fulfil the hens' needs for nest, perch and dust bath'.⁹⁰ However, in order for the ban to be enforced, alternative systems needed to be researched and developed, as they did not exist at the time. In 1991, research grants increased and by 1997, alternative housing systems were developed, including the system of 'enriched' cages.⁹¹

Apart from enriched cages, numerous alternative cage-free housing systems are also permitted in Sweden, such as indoor or outdoor free-range systems, one-tiered systems or multi-tiered ones. Regardless of where egg-layers are reared, all birds *must* have access to environmental enrichment: a nest, a perch, and a dust bath.

The specific legal requirements in regards to enriched cages are more detailed in Swedish legislation than in the Egg Directive. Only smaller varieties of egg-laying hybrids (those under 2.4 kilograms) are allowed to be kept in enriched cages, and only for a maximum life-span of two years.⁹² The dust bath must be accessible for at least five continuous hours a day, and the dust/litter within the bath must stay therein.⁹³ Further, enriched cages in Sweden must have solid walls, with a maximum of sixteen egg-layers per cage.⁹⁴ Meanwhile, the Egg Directive does not contain any upper limits on the number of egg-layers per cage. While an upper limit on the size of the flocks in the cages might seem insignificant for the egg-layers' welfare, it is not. Their wild ancestors, the Red Jungle Fowls, used to live in small flocks with established social hierarchies. By limiting the flock size in the modern

⁹⁰ Djurskyddsförordningen (1988:539) 9§

⁹¹ A Brasch, C Nilsson, 'Sveriges omställning till alternative inhysningssystem för värphöns' (Jordbruksverket Rapport 33 2008) 2

⁹² SJVFS 2010:15, Saknr L100, kap 6 1§

⁹³ *ibid* kap 6 4§, kap 6 15§

⁹⁴ *ibid* kap 6 13§, kap 6 18§ Tabell 17

housing systems, the birds can establish hierarchies and satisfy this strong ethological need.⁹⁵ The formation of a small, stable flock with an established hierarchy is one of the few welfare benefits the enriched cages have, in contrast with the vast groups of thousands of egg-layers in free-range systems.⁹⁶

In free-range systems, the egg-layers must have access to the same environmental enrichments: a nest, a perch, and a dust bath. The nests are commonly group nests, rather than individual nests, and the group nests are required to have 20% bigger surface per egg-layer in Sweden compared to the corresponding provision in the Egg Directive.⁹⁷ Similar to the maximum number of egg-layers per enriched cage, there is a maximum stocking density for free-range birds, allowing no more than twenty hens per square metre of floor space.⁹⁸ This maximum density does not depend on the housing system, and applies to both single-tiered and multi-tiered systems. However, as multi-tiered housing systems allow three-dimensional movement to the birds, there is a *de facto* difference in stocking density, which only emerges upon contextualisation of the provision.

In the intensive egg production industry, egg-layers are commonly moved to a different facility to the one they were reared, around the age of eighteen weeks, right before they start laying the eggs. This industry practice is acknowledged in the Swedish law, as it requires that egg-layers are reared and housed in the *same kind of system* throughout their lives.⁹⁹ For instance, if they are intended for an enriched cage system, they must be housed in enriched cages from hatching; if they are intended for a one-tier free-range

⁹⁵ Chapter 1.4.2

⁹⁶ Åke Spross 'Ekoägg ger inte alltid friska höns' *Uppsala Nya Tidning* (Uppsala, 30 March 2013) <<http://www.unt.se/uppland/uppsala/ekoagg-ger-inte-alltid-friska-hons-2350809.aspx>> accessed 19 September 2014

⁹⁷ SJVFS 2010:15, Saknr L100, kap 6 19§ Tabell 18

⁹⁸ *ibid*

⁹⁹ *ibid* kap 6 2§

system, they need to be housed in a one-level free-range building before that.

More importantly, if they are intended for a multi-tiered housing system, it is *essential* that they are housed in one from hatching. As, if birds intended for free-range multi-tiered systems are reared in cages, they will not learn to move around in three dimensions, which can be lethal for a large proportion of them. If birds that never learned to move in three dimensions, are suddenly moved to a multi-tiered system, they will be unable to find food and water, and will starve to death. Additionally, rearing the birds in cages causes lack of movement, which results in weaker bones and increases the risk of breakages occurring when the birds are later moved to a multi-tiered system, where they need to fly and jump.¹⁰⁰ In addition to ensuring that young hens are reared in a suitable housing system, there is also a limit regulating the space available for each young bird, and the stocking density, when reared in cages.¹⁰¹

The final significant difference between Swedish legislation and EU law on egg-layers illustrates Sweden's proactive approach to farm animal welfare legislation. Administrative Specification L100 requires that future egg-laying hens have access to litter at all times.¹⁰² By requiring access to litter, the birds' ethological need to peck is developed and satisfied, which is an effective preventative measure to reduce the occurrence of feather pecking and aggressive pecking in later life. Aggressive pecking is a significant welfare problem, not only because it can ultimately lead to cannibalism, with obvious financial consequences due to the resulting deaths, but also because poor plumage coverage increases the amount of feed the birds need to consume to maintain their body temperature.¹⁰³ The proactive nature of the legislative approach in regards to pecking problems is further

¹⁰⁰ The reasons for why the bone strength differs and an expansion on welfare issues are found in chapter 2.

¹⁰¹ SJVFS 2010:15, Saknr L100, kap 6 22§ Tabell 20

¹⁰² *ibid* kap 6 5§

¹⁰³ Chapter 1.4.2

highlighted, as the common practice of beak-trimming is prohibited in Sweden.

4.3.2.3 Broilers

Apart from the joint provisions previously outlined, the Swedish legislation applicable to broilers is largely in line with the Broiler Directive. However, there are two noteworthy differences, and the most important concerns the legislative limits on the stocking density, which consequently impact the amount of space available per broiler.

The table below shows the percentage of the difference in space available for each broiler at different stocking density levels. It enables a comparison between the EU and the Swedish requirements, further facilitated by using the size of an A4 sheet of paper as reference point, which most people are familiar with. These calculations assume the average weight of a bird at 2.5 kilograms, when it is near its slaughter weight, although some birds exceed it. However, it is important to calculate the stocking density with a weight close to the final weight, as the older and bigger the broilers grow, the tighter the space allocated to them becomes.

Table I	Sweden	EU	Percentage in difference in favour of Sweden*
General limit of kg liveweight of broilers per m ²	20kg/m ²	33kg/m ²	39.4%
Maximum limit of kg liveweight of broilers per m ²	36kg/m ² **	42kg/m ² ***	14.26%
Biggest difference	20kg/m ²	42kg/m ²	52.4%

*Calculated on the basis that each broiler weighs two point five kilograms

** For Sweden, thirty-six kilograms per square metre is the absolute maximum, or no more than twenty-five animals per square metre, provided that the farmer participates in voluntary control programmes.¹⁰⁴ Otherwise, the limit is twenty kilograms per square metre.¹⁰⁵

*** Very common occurrence.¹⁰⁶

¹⁰⁴ SJVFS 2010:15, Saknr L100, kap 7 8§

¹⁰⁵ ibid kap 7 7§ Tabell 23

¹⁰⁶ Lantbrukarnas Riksförbund (n. 19) 14

At a stocking density of forty-two kilograms per square metre, which is quite common in the EU, the birds struggle for space and the severe space limitations often result in the weaker birds getting trampled and/or crushed. While spatial differences are significant between all three comparisons, the most striking is between the common stocking density used in Sweden (twenty kilograms per square metre) and the maximum stocking density permitted (and commonly occurring) in the EU (forty-two kilograms per square metre), which is a staggering 54.2%. The visualisation of the A4 sheet of paper clarifies this difference further: one broiler which weighs 2.5 kilograms and housed in a density of forty-two kilograms per square metre has the individual space of 595cm² available to it, which is smaller than one A4 sheet (623.7cm²). Contrastingly, a broiler of the same weight, in a building with the stocking density of twenty kilograms per square metre, which is the norm in Sweden, would have 1,250cm² of space available to it, which is close to two A4 sheets.

The reason why spatial differences matter, is the considerable impact they have on each broiler's welfare. Larger space and lower density significantly reduce the risk of individual birds being crushed to death by their flock mates, while also allowing for a greater degree of locomotion. Both large-scale and small-scale locomotion benefit from more space, as they enable the birds to move and walk around more (large-scale) but also provide the space required for broilers to be able to prune their plumage (small-scale).

Additionally, when larger space is combined with the requirement for perches, which is the second important difference between Swedish legislation and the Broiler Directive, then the welfare benefits increase further. As a *Gallus gallus domesticus* hybrid, roosting on perches is a compelling ethological need for broilers, particularly at night. Roosting provides a further welfare benefit for the broilers, as providing perches increases their bone strength.¹⁰⁷ Perches particularly benefit broilers'

¹⁰⁷ see at 1.4.2.2.

physiological welfare when they are provided from an early age: as ascending and descending from perches strengthens the bones in their legs. Stronger leg bones allow the birds to move around to a greater extent later in their lives and reduce the prevalence of leg problems.¹⁰⁸

4.3.2.4 Summary

Both commercial hybrids have significantly more space in Sweden than their counterparts in Member States which only adhere to the EU minimum. When the greater amount of space is combined with environmental enrichment and a ban on beak-trimming, both hybrids' welfare is greatly improved, as they can behave naturally and satisfy ethological needs. Other important factors that ensure the hybrids' welfare are the mandatory provision of perches (for both hybrids) and the requirement of making litter available at all times, which both particularly facilitate the hybrids' strong innate pecking behaviour. Further, the stricter requirements about pollution levels permitted in poultry houses improve the air-quality for all birds, not only decreasing respiratory diseases (and improving physiological welfare), but also improving the quality of the work environment for the farmers who tend to the hybrids.

However, these welfare benefits result in higher production costs for rearing commercial hybrids in Sweden. The stocking density and the space allocation are the biggest contributors to an increased cost. For instance, it is estimated that the introduction of enriched cages alone, excluding any enrichment material, increased the cost of keeping the egg-layers by 15%.¹⁰⁹ Similarly, a reduction in stocking density for broilers from twenty-five kilograms per square metre to twenty also increases costs by 15%.¹¹⁰ In other words, the higher standards required in Sweden are accompanied with considerably higher input costs for the farmers.

¹⁰⁸ The leg problems, their causes and effects are discussed at length at 1.4.2.2.

¹⁰⁹ Moynagh, (n. 1)

¹¹⁰ *ibid*

4.3.3 Evaluation

The critical analysis above showed that Swedish farm animal welfare legislation is, in general, significantly stricter than the minimum provisions in the EU Directives. It is noteworthy that the above provisions are only an indicative part of the Swedish legislation of farm animal welfare, as there is also an extensive amount of legislation specifically for dairy cows, beef cows, sheep, lambs, goats and other avian species, all of which lack species-specific legislation at the EU level. Indeed, all of these kinds of farm animals are only covered by Directive 98/58 in EU law.

4.3.3.1 The impact of competitive trade from the rest of the EU

While, from an animal welfare perspective, the higher standards in Sweden are beneficial, as animals enjoy a better quality of life, the situation is different from an economic point of view. As established throughout in this thesis, farm animal welfare is expensive. The higher the level of welfare provided, the higher the cost of providing it.¹¹¹ Compared to farmers who only adhere to minimum standards, Swedish farmers inevitably have substantially higher production costs, regardless of whether they are rearing pigs, broilers, or producing eggs.

Housing, generally, incurs great costs, as it requires long-term investment upon initial construction, followed by maintenance costs. Any legislative changes requiring substantial alterations to the buildings, increase the costs further.¹¹² Additionally, there are also ongoing costs, such as providing environmental enrichment (ie straw, litter and perches), higher labour demands and utility bills. The welfare legislation may also impact the utility bills, as longer periods of lighting are required – a trivial but important detail, as due to the tight financial margins farmers operate on, every penny matters.

¹¹¹ C.J. Lagerkvist, H. Hansson, S. Hess, R. Hoffman 'Provision of Farm Animal Welfare: Integrating Productivity and Non-Use Values' (2011) 33(4) Applied Economic Perspectives and Policy 484

¹¹² Loxbo, Ekman (n. 26) 4.6.

Since joining the EU in 1995, meat prices in Sweden have had a low increase rate,¹¹³ and general meat consumption has increased significantly during the same period.¹¹⁴ Meanwhile, Swedish meat production overall declined, with the biggest decline observed in pork production, which reduced by a third since 1995.¹¹⁵ The growing demand of meat –due to the increased consumption– has been met by imports from other Member States. A probable reason why consumers chose to purchase imported meat over the domestic produce is its lower price.¹¹⁶ The imported meat comes from animals reared at a lower welfare standard in comparison to the Swedish animals, which consequently means lower input costs for the farmer producing it.

Lower input costs enable the farmer to sell their produce at a lower price than the one it would have, were it reared to higher standards. Due to the Free Movement of Goods provisions of the Internal Market, this cheaper meat ends up next to the Swedish produce, and the competitive trade begins. Cost-conscious consumers purchase the cheaper option, which lowers the proportion of Swedish produce sold. Despite studies showing that Swedish consumers value high welfare standards for pigs, (higher than those of the EU minimum) the cheaper, imported meat sells well.¹¹⁷ Indeed, 41% of the pork purchased in Sweden during 2013 was imported.¹¹⁸ The

¹¹³ Meat increased by 4% in price between 1994 and 2009 compared to a general price increase of 20%. Svenskt Kött 'Prisutveckling' <<http://www.svensktkott.se/om-kott/statistik/hur-mycket-kott-ater-vi/prisutveckling/>> accessed on 26 August 2014

¹¹⁴ Svenskt Kött 'Köttmarknadsutveckling för gris, nöt och lammkött i ton' <<http://www.svensktkott.se/om-kott/statistik/hur-mycket-kott--produceras/kottmarknadsutveckling/>> accessed on 26 August 2014

¹¹⁵ *ibid*; Svenskt Kött 'Köttmarknadsutveckling för griskött i ton' <<http://www.svensktkott.se/om-kott/statistik/hur-mycket-kott-produceras/kottmarknadsutveckling/kottproduktion-gris-1/>> accessed on 14 September 2015

¹¹⁶ C Burman, E Jirskog, Å Lannhard Öberg, A Rosell, 'Från gård till köttdisk – Konkurrensen på den svenska köttmarknaden' (Jordbruksverket Rapport 2 2011) 4.7,5.5,7; Svenskt Kött 'Importländer' <<http://www.svensktkott.se/om-kott/statistik/hur-mycket-kott-produceras/importlander/>> accessed 6 August 2014; Svenskt Kött (n. 116)

¹¹⁷ C. Liljenstolpe 'Evaluating Animal Welfare with Choice Experiments: An Application to Swedish Pig Production' (2008) 24(1) *Agribusiness* 67

¹¹⁸ Svenskt Kött (n. 116)

financial indirect consequence of the imports, and the slow increase of meat price, is that the remuneration the farmers receive for their produce remains at a low level, while the production costs steadily increase. The inevitable effect is that the Swedish pig farming sector is fighting for its survival.¹¹⁹

The statistics for chicken meat from broilers are similar to the pork statistics: the demand for chicken is increasing rapidly in Sweden (up 13% from 2009 to 2014).¹²⁰ However, while the Swedish production of chicken increased too, from 110,600 tonnes in 2002 to 133,200 tonnes in 2014, the increase in imported chicken meat during the same period is far greater. In 2002, 31,600 tonnes of chicken were imported, and this number increased to 89,200 tonnes in 2014.¹²¹ As in the case with the imported pork, imported chicken from other Member States retails at a lower price, as broilers are reared in considerably higher stocking densities and without any environmental enrichment, such as perches, to satisfy their ethological needs.

The situation in regards to egg production is slightly different than for pork and chicken. The egg consumption increased in a similar fashion, from an average of 12.5 kilograms per annum per person in 1994 to 14.7 kilograms per annum per person in 2014.¹²² The difference is that unlike the chicken and pork industry, egg production is increasing, and so is the amount of Swedish eggs exported. Indeed, the Swedish self-sufficiency in eggs has been over 90% for a number of years, until a break in the trend in 2014, which saw the domestic production fall, and the imports increased by nearly

¹¹⁹ Mikael Grill Pettersson 'Kris bland grisbönder –klarar inte konkurrensen' *Sveriges Television* (Uppland, 3 February 2014) <<http://www.svt.se/nyheter/sverige/kris-bland-grisbonder-klarar-inte-konkurrensen>> accessed 22 August 2014; Carina Galanou Ipsonius 'Grisbönder tvingas lägga ner' *Sveriges Radio* (Örebros län, 19 April 2011) <<http://sverigesradio.se/sida/artikel.aspx?programid=159&artikel=4462811>> accessed 23 August 2014; Göran Berglund 'Stor oro hos grisbönder efter Scans neddragningar' *Lantbruk&Skogsland* (Uppland 31 January 2014) <<http://www.lantbruk.com/lantbruk/stor-oro-hos-grisbonder-efter-scans-neddragningar>> accessed 23 August 2014; Lantbrukarnas Riksförbund (n. 19) 12

¹²⁰ Svensk Fågel 'Fågel i siffror 2014' <<http://www.svenskfagel.com/sida/konsument/statistik-matfagel>> accessed 2015-09-15

¹²¹ *ibid*

¹²² Å Lannhard Öberg, 'Marknadsråd ägg 2015-04-15' (Jordbruksverket 2015) 1.2

10% compared to 2013.¹²³ It is too early to ascertain whether this change develops into a similar pattern of decreasing domestic production and increasing imports of eggs to Sweden or it is a singular occurrence.¹²⁴ A contributing factor for the high demand in Swedish eggs, and the comparatively high level of self-sufficiency (in eggs), may be the early ban of battery cages in Sweden. Battery cages are commonly seen as one of the worst form of animal husbandry systems, and by buying Swedish eggs, the consumers are certain that the eggs has not been laid by battery hens.

Another likely contributor is the salmonella-free status of Swedish eggs. In Sweden, usage of raw eggs in food and drinks is taken for granted – if they are *Swedish*.¹²⁵ Due to proactive and thorough work from the 1950's and onwards, all the production chain of eggs is considered salmonella-free. Comparatively, the EU average of salmonella contamination in eggs is over 20%.¹²⁶ Indeed, the salmonella-free status is of high importance for Sweden, who were granted a special guarantee concerning salmonella by the EU.¹²⁷ This guarantee gives Sweden the right to demand that all eggs imported from other EU Member States (except Finland and Denmark)¹²⁸ must have been tested and certified to be salmonella-free. The importance placed on ensuring the absence of salmonella in eggs is further reflected in the import, as around 90% of imported eggs in 2013 and 2014 originated from Finland and Denmark.¹²⁹

¹²³ *ibid* 1.1

¹²⁴ *ibid* 1.3

¹²⁵ Svenska Ägg 'Salmonellafrihet' <<http://www.svenskaagg.se/?p=19877&m=3501>> accessed 2015-09-15

¹²⁶ EFSA 'Report on the Analysis of the baseline study on the prevalence of Salmonella in holdings of laying hen flocks of *Gallus gallus*' (2007) 97 EFSA Journal; Svenska Ägg 'Salmonellafrihet ur ett EU perspektiv' <http://www.svenskaagg.se/?p=19877&m=3501>

¹²⁷ Commission Regulation (EC) No 1688/2005 of 14 October 2005 implementing Regulation (EC) No 853/2004 of the European Parliament and of the Council as regards special guarantees concerning salmonella for consignments to Finland and Sweden of certain meat and eggs (2005) Official Journal L271/17

¹²⁸ Non-EU Member State Norway is also exempted.

¹²⁹ This applies to the eggs which are intended sold and consumed as 'eggs' by consumers in general, rather than other forms of eggs commonly used in the food industry such as liquid, powder and frozen eggs and yokes. Å Lannhard Öberg (n. 123) 1.11

The Internal Market, and the Free Movement of Goods rule, enables the import of cheaper meat, which threatens the financial viability of Swedish farmers. However, the problem originates in the minimum harmonisation Directives. While it must be stressed that minimum harmonisation allows for stricter farm animal welfare standards and is therefore *positive* from a zoocentric perspective, it also has an (unintended and unwanted) consequence for the Member States that use the derogatory power of the Directives. Despite its harmonising purpose, the minimum approach permits the playing field to remain uneven. The introduction of a minimum harmonised standard (ie a 'floor') enables some of the underlying differences between the Member States to be maintained. Arguably, it further pronounces the differences, as new domestic legislative standards are permitted. This unintended consequence impacts, negatively and substantially, the competitive strength of the Swedish farmers, as the Swedish legislators thoroughly utilise the derogatory power to go above and beyond the EU minimum.

A prime example of the effects the uneven playing field has upon the Swedish farmers' finances is the legislation concerning the fixation of sows. Sweden phased-out fixation of sows early on, between 1988 and 1994 (before joining the EU) and phased-in loose housing for all pigs. In contrast with this practice, fixation of sows (by the use of sow stalls) was not banned at an EU level before 2013, nineteen years later. As a result, the Swedish ban required large financial investments by the farmers and re-construction of the housing for the sows in the early 90's, and ever since, the running costs have been significantly higher in Sweden than in the rest of the EU. Consequently, the Swedish pig farmers have had a significant competitive disadvantage ever since Sweden joined the EU, as their produce has been in direct competition with the cheaper imported pork.

When the ban on sow stalls was introduced in the EU, the playing field became more, yet not completely, level as Swedish farmers were already

compliant with the new requirements, unlike other Member States, where farmers faced large investments to comply with the changes. The ban of sow stalls left the affected farmers with few options: they could either decrease the numbers of pigs in farms to create more space, or make large capital investments to extend existing or construct new buildings in order to maintain the same amount of pigs at the farm.¹³⁰ Alternatively, farmers could choose to stop farming pigs altogether, for financial reasons.¹³¹ Therefore, as farmers in many Member States encountered the costs the Swedish farmers had in the 90's, and subsequently have had similarly higher ongoing production costs, the playing field has been levelled to an extent by the introduction of the sow stall ban.

Nevertheless, the 'pork' playing field remains distorted to a degree as, while the sow stall ban outlawed continuous tethering of the sows throughout their pregnancies, it still permits their housing in gestation crates and farrowing pens for a significant portion of their lives. Swedish law does not permit this: the sows must be kept loose at all times. Consequently, this particular welfare issue creates a significant imbalance, as gestation crates and farrowing pens enable a far more cost-effective use of space, compared to loose housing systems. Therefore, the remaining differences in the housing of sows, along with other stricter than the minimum provisions, have a cumulative impact on the Swedish farmers' competitive strength. The situation for egg producers and farmers who rear broilers is similar, as the playing field is also distorted in those sectors. Egg-layers enjoy a higher standard of welfare in Sweden, as do broilers, and the consequence is that the farmers' competitive strength is diminished against the imports from other Member States.

¹³⁰ Jordbruksverket 'Marknadseffekter av grisdirektivet 2013' (2012) 4,6

¹³¹ If enough farmers decide to stop farming due to the costs of adapting to the Pig Directive, then there is a risk of an overall decreased production in the EU, which may in turn lead to increased import of pork from outside the EU where the animal welfare legislation is weaker, which would be a highly undesirable development. Lantbrukarnas Riksförbund (n. 19) 12

A report from the LRF,¹³² assessing the productive strength of Swedish farms since 1995, when Sweden joined the EU, in relation to the productive strength of farmers in other Member States, paints a bleak picture: Swedish farming is facing tough competition and many farmers are fighting for their survival. Indeed, a significant amount of farmers has ceased farming, as it is no longer financially viable to farm, particularly in the pork, beef and dairy sector.¹³³ These claims are supported by statistics provided by the Swedish Department of Agriculture.¹³⁴ The LRF's report chiefly attributes the Swedish farmers' financial struggle to the stricter legislative standards imposed in Sweden, compared to the EU minimum requirements applied in other Member States. The stricter standards are a major factor for the increase in production costs, particularly in regards to rearing pigs and cattle. The report from the LRF contains some positive indications though, reporting a small increase in the production of lamb, and chicken, especially organic.¹³⁵

The conclusion emerges that the stricter farm animal welfare standards in Sweden impact negatively the Swedish farmers' competitive strength, when their produce competes against imports from other Member States, which do not require animal welfare levels higher than the EU minimum. While it may not be the sole cause, the impact of the legislative standards is evident, as Swedish production levels fall, self-sufficiency decreases, and imports increase.

4.3.3.2 Race to the Bottom or Race to the Top?

Having established in the previous section the Swedish farmers' competitive disadvantage in the retail market due to the imported cheaper versions of similar produce from other Member States, the question remains whether the incentive to protect the financial viability of domestic farmers is

¹³² National Farmers' Association

¹³³ Lantbrukarnas Riksförbund (n. 19) 22

¹³⁴ Lannhard Öberg (n. 123) 1.11

¹³⁵ Lantbrukarnas Riksförbund (n. 19) 22

sufficiently strong to trigger a regulatory movement in Sweden. Despite the need to ensure the financial viability of domestic farmers, this conclusion alone does not provide a sufficient amount of evidence to assess the potential of a regulatory race. Rather, it is necessary to examine the legislation per se for evidence of regulatory movement. The critical analysis above establishes that Swedish domestic legislation requires a significantly higher standard of farm animal welfare than the EU minimum and provides a baseline, which potential measures will be measured against, in the search of evidence. However, to observe regulatory movement, it is necessary to compare the current status quo against older legislation, particularly old provisions that have corresponding provisions in the current legislation.

Sweden had a strong legislation on animal welfare before joining the EU in 1995, and few adjustments were necessary to be made, in order to implement the EU farm animal welfare legislation of the time.¹³⁶ Indeed, the discretionary power granted by the EU Directives, which allows Member States to exceed the minimum harmonised standard by maintaining pre-existing stricter requirements, enabled Sweden to maintain its high regulatory standard. Since 1995, several new EU minimum Directives have been introduced in regards to farm animal welfare, such as the Pig Directive and the Broiler Directive. Upon the introduction of these Directives, the Swedish farm animal welfare legislation already contained the relevant welfare-improving provisions, and the few amendments needed concerned mostly administrative procedures, rather than conditions the animals are reared in.¹³⁷ Indeed, scrutiny of the officially listed amendments to the Swedish animal welfare legislation since 1988 shows few amendments originating from the EU.¹³⁸ Common denominator of all amendments since 1988 is a strong emphasis on changes to administrative procedures and enforcement, tightening the regulations concerning animal testing and

¹³⁶ Only part of the legislation regarding the transportation needed to be changed, with its minimum level lowered. However, transportation legislation is outside the scope of this thesis. Dahlén, Kättström (n. 73) 1.1

¹³⁷ *ibid* 3.4-3.7

¹³⁸ A complete list of all changes to the farm animal welfare legislation (in Swedish) is available at <http://www.notisum.se/rnp/sls/fakta/a9880539.htm>; P Jensen (n. 26) 16;

further welfare improvement for farm animals, such as cattle, which lacks species-specific provisions at an EU level and is therefore not relevant for the scope of this thesis.¹³⁹

Having analysed all the amendments to the Swedish farm animal welfare legislation after joining the EU, it is safe to draw the conclusion that –to the present day– the EU Membership has not had an overt downward impact upon the animal welfare level established. However, it is noteworthy that there are ongoing discussions in Sweden regarding a reformation of the farm animal welfare legislation, and a reform proposal is estimated to be delivered to the Parliament some time during 2016.¹⁴⁰ Nevertheless, the conclusion regarding a downward effect in Sweden, leaves the question of whether any upward effects in EU legislation can be attributed to Sweden's EU membership.

Since joining the EU, Sweden has advocated for the cause of improving animal welfare legislation on an EU-wide scale.¹⁴¹ A prime example of this is

¹³⁹ Svensk författningssamling, 'Förordning om ändring i djurskyddsförordningen (1988:539)' SFS 2014:1233 (the Police can ban people from owning animals); Svensk författningssamling, 'Förordning om ändring i djurskyddsförordningen (1988:539)' SFS 2012:869 (administrative changes); Svensk författningssamling, 'Förordning om ändring i djurskyddsförordningen (1988:539)' SFS 2012:701 (allows non-veterinarians to castrate reindeers, but requires veterinarians to perform de-horning on cattle and goats and anaesthetics administered); Svensk författningssamling, 'Förordning om ändring i djurskyddsförordningen (1988:539)' SFS 2012:675 (animal testing); Svensk författningssamling, 'Förordning om ändring i djurskyddsförordningen (1988:539)' SFS 2011:510 (administrative costs); Svensk författningssamling, 'Förordning om ändring i djurskyddsförordningen (1988:539)' SFS 2009:1391 (administrative costs and animals used in competitions); Svensk författningssamling, 'Förordning om ändring i djurskyddsförordningen (1988:539)' SFS 2008:1051 (shelter for outdoor reared animals and changes to administrative structure); Svensk författningssamling, 'Förordning om ändring i djurskyddsförordningen (1988:539)' SFS 2007:1395 (financial penalties if failing to comply with animal welfare legislation); Svensk författningssamling, 'Förordning om ändring i djurskyddsförordningen (1988:539)' SFS 2007:484 (change of Department in charge for animal welfare matters); Svensk författningssamling, 'Förordning om ändring i djurskyddsförordningen (1988:539)' SFS 2006:818 (changes in authority for inspection and enforcement)

¹⁴⁰ Moa Richter Hagert 'Förslag om ny djurskyddslagstiftning kan komma i vår' (*Djurens Rätt* (23 September 2015) <<http://www.djurensratt.se/om-djurens-ratt/nyheter/forslag-om-ny-djurskyddslag-kan-komma-i-var>> 30 September 2015

¹⁴¹ Dahlén, Kättström (n. 73) 1.1, 2.2; Lantbrukarnas Riksförbund (n. 19); Svenska Djurhälsovården 'Sverige har EU:s bästa djurskyddsregler' <<http://www.svdhv.org/sv/start/press---media/schysst-kott/fakta-om-svensk->

the ban of battery cages for egg-layers, as the Swedish ban of unenriched cages predates the equivalent EU ban by nearly two decades. As discussed above, the Swedish ban on battery cages was introduced so early that no alternative housing systems existed. Consequently, time and money was invested into researching, developing and designing alternative housing systems, and the enriched cage systems was one of the outcomes. Sweden promoted the result of the research and displayed the enriched cage systems to invited EU-representatives. The promotion of the enriched cages was successful, as it eventually led to the introduction of the Egg Directive, in which battery cages are banned, albeit after a long phasing-out period.¹⁴² Nonetheless, despite the long phasing-out period, the eventual result has been an EU-wide increase of the welfare standard for egg-layers, as they have been having more opportunities to satisfy three core ethological needs in the enriched cages: roosting, dust-bathing and using a nest when laying their eggs.¹⁴³ However, as the Swedish law for egg-layers remains stricter than the EU ones, for instance by limiting the number of egg-layers to sixteen in one cage, it is unlikely that the EU legislation influenced the Swedish law. Indeed, the Swedish law not only predates the EU one, but it is also established at a higher level. Rather, Sweden has worked towards raising the level of animal welfare in the EU towards the pre-existing Swedish standard, thus slowly increasing the level of animal welfare in the EU.

It would be wrong to label this increase as a 'Race to the Top', as while some progress is made, progress depends on compromise, as consensus must be reached between the twenty-eight Member States. Indeed, even when consensus has been reached, long phasing-out periods are common in regards to farm animal welfare legislation at an EU level, and therefore, rather than a Race, the improvements happen in slow steps. It is further

[notkottsproduktion/basta-djurskyddsreglerna/](#)> accessed 2 August 2014

¹⁴² Chapter 3

¹⁴³ C Nilsson, J Yngvesson, 'Sveriges genomförande av förbudet mot icke inredda burar för värphöns' (Jordbruksverket Rapport 6 2007) 6; Brasch, Nilsson (n. 92) 43; Dahlén, Kättström (n. 73) 2.1

erroneous to dub it a Race, as the Member States are not competing to become an animal welfare heaven.

It would be unwise to assume that the Swedish drive to increase the level of animal welfare legislation in the EU is solely motivated by sheer animal welfare idealism. Any increase in the EU farm animal welfare standards, particularly those already mandatory in Sweden, would benefit the competitive strength of Swedish farmers, they already comply with such provisions. The battery cage ban example (discussed above) illustrates this argument perfectly. Similarly, when sow stalls were banned by the Pig Directive, Swedish pig farmers were already in compliance. Additionally, if the ban of sow stalls were, eventually, followed by a ban on gestation crates and/or farrowing pens, the Swedish pig farmers would also benefit financially, as they already house pigs loosely and would not have to make substantial financial investments to modify their buildings as per the updated requirements.

Therefore, EU-wide improvements in animal welfare standards would benefit Swedish farmers by making their profession more financially viable. Further, they would create more balance in the market, by raising the other Member States' farming production costs to the Swedish level, and eliminating some of Sweden's already established competitive disadvantage. It is evident that this slow walk to the top in animal welfare standards is just as much about improving the competitive strength of farmers as it is about animal welfare.

4.3.4 Conclusion Sweden

This subchapter aimed to assess whether and to what extent the farm animal welfare standard required by the Swedish law goes beyond the EU minimum requirements. Once the difference in regulatory standards was established, the subsequent section evaluated its impact on the Swedish farmers' competitive strength, when their produce competes against cheaper imports from other EU Member States. It concluded with a search for

evidence as to whether there has been a relaxation in regulatory standards in Sweden.

The analysis revealed that the Swedish farm animal welfare legislation is established at a considerably higher standard than the minimum required by the EU. A common theme emerged in the higher standards implemented in both pigs and commercial hybrids: larger spaces for each animal, enriched environments and fewer invasive physiological procedures. In particular, it is the emphasis on suitable environmental enrichment for the animals, combined with the larger space allocation, which greatly increase the welfare standards, as they enable the animals to satisfy their ethological needs to a far greater extent than if the EU minimum legislation were applied.

However, the fact that Swedish law has stricter requirements cannot be only attributed to the minimum nature of the EU provisions, as the Swedish legislation established the high standard of animal welfare *before* joining the EU. Nonetheless, it should be noted that it is only possible for Sweden to maintain higher animal welfare standards as the minimum EU Directives permit it. Indeed, due to the overall high standard in Sweden, since joining the EU, none of the minimum Directives necessitated amendments to the Swedish legislation pertaining to the welfare of animals; any amendments were only related to administrative procedures and issues outside the scope of this thesis.

In fact, there is evidence that Sweden has been working towards increasing the overall level of welfare legislation within the EU, notably by working for a ban on sow stalls and battery cages. Such an increase not only benefits the animals *per se*, but also partially eliminates the financial disadvantage for the already compliant Swedish farmers. However, as domestic standards remain much higher than the EU minimum, the competitive strength of Swedish farmers' remains negated, due to the cheaper imports from other Member States.

As long as Swedish farmers suffer a substantial competitive disadvantage due to the higher production costs, voices of criticism will argue for the relaxing of the Swedish welfare standards to reduce the inequalities in costs, as an attempt to ensure the financial viability of farming in Sweden.¹⁴⁴ With animal welfare at the heart of this thesis, it is argued that relaxing the regulatory standards at the expense of the animals' welfare, is not the answer. Rather, any attempt to support the Swedish farmers must operate from the starting point that the welfare standard needs to be maintained. With this in mind, the next chapter will explore whether the answer lies on the other side of the equation, the consumers' purchasing behaviour, which dictates the demand for high animal welfare produce.

4.4 England

Animal legislation has a long history in England, as it was the first country to legislate against animal cruelty. The first Act passed in England applied to agricultural animals was the Cruel Treatment of Cattle Act in 1822.¹⁴⁵ Since then, English legislation has led by example in advancing the animals' legal protection worldwide. England can rightly pride itself on its historic importance regarding animal welfare.¹⁴⁶

Despite its early and pioneering stance against cruelty, it was not until the 1950's Parliamentary Debates that the term 'welfare' began to be used in connection with animals in the public sphere.¹⁴⁷ 'Welfare' was first used in its modern sense in law in 1968, in the Agriculture (Miscellaneous Provisions) Act.¹⁴⁸ It was arguably Ruth Harrison's *Animal Machines*, published in 1964,

¹⁴⁴ Sara Johansson 'Förslag om ny djurskyddslag till våren' ATL Lantbrukets Affärsstidning (22 September 2015) <http://www.atl.nu/lantbruk/f-rslag-om-ny-djurskyddslag-till-v-ren> accessed 30 September 2015

¹⁴⁵ Cruel Treatment of Cattle Act 1822 (3 Geo IV c71)

¹⁴⁶ BBC 'Welfare law in the UK'

<http://www.bbc.co.uk/ethics/animals/defending/legislation_1.shtml> accessed 6 October 2014

¹⁴⁷ Woods (n. 4) 15

¹⁴⁸ Agricultural (Miscellaneous Provisions) Act 1968 Chapter 34, Eliz 2; Woods (n. 4) 19

that coined the term 'animal welfare' and raised awareness by informing the public about the realities of industrial farming.¹⁴⁹ Harrison's book also resulted in the commissioning of the –legendary– Brambell Report in 1965. It contained a definition of welfare which referred to both the physical and *mental* wellbeing of the animal.¹⁵⁰ A further outcome of the Brambell Report was the foundation of the Farm Animal Welfare Council (now The Farm Animal Welfare Committee,¹⁵¹ abbreviated as FAWC). The Brambell Report and FAWC's most lasting legacy were the Five Freedoms,¹⁵² which have since had a global influence¹⁵³ and still hold a prominent place in the current English legislation.

During the last decade, English celebrity TV-chefs have used their influence to inform the English public of the realities of industrial farming, with an emphasis on poultry and pigs.¹⁵⁴ The information campaigns, which also portrayed the environment the animals live in, and allowed consumers to visually associate meat with its animal origin, were largely successful. The

¹⁴⁹ Woods (n. 4) 19; R Harrison, 'Animal machines' (Vincent Stuart 1964); EN Eadie, *Understanding Animal Welfare An Integrated Approach* (Springer 2012) 3; HD Guither, 'Animal Rights history and scope of a radical social movement' (Southern Illinois University 1998) 2; Carol McKenna 'Ruth Harrison' *The Guardian* (London, 6 July 2000) <http://www.theguardian.com/news/2000/jul/06/guardianobituaries> accessed 6 October 2014; Cottrell Free A, 'A Tribute to Ruth Harrison' (*Animal Welfare Institute Quarterly* 2000 Fall) <<https://awionline.org/awi-quarterly/2000-fall/tribute-ruth-harrison>> accessed 6 October 2014

¹⁵⁰ GP Jupe, *Intensive production – the cruelty question*. 3 March 1964, NA MAF 293/169, 9; Woods (n. 4) 19; Eadie (n. 147) 3.3; Guither (n. 147) 3; Dawkins M, 'Ruth Harrison' (*Farm Animal Care Trust* 2012) <<http://www.fact.uk.com/styled/index.html>> accessed 6 October 2014

¹⁵¹ Gov.UK 'Farm Animal Welfare Committee (FAWC)' <<https://www.gov.uk/government/groups/farm-animal-welfare-committee-fawc>> accessed 6 October 2014

¹⁵² Chapter 1

¹⁵³ G. Matheny, C. Leahy 'Farm-Animal Welfare, Legislation and Trade' (2007) 70(1) *Law and Contemporary Problems* 325,341-342

¹⁵⁴ ThePoultrySite News Desk 'Celebrity Chefs Campaign for Chicken Welfare' *The PoultrySite* (3 January 2008) <<http://www.thepoultrysite.com/poultrynews/13736/celebrity-chefs-campaign-for-chicken-welfare>> accessed on 5 January 2015; Caroline Gammell 'Jamie Oliver campaigns for chicken welfare' *The Telegraph* (12 April 2008) <<http://www.telegraph.co.uk/news/uknews/1574267/Jamie-Oliver-campaigns-for-chicken-welfare.html>> accessed 5 January 2015; James Meikle 'Jamie Oliver says British public 'ignorant' about way pigs are reared' *The Guardian* (11 January 2009) <<http://www.theguardian.com/uk/2009/jan/12/ethicalfood-animalwelfare>> accessed 5 January 2015

most noticeable example of one campaign's success was that it forced major supermarkets in the UK to commit to phasing-out battery eggs from their product lines.¹⁵⁵ This was especially beneficial to animal welfare as it occurred years before the EU-wide ban on battery cages (which came into effect in England in 2012).

This subchapter is an analysis and critique of the English farm animal welfare legislation, with a focus on the provisions that go above and beyond the minimum standards required by the EU harmonising Directives. Here, as throughout the thesis, particular emphasis will be placed on the extent the animals' ethological needs are addressed within the legislation. The analysis also considers whether the effectiveness of the stipulated welfare standards are negated by economic motives. Subsequently, the subchapter will assess whether the competition with the rest of the EU has had an impact on the English farmers' competitive strength and whether there are any indicators of regulatory movement.

4.4.1 Generally applicable provisions

England's regulatory system is different to Sweden's and therefore dictates a different structure to this section. The analysis will commence with a close scrutiny of the three substantially different provisions from the EU minimum legislation, and will address the CoPs next. The 'unnecessary suffering' provision applies to all animals, and will be analysed ahead of the species-specific provisions.

¹⁵⁵ Katy Hastings 'All eggs to be free-range within two years' *The Guardian* (7 January 2008) <<http://www.telegraph.co.uk/news/uknews/1574789/All-eggs-to-be-free-range-within-two-years.html>> accessed 5 January 2015; Martin Hickman 'Sainsbury's to ban battery eggs' *The Independent* (London, 17 January 2009) <<http://www.independent.co.uk/news/uk/home-news/sainsburys-to-ban-battery-eggs-1418252.html>> accessed 5 January 2015

4.4.1.1 Unnecessary suffering

The Animal Welfare Act 2006 (AWA2006) contains the most significant provision of those exceeding the EU minimum standards, and this provision takes the form of a statutory test. It assesses whether any suffering experienced by the animal is deemed unnecessary, and whether the owner/responsible person has committed an offence by causing (or allowing it).¹⁵⁶ Causing unnecessary suffering to an animal is an offence under the AWA2006, as it firmly places the burden of ensuring the animals' welfare upon the owner.¹⁵⁷ This provision inevitably raises the question of what amounts to unnecessary suffering. The term 'suffering' notably covers both physical and mental suffering of the animal,¹⁵⁸ and the inclusion of mental suffering is vital in regards to ensure that the welfare of the animal is fully considered, as it refers to the animals' sentience. The recognition of mental suffering is also important as it is possible for animals to suffer mentally –for instance, to be under severe stress– without their production rate declining. Therefore, by including 'mental' suffering within the statutory test, the legislation considers the animals' ethological needs and whether they are satisfied. The inclusion of mental suffering alone makes a positive overall contribution to the welfare standard, as if an owner fails to consider the animals' ethological needs, they can be convicted of an offence. While the statutory test does not guarantee consistent application by the English courts,¹⁵⁹ its very existence increases the chances of a relatively consistent interpretation, when applied in situations where unnecessary suffering is suspected.

While this test, which assesses whether animal suffering was unnecessary or not, is a significant step above the minimum EU requirements, it also raises criticism from a zoocentric perspective. The statutory test consists of several assessment levels: whether the suffering could have been avoided;

¹⁵⁶ AWA2006 (n. 29) Article 4 (1)-(2)

¹⁵⁷ *ibid* Article 3(3), Article 9

¹⁵⁸ *ibid* Article 62(a)

¹⁵⁹ See further: M. Radford ' "Unnecessary Suffering": the cornerstone of animal protection legislation considered' [1999] *Criminal Law Review* Sept, 702, 702-713

whether it was proportionate; whether there was a legitimate purpose behind it; whether the suffering was in compliance with legislation; and whether the staff was competent.¹⁶⁰ In other words, the emphasis on the statutory test is placed upon the lawfulness of the suffering, whether it can be justified, and whether it was proportionate,¹⁶¹ with little emphasis on the welfare of the animal. The disregard to the welfare of the animal within this test is exemplified by the provision specifying legitimate reasons for causing suffering: namely, the protection of a person, property or other animal.¹⁶² Effectively, it prioritises the protection of property (immaterial things, such as buildings and land) over the welfare of sentient animals.

While it can be argued that the test is based upon the utilitarian preference theory,¹⁶³ ie putting man in charge of deciding whether the suffering of *one animal* for the benefit of *other animals* is acceptable or not, there is one linguistic detail which suggests that this would be a false argument. The statute says 'animal' and not 'animals'. Consequently, it disproves the assumption of the utilitarian preference theory, as the test refers to the welfare of *one* animal versus the welfare of *one* other animal, and not the welfare of one animal versus the welfare of a *group* of animals.

Another point of criticism is the provision that considers whether the conduct which caused the alleged suffering was performed by a 'reasonably competent and humane person'.¹⁶⁴ This provision focuses upon the human conduct, rather than the interest of the animal concerned. Therefore, while the test's existence sends an important message by creating an offence, it

¹⁶⁰ AWA2006 article 4 (3)

¹⁶¹ Radford (n. 157) 705

¹⁶² AWA2006 (n. 29) Article 4(3)(c)(ii)

¹⁶³ 'According to Peter Singer's utilitarian preference theory acceptable or necessary suffering is when suffering in one individual or smaller group is a prerequisite for the good of a larger group.' A theory often central to the animal welfare legislation. F Lundmark, C Berg, H Röcklinsberg, (2013) 'Unnecessary suffering' as a concept in animal welfare legislation and standards' in H Röcklinsberg, P Sandin (eds.), *The ethics of consumption – the citizen, the market and the law* (Wageningen Academic Publishers 2013) 116

¹⁶⁴ AWA 2006 (n. 29) Article 4(3)(e)

does not truly fulfil its potential to increase the protection of animal welfare. If it was formulated with a zoocentric focus, the statutory test concerning unnecessary suffering would aim to minimise the animals' suffering and prevent it from occurring in the first place, rather than attempting to justify the human conduct in the inflicted suffering.

4.4.1.2 Thorough inspections

The second provision in English law which significantly exceeds the EU minimum standard is contained in Regulation No. 2078. Article 2(1) requires 'thorough inspections' of all farm animals.¹⁶⁵ Comparatively, the EU minimum standard requires a daily inspection of all animals, regardless of the kind of husbandry system they are reared within, and in some occasion two inspections. The difference lies in that Regulation No. 2078 requires inspections to be 'thorough', thus more comprehensive than the ones required by the EU minimum standard. A comprehensive inspection enables a higher level of care for the animals, as well as a greater attention to detail. 'Thorough' inspections, instead of 'mere' inspections per the EU minimum standard, permit earlier detection of problems detrimental to animal welfare. Earlier detection of animal welfare and health issues allows prompter remedies. Prompter remedies should in turn reduce any potential suffering by the animals, by restoring the welfare to the level it was before the problem occurred. Therefore, 'thorough inspections' are beneficial to animal welfare.

However, thorough inspections can be impractical, particularly in regards to broilers and fattening pigs, when they are farmed on a commercial scale, in large numbers and in vast spaces. Indeed, if thorough inspections were to be performed as recommended in the CoPs, it would be exceedingly difficult. The extent of the details in the CoPs is very high, and the comprehensiveness of the recommendations can only be conveyed accurately by quoting relevant paragraphs. It should be noted all three CoPs (applying to pigs and the two commercial hybrids) are highly detailed as well.

¹⁶⁵Regulations No. 2078 (n. 30) Schedule 1 Article 2(1)

However, as there is greater variety in the designs of housing systems for egg-layers, they were deemed as a more appropriate example. Regardless whether egg-layers are in enriched cages, in one-tier systems, multi-tier systems or free-range systems with outdoor access, the same recommendations for thorough inspection apply. Thus, according to the CoPs' issued by DEFRA, a thorough manual inspection of egg-layers should be carried out at least once a day –preferably twice– and should achieve the following:

This inspection should be sufficiently thorough to detect illness and injury of individual hens, and special attention should be paid to bodily condition, movements, respiratory distress, condition of plumage, eyes, skin, beak, legs, feet, and claws, and where appropriate, combs and wattles. Attention should also be paid to the presence of external parasites, to the condition of droppings, to feed and water consumption, to growth and to egg production level. Where appropriate the birds should be encouraged to walk. Individual examination should be made of those birds for which the overall inspection indicates this to be necessary. (...)The healthy individual bird should have sounds and activity appropriate to its age, breed or type, clear bright eyes, good posture, vigorous movements if unduly disturbed, clean healthy skin, good feather condition, well-formed shanks and feet, effective walking and active feeding and drinking behaviour. (...) The early signs of ill health may include changes in food and water intake, in preening, in 'chatter' and in activity. There may also be a drop in egg production and changes in egg quality such as shell defects.¹⁶⁶

Upon contextualising this CoP recommendation, it is fortunate for the farmers that it is merely a recommendation and not a statutory requirement,

¹⁶⁶ Egg CoP (n. 34) point 12-14

as the quoted recommendations are both impractical and unreasonable for industrial farming. It is questionable whether people responsible for drafting the recommendation had ever visited a farm which produces eggs on a commercial scale. In fact, the above recommendation is more suitable as advice for people who keep a small flock of egg-laying hens in their back-garden for personal use. Particularly so in regards to poor health indicators, as they are detailed to a level which requires familiarity with every individual egg-layer. Whilst these signs are good indicators for possible issues concerning flock health in one's back-garden, it is impossible to note such changes in individual birds when thousands of egg-layers are housed together. Likewise, in these numbers, if an egg in the packing area is found to be of substandard quality, there is no way to know which egg-layer was the one who laid it. Further, if every one of the thousands of birds kept at each farm were to be as thoroughly inspected as the CoPs recommend, it would incur large labour costs, which would deplete profit margins and render egg production financially unviable – unless the price of eggs increased many times over.

While a thorough inspection, adhering to a similar level of detail, would be less impractical in regards to sows and caged hens, as they are kept in smaller units than those the uncaged hens, broilers and fattening pigs are reared in so large numbers, that the recommendations in regards to them are onerous and labour intensive.

Consequently, the impact upon the finances of the farm would have a comparable effect, if the CoPs were to be followed to the letter. While requiring thorough inspections is positive for the animals' welfare, it is equally important that the levels the requirements are established at are realistic and achievable for the farmers. Currently, as these provisions are included in the CoPs, choosing to adhere to them would be immensely time-consuming, costly and labour-demanding compared to performing 'mere' inspections, as required by the EU.

4.4.1.3 Bedding

The third provision which exceeds the EU's minimum standard and applies to all farm animals is contained in Schedule 1(4) of Regulation No. 2078. It requires that all farm animals housed in buildings (apart from poultry), must be kept on, or have, at all times, access to a lying area, which either has well-maintained dry bedding or is well-drained. As this thesis focuses on poultry and pigs, and poultry is explicitly exempted from this requirement, this provision's relevance to this research lies only in its interaction with the pig-specific provisions (contained in Schedule 8 of Regulation No. 2078).

Schedule 8(10) requires that where bedding is provided, it must be clean, dry and not harmful to pigs. Considering these two provisions in conjunction, provides a clearer specification concerning the bedding requirements for pigs. A joint reading also identifies the provisions as the ones implementing Annex 1 Chapter 1 (3) of the Pig Directive into English legislation. The joint consideration of Schedule 1 and 8 is supported by the corresponding provision in Regulation No. 2126 (from 1994), as all provisions regarding the pigs' bedding found in both Schedules are regulated in Article 14.¹⁶⁷ Indeed, the provisions in Regulation No. 2126 and No. 2078 are in essence the same, barring the difference that No. 2078 has been divided into two provisions.

However, the requirement of having access to bedding at all times, or being housed on bedding, contradicts the provisions which permit slatted floors for weaners and rearing pigs. Schedule 8 (11) permits concrete, slatted floors for piglets, weaners, rearing pigs, sows and gilts. Although piglets, gilts and sows must have access to solid flooring, there is no such requirement for weaners and rearing pigs.¹⁶⁸ As bedding material for pigs is commonly straw and/or hay, the lack of a requirement for weaners and rearing pigs to have access to solid flooring, contradicts the general pig requirement for dry-

¹⁶⁷ The Welfare of Livestock Regulations 1994 No. 2126 Schedule 3 Article 14

¹⁶⁸ Schedule 8 (11),(30),(35)

bedding. If straw or hay is provided on slatted flooring, it will fall through the gaps between the slates and will disappear. The consequence of the omission of a requirement of solid flooring is that any bedding material potentially provided to weaners and rearing pigs will disappear, leaving the pigs without the required bedding material.

While the loss of bedding material through floor gaps affects the pigs' physiological welfare, due to reduced comfort and increased injuries, it also affects their ethological welfare. Environmental enrichment, and particularly access to manipulable materials, enables pigs to satisfy their ethological needs, and has been extensively discussed in Chapter 1, along with the consequences of rearing pigs in a barren environment. Bedding, in the form of straw or hay, can often double as manipulable material for the purpose of satisfying the pigs' ethological needs.

Indeed, the CoP's recommendations consider straw to be an 'excellent material for environmental enrichment' for pigs as it is so versatile.¹⁶⁹ Straw is a fibrous material suitable for eating, and chewing, and the longer straws are appropriate for rooting in and playing with, with the additional benefit of providing physical and thermal comfort when used as bedding.¹⁷⁰ Due to its versatility, the importance of ensuring access to straw for pigs cannot be overestimated. Therefore, if the problem of the incompatibility of straw and slatted floors is not considered, there is a real danger that weaners and rearing pigs end up with neither bedding material nor environmental enrichment. Such a scenario would not only lower the level of welfare below the English requirements, but also below the EU's, amounting to non-compliance with the Pig Directive. It is noteworthy that, as other species-specific Schedules are outside the scope of this thesis and are not addressed, the possibility of the existence of similarly contradictory provisions cannot be dismissed.

¹⁶⁹ Pig CoP (n. 34) point 80

¹⁷⁰ *ibid* point 80

4.4.1.4 Summary

The three provisions critically analysed above, were selected due to the fact that they are the only ones clearly exceeding the minimum standard required by EU in regards to farm animals. The most significant step above and beyond is the statutory test regarding unnecessary suffering, as it provides a clear 'checklist' for English courts to follow in cases of alleged mistreatment of animals. However, the test has been formulated with a human-centric focus, and fails to achieve the strong protection it could have awarded animals, if it were drafted with from a zoocentric perspective. The test also fails to meet the definition of farm animal welfare within this thesis, as it disregards the physiological, ethological and emotional welfare of the animals. If the statutory test was formulated along the lines of a rounded, holistic definition of animal welfare instead, with a firm zoocentric focus, its impact and effect on improving animal welfare would increase significantly.

Nonetheless, as the statutory test will aid towards determining whether an offence has been committed, its existence remains positive, despite the missed opportunity by the legislature. By the same token, requiring 'thorough' inspections of farm animals, raises the level above the EU standard. As inspections are essential in order to detect welfare and health problems for all farm animals, this added emphasis on thoroughness aids towards increasing the welfare standard.

The final general provision that requires animals to be kept on, or have access to a laying area, which is well-drained or had dry bedding, also increases welfare standards. While the above criticism focused on pigs, it is important to emphasise that this requirement applies to all farm animals housed in buildings, apart from poultry. Although it can contradict the pig provision that allows slatted flooring for weaners and rearing pigs, it is undeniably important as it ensures that all farm mammals have access to a laying area which must be dry, and preferably covered in dry bedding, to increase their comfort (ie physical welfare), and also doubling as

environmental enrichment (ie ethological welfare). Taken together, these three provisions improve the standards required for farm animals in England considerably, but to a certain extent.

4.4.2 Pigs

The provisions specifically for pigs are contained in Schedule 8 of Regulation No. 2078. While Schedule 8 contains pig-specific requirements far more detailed and precise than those located in AWA2006, the overwhelming majority of the content in Schedule 8 is a verbatim implementation of the Pig Directive, the provisions of which have been closely scrutinised in Chapter 3. Indeed, the requirements in Schedule 8 that cannot be traced to the Pig Directive, generally have a corresponding (albeit not necessarily identical) provision in Directive 98/58, barring a few housing provisions within Regulation No. 2078.

As a matter of fact, to identify other pig-specific welfare measures which exceed EU's minimum standard, it is necessary to go beyond the legislation and consider other sources, such as the non-statutory, non-binding, Code of Practise (CoP) for pigs.¹⁷¹ It should be noted that the CoP emphasises that requirements laid down in law are the absolute minimum permitted, and depending on the housing system and the management of the pigs, greater space *may* therefore be necessary.¹⁷² The few exceeding provisions can be sorted under three common 'themes': housing, physical interventions, and inspections and health. As there are some legislative provisions relating to housing which do exceed the EU minimum, these will be discussed in conjuncture with the relevant CoP recommendations.

4.3.1.1 Housing provisions

The minimum amount of space permissible for each weaner and rearing pig within Regulation No. 2078 reflects the space allocations in the Pig Directive

¹⁷¹ *ibid*

¹⁷² *ibid* point 100

to the letter, and is calculated in the same manner: the weight of the pig determines the size of space it should have.¹⁷³ However, in regards to the space allocation, the recommendations by the CoP emphasise that the legal requirement is a minimum requirement and encourage a movement beyond the minimum. The encouragement is made evident as the CoP recommends the total floor space should be of a size adequate for pigs to sleep, feed, dung, and exercise, and that the lying area must be of a size that allows all pigs to lie down simultaneously, on their sides.¹⁷⁴ If the farmers adhere to the minimum space required by law, no part of this recommendation is possible, as the pigs would not have the necessary amount of space available.

Further, as the vast majority of the English legislation applicable to pigs has been lifted verbatim from the Pig Directive, it is noteworthy that the concrete examples of measures against aggression and fighting among pigs within the Pig Directive¹⁷⁵ have *not* been included in Regulation No. 2078. Whether or not this is a deliberate omission, is debatable. However, this omission leaves the requirement of reduced aggression up to the farmers' interpretation and reduces the level of statutory guidance.¹⁷⁶ Nonetheless, it should be noted that this does not lower the level of welfare required, as the Regulation nonetheless requires efforts towards reducing aggression and fighting, and therefore maintains the minimum standard the EU requires. The omission remains inexplicable though, particularly as it is one of the few changes to the otherwise verbatim implementation of the Pig Directive.

One of the few provisions in the Regulation which is not a verbatim implementation of the EU Directives, requires that the size of individual holdings are calculated according to the length of the pig it is intended for.¹⁷⁷ The Regulation specifies that the length of the pig is to be measured from

¹⁷³ Regulations No. 2078 (n. 30) Article 43

¹⁷⁴ Pig CoP (n. 34) point 100

¹⁷⁵ Chapter 3

¹⁷⁶ Regulations No. 2078 (n. 30) Schedule 8 Article 8(1),(2),42

¹⁷⁷ The internal area must not be less than the square of the length of the pig and no side less than 75% of the length of the pig.

the tip of its snout to the base of its tail, whilst the pig is standing and its back is straight.¹⁷⁸ Further, it requires that these individual housings are only to be used when a pig is ill or needs to be removed from the group to reduce aggression or as a preventative measure against fighting.¹⁷⁹

A second provision in Regulation No. 2078 which lacks a verbatim one in the EU legislation is the requirement that weaners and rearing pigs must be kept in stable groups, with as little mixing as possible.¹⁸⁰ If pigs unfamiliar with one another must be mixed, then they should be mixed as young as possible. Indeed, if the situation allows, it is preferred to mix them before weaning, or up to a week after. When the mixing happens, the pigs must be provided with adequate opportunities to escape and hide.¹⁸¹ However, if the pigs are familiar with each other, then the mixing should happen as soon as possible after weaning. Additionally, tranquilising medication to facilitate mixing may only be used in exceptional conditions, and upon consultation with a veterinarian.¹⁸² These strict requirements regarding how and when the pigs should be mixed are of high importance for their welfare. Mixing creates a new social situation for pigs and often results in aggression between them, as they have the need to establish a hierarchy, for ethological reasons. The CoP provides additional recommendations regarding the best approach to mixing the pigs when new groups are to be established.¹⁸³

Regulation No. 2078 also includes a ban on any husbandry systems in which pigs are kept in an environment with constant high temperatures and where a high level of humidity is maintained, ie 'sweat-box' systems.¹⁸⁴ This ban is particularly noticeable, as the EU legislation lacks a corresponding provision. As a result of this, providing that the domestic legislations permit

¹⁷⁸ Regulations No. 2078 (n. 30) Schedule 8 Article 6

¹⁷⁹ *ibid* Article 8 (2)

¹⁸⁰ *ibid* Article 39

¹⁸¹ *ibid* Article 40

¹⁸² *ibid* Article 41

¹⁸³ Pig CoP (n. 34) point 101

¹⁸⁴ Regulations No. 2078 (n. 30) Schedule 8 Article 16

them, other Member States are allowed to use such husbandry systems. The ban of sweat-box systems in England significantly improves the welfare standard. As, pigs do not have any sweat glands,¹⁸⁵ they face difficulties when regulating their body temperatures; therefore, sweat-box systems cause suffering and have a negative impact on their welfare. Additionally, pigs are highly susceptible to heat stress, and the CoP recommends cooling methods to ensure that the pigs do not overheat in hot weather.¹⁸⁶ Indeed, the CoP also includes a table of guidance for stock-keepers with appropriate temperatures for the pigs during different stages in their lives, which range from thirteen to thirty-two degrees Celsius.¹⁸⁷ The CoP highlights that wide temperature fluctuations may cause stress, disease or tail biting, and recommends steady temperatures for pigs.¹⁸⁸

When it comes to the housing of sows and their piglets, Schedule 8 is generally identical to the Pig Directive, with one important addition. It requires that if a farrowing crate is used, the piglets must be provided with a heat source (around thirty-two degrees Celsius) and a solid, dry, comfortable lying area, with sufficient space for all the piglets to rest simultaneously.¹⁸⁹ The resting area with the heat source must be away from the sow (as the sow should be in a temperature of eighteen to twenty degrees Celsius to optimise lactation). The inclusion of the legal requirement of a heat source is beneficial for the piglets' welfare. Piglets cannot regulate their body temperature effectively,¹⁹⁰ consequently, they seek a heat source. If the only available heat source is the sow, the risk for piglets to be laid upon by the sow, and crushed to death, increases. Although providing the additional heat source increases costs, it overall benefits the welfare of the pigs by

¹⁸⁵ M.B.M. Bracke 'Review of wallowing in pigs: Description of the behaviour and its motivational basis' (2011) 132 *Applied Animal Behaviour Science* 1

¹⁸⁶ Pig CoP (n. 34) point 54

¹⁸⁷ *ibid* point 55,56

¹⁸⁸ *ibid* point 56

¹⁸⁹ Regulations No. 2078 (n. 30) Schedule 8 Article 34

¹⁹⁰ Bracke (n. 183); R Bergeron, M-C Meunier-Salaün, S Robert 'The welfare of pregnant and lactating sow' in L Faucitano and AL Schafer (eds.) *Welfare of pigs from birth to slaughter* (Wageningen Academic Publishers 2008) 3.3

decreasing the numbers of death by crushing. Reducing the mortality rates also benefits the farmers' finances, as each dead piglet reduces profits.

In regards to housing provisions, there is only one in the EU legislation not implemented in the English law, and it can be argued that constitutes a case of non-compliance with EU law: the EU legislation establishes an upper limit of ammonia levels, while the English legislation does not address it all in regards to pigs. As ammonia is harmful to the health of both pigs and humans, the lack of a limit is alarming, and the omission lowers the welfare standard for pigs in England below the EU requirement.

4.3.1.2 Physical interventions

Physically invasive procedures are regulated separately in English law, in Regulation No. 1100 which applies to *all* farm animals. Schedule 1 contains a list of all physical interventions permitted by law, resulting in an inexplicit ban on all others.

In regards to pigs, Regulation No. 1100 permits a number of physical interventions relating to permanently marking them for identification purposes: namely, ear-clipping, ear-notching or ear-tagging, micro-chipping and tattooing.¹⁹¹ However, for these physical interventions to be lawful, they must be performed by competent staff, and under hygienic conditions, while ensuring that the pigs experience the minimum amount of pain and suffering possible.¹⁹² In line with this, the CoP recommends ear-tagging over ear-notching and ear-punching, as ear-tagging causes less pain and distress. The CoP emphasises that slap marking should only be considered as acceptable for identification purposes, if performed immediately before transporting pigs to slaughter.¹⁹³ However, neither the Regulation nor the CoP contain any reference regarding pain-relief or anaesthetics in

¹⁹¹ The Mutilations (permitted Procedures) (England) Regulations 2007 No. 1100, Schedule 1 at Pigs

¹⁹² *ibid* Article 3(a)-(d)

¹⁹³ Pig CoP (n. 34) point 18-19

connection with invasive marking procedures for the purpose of identification.

Regulation No. 1100 permits piglet castration, provided that it entails no tearing of tissues.¹⁹⁴ However, in England, the castration rates are low, as the majority of pigs are slaughtered at a lower liveweight. Slaughtering the pigs at a lower weight means that they are at a younger age, and by doing so, most of the welfare issues that may arise due to the behaviour of intact boars (who are reaching their sexual maturity) are eradicated, and the issue of boar taint in the meat avoided. Therefore, the CoPs recommend that while castration is lawful, it should be avoided, and allow the stock-keeper to consider whether it is necessary.¹⁹⁵ However, if castration is performed in England, it is generally done without any pain-relief or anaesthetics, provided that the castration happens within seven days of birth.

The provisions on tail-docking in Regulation No. 1100 are lifted verbatim from the Pig Directive, barring the addition that the method for tail-docking must 'involve quick and complete severance of the tail'.¹⁹⁶ The CoP recommends that detailed records are kept regarding the quantity of the tail-biting, along with any possible causes, as this can help attempts to minimise tail-biting.¹⁹⁷ Similarly, the Regulation provision on teeth-clipping or teeth-grinding has been lifted verbatim from the Pig Directive.¹⁹⁸ The CoP recommendations are more specific and emphasise that only as a last resort the upper and lower canine teeth are to be reduced, and highlight that it is not always necessary to reduce the teeth of the whole litter.¹⁹⁹ If a reduction is to be performed, teeth grinders are recommended by the CoP, as using

¹⁹⁴ Regulations No. 1100 (n. 189) Schedule 3(1)

¹⁹⁵ Pig CoP (n. 34) point 82

¹⁹⁶ Regulations No. 1100 (n. 189) Schedule 3(5)

¹⁹⁷ Pig CoP (n. 34) point 86

¹⁹⁸ Regulations No. 1100 (n. 189) Schedule 3(6)

¹⁹⁹ Pig CoP (n. 34) point 87-88

grinders over clippers reduces the risk of shattering teeth, which cause prolonged pain for the piglet.²⁰⁰

The Regulation only permits nose-ringing if the pigs are not kept continuously indoors, and allows tusk-trimming only when there is evidence that proves it necessary, as a preventative measure against injuries to other animals or for (human) safety reasons.²⁰¹ While there is an important safety element in permitting the trimming of tusks, particularly in the case of intact boars, the same cannot be said about nose-ringing. Only pigs who have outdoors access are to be nose-ringed, for the purpose of protecting the ground and pasture from the extensive damage rooting and foraging pigs are capable of inflicting upon it. Thus, it is for economic reasons (as it costs to restore the ground) and arguably environmental reasons (due to the damage) that nose-ringing is performed, rather than for pig-welfare concerns. Indeed, if anything, nose-ringing has a negative impact on the pigs' welfare, as it considerably reduces their ability to satisfy their ethological need of rooting, by causing them pain.

4.3.1.3 Summary

Overall, the vast majority of detailed provisions concerning pigs in English law is nothing more than a verbatim implementation of EU legislation, predominantly the Pig Directive. However, the analysis of the legislation does reveal that there is a small number of legally binding provisions that do exceed the minimum standard of EU law. These few provisions aim to increase the pigs' health, and only sometimes raise the (mainly physiological) welfare standard above what is required for compliance with EU legislation. There are also some provisions which arguably lower the welfare below the EU level. The most notable of these 'lowering' provisions are in regards to the bedding (ie straw) problem, where fully-slatted floors may cause problems both in regards with other English provisions and EU

²⁰⁰ *ibid* point 88

²⁰¹ Regulations No. 1100 (n. 189) Schedule 3,4,7

requirements. In a similar fashion, the lack of an upper limit ammonia levels in English law does not only lower welfare below the EU required standard, but also raises compliance issues as the EU limit is not implemented into the English legislation.

The CoP provides very detailed recommendations to farmers on how to improve the pigs' welfare and health standard. However, as CoPs are only recommendations, the provisions therein do not amount to a statutory obligation, which is highly unfortunate for pigs in England. If the recommendations regarding space and environmental enrichment were legal requirements, the welfare standard of pigs would increase significantly.

From a zoocentric perspective, one of the biggest issues with English legislation is that castration of piglets remains lawful. While lawfulness of castration is wholly in line with the EU requirements, and not wrong per se, when this permission is placed into the context of the English pig industry and their practices, the flaw becomes apparent: in England, pigs are commonly slaughtered at a lower liveweight, compared to rest of the EU. The effect is that pigs in England are commonly slaughtered *before* they reach sexual maturity, and consequently there is no risk of boar taint in the meat. Similarly, the associated welfare issues with boars exhibiting mounting behaviour are likely to be infrequent, due to the lack of sexual hormones. Therefore, there is no justifiable reason for castration of piglets to remain lawful in England. However, if the pig industry insists to castrate when necessary, as a precaution, then there is no reason for allowing such *occasional* castrations to take place without administering pain-relief and prolonged analgesia. Indeed, in regards to physical interventions, the English legislation must be critiqued on the general lack of requirements of pain-relief and prolonged analgesia, in relation to all permitted interventions. All of the lawful physical interventions are likely to inflict some pain on the pigs, albeit at varying degrees. By administering pain-relief and anaesthetics, the pain could easily be prevented, and the pigs' welfare standard would improve.

4.3.2 Commercial hybrids

As in the case of the pig legislation, the English law applicable to commercial hybrids has been lifted verbatim from the EU legislation: namely, the Egg Directive and the Broiler Directive. Any implementation changes are minor in nature. As the CoPs which apply to the commercial hybrids are highly detailed, most of the analysis in the following subsection will focus on the CoPs recommendations, despite their non-binding nature. Since the rules concerning physically invasive procedures apply to both commercial hybrids, they will be addressed first, followed by the egg-layer and subsequently the broiler legislation.

4.3.2.1 Physically invasive procedures on commercial hybrids

The physically invasive procedures on commercial hybrids are listed in Regulation No. 1100 and interventions performed on the hybrids can be divided into two categories: rules applicable to broilers and egg-layers intended for (commercial) establishments (larger than 350 birds), and rules applying to the parent and grandparent birds of the birds in the former category.²⁰²

In regards to the commercial hybrids of the first category, the only physical intervention permitted under the Regulation is beak-trimming, aiming to prevent feather-pecking and cannibalism among the birds. The provisions regarding beak-trimming are based on the corresponding EU provisions, although the Regulation contains a greater level of detail about how it must be performed. The beak-trimming provisions are essentially the same for both kinds of hybrids, with two exceptions: first, the beaks of egg-layers *must* be trimmed with infra-red technology, while no trimming method is specified for broilers; and second, broilers' beaks may only be trimmed upon

²⁰² The Mutilations (Permitted Procedures) (England) (Amendment) Regulations 2010 No. 3034 Article 2(3)(a)

consultation with a veterinarian.²⁰³ The broiler CoP emphasises that beak-trimming should not be necessary on broilers, as they never reach sexual maturity, and should therefore be avoided if possible.²⁰⁴ Indeed, the broiler CoP states that beak-trimming causes considerable pain to broilers, and would 'therefore constitute a major welfare insult to farm animals'.²⁰⁵ The strength of this statement makes the lack of a corresponding one in the egg-layer CoP troubling, as they reasonably experience the same amount of pain.

The second category of physical interventions, those permitted on the parent breeding stock, includes beak-trimming for broiler parents, although beak-trimming is not advised for female breeding birds.²⁰⁶ While the breeding roosters' beaks may be trimmed, it is recommended that only the tip of the beak is removed, and that the procedure happens within five to ten days from hatching, to allow eating and pecking behaviour to develop first. A number of additional physical interventions are permitted on breeding roosters. Dubbing, the removal of the rooster's comb, is permitted, despite being unlikely to result in any welfare improvement, as the main effect of dubbing is causing the roosters pain and should therefore be avoided. Although the Regulation permits dubbing, it requires that it should be done at the age of one day, and performed by a trained person with the use of sharp scissors. Indeed, if the rooster chicks are older than seventy-two hours, a veterinarian must perform the dubbing.²⁰⁷ Further, non-veterinarians are legally permitted to remove parts of the rooster's wattles.²⁰⁸ The roosters' feet are also subjected to physical interventions, as the law permits the removal of the spur bud, by the use of a heated wire, upon day-old rooster chicks. The underlying reason for permitting this procedure is that a

²⁰³ *ibid* Article 2(3)(b)

²⁰⁴ Broiler CoP (n. 34) point 36

²⁰⁵ *ibid* point 35

²⁰⁶ *ibid* point 37

²⁰⁷ Regulations No. 1100 (n. 189) Schedule 4(8); The Veterinary Surgeons Act 1966 (Schedule 3 Amendment Order 1988 (SI 1988 No 526))

²⁰⁸ The Veterinary Surgeons Act 1966 (n. 205)

pronounced spur may injure hens whilst mating.²⁰⁹ The final intervention permitted on roosters is toe removal, for identification purposes. Toe removal is deemed to be an unnecessary physical intervention by the CoPs, but it does nonetheless remain legal and widely practised.²¹⁰

Overall, while the numbers of beak-trimmed egg-layers far outnumber the broiler breeding stock subjected to physical interventions, the number of different interventions permitted on broiler hybrids parent birds is much higher. Particularly rooster chicks may be subjected to multiple interventions, at different times, in their early lives. The imbalance in the number of permitted interventions between the two different hybrids must be queried, especially in regards to the differences for the parent stock. Rooster chicks of the broiler hybrid (intended for breeding) can almost be mutilated, for the reason of protecting the hen during mating. Although parent birds for egg-layers need to mate too, and encounter the same risk of inflicting and sustaining injuries, it is not permitted to subject the egg-layer parents to the same physical interventions. Consequently, the question must be asked whether it is absolutely necessary to subject the rooster chicks of broiler hybrids to these procedures in the first place.

4.3.2.2 Egg-layers

The four Schedules in Regulation No. 2078 which apply to egg-layers (Schedule 2,²¹¹ 3,²¹² 4,²¹³ and 5²¹⁴) are all a verbatim implementation of the Egg Directive, with no alterations. As a result, there are no legal requirements exceeding the EU welfare standard minimum. However, there are plenty of highly detailed recommendations in the non-binding CoPs, which indeed exceed it. The CoP recommendations provide comprehensive guidance on how stockmen can maximise their flocks' welfare. The extent of

²⁰⁹ Broiler CoP (n. 34) point 39

²¹⁰ Regulations No. 1100 (n. 189) Schedule 4(7); Broiler CoP (n. 34) point 41

²¹¹ Regulations No. 2078 (n. 30) Schedule 2

²¹² *ibid* Schedule 3

²¹³ *ibid* Schedule 4

²¹⁴ *ibid* Schedule 5

their feasibility, as the previous discussion on the recommendation of ‘thorough’ inspections showed, is a different matter. Nonetheless, what follows is an analysis of the most important recommendations outlined in the CoPs, the ones which have the potential to increase the welfare standard of egg-layers by a noticeable amount, if they are adhered to.

The CoP recommendations concerning feed and water state that areas used by the subordinate birds require particular attention to ensure that these birds are able to access feed and water.²¹⁵ This recognition of the hierarchy within the flocks is of importance to the birds’ welfare, as the subordinate birds will have difficulties in gaining access some areas, due to dominant birds’ aggression.

The CoP stresses the importance of consistency in the quality of the feed, and advises against sudden changes in feed quality (or quantity), as a change may cause outbreaks of aggressive feather-pecking.²¹⁶ However, while this recommendation is important due to the severe welfare implications an outbreak of pecking may have, feed consistency is largely outside the scope of the farmers’ control, as it is the feed suppliers which must ensure consistency in their products. Consequently, it is beneficial for the farmers that this recommendation is not a statutory provision. To further reduce the risk of feather-pecking outbreaks, it is recommended that whole grain is scattered over the litter on a daily basis in non-caged systems, thereby channelling the foraging, scratching and pecking behaviour towards the grain, rather than fellow flock mates.²¹⁷ The CoP expands on reasons why feather-pecking in the flock is undesirable from both an economic and a welfare standard perspective: the loss of feathers can lead to the birds experiencing cold stress, and consuming more food to retain their body heat.²¹⁸ As feed is a major expense for the farmers, increased consumption,

²¹⁵ Egg CoP (n. 34) point 21

²¹⁶ *ibid* point 24

²¹⁷ *ibid* point 27

²¹⁸ *ibid* point 52

as a consequence of feather-pecking, inevitably results in increased production costs and reduced profits.

The CoP recommends that induced moulting (by withdrawing feed and water) should not be allowed in any circumstances.²¹⁹ It is highly regrettable from an animal welfare point of view that this has not been included in the Regulations, as it is an unacceptable practice. Therefore, an inclusion in the legislation would make the recommendation a 'real' prohibition, and would raise the level of welfare for egg-layers above the EU minimum.

Additionally, the CoP recommends that caged egg-layers should not have a light intensity lower than 5 lux and should preferably be at least 10 lux, whilst for non-caged egg-layers the light intensity should be at least 10 lux at bird eye height.²²⁰ Interestingly, there are no minimum requirements regarding the amount of light for egg-layers in the EU Directives nor in the English legislation, while there is an EU requirement of at least 20 lux for broilers.

4.3.2.3 Broilers

Regulation No. 3033 amends Regulation No. 2078 by adding Schedule 5A,²²¹ which implements the Broiler Directive, by a verbatim replication of the text in the Broiler Directive, barring one change: when the stocking density of broilers is increased above 33kg/m², a notice must be given to the authorities. Schedule 5A requires at least fifteen working days' notice²²² before the increase (combined with a definition of a 'working day'),²²³ whilst in the EU Directive it only says fifteen days. It is highly unlikely that this slight change to the time scale can have any significant impact upon the concerned broilers' welfare standard. Thus, all measures which exceed the

²¹⁹ *ibid* point 25

²²⁰ *ibid* point 54

²²¹ The Welfare of Farmed Animals (England) (Amendment) Regulations 2010 No 3033 Schedule 5A

²²² *ibid* Article 4(3)

²²³ *ibid* Article 4(4)

EU minimum standard for broilers are in the form of recommendations in the non-binding CoP. The CoP emphasises that its recommendations apply to breeding stocks (parent and grandparent), unlike the Broiler Directive or Schedule 5A.²²⁴

The CoP recommends that care is taken regarding the selection of the appropriate broiler-hybrid, as the housing system and rearing standard the birds are intended for, impacts on which specific kind of broiler-hybrid is the most appropriate: free-range and/or organic broilers live longer lives than 'conventionally' reared broilers. The longer lifespan of free-range and organic birds makes it *essential* that hybrids of slower growth are selected. It is also important to adapt the feeding regime to an appropriate level to ensure an appropriate growth rate.²²⁵ Although this seems rather obvious, despite its importance, neither Regulation No 3033 nor the Broiler Directive make any reference to the selection of an appropriate broiler-hybrid for the respective rearing standards.

As addressed above, the CoP recommendations for inspections are highly detailed, and the 'thorough' inspection of broilers entails many practical issues, as the larger the birds get, the more crowded their living conditions become. Individual inspection is near impossible, therefore it is more appropriate to inspect and assess the overall flock health instead. As a recommended practice of flock inspection, the CoP states that in those housing systems where broilers are not fed *ad libitum*, inspections carried out at feeding time are particularly effective, as the unfit birds will be slower to feed.²²⁶

However, the CoP recommends that in order to ensure the thoroughness of the inspection, the flock-keeper should go walkabout within three meters of

²²⁴ Broiler CoP (n. 34) point 1, 84-101

²²⁵ *ibid* point 4

²²⁶ *ibid* point 23

every bird encouraging them to move, without frightening them. It is suggested that the flock-keeper should pass close enough to the birds to see them clearly, and for broilers to be disturbed and move away. Encouraging the birds to move, makes the identification of sick, injured, or weak individuals easier, as they are less likely to move away. Such birds should be treated or culled immediately. The signs of disease for broilers are identical to the signs for egg-laying hybrids, listed in the thorough inspection quote above. However, the CoP encourages the usage of parasiticides for the control of external parasites, particularly in regards to controlling red mite infestations in flocks of broiler breeders.²²⁷

Broilers are known to face severe leg problems, which are given special mention within the CoP. The recommendations are that broilers with severe leg problems,²²⁸ when struggling to move, find feed and water, should be culled immediately, unless the problems are treatable and the bird is likely to recover, within twenty-four hours without unnecessary suffering.²²⁹ Further, flock-keepers should monitor the broilers daily, for signs of leg problems,²³⁰ and the CoP contains an extensive list of measures aimed at improving the leg health of the broilers.²³¹

Further, for broilers, the litter condition is of utmost importance in regards to their physiological welfare, as they spend their entire lives in contact with it. Therefore, the litter directly affects their health and welfare standard, as it is never changed during the broilers' life time. In the Broiler Directive, litter is merely seen as a surface for the broilers to live on and –due to the verbatim implementation of the Directive into the Regulation– the Regulation makes no reference to dust bathing, or other ethological needs, and treats litter identically. However, the CoP emphasises the importance of good litter

²²⁷ *ibid* point 28

²²⁸ Problems such as considerable difficulties whilst walking, severe ascites, malformations, severe wounds or seizures.

²²⁹ Broiler CoP (n. 34) point 29

²³⁰ *ibid* point 32

²³¹ *ibid* point 33-34

maintenance, which is further underlined by a specific booklet provided by DEFRA containing advice on litter management.²³² A miss-managed broiler litter will cause severe welfare problems,²³³ and the additional booklet on its management acknowledges its importance; however, it is unfortunate that there is not a stronger emphasis on litter management in the binding legislation.

The only broiler welfare issue that can surpass in importance the management of the litter is stocking density. The CoP recommends a maximum stocking density of thirty-four kilograms per square metre,²³⁴ which is an interesting limit. The maximum stocking density allowed for the minimum level of rules in the Broiler Directive is at thirty-three kilograms per square metre. Thus, the flock-keepers following the recommendations of the CoP become subject to the additional legal requirements for 'higher density' for the sake of one kilogram. One may query the reasoning behind this, as it increases the administrative burden for the farmers, and increases the standard required in regards to the housing buildings for broilers. Consequently, the costs for the farmer are increased and are highly unlikely to be off-set by the added kilogram of broiler liveweight.

Further, the CoP recommends that broilers should have enough space to be able to stand, sit, turn around, and stretch their wings without difficulty.²³⁵ Whilst the maximum density recommended in the CoP is on the lower end of what is permitted in the EU, it is nonetheless unlikely that the broilers will have sufficient amount of space to stretch their wings. Particularly towards the end of their lives when they have grown bigger.

²³² DEFRA 'Poultry Litter Management' (DEFRA Publications 1994)

²³³ Chapter 1.4.2.2.

²³⁴ Broiler CoP (n. 34) point 59

²³⁵ *ibid* point 61

It is also noteworthy that the CoP addresses the practice of ‘thinning’, ie deliberately placing high numbers of chicks and routinely thinning them out (by culling them), in order to avoid exceeding the stocking limits. This is not recommended and should be avoided as it causes unnecessary distress for the broilers.²³⁶ As the practice of thinning may be tempting for those farmers who aim to maximise their profit margin, it is positive for the broilers’ welfare that the CoP expressly discourages it, despite the lack of a legal prohibition.

In summary, the English legislation for both commercial hybrids and their welfare is in essence a verbatim implementation of the Egg Directive and the Broiler Directive, with no significant departures from the minimum standards required by the EU. Indeed, even the difference in the amount of attention awarded to the ethological needs of the birds echoes the EU approach, by showing some recognition of the egg-layers’ ethological needs, while showing none to the broilers’. While the CoP contains an array of measures that exceed the EU minimum, they are *mere recommendations* and do not impose any statutory obligation on English farmers.

4.3.3 Evaluation

Overall, as shown above, the majority of the English farm animal welfare legislation is *exactly* in line with the requirements laid down by the EU minimum standards. The few legal measures established at a higher level than the EU minimum –namely, the statutory test on ‘unnecessary suffering’, and the requirements for ‘thorough inspections’ and bedding– have been discussed at length. While these measures are positive for the animal welfare, particularly the statutory test, they do not raise the overall level of welfare significantly. If the CoP recommendations were statutory obligations, they would far exceed the EU minimum. Unfortunately from a zoocentric point of view, the CoPs remain recommendations.

²³⁶ *ibid* point 64

4.3.3.1 The impact of competitive trade from the rest of the EU

The English legislation is just inches above the EU minimum, mainly due to the statutory test for unnecessary suffering and the thorough inspections. Consequently, the demands imposed upon the English farmer by national law, compared to those imposed upon farmers in other Member States, where only the EU minimum is required, are essentially identical. Similar legal requirements ought to result in similar costs, and accordingly the English farmers' competitive strength should not be affected compared to other Member States' farmers.

However, the CoP recommendations establish a standard significantly higher than the legislation. While the recommendations are not strictly law, they may nonetheless be used as evidence against farmers in prosecutions regarding the failure to ensure the animals' welfare.²³⁷ If the recommendations in the CoPs are complied with, to any significant extent, the costs will change, and the impact will inevitably be noted on the competitive strength of the English farmers. The majority of the provisions in the CoPs require a significantly higher housing standard for rearing animals, and buildings of such high standards are more expensive to construct and maintain. Additionally, the stocking densities permitted by the CoPs differ substantially from the EU minimum, in particular for broilers. The effect is that if the CoP recommendations were followed, the stocking densities would be reduced, requiring either extensions to the existing housing means, or a reduction in the number of animals at the farm. Official DEFRA statistics indicate that most farms have some sort of 'animal disease prevention practice' in place, in line with the CoP requirements (82% of pig farms,²³⁸ 79% of broilers farms²³⁹ and 69% of egg farms²⁴⁰). The most commonly cited

²³⁷ Agricultural (Miscellaneous Provisions) Act 1968 Chapter 34, Eliz 2 Part 1 Article 3

²³⁸ DEFRA 'Animal Health and Welfare Practises on Farm 2011/2012, England' (DEFRA National statistics 2013) 2.4

²³⁹ *ibid* 2.5

²⁴⁰ *ibid* 2.6

reasons for following such practices are for reasons related to animal welfare and finance.²⁴¹

Further, apart from DEFRA-issued CoPs, there is a number of private voluntary labelling schemes, also known as 'food assurance schemes', all of which have their own sets of additional standards for participating farmers to comply with. Participation in these labelling schemes is popular, as currently over 78,000 farms in the UK are 'Red Tractor' farms,²⁴² nearly 90% of all eggs produced in the UK are 'Lion Quality Eggs',²⁴³ as well as 50% of all egg-layers and around a third of all pigs in the UK are farmed to 'RSPCA Assured' standard.²⁴⁴ Of the UK pork production, approximately 90% is reared to 'Red Tractor' standards.²⁴⁵ The Food Standard Agency has issued best practice recommendations to ensure that all schemes operate in an appropriate manner.²⁴⁶ While these positive indicators that many farm animals do in fact enjoy a higher standard than the legislative minimum, it must be stressed that these are *voluntary* schemes, and they all have their own standards. The effect is that the voluntary schemes therefore create a very inconsistent patchwork across the country, and it depends on the individual farmer which standards applies.

Further, while a large proportion of the consumers recognise the various labels,²⁴⁷ the quantity of labels and the difference in standards between them cause confusion as to what each label represents in regards to animal

²⁴¹ *ibid* 3

²⁴² Assured Food Standards 'FAQ' <http://www.redtractor.org.uk/who-we-are/faq#488> accessed 23 November 2015

²⁴³ Egginfo 'A great British success story' (*Egginfo*) <<https://www.egginfo.co.uk/british-lion-eggs/about/success-story>> accessed 19 November 2015

²⁴⁴ RSPCA Assured 'More than one in four shoppers recognises RSPCA Assured label' (27 October 2015) <<https://www.rspcaassured.org.uk/press-and-media/more-than-one-in-four-shoppers-recognises-rspca-assured-label/>> accessed 21 November 2015

²⁴⁵ Agriculture & Food 'A view of European pig production. A benchmarking exercise for Denmark, England, Holland and Germany' (Danish Agriculture & Food Council) 4

²⁴⁶ Gov.UK 'Food certification and assurance schemes' <<https://www.gov.uk/guidance/kitemarks-in-farmed-meat-and-produce>> accessed 25 November 2015

²⁴⁷ RSPCA Assured (n. 242)

welfare. Many farmers participate in the voluntary schemes due to the premium the label adds to the remuneration for their produce. Indeed, to stay financially viable, it is important for farmers in England to maximise profit where they can. Particularly so, in the last couple of years, where the remuneration they receive for their produce by supermarkets has been likely to be less than their production cost.²⁴⁸ The dominance of supermarkets in England means that they are always able to find alternative suppliers who accepts a lower prices. EU membership has also had an impact on the remuneration English farmers receive, as if they will not accept the price the supermarkets offer, there is always the possibility for the supermarkets to source necessary supplies from other Member States with cheaper produce. Indeed, if produce imported from other Member States is at a significantly lower price than the domestic one, the supermarkets are known to cancel their supply contracts with domestic farmers. The financial consequences of such cancellations may be so severe that the English farmers are forced out of business.²⁴⁹ This effectively results in English farmers sometimes selling at a loss.²⁵⁰

Declining domestic production and increasing imports form a trending pattern: the total number of pigs in England in 1992 was just over 6.5 million,

²⁴⁸ Katy Salter 'Chicken wars: Waitrose sells whole bird for £2.11' *The Telegraph* (19 January 2015) <<http://www.telegraph.co.uk/food-and-drink/news/chicken-wars-waitrose-sells-whole-bird-for-211/> accessed 2015-01-19> accessed 19 January 2015; Fiona Harvey 'Pig Farmers being forced out of business, survey warns' *The Guardian* (1 August 2012) <<http://www.theguardian.com/environment/2012/aug/01/pig-farmers-struggling-mpa-survey>> accessed 17 January 2015

²⁴⁹ Alex Renton 'British farmers forced to pay the cost of supermarket price wars' *The Guardian* 2 (July 2011) <<http://www.theguardian.com/environment/2011/jul/02/british-farmers-supermarket-price-wars>> 17 January 2015; Jay Rayner 'Britain's farming crisis: 'People don't realise how tough everything is'' *The Guardian* (16 March 2013) <<http://www.theguardian.com/environment/2013/mar/16/britain-farming-crisis-how-tough>> accessed on 17 January 2015

²⁵⁰ Renton (n. 249); Jon Henley 'The battle for the soul of British Milk' *The Guardian* (2 November 2014) <<http://www.theguardian.com/uk-news/2014/oct/02/-sp-battle-soul-british-milk>> accessed 17 January 2015; Louise Gray '40 million chicks on 'conveyor belt to death'' *The Telegraph* (4 November 2010) <<http://www.telegraph.co.uk/earth/earthnews/8107957/40-million-chicks-on-conveyor-belt-to-death.html>> accessed on 1 March 2014; Jennifer Rankin 'Supermarket milk price war alarms farmers' *The Guardian* (5 May 2014) <<http://www.theguardian.com/business/2014/mar/05/supermarket-milk-price-war-alarms-farmers>> accessed 17 January 2015;

and twenty-one years later, in 2013, this number dropped to 3.6 million pigs²⁵¹ – a sharp reduction. Indeed, the annual number of slaughtered ‘clean pigs’ (pigs reared for meat and not for breeding) in the UK has fallen from 13.5 million in 1994 to 8.6 million in 2014.²⁵² While the number of pigs reared for pork in England is in sharp decline, the total import of pork to the whole of the UK has increased from 845,247 tonnes in 2005 to 873,589 tonnes in 2014.²⁵³ Meanwhile, while imports have increased, the worldwide exports of British pork have also increased from 141,686 tonnes in 2005 to 265,120 tonnes in 2014.²⁵⁴ The numbers paint the picture of a decreasing consumer demand of domestically produced pork and an increasing demand of imported pork. However, the increase in import is lower than the reduced production and the increased export combined, which indicates a general decline in demand in pork. Indeed, while the total consumption of pork in the UK has increased by 162,000 tonnes between 1990 and 2014, per capita consumption has declined by 600 grams during the same period.²⁵⁵ While the increase of cheaper imported pork has a negative impact on English pig farmers, the increase in export should be commended, as the export market ensures that many of the pig farms remains financially viable. Nonetheless, the UK-wide self-sufficiency in pork has declined from 69% in 1990 to 56% in 2014.²⁵⁶

The broiler statistics are in stark contrast to the pig ones, as the amount of broilers slaughtered in England and Wales increased from 542.8 million

²⁵¹ Gov.UK ‘Livestock numbers in England and the UK at December each year’ 2014 <https://www.gov.uk/government/statistical-data-sets/structure-of-the-livestock-industry-in-england-at-december> accessed 20 November 2015

²⁵² AHDB Pork ‘Annual Clean Pig’ <<http://pork.ahdb.org.uk/prices-stats/production/gb-slaughtering/annual-clean-pig/>> accessed 18 October 2015

²⁵³ AHDB Pork ‘UK Pig Meat Imports’ <<http://pork.ahdb.org.uk/prices-stats/imports-exports/uk-pig-meat-imports/>> accessed 18 October 2015

²⁵⁴ AHDB Pork ‘UK Pig Meat Exports’ <<http://pork.ahdb.org.uk/prices-stats/imports-exports/uk-pig-meat-exports/>> accessed 18 October 2015

²⁵⁵ AHDB ‘EU Per Capita Consumption’ <<http://pork.ahdb.org.uk/prices-stats/consumption/eu-per-capita-consumption/>> accessed 18 October 2015

²⁵⁶ AHDB Pork ‘EU Self-sufficiency’ <<http://pork.ahdb.org.uk/prices-stats/consumption/eu-self-sufficiency/>> accessed 18 October 2015

birds in 1994 to 776.2 million birds in 2014.²⁵⁷ Although pork consumption is declining, the consumption of chicken has increased from just over twenty-one kilograms per capita in 1990 to thirty-three kilograms per capita in 2013.²⁵⁸ Despite the considerable growth in domestic production, the UK is not self-sufficient in poultrymeat, and the import has increased from 298,000 tonnes in 2000 to 384,000 tonnes in 2014. Meanwhile, the export from the UK increased from 191,000 tonnes in 2000 to 342,000 tonnes in 2014.²⁵⁹ Consequently, even if all export of poultrymeat from the UK stopped, it would still not be sufficient to meet the domestic demand. As such, while the increase in demand of poultry by the consumers is positive for the farmers in England, they nonetheless face the competition from (cheaper) imports.

Similar to the increase in chicken, the consumption of eggs in the UK has increased, from 10.3 billion eggs in 2004 to 11.8 billion in 2014, with an estimated per capita consumption of 184 eggs in 2014.²⁶⁰ However, while the consumption has increased by 1.8 billion, the import increased by 600 million during the same period.²⁶¹ Despite failing to be self-sufficient, the egg industry is estimated to have increased in value, from £586 million to £955 million in 2014. It is not only the egg producers who have benefited from this increase. The industry estimate of the free-range (including organic) eggs' market share volume increased from 32% in 2004 to 52% in 2014, which

²⁵⁷ Gov.UK 'Slaughter statistics' <https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/469902/poultry-slaughter-22oct15.ods> accessed 18 November 2015; Gov.UK 'Latest poultry and poultry meat statistics' <<https://www.gov.uk/government/statistics/poultry-and-poultry-meat-statistics>> accessed 18 November 2015; Gov.UK 'United Kingdom Poultry and Poultry Meat Statistics – October 2015' (DEFRA)

<https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/469901/poultry-statsnotice-22oct15.pdf> accessed 19 November 2015

²⁵⁸ G Ford 'State of Poultry Industry' (AHDB Outlook Conference 11th February 2015) <<http://www.eblex.org.uk/wp/wp-content/uploads/2015/02/State-of-the-Poultry-Industry-Gary-Ford-130215.pdf>> accessed 18 November 2015

²⁵⁹ *ibid*

²⁶⁰ Egginfo 'Industry data' (*Egginfo*) <<https://www.egginfo.co.uk/egg-facts-and-figures/industry-information/data>> accessed 15 November 2015; Egginfo 'Industry data 2004 to 2014' (*Egginfo*) <<https://www.egginfo.co.uk/sites/default/files/Archive%20industry%20stats%202004%20-%202014%20%282%29.docx>> accessed 15 November 2015

²⁶¹ Egginfo 'Industry data 2004 to 2014' (n. 260)

consequently means a greater number of egg-layers enjoy a standard of welfare far higher than the minimum required by law.²⁶²

While the steadily increasing sales in all three products, and particularly in chicken, are positive news for the English farmers, the increase in exports and imports indicate a problem: imports sell very well in the retail market, probably due to the lower price. When the price-conscious English consumers are faced with the choice between a more expensive piece of domestically produced meat and a piece of meat, which looks the same, but is cheaper as it is imported from a Member State with minimum standards, the most cost-effective choice is often made. The consequence is that the cheaper imports sell better, and the demand for domestic produce decreases. Effectively, the competitive strength of the English farmers suffers, and further undermines their ability to ask supermarkets for remuneration that meets their production costs and preferably allows for a profit. If they keep selling their produce at a loss (for example ten to thirty pounds sterling per finished pig),²⁶³ farmers will be left with few options: to export, to quit farming or to make cost-savings. If the selection is cost savings, one of the easiest paths is by reducing farm animal welfare, particularly if they already participate in voluntary labelling schemes and follow higher standards. The option may be to choose a less demanding labelling scheme or to leave such voluntary schemes altogether, thus enabling the standard of welfare to be lowered (closer) to the legal requirements.

Economic analyses of the cost of rearing animals to higher welfare standards have suggested that in order to ‘...guarantee farmers’ livelihoods in the long term, price premiums for high-welfare meat need to be

²⁶² Egginfo ‘Industry data’ (n. 260); Egginfo ‘Industry data 2004 to 2014’ (n. 260)

²⁶³ BBC ‘Pig owners protest about cost of running business’ *BBC News Berkshire* (3 March 2011) <<http://www.bbc.co.uk/news/uk-england-berkshire-12633496>> accessed 17 January 2015

maintained'.²⁶⁴ However, in recent years, a strong price pressure due to the consumers' demand for cheap food has reduced the farmers' remuneration. It has been reported that this price pressure erodes the current welfare standards,²⁶⁵ and renders any aspiration to increase the welfare levels unrealistic.

4.3.3.2 Race to the Top or Race to the Bottom?

The previous section found that the competitive strength of the English farmers is indeed negated by competition from imported, cheaper versions of their produce, despite the small difference between the farm animal welfare standard required by the EU minimum and the one required by domestic law. However, welfare standard remains an important factor in regards to the competitive strength, as the voluntary labelling schemes come with a variety of additional requirements which do raise the welfare standard beyond the EU minimum, and consequently increase the farmers' costs. As most requirements that exceed the EU minimum lie in these voluntary labelling schemes, any de-regulation in the official, binding legislation –which is close to the minimum standards– aiming to ease the farmers' financial burden, would effectively amount to non-compliance with the EU law. Nonetheless, the incentive to protect the financial buoyancy of the domestic farmers remains strong, as it impacts on the economy as a whole, and on the nation's food security. Therefore, the English legislation will be examined below, and in order to ascertain if there is any evidence of regulatory movement it is necessary to consider outdated legislation, to identify old provisions that have a corresponding, modern version in the current legislation.

As England joined the European Community –now European Union– in 1973, it has been a member the entire time of the development of animal welfare law in the EU. Consequently, in order to assess any upward or

²⁶⁴ H.L.I. Bornett, J.H. Guy, P.J. Cain 'Impact of animal welfare on costs and viability of pig production in the UK' (2003) 16 *Journal of Agricultural and Environmental Ethics* 163, 184

²⁶⁵ Salter (n. 248)

downward movement in the level of welfare required by law, it is necessary to use as reference points legislative provisions in English law which pre-date the introduction of EU legislation.

England was the pioneering country in regards to legislating against animal cruelty, with the first Act being passed in 1822.²⁶⁶ Due to the long history of legislation against animal cruelty, which subsequently developed into animal welfare legislation, there has been a multitude of Acts²⁶⁷ and later Regulations²⁶⁸ on the matter, covering a range of subjects, from wild and agricultural animals, to dogs, and animals used for scientific experiments. Consequently, a large amount of the legislation falls outside the scope of this thesis. However, the following Acts are of relevance: the Protection of Animals (Anaesthetics) Act 1954,²⁶⁹ the Agricultural (Miscellaneous Provisions) Act 1968²⁷⁰ and the Animal Welfare Act 2006²⁷¹ (AWA2006, see above).

²⁶⁶ Cruel Treatment of Cattle Act 1822 (3 Geo IV c71)

²⁶⁷ *ibid*; Cruelty to Animals Act 1835 (5 Will 4 c59); Cruelty to Animals Act 1849 (12 & 13 Vict. c92); Cruelty to Animals Act 1876 (39 & 40 Vict. c77); Wild Animals in Captivity Protection Act 1900 (63 & 64 Vict. c33); Protection of Animals Act 1911 (1 & 2 Geo 5 c 27); Protection of Animals (Cruelty to Dogs) Act 1933 (23 & 24 Geo 5 c27); Protection of Animals Act 1937 (Geo 5 c21); Protection of Animals (Amendment) Act 1954 (2 & 3 Eliz. 2 c40); Abandonment of Animals Act 1960 (8 & 9 Eliz. 2 c43); Animals (Cruel Poisons) Act 1962 (10 & 11 Eliz. 2 c26); Veterinary Surgeons Act 1966 (Eliz. 2 c36); Agricultural (Miscellaneous Provisions) Act 1968 (Eliz. 2 c34); Agriculture (Miscellaneous Provisions) Act 1972 (Eliz. 2 c62); Wildlife and Countryside Act 1981 (Eliz. 2 c69); Animal (Scientific Procedures) Act 1986 (Eliz. 2 c14); Protection of Animals (Penalties) Act 1987 (Eliz. 2 c35); Protection of Animals (Amendment) Act 1988 (Eliz. 2 c29); Protection against Cruel Tethering Act 1988 (Eliz. 2 c14); Animal Welfare Act 2006 (Eliz. 2 c45);

²⁶⁸ The Welfare of Livestock Regulations 1994, SI 1994/2126 amended by The Welfare of Livestock (Amendments) Regulation 1998, SI 1998/1709; The Welfare of Livestock Regulations 1994, SI 1994/2126; The Welfare of Farmed Animals (England) Regulation 2000, SI 2000/1879; The Welfare of Farmed Animals (England) (Amendment) Regulation 2002, SI 2002/1646; The Welfare of Farmed Animals (England) (Amendment) Regulations 2003, SI 2003/229; The Mutilations (permitted Procedures) (England) Regulations 2007, SI 2007/1100; The Welfare of Farmed Animals (England) Regulations 2007, SI 2007/2078; The Welfare of Farmed Animals (England) (Amendment) Regulations 2010, SI 2010/3033; The Mutilations (Permitted Procedures) (England) (Amendment) Regulations 2010, SI 2010/3034

²⁶⁹ Anaesthetics Act 1954 (n. 267)

²⁷⁰ Agricultural Act 1968 (n. 267)

²⁷¹ AWA2006 (n. 29)

The earliest of these acts, the Anaesthetics Act 1954, is of particular interest to this research, as it concerns physical interventions. According to the 1954 Act, any operation not included in the First Schedule of the Act²⁷² must be accompanied by the administration of anaesthetics; otherwise such an operation will be considered to have been performed 'without due care and humanity'.²⁷³ This reference to 'due care and humanity' is effectively an early recognition that animals have the ability to feel pain. However, modern scientific knowledge raises the question if the operations listed in the First Schedule should be considered to be performed without due care and humanity too.

A prime example is pig castration. The First Schedule of the 1954 Act explicitly permits pig castration, before the age of seven months, without anaesthetics.²⁷⁴ This age-limit was not reduced until 1982, when anaesthetics were required over the age of four weeks.²⁷⁵ The four week age-limit was maintained, until it was lowered further in 2003, to the current limit of seven days²⁷⁶ due to EU demands. The EU Directive 91/630/EEC²⁷⁷ contained the same four week age-limit, until it was amended in 2001 and lowered to seven days.²⁷⁸ The change was implemented into the English law by Regulation No. 299 in 2003, and has remained there since. Consequently, the amended age limit for pig castration, as it can be traced and followed clearly in the English legislation, provides an example of regulatory movement with an upward trajectory. However, it must be emphasised that this specific upward movement is a result of the EU requirements, rather than the English legislator's initiative, as Regulation No. 299 only implements the EU standard.

²⁷² Anaesthetics Act 1954 (n. 267) Article 1(2)(b)

²⁷³ *ibid* Article 1(1)

²⁷⁴ *ibid* First Schedule Article 6

²⁷⁵ Protection of Animals (Anaesthetics) Act Amendment Order 1982 No 1626 Article 5

²⁷⁶ Regulations No. 229 (n. 268) Article 23

²⁷⁷ Council Directive 91/639/EEC of November 1991 laying down minimum standards for the protection of pigs [1991] OJ L340/33 Chapter II Piglets III Article 3

²⁷⁸ Commission Directive 2001/93/EC of 9 November 2001 amending Directive 91/630/EEC laying down minimum standards for the protection of pigs [2001] OJ L316/36 Annex Chapter 1 Article 8

Another physical intervention, tail-docking of pigs, provides an interesting contrast. Tail-docking of a piglet older than seven days has been prohibited by a statutory Order since 1974,²⁷⁹ as the procedure was acknowledged to be painful. However, the same age limit regarding tail-docking was not introduced in EU legislation until 1991.²⁸⁰ This can be contrasted with castration, where the seven-day limit was introduced in the opposite order. It is also noteworthy that tail-docking was recognised as sufficiently painful in 1974 to warrant a change in law, while castration was not changed in the same manner until 2003.

Apart from the movements related to physical interventions, there is also evidence that shows a downward trend, which concerns the DEFRA CoPs. The legal base for DEFRA to issue the CoPs is located in Article 3 of the 1968 Act,²⁸¹ with additional, more detailed provisions than the ones located within Regulations. In Regulation No. 2126 of 1994 Article 4 states that ‘any person who employs or engages persons to attend to livestock *shall ensure* that the person attending the livestock²⁸² is acquainted to, has access to and has received instruction and guidance on the relevant CoP, and if not, said person is not permitted to attend the livestock. This is an important provision due to the highly detailed recommendations contained in the CoP. However, this quote from Article 4 must be contrasted with Article 6 in the (newer) Regulation No. 2078 from 2007, which states that ‘a person responsible for a farmed animal (...) *must take all reasonable steps to ensure* that a person employed or engaged by him does not attend the animal unless²⁸³ that person is acquainted with, has access to and has received instruction and guidance on the CoP.

²⁷⁹ Docking of Pigs (Use of Anaesthetics) Order 1974 SI 1974/798

²⁸⁰ Directive 1991/639/EEC (n. 274) Chapter II Piglets III Article 4

²⁸¹ Agricultural Act 1968 (n. 31) Chapter 34, Eliz 2 Part 1 Welfare of Livestock Article 3

²⁸² The Welfare of Livestock Regulations No 2126 (n. 165) Article 4 (emphasis added)

²⁸³ Regulation No. 2078 (n. 30) Article 6 (emphasis added)

The change of the emphasised words is of high significance as the requirement for any 'staff' to be familiar with the content of the CoP before tending to the animals was stricter in 1994, than it became in the current Regulation. Indeed, the phrasing in Regulation No. 2978 has been adjusted to allow some flexibility and mitigation, which undoubtedly will be exercised in favour of the farmer and the staff, rather than the concerned animals. While this change may seem to be a minor detail, although CoPs are not legally enforceable *per se*, amending 'shall ensure' to 'must take all reasonable steps to ensure' effectively reduces the responsibility placed upon the farmers to ensure that the all staff are familiar with the CoPs. Additionally, due to the political lack of willingness²⁸⁴ to increase the welfare requirements in the legislation to a standard exceeding the EU minimum, the CoPs increase in importance.

In summary, while there is some evidence that England animal welfare standards predated the EU –for instance, by requiring, from 1974, that anaesthetics are administered when tail-docking piglets older than seven days–, there is also evidence of the opposite. Namely, the EU legislation preceded English law on other welfare issues, such as piglet castration. Consequently, in regards to these two aspects, they effectively cancel each other out in regards to who preceded whom to introduce stricter welfare standards first. The analysis of the legislation regarding familiarity with the CoPs, however, provides evidence which indicates that the English legislators are relaxing the national standards *without* a requirement from the EU to do so. While the CoPs are not statutory instruments, this relaxation remains significant: the English legislation is essentially verbatim to the EU welfare legislation, bar a handful of provisions. Since the requirements in the AWA2006 and the different Regulations are so close to the EU minimum, the legislative standards cannot be much further lowered in the first place. Therefore, any relaxation concerning the CoPs should be considered to be an indication of a beginning of a downward trajectory in England, and

²⁸⁴ D. Ryland 'Animal welfare in the reformed Common Agricultural Policy: wherefore art thou?' (2015) 17 Environmental Law Review 22 33

towards becoming a Member State adhering verbatim to the minimum standards.

4.3.4 Conclusion England

This subchapter aimed to assess: whether the animal welfare legislation in England is established at a level which moves the welfare standard above and beyond the minimum requirements imposed by the EU; whether the English farmers' competitive strength is negated by import from other Member States; and whether there is any evidence of regulatory movement in England.

The above analysis showed that the approach taken by the English legislators has been to ensure that the EU minimum harmonising Directives are implemented and transposed into English law at the exact level required, commonly in a verbatim manner. The few instances where the English law exceeds the minimum standard are, due to their rarity, noticeable. The most noticeable provisions exceeding the EU minimum are the requirements for the statutory test for determining 'unnecessary suffering' and for 'thorough inspections'. However, these above-minimum provisions are flawed in their current format, especially the 'unnecessary suffering' test. Its checklist is not formulated from a zoocentric perspective, nor does it aim to prevent the suffering from occurring in the first place. Rather, the emphasis of the test is to justify the suffering, by assessing it against human (economic) interests.

Whereas the CoPs are established at a far higher level than the minimum requirements established by the EU, they are not statutory instruments. The consequence is that –while there is a legal obligation on the farmer to ensure (by taking all reasonable steps) that no one attends the animals without familiarity with the relevant CoPs, and indeed, the CoPs can be used in evidence against persons in cases of miss-treatment of animals– in essence they remain mere recommendations and not requirements.

While the English legislation is very similar to the EU minimum requirements, EU Membership and the unhindered influx of cheaper farm produce onto the English market, due to the Internal Market, have had a negative impact on the domestic farmers' competitive strength. There are two underlying reasons for this: First, the private voluntary labelling schemes, membership in which has become essential for farmers, who wish to maximise the remuneration for their produce, as the labels enable the produce to be sold at a premium. However, all labelling schemes require additional measures to be followed, which generally aim at increasing the standard of welfare. As a result, along with the remuneration, the input costs increase too. Second, there is pressure from the consumers, who are getting price-conscious: food should be cheap. This demand for cheap food can be met due to the Internal Market from farmers in Member States that only adhere to the EU minimum. As a result, English produce competes against the cheaper imports on the supermarkets' shelves, and the price difference is enough to determine the buying behaviour of price-conscious consumers: they will unavoidably choose the latter.

4.5 Comparative discussion and chapter conclusion

The purpose of this chapter was to critically analyse the farm animal welfare legislation in Sweden and England, to enable an evaluative assessment of the impact it has on the competitive strength of their farmers. The motivation for doing so was the identification of an underlying causal link among the welfare requirements of the two Member States and their respective farmers' financial hardship. Understanding the underlying factors was necessary to investigate what can be done to improve the farmers' competitive strength (which will be discussed in the next Chapter) while maintaining a high standard of animal welfare. This chapter provided detailed information of the farm animal welfare standards in Sweden and England by identifying and critiquing the provisions which exceed the minimum standard required by the EU. This section evaluates the different standards and the regulatory approach by comparing and contrasting.

The first section of this chapter outlined why Sweden and England were selected, and since the aim of the thesis is not to identify a 'better law', an underlying presumption of similarities would therefore be inappropriate as the epistemological foundation. However, due to a number of similarities, namely both countries being members of the EU, and having to adhere to the legislative *acquis* of the EU, as well both countries having long-standing traditions of pursuing non-economic values through public policies, an underlying presumption of differences would be equally inappropriate. Consequently, for the comparative discussion, an underlying *praesumptio similitudinis* and *praesumptio disimilitudinis* must be adopted.

The most notable difference between Sweden and England, which is central to this thesis, is in the implementation of the EU legislation. The Swedish legislation contains a large quantity of very detailed, legally binding provisions, which significantly increase the overall standard of welfare for farm animals, compared to the EU requirements. Contrasting the Swedish with the English approach, the difference is stark. The English legislation fulfils the requirements that come with EU membership, by verbatim implementing the various EU Directives. Indeed, only a few domestic provisions exceed the EU minimum.

Consequently, the English farm animal welfare legislation is nearly identical to the EU legislation. In the English legislation section above, only three requirements were identified to exceed the minimum. Unfortunately from a zoocentric perspective, all three have inherent flaws, particularly noticeable in the statutory test for 'unnecessary suffering'. Their combined effect does not raise the standard of welfare in England to any notable extent over the minimum EU standard.

However, the English standard of farm animal welfare is not identical to the EU minimum. The Department of Environment, Food and Rural Affairs issues Codes of Practice (CoP). While the CoPs are not statutory instruments, they consist of recommendations providing guidance to the

farmers, and can be used in prosecution to prove mistreatment of animals. If the CoPs had the same legally binding effect as the Swedish Administrative Specifications and the farmers were obliged to adhere to the provisions therein, the animals' welfare standard would increase dramatically, compared to the current legal requirements.

Nonetheless, some farm animals in England already enjoy a higher standard of welfare, due to the popularity of private voluntary labelling schemes. These schemes all come with their own set of welfare standards. While private voluntary labelling schemes exist in Sweden too, due to the legally binding nature of the Administrative Specifications, their impact is not as noticeable in raising the welfare standard throughout the country. The underlying cause as to why there is such a difference between Sweden and England, is a fundamentally different attitude regarding the state's role. This is best explained by an overview of each country separately.

Modern Swedish society is based on a centralised and collectivist system, with a strong directive function towards public law. Public law is centrally formulated by the government, implemented by the parliament, and centrally enforced by the state. Using the farm animal welfare provisions as an example for this, the state seeks to encourage what is deemed to be a public interest, namely to ensure a good standard of farm animal welfare, by regulating it in law. The Swedish legislature issues the farm animal welfare legislation (ie an Act) which is complimented by a Regulation. Both the Act and the Regulation are broad in their scope, and outline general aims, perhaps including aims which were part of the government's election manifest. However, the exact detail regarding how these aims are to be achieved are delegated to the relevant Department. In the case of farm animal welfare, it is the Swedish Department of Agriculture. The Department has been delegated power, not only to decide how the aims are best achieved, but also to issue legally binding Administrative Specifications. These Administrative Specifications are further clarified by non-legally binding General Advice (also issued by the relevant Department).

The enforcement of the law, including the Administrative Specifications, is centrally controlled as well. In regards to farm animal welfare, the enforcement is done through inspectors, employed by the twenty-one County Administrative Boards of Sweden (ie the authorities). These state-employed inspectors are required, by law, to report to the Swedish Department of Agriculture. Animal welfare inspectors have the power to issue a variety of sanctions to individuals found to be in breach of the law, ranging from a fine to criminal prosecution, which may lead to imprisonment. The Swedish state plays a fundamental role throughout, from the formulation of the legislation to the issuing of sanctions when enforcing the law, and the system is therefore a typical centralised system.

Contrastingly, in England, the regulatory approach differs greatly from the centralised Swedish approach. While there are elements of a centralised system present in England, the English system also contains elements pertaining to a market-based system. In a market system, the state commonly stipulates some basic restrictions, leaving individual actors free to pursue their own goals. The key characteristic of the market model is that the laws' primary function is facilitative: the law provides the framework for the formalisation of agreements, which the individual actors utilise to achieve their aims. Therefore, it is mainly through private law arrangements the actors pursue their goals.

The consequence of using private law agreements is that it requires from individuals to enforce their own rights. Whilst the state is involved in the enforcement by controlling the courts, it is up to the individual parties to negotiate an arrangement, containing both mutual rights and obligations. Such an arrangement can subsequently be enforced by the court, but only if one of the parties brings the issue before the court. A market system is not only private, but it is characteristically decentralised as well. The English legal system is heavily influenced by the market system approach: the system as a whole is essentially a framework, designed for the actors to

operate within. This framework can be classified as public law by its nature, as it is contained in numerous Acts, which are general in their scope, and these Acts may outline public-interest aims. For instance, animal welfare is considered a public-interest aim, as encouragement is required to ensure its pursuit, otherwise unlikely to be fulfilled in an unregulated market. However, animal welfare is a special kind of public interest, as it can also be considered to be a form of social regulation, due to the relationship between consumers and farm animals, which produce the food the consumers subsequently purchase and consume. Therefore, a market-based system is not a perfect fit for the English society, as it is further exemplified by the enforcement of the animal welfare legislation.

Local Councils in England have the power, under the AWA2006, of employing inspectors for enforcing the Act and Regulations. However, it is in their discretion. Consequently, DEFRA relies on the Royal Society for the Prevention of Cruelty to Animals (RSPCA) for much of the general day-to-day enforcement of farm animal welfare legislation. As the RSPCA is a charity, it is a private organisation, and enforcement by the RSPCA amounts to private enforcement. The RSPCA does not have any official enforcement power in law, and may therefore require back-up by the local authority, an Animal Health inspector or the police. Thus, the enforcement of the farm animal welfare legislation in England is a mixture of public and private decentralised elements.

With these fundamentally different approaches in regards to how animal welfare should be regulated, there is no surprise that the format and the standard of welfare results in different outcomes. Despite the differences, it is noteworthy that neither Swedish nor English farm animal welfare standards have been reduced as a consequence of the EU-introduced legislation. The minimal impact of the EU legislation in levelling the playing field is likely due to two main causes.

First, England joined the EU long before animal welfare legislation was developed in the EU, and the domestic legislation was still in its infancy in regards to the concept of 'welfare' (albeit with a long-standing tradition of attempting to prevent 'cruelty' to animals through legislation). Consequently, the English legislation did not have the opportunity to develop its own animal welfare standard before its legislation became co-ordinated with the EU's. (While the Five Freedoms do originate from England and predate its EU membership, they are not enshrined in *law*.) Contrastingly, Sweden did not join the EU until much later, in 1995 and therefore had ample of time in developing its domestic legislation, which was established at a generally high level. Second, the two Member States have fundamentally different approaches regarding the extent the state should control animal welfare. Considering these two causes jointly, reveals the effect: Sweden utilises the discretionary power located in the minimum Directives, and far exceeds the minimum standard the EU requires, whereas England's approach is essentially the opposite, as there is a verbatim implementation and transposition of the EU legislation into English law, and it is left to private actors to initiate any movement above and beyond the minimum standard.

Indeed, this difference is evident in the analysis of the evolution of farm animal welfare legislation above. EU membership has not reduced the level of farm animal welfare in Sweden, as the discretionary power is used. Rather, the opposite is true, as Sweden has worked towards increasing the overall level of welfare required at the EU level, particularly in regards to egg-layers. Consequently, there is no empirical evidence to suggest a downward movement, a Race to the Bottom, in Sweden's legislative standard. However, despite the Swedish efforts in increasing the welfare level EU-wide, it would be wrong to label this as a Race to the Top, as these efforts do not constitute a regulatory competition, as they would be applicable to all Member States. Nonetheless, from a zoocentric point of view, the upward trajectory is encouraging.

Regardless of the inherently different approaches to regulating farm animal welfare, the farmers in Sweden and England have one thing in common: their competitive strength has been, and continues to be, diminished as a consequence of the Internal Market and the Free Movement of Goods. Their produce simply cannot compete against the cheaper imports from other Member States, where only the minimum standard is adhered to, as it is considerably cheaper to rear animals with a lower welfare standard. This has been supported by statistics on production, consumption, import and export in regards to the respective country above. However, when the statistics are lined up next to each other, particularly in regards to pork, the numbers indicate that the Swedish farmers are affected more severely than the English farmers. In 1990, self-sufficiency in the UK in regards to pork amounted to 69%, while in Sweden the level of self-sufficiency was 106% – Swedish farmers produced more pork than the Swedish public consumed. Nevertheless, in 2014, the self-sufficiency level declined to 56% in the UK (a reduction of 14%), while in Sweden it was reduced to 68% (a decrease of 38%).²⁸⁵ In little over two decades, Sweden went from being a net exporter to importing over 30% of the pork consumed. The sharper decline in pork production in Sweden may be attributed to the higher costs of producing pork there, compared to England (and indeed other Member States).

The scale of the problem the Swedish and English farmers face becomes more evident when the data is benchmarked against a Member State such as Denmark, particularly in regards to pork.²⁸⁶ Denmark produces vast quantities of pork and exports 90% of it, 70% of which goes to other Member

²⁸⁵ AHDB Pork 'EU Self-sufficiency' <<http://pork.ahdb.org.uk/prices-stats/consumption/eu-self-sufficiency/>> accessed 18 October 2015

²⁸⁶ The brief summary in English provided by the Ministry of Environment and Food of Denmark in regards to the legislative standards applicable to broilers and egg-layers provides no indication of domestic measures exceeding the standard required by the Poultry Directives, apart from a limit of ten hens per enriched cage and a ban on beak-trimming in regards to broiler parent breeding stock. Ministry of Environment and Food of Denmark 'Laying Hens' (14 October 2015) <https://www.foedevarestyrelsen.dk/english/Animal/AnimalWelfare/Farm_animals/Laying_Hens/Pages/default.aspx> accessed 25 July 2016; Ministry of Environment and Food of Denmark 'Broilers' (2 October 2015) <https://www.foedevarestyrelsen.dk/english/Animal/AnimalWelfare/Farm_animals/Broilers/Pages/default.aspx> accessed 25 July 2016

States: Sweden and UK are both included in the top five of the importing Member States.²⁸⁷ Compared to Sweden and England, the farm animal welfare standard in Denmark is closer to the EU minimum standards. A report from CIWF found that of the farms they visited in Denmark, 100% practised tail-docking, and 67% failed to provide effective environmental enrichment for the pigs, compared to 54% and 35% respectively of the UK farms.²⁸⁸ The same report acknowledged Sweden's ban on tail-docking.

However, this is not to say that Denmark does not utilise the derogation within the Pig Directive whatsoever. The Danish animal welfare measures for pigs which are found to exceed the EU minimum are the following: a requirement for sprinkling facilities for all pigs over 20 kg, pain relief to be administered for piglet castration,²⁸⁹ a ban of fully-slatted floors for weaners and finishing pigs from July 2015.²⁹⁰ Teeth-clipping is banned (but not teeth-grinding) and tail-docking must be performed between two and four days, and only half of the tail can be removed.²⁹¹ Additionally, it is specified that environmental enrichment must be of natural materials, in contact with the floor and that chains alone are not acceptable.²⁹² Thus, in regards to the sprinkling facility, the Danish legislation actually requires a higher standard than the English counterpart. Nonetheless, due to the voluntary labelling

²⁸⁷ Danish Agriculture & Food Council 'Statistics 2013 pigmeat' (Danish Agriculture & Food Council June 2014) 31; Danish Agriculture & Food Council 'Danish Pig Meat Industry' <<http://www.agricultureandfood.dk/danish-agriculture-and-food/danish-pig-meat-industry>> accessed 25 July 2016

²⁸⁸ Compassion in World Farming 'Pig Farming in the EU Briefing' <<https://www.ciwf.org.uk/media/3818865/eu-pig-farming-briefing.pdf>> accessed 25 July 2016

²⁸⁹ Since 1st January 2011. Danish Agriculture & Food Council 'Pig Industry Quality Manual' (2013) 33

²⁹⁰ Agriculture & Food (n. 245) 9-12 <<http://www.agricultureandfood.co.uk/~media/agricultureandfood-co-uk/Current%20issues/Publications/LFBenchUK1401.ashx>> accessed 25 July 2016; Danish Agriculture & Food Council 'Pig Industry Quality Manual' (2013) 29-30

²⁹¹ Agriculture & Food 'Danish Pig Producers and Animal Welfare' (Danish Agriculture & Food Council 2010) 5 <http://www.agricultureandfood.co.uk/Pig_production/Animal_welfare.aspx> accessed 25 July 2016

²⁹² Agriculture & Food (n. 289) 10; Agriculture & Food 'Fact File – Danish pig production' (Agriculture & Food September 2013) 10 <<http://www.lf.dk/~media/lf/aktuelt/publikationer/svinekod/engelsk-fact-file-final-opdateret-september-2013.pdf?la=da>> accessed 25 July 2016

schemes and their stricter standards in England, pork production remains cheaper in Denmark than England.

However, compared to the Swedish legislation, the Danish standard is still considerably lower. A prime example is that Denmark aims that at least 10% of the sows are housed in loose farrowing pens by 2020.²⁹³ This should be contrasted to the mandatory requirement that all sows must be housed loosely in Sweden, which dates back to 1994. As loose housing requires vastly greater space than farrowing crates, it costs substantially more, and it comes to no surprise that overall, Swedish farmers incur significantly higher input costs than their Danish counterparts. It is also noteworthy that Danish pigs reared on UK contracts are reared to UK legal standards.²⁹⁴

The cost difference in producing the pork is notable. For example, in 2013, the cost of producing one kilogram of pork in Sweden amounted to £1.76, compared to £1.60 in the UK and £1.42 in Denmark (where most of the imported pork in Sweden originates from), which is a significant difference in cost, when the slaughter weight of one pig exceeds 100kg.²⁹⁵ This difference in production cost cannot be attributed to feeding, as the feed cost in Sweden counted for 58% of the cost, while it amounted to 66% in the UK and 63% in Denmark.²⁹⁶

²⁹³ Agriculture & Food (n. 289) 9

²⁹⁴ Agriculture & Food (n. 245) 4

²⁹⁵ AHDB Pork 'EU Cost of Production' <<http://http://pork.ahdb.org.uk/prices-stats/costings-herd-performance/eu-cost-of-production/>> accessed 18 October 2015

²⁹⁶ *ibid*; The available financial statistics for the Agricultural sector in EU are highly detailed, and the Farm Business Survey and the statistics provided by the Swedish Department of Agriculture cover everything from the cost of water and electricity to feed for animals. However, there are no statistics regarding the cost for environmental enrichment, nor any category for welfare measures. Further, it is not possible to identify a year when a legislative change enters into force to calculate the cost difference before and after, as all the Directives have lengthy implementation periods, sometimes spanning over a decade. Additionally, the input costs and the income for the produce varies dramatically on an annual basis due to the weather events and the global market – for example, the surge in food price of 2008. Therefore, it has not been possible to locate further hard statistics on production costs differences.

Therefore, the most likely source to incur higher costs is the higher welfare standards required for pigs (for instance, compulsory loose housing for all pigs in bedded or deep-straw boxes) and the associated labour costs. It is not surprising that Swedish pork farmers are affected to a greater extent by the competition from cheap imports from other Member States, than English farmers are. Nonetheless, the English farmers' competitive strength is undoubtedly effected as well.

However, it should be noted that the Internal Market has at the same time positive effects for the farmers, as it creates and provides opportunities for Swedish and English farmers to export their produce to other Member States. Apart from general exports, the Internal Market –due to its size– also enhances the potential to develop 'niche-products', emphasising high welfare standards. In other words, the Internal Market could create the possibility of exporting niche-products to other Member States and would effectively negate some of the effects of the price differences between the Swedish and English farmers' produce and the produce from the other Member States. Further, any additional requirements, above the minimum required in all the Member States, would increase the production cost for the farmers in the Member States which currently apply the minimum, and would improve the competitive strength of the farmers in Sweden, and those in England participating in private labelling.

This chapter concludes that, despite their differences in regulatory approach, farm animal welfare in both Sweden and England exceeds the EU minimum harmonised standard. In Sweden the domestic legislation is established at a significantly higher level than the EU minimum, which unavoidably results in higher production costs for the farmers. While the English legislation is, mostly, in line with the EU provisions, the market-system approach in regulating farm animal welfare has resulted in numerous voluntary private labelling schemes, which considerably raise the welfare standards. Membership numbers in such schemes are high, which results in a *de facto* increase in farm animal welfare for participating farms, even though it is not

a legal requirement. The consequence of these higher standards of farm animal welfare is that the produce from Sweden and England struggles when faced with direct competition at the point of retail, and when the cheaper, imported option wins, the domestic farmers' competitive strength is negated. This issue raises the question: what can be done, within the current regulatory framework, to improve the competitive strength of the Swedish and English farmers, *without* compromising a high level of farm animal welfare? If the welfare standards remain unchanged, the issue must be resolved by exploring the other side of the economic equation, the consumer behaviour, which will be explored in the next chapter.

5 Consumers

5.1 Introduction

In the previous chapters, this thesis critically analysed and evaluated the EU regulatory framework surrounding farm animal welfare (Chapter 2) alongside the specific provisions that regulate it (Chapter 3), and identified the extent to which Sweden and England exceed the minimum harmonisation Directives (Chapter 4). By referring to modern scientific research, it also established how important exceeding measures actually are from a zoocentric perspective, serving (to a certain degree) an updated, well-rounded and holistic definition of animal welfare, fully considering the animals' ethological needs (Chapter 1). However, the analysis also proved that higher standards can have a dire impact on the Swedish and English farmers' competitive strength, when their produce competes with cheaper imported produce from less strict Member States at the point of retail (Chapter 4). With animal welfare at the heart of this research, the last major variable appropriate to examine as part of a possible solution to these farmers' financial struggle, is consumer behaviour.

The amount consumers pay for their food directly relates to the remuneration farmers receive for their produce, and consequently, the consumers' purchase behaviour significantly impacts on the financial viability of rearing farm animals with a higher standard of welfare. The argument is therefore that consumers have the power to strengthen the competitive position of their domestic farmers, without necessitating any regulatory changes. It is noteworthy that it is in the consumers' interests to ensure the competitive strength of the farmers, as when farming production levels decline, the domestic market relies increasingly on imports to meet the food demand and it is ultimately the consumers' access to food and their food security which are at stake.¹ If the problems of ensuring the financial viability of farming

¹ W. Grant 'Economic patriotism in European agriculture' (2012) 19(3) Journal of European Public Policy 420

spreads throughout the Member States, the end result will be that the EU becomes net importer of food in order to feed the Unions' citizens.

The consumers' power to support the farmers stems from the 'willingness to pay'-theory. According to this, the higher value the consumers ascribe to ensuring high welfare standards for the animals, the more they are willing to pay for a product of high-welfare origin. However, for an ascribed value to be expressed as purchasing behaviour, consumers must associate it with specific products so they can make an informed decision. Therein lies a prime issue: there is a general information deficiency in regards to where food comes from, the realities of 'factory' farming, the production chain, and how to tell in the retail counter whether an end product –for instance, a piece of meat– comes from an animal reared in a higher welfare environment. This problem determines the two remaining aspects of consumer behaviour: information deficiency and labelling issues, both covered within this chapter.

Information deficiency will be addressed first, supported by findings of empirical research articles, and followed by an examination into the consumers' willingness to pay (WTP) for higher animal welfare. The WTP section draws upon economics literature and evaluates in what way WTP can affect high animal welfare standards. An analysis of the issue of ineffective labelling on packages comes next, which evaluates the literature, predominantly on nutritional labelling, and applies the findings to farm animal welfare labelling. Lastly, there is a speculative discussion of what measures can be taken, within the current regulatory framework, to educate consumers and support the competitive strength of the farmers, *without* lowering farm animal welfare standards. In the same context, the last section also explains the relevant EU legislation, how it applies in this scenario and what actions are possible.

5.2 Consumer information deficiency

Western societies are becoming increasingly urbanised; people have lost touch with the rural aspects of life and eventually failing to trace the origin of their food.² Eggs have become staple food, stacked in paper cartons in the grocery stores. Milk is a chilled drink, often cheaper than soft drinks. Different meats are neatly presented, side by side, in low-oxygen packages, sometimes only resembling 'meat' and evoking few associations with the animals they once came from. This is partly because the food industry wants to dissociate food from living animals: the connection with a 'baby lamb' will probably make the lamb roast less appealing, and images of the 'baby chicken' can make the consumers have second thoughts about the ordinary scrambled eggs in their breakfast.

Dissociating food from its animal origin is a common 'tactic' the food industry uses to maximise sales, as studies have shown that consumers are generally quite reluctant in engaging with the 'unpleasant' side of rearing animals for food production.³ Indeed, 'disgust reactions' of people being informed of the realities of farming have been reported to contribute to an increase in ethical and health-motivated vegetarians.⁴ The consumers' tendency to dissociate is evident in the popularity of processed meat products, in which the raw muscle mass is often no longer recognisable, as the extensive processing completely disconnects the processed meat from its animal origins. The dissociation is further aided by the food industry's nomenclature in regards to processed meat.⁵

² F. Vanhonacker, W. Verbeke, E. Van Poucke, F.A.M. Tuytens 'Do citizens and farmers interpret the concept of farm animal welfare differently?' (2008) 116 *Livestock Science* 126

³ H. Buller, C. Cesar 'Eating well, eating fare: Farm animal welfare in France' (2007) 15 *International Journal of Sociology of Agriculture and Food* 567; M. Hamilton 'Disgust reactions to meat among ethically and health motivated vegetarians' (2006) 45 *Ecology of Food and Nutrition* 125

⁴ Hamilton (n. 3)

⁵ F. Vanhonacker, W. Verbeke 'Public and Consumer Policies for Higher Welfare Food Products: Challenges and Opportunities' (2014) 27 *Journal of Agricultural and Environmental Ethics* 153,161; P.J. Eastwood 'Farm animal welfare, Europe and the meat manufacturer' (1995) 97 *British Food Journal* 4; S.A. Phan-Huy, R.B. Fawaz 'Swiss market for meat from animal-friendly production- responses of public and private actors in

5.2.1 Increasing anthropomorphism

The sentience of animals is increasingly recognised by the general public, which stresses the importance for the food industry to maintain the distance between food and the animals of origin, as the idea of animals' feelings and their suffering will pull at many consumers' heartstrings and will cause moral and ethical dilemmas. Indeed, research has shown that the gradual urbanisation of societies has increased peoples' anthropomorphism (attributing human thoughts and feelings to animals).⁶ As a result of anthropomorphism, people increasingly want animals to be 'happy'.⁷ However, studies have illustrated an interesting contrast: rural people, who live with and care on a day-to-day basis for animals, are less concerned with farm animal welfare than urban people.⁸

The anthropomorphism of farm animals by the general public is partially contributable to an increased public awareness about farm animal welfare, achieved through campaigns by Non-Governmental Organisations (NGOs),⁹ such as the Royal Society for the Prevention of Cruelty to Animals (RSPCA), Compassion in World Farming (CIWF), World Society for the Protection of Animals (WSPA) and People for the Ethical Treatment of Animals (PETA) among others. The message in these campaigns targets the romanticised,¹⁰

Switzerland' (2003) *Journal of Agricultural and Environmental Ethics* 218; Buller, Cesar (n. 3)

⁶ A.C. Horowitz, M. Bekoff 'Naturalizing anthropomorphism: behavioural prompts to our humanizing of animals' (2007) 20 *Anthrozoös* 23; J.A. Sprell 'Anthropomorphism and Anthropomorphic selection – beyond the "cute response"' (2003) 11 *Society & Animals* 83

⁷ B. Bock, H. Buller 'Healthy, Happy, Humane: Evidence in Farm Animal Welfare Policy' (2013) 53(3) *Sociologia Ruralis* 390,404; E. Kanis, A.F. Groen, K.H. de Greef 'Societal concerns about pork and pork production and their relationships to the production system' (2002) 16 *Journal of Agricultural and Environmental Ethics* 137

⁸ M. Musto, D. Faracone, F. Cellini 'The Role of Cognitive Styles and Sociodemographic Characteristics in Consumer Perceptions and Attitudes Toward Nonhuman Animal Welfare' (2014) 17(3) *Journal of Applied Animal Welfare Science* 198, 208; H.A Kendall, L.M. Lobao, J.S. Sharp 'Public concern with animal well-being: Place, social structural location and individual experience' (2006) 71 *Rural Sociology* 399; F. Vanhonacker, W Verbeke, E. Van Poucke, F.A.M. Tuytens 'Segmentation based on consumers' perceived importance and attitude toward animal welfare' (2007) 15 *International Journal of Sociology of Food and Agriculture* 84

⁹ Bock, Buller (n. 7) 403; L. Busch 'How animal welfare standards create and justify realities' (2011) 20 *Animal Welfare* 21

¹⁰ Vanhonacker, Verbeke (n. 5) 160; H.T. Te Velde, N. Aarts, C. Van Woerkum 'Dealing

distorted idea people may already have, and confronts them with the dire reality of farming. For some previously unaware consumers, information on the production methods and the reality of the conditions the animals are reared in, may come as a shock.¹¹ These campaigns create public awareness of (the lack of) farm animal welfare and promote 'ethical consumption'. They also attempt to re-establish the link between food and its animals of origin, for those consumers who still have a genuine concern about it.

Nonetheless, despite the NGOs campaigns, the number of informed consumers remains limited, particularly in the United Kingdom (UK). In 2009, British TV-chef Jaime Oliver made headlines by saying that the British public are ignorant about pig rearing, a claim which was supported by the RSPCA, who stated that consumers are 'pig-ignorant' in regards to how pork is produced.¹² The information deficit is particularly noticeable among young adults,¹³ as a UK survey from 2014 showed that half of the young adults¹⁴ could not link beef cattle with steak, 8% thought that bacon comes from wheat, while a third of the respondents did not know that eggs come from hens.¹⁵

5.2.2 'Freedom Food' Report

This section analyses the findings and observations from a report commissioned by RSPCA's 'Freedom Food' label in 2007, paying particular

with ambivalence: Farmers' and consumers' perceptions of animal welfare in livestock breeding' (2002) 15 *Journal of Agricultural and Environmental Ethics*

¹¹ C. Hall, V. Sandilands 'Public attitudes to the welfare of broiler chicken' (2007) *Animal Welfare* 499,509

¹² James Meikle 'Jamie Oliver says British public 'ignorant' about way pigs are reared' *The Guardian* (11 January 2009) <<http://www.theguardian.com/uk/2009/jan/12/ethicalfood-animalwelfare>> accessed 5 January 2015 Ed Bedington 'RSPCA tackles pig ignorant consumers' *MeatInfo* (12 January 2009) <http://www.meatinfo.co.uk/news/archivestory.php/aid/1515/RSPCA_tackles_pig_ignorant_consumers.html> accessed 23 November 2015

¹³ Musto, Faracone, Cellini (n. 8) 208

¹⁴ 16-23 year-olds

¹⁵ T. Grandin 'Animal welfare and society concerns finding the missing link' (2014) 98 *Meat Science* 461

attention to consumer misinformation. While some of the information deficit about farming practices is due to the industry's attempts to dissociate the image of food from its animals of origin, for some consumers, this may be intentional. The report found that some consumers keep themselves 'deliberately ignorant' and cites guilt as the main reason for doing so.¹⁶ These consumers feel guilty about consuming meat, due to the slaughter involved, and therefore reject the information about food production by deliberately, thereby using ignorance, as a defence mechanism, against the emotional impact of the knowledge of what animals have to endure for their dinner steak. Indeed, even consumers who express interest for information, only desire to know about the lives the animals have *prior* to slaughter. The focus on the pre-slaughter life reduces the consumers' guilt-level, by ensuring that animals are treated well during their lifetime. The problem with this focus is that transport to the abattoir and slaughter per se are highly stressful events for the animals.

One of the participants in the survey the report is based on responded as follows: 'Higher welfare is about making sure that they can run around, and have a nice life before we eat them!'¹⁷ This consumer refers to the aspirational ideal of high animal welfare, which has little to do with the reality of farming, as precious few farmed animals (in the most commonly used husbandry systems) have the ability to 'run around'. Indeed, even the aspiration to a 'nice life' for the animals is misinformed to a degree, as only animals reared in husbandry systems of very high welfare standard are likely to have a relatively 'nice life', while the vast majority of farm animals spend their short lives in intensive husbandry systems.¹⁸

The same report also highlighted consumers' (mis)perception of animal welfare, as animals who are advertised to have outdoors access (ie in

¹⁶ IGD 'Consumer Attitude to Animal Welfare A Report for Freedom Food by IGD' 2007

¹⁷ *ibid* 16

¹⁸ M. Cole 'From "Animal Machines" to "Happy Meat"? Foucault's Ideas of Disciplinary and Pastoral Power Applied to 'Animal-Centred' Welfare Discourse' (2011) 1 *Animals* 83

fields), such as beef cattle and sheep, were perceived to have significantly better living conditions than broilers and egg-layers, which are commonly reared indoors. However, seeing cattle outdoors in a scenery compatible with what consumers consider to be 'acceptable living conditions' is highly deceptive: it is only *some* of the cattle the consumers can see. The sight of cattle outdoors creates and maintains a misguided idea that *all* cattle are farmed this way. Rather, the majority of cows, particularly dairy cows, are commonly reared indoors. Indeed, Sweden is one of few countries in the world where the law requires that cattle graze in the summer.¹⁹

Consumers also feel that dairy cows enjoy higher welfare standards, as they are perceived as more profitable,²⁰ therefore making it important to maintain the standards for the farmers to protect the herd, as a financial asset.²¹ This perception could not be further from the truth. Dairy is a farming sector currently fighting for its survival, as the dairy farmers commonly receive less remuneration for the milk than it costs to produce it. The 'milk crisis' is currently so severe that the European Commission has promised a €500 million rescue plan, generally deemed not sufficient to avert the crisis.²²

Contrary to the sight of cattle in fields, information about issues with poultry and their welfare is provided by media, such as documentaries exposing intensive battery farming.²³ The report questions the effect of the exposés on

¹⁹ Djurskyddsförordning (1988:539) 10§, 11§

²⁰ Dairy cows can be milked continuously, while other animals, such as beef cattle can only be slaughtered once

²¹ IGD (n. 16) 20

²² Aline Robert 'Milk crisis drives wedge between France and Germany' (*EurActiv.com* 22 sept 2015) <<http://www.euractiv.com/sections/agriculture-food/milk-crisis-drives-wedge-between-france-and-germany-317578>> accessed 23 November 2015; European Milk Board 'Press release: Vote on the EU Milk Report: compromise for dairy farmers' (*European Milk Board* 7 July 2015) <http://www.europeanmilkboard.org/special-content/news/news-details/article/second-fair-milk-conference-in-montichiari-honours-merits-in-the-field-of-sustainable-agriculture.html?tx_ttnews%5BbackPid%5D=78&cHash=7fa59f29a21c9ad9347d0088cdc9aaf3> accessed 23 November 2015; Attila Jambor 'Some thoughts on the European milk crisis' (*CAPReform.eu* 9 Sept 2015) <<http://capreform.eu/some-thoughts-on-the-european-milk-crisis/>> accessed 23 November 2015

²³ TV exposés such as; Hugh's Chicken Run (Channel 4), Dispatchers Supermarket Secrets (Channel 4), Jamie's Fowl Dinners (Channel 4), Panorama - The Chicken Run

consumer purchasing behaviours, as the poultry industry is thriving despite the publicity. The report states:

Consumers express reluctance to purchase economy brand poultry products as the result of viewing these programmes, but they do not change behaviour or purchase higher welfare goods, believing instead that welfare standards of standard chicken products will be good enough.²⁴

The extensive detail in regard to the report is included to demonstrate the degree at which the public is misinformed, and that not even a report on consumer attitudes for a major private label like 'Freedom Foods' is correct: documentaries exposing intensive battery farming are unlikely to affect the consumers' purchase behaviour in regards to chicken, as battery farming refers to egg-layers and not broilers, the hybrids reared for meat. While egg-layers and broilers are the same species, they are distinctly separate commercial hybrids, and have different welfare issues. When 'experts' make such mistakes about basic aspects of farm animal welfare, it is no wonder the consumers are still ill-informed.

5.2.3 Consumers seeking information

Nonetheless, despite the industry's benefit to keep consumers unaware of the realities of factory farming, the information is available for those who seek it, particularly online. The problem with information in general, and especially from online sources, is that consumers must be overly critical of the source of the information to be able to make a truly informed decision.

(BBC). Moore J 'Myths About Your Five A Day – Reporter Feature' (Dispatchers Channel 4) <http://www.channel4.com/programmes/dispatches/articles/2012/myths-about-your-five-a-day-reporter-feature> accessed 4 December 2015; K. Walley, P. Parrott, P. Custance, P. Meledo-Abraham, A. Bourdin 'A review of UK consumers' purchasing patterns, perceptions and decision making factors for poultry meat' (2014) 70 *World's Poultry Science Journal* 493; G.T. Tonsor, N. J. Olynk 'Impacts of animal well-being and welfare media on meat demand' (2011) 62(1) *Journal of Agricultural Economics* 59

²⁴ IGD (n. 16) 22

Maintaining a critical attitude is difficult, as the issue of animal welfare is subjective, and largely depends on the ethical and moral positions of individuals, who are informed by the 'facts' presented to them. The issue is that these may originate from sources that advocate different agendas, such as animal rights activists, whose ultimate aim is to eradicate consumption of animals, scientists with a more pragmatic approach, animal charities, farmers, meat industry lobbyists or retailers who are aiming to maximise their profits. Consequently, separating fact from fiction is difficult. Additionally, the fluidity of the concept of 'animal welfare' enables various stakeholders to adapt the concept to support their point, which increases the difficulties the consumers face when seeking information on farm animal welfare.

Further, even if consumers have sought information, the knowledge needs to become purchase behaviour to have any actual impact on welfare standards. The process of turning knowledge into an informed purchase decision comes with another set of issues. Food purchase is commonly a routine process, which needs to be quick and generally involves little information processing.²⁵ The information the majority of consumers seek concerns mostly tangible variables, such as the price, the size or quantity of the product and its expiry date, rather than considering and factoring intangible variables of product attributes (namely, animal welfare) into their purchase decision.²⁶ The fundamental issue here is that in a free and open market, there is the assumption that individual consumers are aware of the full range of their options and are capable of weighing up all the positive and negative variables before making their informed decision of which product to purchase. The sheer quantity of products available to the consumers and the

²⁵ M. Binnekamp, P. Ingenbleek 'Market barriers for welfare product innovations' (2006) 54 *NJAS-Wageningen Journal of Life Sciences* 169; W. Verbeke 'Agriculture and food industry in the information age' (2005) 32 *European Review of Agricultural Economics* 347

²⁶ Vanhonacker, Verbeke (n. 5) 164; M.G. McEachern, M.J.A. Schröder 'The role of livestock production ethics in consumer values towards meat' (2002) 15 *Journal of Agricultural and Environmental Ethics* 221

general 'information overload'²⁷ renders this assumption false and unrealistic.

The interest in where food comes from, particularly in regards to foodstuff of animal origin, is growing, and people are worried about the manner farm animals are treated.²⁸ While there is a vast gap in consumers' knowledge about animal rearing, the number of consumers who considers it important is sufficient for the food sector and the retailers to identify this growing interest as a market opportunity, by turning 'farm animal welfare' into a commodity for sale. Commodification of animal welfare works by producing high-priced, high-welfare niche-products and targeting the consumers who value 'ethical consumption'.²⁹ This will be analysed in the following subsection, as commodification is only possible if an 'added value' can be attributed to animal welfare – a value reflected in the consumers' willingness to pay for products which guarantee the higher standard.

5.3 Consumers' willingness to pay

Willingness to pay (WTP) is an economic concept,³⁰ referring to the maximum amount an individual is willing to pay for the purchase of a good or to avoid something undesirable, and can be measured by a variety of methods. By applying the WTP to farm animal welfare, it shows how consumers value changes to a welfare level index in monetary terms, thereby providing an indication to the food sector whether it is financially

²⁷ Vanhonacker, Verbeke (n. 5) 164; P. Thompson, C. Harris, D. Holt, E.A. Pajor 'Livestock welfare product claims: The emerging social context' (2007) 85 *Journal of Animal Science* 2354; Verbeke (n. 25)

²⁸ Musto, Faracone, Cellini (n. 8); Tonsor, Olynk (n. 23); G.A. María 'Public perception of farm animal welfare in Spain' (2006) 103 *Livestock Science* 250

²⁹ Bock, Buller (n. 7)

³⁰ WTP is a complex concept and inherently rooted in academia of economics, which is not the focus of this thesis. Therefore, WTP will only be discussed in regards to its importance for farm animal welfare, as a method for measuring the premium consumers place on high animal welfare standards.

viable to implement the changes.³¹ However, it must be emphasised that the WTP refers to the maximum amount someone is willing to pay for foodstuff produced at a higher standard of welfare, *and not the actual market price*. Therefore, if the individuals' WTP premium is greater than the actual price premium of a higher welfare product, it is expected that they would buy that product.

5.3.1 Problems with WTP

The WTP factor is closely related to the individuals' overall spending behaviour, as using one pound sterling to buy a specific product renders it impossible to spend that pound sterling on another product. As such, if one is prepared to pay more for animal welfare, it requires that one gives up spending that money on something else.³² The difference in financial means available to people impacts their WTP in different ways: they may be highly aware of their limited finances, to the extent that they under-report their WTP; alternatively, they may adopt a hypothetical approach and attribute a WTP for high animal welfare according to moral beliefs, wholly disconnected from their financial reality. Either approach has the ability of distorting and limiting the accuracy of the surveys' findings.

As a result, WTP findings may not correspond the market reality, as it may be financially impossible for consumers to express the hypothetical WTP as an actual purchasing behaviour. This gap between the hypothetical WTP and real purchasing behaviour, also called hypothetical bias, has been discussed in literature, and limits the surveys' reliability: for instance, when hypothetical scenarios were presented to individuals, they stated that they were willing to pay two to three times higher prices than what the same individuals would be in fact prepared to pay if they were faced with the same

³¹ A. Kehlbacher, R. Bennet, K. Balcombe 'Measuring the consumer benefits of improving farm animal welfare to inform welfare labelling' (2012) 37 Food Policy 627

³² F Bailey Norwood, JL Lusk, *Compassion, by the Pound Economics of Farm Animal Welfare* (OUP 2011) 249

scenario, using their own money.³³ The hypothetical bias in the surveys is an important issue with WTP that affects its usefulness, as it deducts from its accuracy. However, it is not the only variable which must be considered before relying on WTP findings.

Another important variable to consider is that individuals have different perceptions regarding farm animal welfare. As people attribute different emotional, ethical and moral value to the importance of supporting high welfare standards, it will also affect their WTP for it. Due to the moral aspects of farm animal welfare, explorations of the connection between 'moral intensity'³⁴ and WTP have been made, arguing that the main use of WTP is gauging the extent farm animal welfare legislation can address peoples' moral obligations. This argument corresponds with another variable: whether it is a private or a public good the WTP relates to impact on the findings.³⁵ While farm animal welfare can be classed as a public good,³⁶ it also has a private dimension due to the moral and ethical 'gratification' individuals experience when purchasing high-welfare products.³⁷

The last major variable which must be considered in regards to WTP is the sociodemographic and socioeconomic groups the individuals participating in

³³ Bailey Norwood, Lusk (n. 32) 260; J.M. Little, R. Berrens 'Explaining Disparities between Actual and Hypothetical Stated Values: Further Investigation using Meta-Analysis.' (2004) 3(6) *Economics Bulletin* 1; J.A. List, C.A. Gallet 'What Experimental Protocol Influence Disparities Between Actual and Hypothetical Stated Values?' (2001) 20(3) *Environmental and Resource Economics* 241

³⁴ T.M. Jones 'Ethical Decision Making by Individuals in Organisations: An Issue Contingent Model' (1991) 12 *Academy of Management Review* 366; R.M. Bennett, J. Anderson, R.J.P. Blaney 'Moral Intensity and Willingness to Pay concerning Farm Animal Welfare Issues and the Implications for Agricultural Policy' (2002) 15 *Journal of Agricultural and Environmental Ethics* 187

³⁵ F. Carlsson, P. Martinsson 'Do Hypothetical and Actual Marginal Willingness to Pay Differ in Choice Experiments?' (2001) 41 *Journal of Environmental Economics and Management* 179

³⁶ Chapter 4

³⁷ J. Andreoni 'Impure altruism and donations to public goods: A theory of warm glow giving' (1990) 100 *Journal of Econometrics* 464; D. Kahneman, J. Knetsch 'Valuing public goods: The purchase of moral satisfaction' (1992) 22 *Journal of Environmental Economics and Management* 57

the surveys are classified into, as it is generally accepted that this impacts their WTP. Specifically, it is female individuals,³⁸ highly educated, high earners, and/or health-conscious, who are more likely to attribute a higher WTP for higher farm animal welfare,³⁹ while it also depends on the individuals' differences in regards to empathy.⁴⁰

5.3.2 When can WTP estimate be useful?

While there are major issues with studies assessing the consumers' WTP for high farm animal welfare standards, particularly hypothetical bias, WTP remains an important tool in assessing the monetary value of high welfare standards, and estimating market demand for novel products.⁴¹ Studies indicate that consumers perceive high-welfare meat as a product distinct from meat reared to 'conventional' standards.⁴² This suggests that a specific market for these products exists, and that they may command a price premium when retailed.

One aspect as to why a price premium may be possible is that high-welfare meat is perceived to have a 'better quality'.⁴³ In a UK survey, 75.5% of the respondents answered that they 'strongly agreed' or 'agreed' with the notion of being concerned with the manner farm animals are treated during their lives.⁴⁴ This suggests that animal welfare per se is likely to be an important component contributing to a price premium. Indeed, the respondents in the same survey stated that they were willing to increase their monthly

³⁸ N. Taylor, T.D. Signal 'Empathy and attitudes to animals' (2005) 18 *Anthrozoös* 18; Kendall, Lobao, Sharp (n. 8); Vanhonacker, Verbeke, Van Poucke, Tuytens (n. 8); María (n. 28)

³⁹ Kehlbacher, Bennet, Balcombe (n. 31) 631

⁴⁰ Musto, Faracone, Cellini (n. 8); J.L. Lusk, D. Hudson 'Willingness-to-Pay Estimates and Their relevance to Agribusiness Decision Making' (2004) 26(2) *Review of Agricultural Economics* 152,164

⁴¹ Lusk, Hudson (n. 40) 153

⁴² Musto, Faracone, Cellini (n. 8) 207

⁴³ Grant (n. 1) 425; L.R. Heerwagen, M.R. Mørkbak, S. Denver, P. Sandøe, T. Christiansen 'The Role of Quality Labels in Market-Driven Animal Welfare' (2015) 28 *Journal of Agricultural and Environmental Ethics* 67; European Commission 'Special Eurobarometer 270: Attitudes of EU citizens towards animal welfare' (2007 Brussels); European Commission 'Special Eurobarometer 229: Attitudes of consumers towards the welfare of farmed animals' (2005 Brussels)

⁴⁴ Kehlbacher, Bennet, Balcombe (n. 31) 631; Bennett, Anderson, Blaney (n. 34) 193

expenditure on meat, by about a third, in order to purchase high-welfare meat. Nevertheless, as a third is a substantial increase, there must be caution in regards to hypothetical bias. Even if there is significant hypothetical bias in this case, the WTP still provides an indication in regards to the potential of commodifying animal welfare for the food sector.

The WTP's true potential is illustrated in the evaluation of different methods of product differentiation, as product differentiation is necessary as means that directly inform consumers which products have been produced at a higher welfare standard. Specifically in regards to farm animal welfare, a Swedish study suggests that the WTP for identical welfare attributes varies between different products, as the importance placed on animal welfare attributes appears to be animal-specific.⁴⁵ Indeed, the study showed that consumers are willing to pay 'surprisingly high premiums' for some animal-specific welfare improvements, such as for broiler hybrids with a slower growth rate and for the outdoor rearing of pigs.⁴⁶ Such findings highlight the application of using WTP to identify potential animal and welfare attribute-specific niche-markets, as well as 'general' product differentiation. This is particularly important for farmers in Member States that require higher animal welfare standards by law than the EU minimum, as informing the consumers about the differences aims at maintaining competitive strength against products produced to a lower standard. Therefore, WTP is an important tool in evaluating what can be done to improve the competitiveness of the Swedish and English farmers, without reducing the standard of welfare.

Product differentiation is complex and has a direct impact on the consumers' WTP. Unless the differentiation is clearly communicated to the consumers, they are unable to accurately assess their WTP by making an informed purchase decision. In the case of farm animal welfare, product differentiation

⁴⁵ F. Carlsson, P Frykblom, C J. Lagerkvist 'Consumer Preferences for Food Product Quality Attributes from Swedish Agriculture' (2005) 34(4-5) *Ambio* 366

⁴⁶ *ibid* 370

is generally agreed to be best achieved through providing information on the packaging. The emerging issue concerns how such information is provided in the most efficient manner to ensure that consumers notice, understand, and value it enough to affect their decision to purchase the differentiated product (commonly priced at a premium). Therefore, after discussing the potential and the drawbacks of measuring the consumers' WTP for high-welfare products, the discussion in the next section turns to the debate on labelling.

5.4 Labelling issues

The usage of labels on foodstuff to differentiate between products for the benefit of consumers is not a novel practice, and can be traced in EU law as far back as *Cassis de Dijon*⁴⁷ and *Walter Rau*.⁴⁸ The laws of the Member States relating to labelling, presentation and advertising of foodstuff were harmonised at the end of 1978,⁴⁹ and a number of Directives⁵⁰ and Regulations⁵¹ regarding labelling issues have been introduced since. The legislation aims at clarifying labelling from the consumers' perspective: the information available on the packaging of food stuff is essential, as it is the

⁴⁷ 120/78 *Rewe-Zentral AG v Bundesmonopolverwaltung für Branntwein (Cassis de Dijon)* [1979] ECR 64,13

⁴⁸ 261/81 *Walter Rau Lebensmittelwerke v De Smedt PVBA* [1982] ECR 3961

⁴⁹ Council Directive 1979/112/EEC of 18 December 1978 on the approximation of the laws of the Member States relating to the labelling, presentation and advertising of foodstuffs for sale to the ultimate consumer [1979] OJ L33/1

⁵⁰ A selection of the more noteworthy Directives: Council Directive 2000/13/EC of the European Parliament 20 March 2000 on the approximation of the laws of the Member States relating to the labelling, presentation and advertising of foodstuffs [2000] OJ L109/29; Council Directive 1990/496/EEC of 24 September 1990 on nutrition labelling on foodstuff [1990] OJ L276; Commission Directive 2008/100/EC of 28 October 2008 amending Council Directive 90/496/EEC on nutrition labelling for foodstuffs as regards recommended daily allowances, energy conversion factors and definitions [2008] OJ L285/9

⁵¹ A selection of key Regulations: Council Regulation (EC) No 1924/2006 of the European Parliament of 20 December 2006 on nutrition and health claims made on foods [2006] OJ L404/9; Council Regulation (EC) No 510/2006 of 20 March 2006 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs. [2006] OJ L93/12; Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/1991; Commission Regulation (EC) No 1254/2008 of 15 December 2008 amending Regulation (EC) No 889/2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regards to organic production, labelling and control [2008] L 337/80

only way for them to know what they are consuming and whether it is safe to eat it.⁵² The EU horsemeat scandal emphasised the importance consumers place on this information.⁵³ A trustworthy ingredients list, combined with plain nutritional information, is vital for the general consumer, and potentially life-saving for consumers with special dietary requirements.⁵⁴

While there is a substantive *acquis* regarding labelling relating to ingredients and their nutritional value, there is no harmonised law for labels indicating different farm animal welfare standards. Instead, there is a variety of voluntary labelling schemes in different Member States. The lack of harmonised legislation may have a detrimental effect on the competitive strength of farmers, as it increases the consumers' difficulty to understand the welfare implications of the different husbandry systems.

However, it is also possible that the absence of harmonised welfare-labelling has no impact at all, as the effectiveness of (nutrition) labelling has been debated and researched. Some academics have concluded that consumers do not pay attention to (nutritional) labels and even if they notice them, they do not understand what labels mean.⁵⁵ Nonetheless, survey respondents are

⁵² A. Böcker 'Consumer response to a food safety incident: exploring the role of supplier differentiation in an experimental study' (2002) 29(1) *European Review of Agricultural Economics* 29; M.J.J. Mangen, A.M. Burrell 'Who gains, who loses? Welfare effects of classical swine fever epidemics in the Netherlands' [2003] 30(2) *European Review of Agricultural Economics* 125; N. Salmon 'What's cooking? From GM food to nanofood; regulating risk and trade in Europe' [2009] 11(2) *Environmental Law Review* 97; MacMaoláin C 'Food Labelling requirements in European Union law: Creating the right package of measures to achieve the aims of Common Agricultural Policy 2020' in McMahon JA, Cardwell MN (eds) *Research handbook on EU Agricultural Law* (Elgar 2015) 282-283

⁵³ J. Premanandh 'Horse meat scandal – A wake-up call for regulatory authorities' (2013) 34(2) *Food Control* 568; F.A. Yamoah, D.E. Yawson 'Assessing Supermarket Food Shopper Reaction to Horsemeat Scandal in the UK' (2014) 4(2) *International Review of Management and Marketing* 98

⁵⁴ G. Cowburn, L. Stockley 'Consumer understanding and the use of nutrition labelling: a systematic review' (2005) 8(1) *Public Health Nutrition* 21

⁵⁵ C MacMaoláin 'Regulating consumer information: using the food labelling and mandatory disclosures to encourage healthier lifestyles' in A Alemanno, A Garde (eds.) *Regulating Lifestyle Risks The EU, Alcohol, Tobacco and Unhealthy Diets* (Cambridge University Press 2015); Cowburn, Stockley (n. 54); C. MacMaoláin, 'Waiter! There's a Beetle in my soup. Yes sir, that's E120; Disparities between actual individual behaviour and regulating food labelling for the average consumer in EU Law' (2008) 45 *Common Market Law Review* 1147; G. Baltas 'Nutrition labelling: issues and policies' (2001) 35(5/6) *European Journal of Marketing*

often positive to farm animal welfare labelling.⁵⁶ Further, as the information included and attempted to convey in nutritional labels differs in complexity among existing labels at Member State level, it would be unwise to easily dismiss welfare-labelling as ineffective. Therefore, the following premise is adopted for the remainder of this discussion: animal welfare labels can be sufficiently effective to make significant contribution to the farmers' competitive strength, while supporting high animal welfare standard.

5.4.1 Different types of labels

Labels for the purpose of informing the consumers of the level of farm animal welfare can be designed in different ways. The two most prominent types of labels are:⁵⁷

- i) a logo system, where the label is in the form of a logo, certifying that a specific minimum standard of animal welfare (commonly higher than the legislative minimum) has been fulfilled at the farm the produce originates from;
- ii) a tiered system, where a score or a rating is provided upon the packaging, indicating the specific level of animal welfare for that animal. This is a relative scale, as the different level of welfare must be placed in relation to each other, in order to provide any useful information.

A logo type label was reported to be the preferred format by 35% of Eurobarometer respondents in 2007, while 26% of respondents preferred a tiered label.⁵⁸ However, the type of label selected conveys more than information to the consumers, as it can be directly linked to the attitude towards animal welfare. If the intended attitude is that a specific higher

⁵⁶ Musto, Faracone, Cellini (n. 8) 207; J. Tawse 'Consumer attitudes towards farm animal and their welfare: A Pig production case study' (2010) 3 Bioscience Horizons 156; Kehlbacher, Bennet, Balcombe (n. 31); Bennett, Anderson, Blaney (n. 34) 193

⁵⁷ Kehlbacher, Bennet, Balcombe (n. 31) 628

⁵⁸ European Commission 270 (n. 43)

standard has been set and the farmers are required to achieve this standard (to use the label) and nothing more, a certificate logo is appropriate. A tiered system operates differently. *All* farms would be included within such a system, and the farms with minimum standards would be assigned the lowest tier upon joining such a labelling scheme. This enables farmers to move up the tiers by improving welfare standards. If the price premium paid by the consumers is passed directly to the farmers to cover the costs of the higher welfare standards, the financial incentive to improve these standards increases. A tiered system also provides a greater selection of 'standards' for the consumers to choose from, therefore enabling them to adjust their purchase behaviour to truly reflect their preferred level of welfare, as consumer preferences vary greatly.⁵⁹

The issue with the tiered system is its complexity, as it would be significantly more difficult for the consumers to comprehend, and the difference between tiers would need to be explained. A study from 2012 reported that over 90% of its respondents would welcome a 'welfare scoring system' (ie a tiered system).⁶⁰ On the other hand, the logo is more easily understood and more communicable to the consumers, and despite the lack of 'incentive' that would exist in the tiered approach, it would still significantly surpass the legislative minimum.⁶¹

Apart from the labels' type, the labels' origin can also vary: they may either be mandatory or they can originate from private voluntary labelling schemes.⁶² Private schemes are far more common, partially as their voluntary nature allows for a great variety in topic, scope and origin. Specifically, in regards to farm animal welfare, there are schemes whose sole focus is animal welfare (RSPCA Assured⁶³ in UK, Label Rouge in

⁵⁹ L.R. Heerwagen, M.R. Mørkbak, S. Denver, P. Sandøe, T. Christiansen 'The Role of Quality Labels in Market-Driven Animal Welfare' (2015) 28 *Journal of Agricultural and Environmental Ethics* 67

⁶⁰ Kehlbacher, Bennet, Balcombe (n. 31) 631

⁶¹ Bock, Buller (n. 7) 403

⁶² Verbeke (n. 25)

⁶³ Freedom Foods were rebranded to RSPCA Assured in 2015, but maintains the same

France) and schemes which include animal welfare as one of many aspects (KRAV in Sweden, Red Tractor in UK and the international Marine Stewardship Council).⁶⁴

5.4.2 Understanding the labels

Regardless of which style a particular label chooses to adopt, or which scheme should be chosen for an EU-wide farm animal welfare label, unless consumers were truly able to *understand* them,⁶⁵ they would be worthless. As previously discussed in the section about the current information deficiency, consumers' general idea of what farming entails is seriously disconnected from the realities of intensive farming, partially because the food industry has a vested interest in projecting a romanticised and nostalgic image of farming, but also because some consumers have chosen ignorance as a defence mechanism. This is highly problematic for the effectiveness of any labelling scheme, as studies have shown that knowledge about labels and what they stand for, plays a significant role in ultimately influencing the consumers' purchase decision.⁶⁶

The consumers who are interested in knowing where their food comes from, and who seek knowledge about farming practises, may benefit from the information on different labels, as they facilitate informed purchasing decisions. Welfare-labelling would benefit from this type of consumers, as they are the ones more likely to take the time to inform themselves of what labels stand for, and would therefore become the prime target group for the

standards. Freedom Food 'Freedom Food to rebrand as RSPCA Assured' (*FREEDOM FOOD*) <<http://industry.freedomfood.co.uk/industrynews/2014/09/freedom-food-to-rebrand-as-rspca-assured>> accessed 23 November 2015

⁶⁴ Kehlbacher, Bennet, Balcombe (n. 31); Vanhonacker, Verbeke (n. 5) 165

⁶⁵ MacMaoláin (n. 52) 279

⁶⁶ M. McEachern, G. Warnaby 'Exploring the relationship between consumer knowledge and purchase behaviour of value-based labels' (2008) 31 *International Journal of Consumer Studies* 414; K.G. Grunert, S. Hieke, J Wills 'Sustainability labels on food products: Consumer motivation, understanding and use' (2014) 44 *Food Policy* 177; T Lang, M Heasman *Food Wars The global battle for mouths, minds and markets* (2nd ed) (Routledge 2015) 238

commodified higher farm animal welfare.⁶⁷ However, for a label to be effective and to reach its true potential, it must be understandable for *all* consumers. Vanhonacker and Verbeke identified a short list of key features which contribute to the effectiveness of labels:⁶⁸

- High visibility of the label is essential to counteract the information overload common on food packaging;
- A simple format which is clearly understandable and accessible;
- Recognisability – the subject of the labelling scheme must be based on a problem which is recognisable to the consumer;
- Notoriety – if the label is on well-known quality products, it will be more successful;
- Transparency and credibility – consumer trust is paramount.

There is a general problem with information overload about foodstuff.⁶⁹ Consequently, for a label to bypass the noise of the information overload, it must be designed in a way which makes it highly visible, and it must stand out from its surroundings. Therefore, a simple format is most effective: it is clearly formulated and easy to understand for everyone, regardless of age and education level.⁷⁰ An example of a simple format system in operation, is the voluntary Traffic Light System, a tiered system, which informs about nutritional content in the UK.⁷¹ This system is formatted so that 'bad', 'OK' and 'good' can be identified at a glance with the aid of colours, while also providing more details, on the same label, for those who desire it. Whether a similar approach is appropriate for the complexity of farm animal welfare remains to be evaluated, but it provides a reference point. An example of a

⁶⁷ Cole (n. 18) 93; Bock, Buller (n. 7)

⁶⁸ Vanhonacker, Verbeke (n. 5) 165

⁶⁹ As discussed above at 5.2.3

⁷⁰ G. Harper, S Henson 'Consumer concerns about animal welfare and the impact on food choice. Final Report' (2001) EU FAIR CT98-3678

⁷¹ Department of Health and the Food Standards Agency 'Guidance to creating a front of pack (FoP) nutrition label for pre-packed products sold through retail outlets' (2013); Department of Health 'Final design of consistent nutritional labelling system given green light' (*Department of Health Press Release* 2013) <<https://www.gov.uk/government/news/final-design-of-consistent-nutritional-labelling-system-given-green-light>> accessed 23 November 2015; MacMaoláin (n. 52) 270,279

simple certified logo which indicates that the product is compliant with the standards of its food-group (in line with the Nordic Nutrition Recommendations) is the voluntary 'Keyhole label', used in Sweden, Denmark, Iceland and Norway.⁷² It is a simple, highly visible label, but –as all labels– requires that the consumers are aware of what it stands for.

Labels, to be truly effective, must reflect the public's perceptions, as they are intended to aid the public to make informed purchase decisions. The public's perception of what animal welfare is, and which welfare issues are important, often differs significantly from other stakeholders', therefore making the recognisability of the subject of a label (welfare standard) particularly important.⁷³ Understanding how the public perceives animal welfare is central to the success of any labelling scheme, as such understanding would enable such labels to align with the public's concerns about animal welfare, which in turn would lead to an increase in market acceptance for higher welfare products.⁷⁴ An increased acceptance is likely to translate to a higher demand, which would consequently strengthen the financial incentive for farmers to ensure, and improve welfare standards, to the benefit of the animals.

As people are brand conscious,⁷⁵ the reputation of a label improves, according to studies, when a well-known product is labelled compared to lesser-known ones, which in general translates to a higher WTP.⁷⁶ However, regardless of how a label is designed, the consumers' trust in the label is

⁷² Annie-Rose Harrison-Dunn 'UK's traffic light label is "negative", says Commission' *Foodnavigator.com* (6 Oct 2014) <<http://www.foodnavigator.com/Policy/Nordic-keyhole-vs.-UK-s-traffic-light-nutrition-label>> accessed 23 November 2015

⁷³ J. McNerney 'Animal welfare, economics and policy – Report on a study undertaken for the Farm and Animal Health Economics Division of Defra' (2004)

⁷⁴ Vanhonacker, Verbeke (n. 5) 157

⁷⁵ G. Nocella, L. Hubbard, R. Scarpa 'Farm Animal Welfare, Consumer Willingness to Pay, and Trust: Results of a Cross-National Survey' (2010) 32(2) *Applied Economic Perspectives and Policy* 275,278; Lang, Heasman (n.65) 221

⁷⁶ U. Enneking 'Willingness-to-pay for safety improvement in the German meat sector: The case of the Q&S label' (2004) 31 *European Review of Agricultural Economics* 205

paramount.⁷⁷ Without the consumers' trust, no voluntary labelling scheme will work. For the consumers to trust the label, they must also have trust in the message the label conveys to them, as well as the sender of the message and its source.⁷⁸ This necessitates transparency and credibility, which can be achieved by providing readily accessible information for the consumers, combined with monitoring and inspecting farms to ensure compliance with the labels' rules.⁷⁹ Preferably, independent inspectors should verify the findings to ensure that the credibility is guaranteed.

The following hypothetical example illustrates why consumer trust is important. A media exposé on a logo certification informs the public that this label organisation is failing to monitor and inspect the farms which supplies the products bearing its logo. This exposé will inevitably undermine the consumers' trust in that label. Although consumers may have previously trusted the label enough to pay for the price premium, which the specific high-welfare labelled products were likely to command, the exposé may diminish the level of trust to the extent that they no longer believe in what the logo stands for, and therefore become unwilling to pay the premium. Additionally, a lack of trust may also be caused by misleading, vague or confusing information associated with the labels. In such cases, the lack of trust may be warranted, as it is possible that the label is actually a pure marketing tool, a prime example being the '5-a-day' label, which is extensively misused by the food industry.⁸⁰

⁷⁷ H.J. Blokhuis, L.J. Keeling, A. Gavinelli, J. Serratosa 'Animal welfare's impact on the food chain' (2008) 19 Trends in Food Science & Technology 79

⁷⁸ Vanhonacker, Verbeke (n. 5) 162

⁷⁹ Nocella, Hubbard, Scarpa (n. 75)

⁸⁰ Department of Health '5 A DAY'

<http://webarchive.nationalarchives.gov.uk/+http://dh.gov.uk/en/publichealth/healthimprovement/fiveaday/index.htm> accessed 4 December 2015; Committee of Advertising Practice Ltd 'Food: 5 A DAY claims' <https://www.cap.org.uk/Advice-Training-on-the-rules/Advice-Online-Database/Food-Five-a-day-claims.aspx#.VrJl6fnJzIU> accessed 4 December 2015; Moore J 'Myths About Your Five A Day – Reporter Feature' (Dispatchers Channel 4) <http://www.channel4.com/programmes/dispatches/articles/2012/myths-about-your-five-a-day-reporter-feature> accessed 4 December 2015; Paula Coccozza 'The five-a-day disaster: why the numbers don't add up' *The Guardian* (London, 14 May 2014) <http://www.theguardian.com/lifeandstyle/2014/may/14/five-a-day-fruit-vegetables-portion-supermarket> accessed 4 December 2015

Nonetheless, despite all problems associated with labelling schemes, labelling is ultimately a suitable tool for product differentiation, for the purpose of emphasising different product attributes in an attempt to increase the consumers' WTP. Product differentiation by labels is particularly effective in consumer segments, whose purchasing behaviour is not (yet) fully aligned with their interest in higher welfare products and the importance they attribute to such issues is still not expressed as an informed decision.⁸¹ Animal welfare labelling schemes are an effective way of communicating to consumers which products were produced at a higher standard, and is a method currently permitted under the current regulatory framework of the EU.

5.5 Supporting the farmers within the current regulatory framework

So far, this chapter has outlined why consumers and their purchase behaviour matter to farm animal welfare, by analysing the issues concerning the information deficit, the consumers' willingness to pay for animal welfare and labelling schemes. The consumers' purchase behaviour has a direct impact on domestic farmers, who are the producers and suppliers of the all farming products' 'ingredients'. The consumers' choice of domestic products is what maintains the specific demand. If the consumers who normally purchased domestic products switched and bought imports, then the demand for the specific domestic product would decrease, and it would in turn increase the demand for imports, and vice versa.⁸² This is true for all categories of farming products, including products originating from pigs and poultry. For pig and poultry products, the choice of purchasing domestic or imported goods from other Member States increases in importance, due to the minimum harmonisation approach taken to regulate farm animal welfare in EU legislation.

⁸¹ Vanhonacker, Verbeke (n. 5) 164

⁸² Bailey Norwood, Lusk (n. 32) 249; Lang, Heasman (n.66) 227

The minimum harmonisation Directives include explicit derogation clauses⁸³ which enable the introduction and maintenance of stricter animal welfare requirements in each Member State. The farmers in these Member States must comply with stricter welfare standards, which increase the input costs and must be associated with higher retail prices as well. This side-effect of harmonisation makes farmers in stricter Member States particularly sensitive to domestic consumers' purchase behaviour, as the Internal Market exposes their more expensive produce to direct competition with (cheaper) imports. The impact of consumers' purchase behaviour on the competitive strength of the farmers is evident in the statistics discussed in Chapter 4.

For the purpose of this chapter, it is sufficient to emphasise the key points of said statistics: there is a general decline in domestic production of pork in stricter Member States, as not only are fewer animals reared, but the overall level of self-sufficiency is declining. In the last two decades, the self-sufficiency in pork has reduced by 14% in the UK and 38% in Sweden.⁸⁴ Consequently, the shortfall in domestic production is increasingly met by imports from other Member States. Indeed, in 2014, 41% of the pork consumed in Sweden was imported. In regards to chicken, the consumption is rapidly increasing, as are production levels. However, it is not sufficient to meet the demand. As a result, the UK imports of broilers have risen around 22% the last 14 years and the corresponding increase is 35% in Sweden. The increased import numbers could be explained by the inability of domestic production to meet the demand, bar the fact that the export of Swedish and British produce has increased during the same periods. The increasing import of cheaper produce and export of domestic, more expensive produce, indicates that consumers are price-conscious and turn to cheaper alternatives. The question that arises for the remainder of this chapter is the following: what can hypothetically be done, within the existing

⁸³ See at 2.4

⁸⁴ AHDB Pork 'EU Self-sufficiency' <<http://pork.ahdb.org.uk/prices-stats/consumption/eu-self-sufficiency/>> accessed 18 October 2015

EU regulatory framework, to support the competitive strength of domestic farmers as they provide a higher standard of welfare for their animals? This thesis argues that it is the consumers' purchase behaviour which is the key variable.

5.5.1 'Buy Domestic' campaigns

As the higher standard farm animal welfare is due to the decision of the Member States to apply stricter requirements in their territory, it is easy to presume that influencing the consumers' purchase behaviour would be straightforward. The Member State in question can launch a campaign promoting the domestic produce and discrediting imports, and thereby increasing the ethnocentric purchase behaviour of their citizens.

Ethnocentric behaviour typically includes an overestimation of the quality and value of domestic products combined with a moral obligation of buying them, while underestimating the virtues of imports, resulting in an intense preference for domestic products.⁸⁵ Encouraging ethnocentric behaviour with higher animal welfare is likely to be effective, as the topic evokes ethical and moral concerns for the consumers. By discrediting the husbandry systems of other Member States, the appeal of the cheaper imported produce may be reduced. Such a reduction would increase sales of domestic produce, thus improving the competitive strength of the domestic farmers, and safeguarding the higher national standards of farm animal welfare.

However, the situation is not as simple as it may seem, as any measure which can be taken for the purpose of influencing consumers' purchase behaviour to increase sales of domestic products *must* comply with EU law. EU law does not permit overtly protectionist behaviour, as such behaviour impedes the Free Movement of Goods on the Internal Market (Article 34 TFEU, prohibiting QRs and MEEQRs).⁸⁶ Consequently, it is not possible for the authorities in Sweden or England to simply launch a campaign,

⁸⁵ E. Kaynak, A. Kara 'Consumer perception of foreign products: An analysis of product country images and ethnocentrism (2002) 36 European Journal of Marketing 934

⁸⁶ Discussed at length at 2.2 and 2.3.

proclaiming 'Buy Swedish' or 'Buy English'⁸⁷ as an attempt to increase the ethnocentric consumer behaviour of their citizens. The difficulty lies in that such a campaign would be deemed to be an intentional attempt to protect the national economy and domestic goods, to the detriment of goods originating from other Member States. Such behaviour contradicts the core ethos of the Internal Market, Free Movement of Goods, and would therefore amount to an MEEQR and would be held to be incompatible with EU law.⁸⁸

Nevertheless, it is possible for 'Buy Domestic' campaigns to be classified as lawful and in compliance with EU law, as their legality depends on the source of the campaign. A reason why the *Buy Irish*⁸⁹ campaign was held to contravene EU law was that the Irish Goods Council, which ran the campaign, was established by the Irish Government. Therefore, Ireland, as a Member State, contravened Article 34 TFEU. Similarly, the German Fund for quality marking was held to contravene Article 34 TFEU, as the central fund was created by legislation.⁹⁰ Nonetheless, as Article 34 TFEU only prohibits *state measures*⁹¹ which limit the Free Movement of Goods on the Internal Market, it is only campaigns originating from the state, which contravene the Article. However, the meaning of 'state' is interpreted broadly in this context, and includes not only central (ministerial or departmental) and regional authorities,⁹² but also private entities which can be attributed to the state, for instance, private entities funded by the state or having obligatory contributions of companies in certain sectors or having members appointed (or controlled) by public authorities.⁹³ Indeed, even public statements of state officials can be held to contravene Article 34 TFEU, if it is likely that the

⁸⁷ Alternatively, 'Buy British'.

⁸⁸ 249/81 *Commission v Ireland* [1982] ECR 4005

⁸⁹ *ibid* para 30

⁹⁰ C-325/00 *Commission v Germany* [2002] ECR I-9977

⁹¹ 8/74 *Procureur du Roi v. Dassonville* [1974] ECR 837

⁹² 45/87 *Commission v Ireland (Dundalk Water Supply)* [1988] ECR 4929; C-1/90 *Aragonesa de Publicidad v. Departamento de Sanidad* [1991] ECR I-4151

⁹³ C-227/06 *Commission v Belgium* [2008] ECR I -46; J. Hojnik 'Free movement of goods in a labyrinth: Can Buy Irish survive the crises?' (2012) 49 *Common Market Law Review* 291,302

statements can be seen by the public as the state's official position, regardless of whether it was a personal statement or not.⁹⁴

Contrastingly, if a 'Buy Domestic' campaign is entirely privately owned, it generally cannot be caught by Article 34 TFEU, as the Court has not explicitly recognised a horizontal direct effect of the Article.⁹⁵ An example of when horizontal direct effect does not apply is *Sapod Audic*,⁹⁶ which concerned a Green Dot logo and a contractual obligation to place the label upon packages. As a contractual obligation between private parties, not imposed by the state, the Court held that it did not constitute a barrier to free trade within the scope of Article 34 TFEU. However, private ownership does not automatically remove a campaign entirely from the scope of the Treaty provisions on the Internal Market: the state can potentially be held responsible for activities of private individuals, if the state fails to adopt appropriate and adequate measures to ensure Free Movement of Goods and if the obstacle is deemed severe enough.⁹⁷ Therefore, before choosing appropriate state action, it is necessary to preserve a delicate balance to protect the free movement of goods within the domestic territory and this balance must be judged on a case-by-case basis.⁹⁸

Besides using a private source for such a campaign to bypass Article 34 TFEU, it is also possible to attempt to justify it under Article 36 TFEU.⁹⁹ While it is possible, it is very difficult for Member States to satisfy the criteria in regards to 'Buy Domestic' campaigns, particularly as primary motivations are often linked to economic policy reasons. In general, the Court will not accept

⁹⁴ C-470/03 *A.G.M. – COS.Met Srl v Soumen valtio in Tarmo Lehtinen* [2007] ECR I-2749

⁹⁵ C-265/95 *Commission v France* [1997] ECR I-06959; C-171/11 *Fra.bo SpA v Deutsche Vereinigung des Gas – und Wasserfaches ev (DVGW)* [2012] ECR 453; C. Krenn 'A missing piece in the horizontal effect "jigsaw": Horizontal direct effect and the free movement of goods' (2012) 49(1) *Common Market Law Review* 177

⁹⁶ C-159/00 *Sapod Audic v Eco-Emballages SA* [2002] ECR I-5031; Hojnik (n. 93) 303

⁹⁷ C-265/95 *Commission v France* [1997] ECR I-6959; C-112/00 *Eugen Schmidberger v Austria* [2003] ECR I-5659; C-171/11 *Fra.bo SpA v Deutsche Vereinigung des Gas – und Wasserfaches ev (DVGW)* [2012] ECR 453

⁹⁸ Hojnik (n. 93) 304

⁹⁹ See at 2.3.1.

any justification on the ground of economic policy reasons, such as job preservation, public finances, or hardship in sectors of the national economy.¹⁰⁰ Therefore, supporting the domestic farmers –both in regards to ensuring the financial viability of farming and preserving the jobs in agriculture– is likely to be dismissed as an appropriate justification. However, the Court will accept the mandatory requirement¹⁰¹ of consumer protection, particularly in regards to the quality of goods, which is a possible justification for ‘Buy Domestic’ campaigns. Nonetheless, it must be highlighted that the quality of a product cannot be guaranteed just because it originates from a specific Member State, especially in regards to goods produced in line with harmonised EU wide standards. Mandatory requirement of consumer protection does, nevertheless, present an opportunity to justify campaigns, provided that it is argued in an appropriate manner, emphasising a product’s higher quality (welfare) rather than its origin (which guarantees is compliance with EU minimum standards).

5.5.2 Animal welfare campaign

Having outlined the obstacles posed by EU law to a national campaign which promotes the domestic higher standard of farm animal welfare, and thereby improves the farmers’ competitive strength, the question remains whether such a campaign is possible. This thesis argues that the lawfulness of such a campaign depends on its organisational source, its focus and scope, and the weight given to Article 13 TFEU.

First and foremost, any campaigns’ source *must* be a private organisation, which receives no funding support from the authorities, nor has any other connections with the state, its departments, regional branches or employees. If the State can be attributed to the organisation as a source of the campaign

¹⁰⁰ 95/81 *Commission v Italy* [1982] ECR 2187; Joined Cases 62 & 63/81 *SECO SA v Établissement D’Assurance Contre La Vieillesse et L’Invalidité and Desquenne & Giral SA v Établissement D’Assurance Contre La Vieillesse et L’Invalidité* [1982] ECR 223; C 224/97 *Ciola* [1999] ECR I-2517

¹⁰¹ 120/78 *Rewe-Zentral AG v Bundesmonopolverwaltung für Branntwein (Cassis de Dijon)* [1979] ECR 64; See at 2.3.2.

in any way, it is likely to be caught by Article 34 TFEU. Therefore, the importance of the source being private actors cannot be emphasised enough. Further, rather than a 'Buy Domestic' campaign, it should be a campaign promoting the idea of buying produce with 'High Animal Welfare'. By changing the focus and focusing on animal welfare, rather than the national origin of the produce, problems arising from the overtly protectionist elements of such a campaign are removed. Changing the focus of the campaign to 'higher animal welfare' also narrows the scope of the products affected, and one of the reasons why the *Buy Irish* campaign was struck down is that it affected the national economy as a whole.¹⁰² Therefore, by focusing on the animal welfare aspect and narrowing the scope, the campaign would only affect *one* section of the economy, rather than the economy as a whole.

Further, if higher farm animal welfare standards can be classed as a standalone quality attribute of the product, then it may be possible to justify a campaign under Article 34 TFEU. In *Apple and Pear Development Council*,¹⁰³ the Court held that the promotion of specific goods which have *distinctive qualities*¹⁰⁴—other than their national origin— is permissible under Article 34 TFEU, if the promotion highlights these qualities. Therefore, placing the focus firmly on the varying standards of animal welfare, rather than which Member State the animal originates from, promotes the distinct qualities of the goods, rather than their origin. The success rate of such a justification may be increased if it is combined with a mandatory requirement of consumer protection. However, whether this is a possible justification, depends on the EU's definition of 'quality': if quality is perceived as an attribute of the product that can be identified in an objective manner, it is unlikely that the criteria of distinctive quality are satisfied in regards to farm animal welfare.¹⁰⁵ Because, while consumers generally associate high

¹⁰² 249/81 *Commission v Ireland* [1982] ECR 4005 para 29

¹⁰³ 222/82 *Apple and Pear Development Council v K.J. Lewis Ltd* [1983] ECR I-4083

¹⁰⁴ Joined Cases C-465/2002 and C-466/2002, *Germany and Denmark v Commission* [2005] ECR I-9115

¹⁰⁵ Hojnik (n. 93) 306

animal welfare standards with higher quality meat, 'healthier' and 'tastier', it is not possible to objectively prove such subjective qualities.¹⁰⁶

There are legislative indications that high farm animal welfare may be considered as a 'quality', as Article 16 of Regulation 1305/2013 states that financial support is available under the Rural Development Programmes for new participation by farmers in 'quality schemes, including farm certification schemes for... foodstuffs', provided that they guarantee any of the following: 'specific product characteristics, specific farming or production methods, or the quality of the final product that goes significantly beyond the commercial commodity standards as regards public, animal or plant health, animal welfare or environmental protection'.¹⁰⁷

Therefore, if high animal welfare is recognised as a quality attribute in the foodstuff, the focus of the campaign may need to be adjusted. Rather than promoting the higher standards of a specific Member State, it may be beneficial to promote higher animal welfare standards EU-wide. Such an approach would further distance the campaign from being classified as a protectionist measure. A wider focus could still benefit the specific farmers who have higher welfare costs, by ensuring that the price premium attributed to their higher standard products were transferred to them directly. Indeed, an EU-wide campaign focused on high animal welfare standards can arguably be seen as a tool of market integration, as it would underpin the standards in the EU,¹⁰⁸ and would potentially increase the standard of welfare for billions of animals, provided that the campaign focused on highlighting the standards which exceed the minimum requirements.

¹⁰⁶ Grant (n. 1) 425; European Commission 270 (n. 43); European Commission 229 (n. 43)

¹⁰⁷ Regulation (EU) No 1305/2013 of the European Parliament and the Council of 17 December 2013 on support for rural development by European Agriculture Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005 Article 16(b)(i)

¹⁰⁸ B. Clift, C. Woll 'Economic patriotism: reinventing control over open markets' (2012) 19(3) Journal of European Public Policy 307; Grant (n. 1) 426

Even if an EU-wide 'higher animal welfare' campaign is found to contravene Article 34 TFEU, another legal possibility to promote higher animal welfare remains, and consequently support the farmers and improve their competitive strength. While EU law prohibits protectionist behaviour by the Member States, it recognises that sometimes public authorities are the best agents to inform consumers, especially on the quality of different goods, as well as about the health and environmental impact of various products. While this responsibility lies predominantly with producers, distributors and the national authorities within each Member States the EU plays the role of facilitator and supporter.¹⁰⁹ In support of the EU's facilitating role, it is noteworthy that there is a specific EU Regulation No. 3/2008¹¹⁰ which specifically regulates issues regarding agricultural products.

The provisions within Regulation No. 3/2008 have the potential of enabling information and promotion programmes in regards to '...agricultural products and their method of production as well as for food products based on agricultural products...' provided that the information is neither brand-orientated nor it encourages consumption of a product due to its specific origin.¹¹¹ As farm animals are classified under agricultural products, 'their method of production' refers to how they are reared, including the husbandry system and the standard of welfare. Even if it is argued that classifying farm animals as agricultural products refers to the animals prior their slaughter, it would still apply to dairy cows and egg-layers, as these animals do not need to be slaughtered before we can consume their produce. However, the argument that animals need to be alive for the applicability of this Article is invalid, as even with such a distinction, 'food products based on agricultural products' would cover *all* farm animals, regardless of whether slaughter is necessary for us to consume their produce. As such, it is evident that the information and promotional programmes in question apply to farm animals.

¹⁰⁹ Hojnik (n. 93) 320

¹¹⁰ Council Regulation (EC) No. 3/2008 on information provision and promotion measures for agricultural products on the internal market and in third countries (2008) OJ L3/1

¹¹¹ *Ibid* Article 1

Article 2 of the Regulation specifies what is meant by information and promotion measures and states that it refers to public relations work, promotion and advertising ‘...in particular to draw attention to intrinsic features and advantages of Community products, notably... *animal welfare*’.¹¹² The inclusion of animal welfare as an intrinsic feature worthy of promotion on the Internal Market is repeated in Article 3. The explicit inclusion of animal welfare indicates that the EU recognises animal welfare sufficiently important to warrant special promotion within the Internal Market. Further, there is also the possibility of supporting a quality scheme through the Rural Development Programmes, as Regulation No. 1305/2013 provides that support may ‘cover costs arising from information and promotion activities implemented by groups of producers in the internal market, concerning products covered by a quality scheme’¹¹³ – and animal welfare is explicitly listed as to what such a quality scheme may guarantee.¹¹⁴

While a promotion in line with the Regulations would be a circumventive way of increasing the competitive strength of farmers in Member States which impose stricter legislation than the EU minimum, if successful, it would nonetheless have such an effect. Additionally, promoting farm animal welfare and increasing the financial viability of rearing them to a high standard would improve the lives of many millions of farm animals in the EU.

5.6 Chapter conclusion

This chapter focused on the role of consumers’ purchase behaviour, due to the direct link between consumers’ actions and the competitive strength of farmers, since the amount consumers pay for their food, directly relates to the remuneration farmers receive. Farmers in Sweden and England are

¹¹² Emphasis added

¹¹³ Regulation No. 1305/2013 (n. 106) Article 16(2);

¹¹⁴ D. Ryland ‘Animal welfare in the reformed Common Agricultural Policy: wherefore art thou?’ (2015) 17 Environmental Law Review 22 38-40

struggling financially, as their competitive strength against cheaper imports from other Member States is reduced due to higher input costs (as farm animal welfare is expensive to provide). Three main aspects of consumer behaviour which influence the farmers' competitive strength have been identified, explored and discussed in this chapter: the information deficiency, the willingness to pay, and labelling issues.

To improve the domestic farmers' competitive strength against cheaper imports, product differentiation is essential. Differentiation *must* communicate to the consumers the differences among the products, ie in this context, higher animal welfare standards. This is particularly important in regards to foodstuff, as it is impossible to tell only by looking at one pork chop next to another in the retail counter, which one comes from a pig reared in a husbandry system with a higher standard of welfare. If consumers do not understand why there is a significant price premium on one of the options, there is nothing to motivate them to select the pricier alternative. Therefore, the information deficiency *must* be overcome.

Based on the analysis in this chapter, it is therefore recommended that an EU-wide farm animal welfare label would be the best way of overcoming the information deficit. A carefully designed and introduced EU-wide label, whose commanded price premium is passed directly to the farmers, would improve the competitiveness of those farmers complying with stricter standards.

The labels design and what it represents is highly important for its effectiveness, as it must 'catch the consumer's eye'. A tiered-label would enable, and incentivise, a continuous improvement in farm animal welfare – which is highly desirable from a zoocentric perspective. However, a tiered-label faces the problem of communicating to the consumers what it represents. A logo label on the other hand, can be a simple, clear and colourfully designed, making it easily distinguishable and recognisable,

thereby being more noticeable by the consumers, albeit without the zoocentric benefits of continuous welfare improvement.

Regardless of the type of label, it should be noted that the EU does have experience in introducing relevant food labelling schemes in the past, such as the Protected Designated Origins, Protected Geographical Indications, Traditional Speciality Guaranteed, and more recently, the Organic label.¹¹⁵ As farm animal welfare is at the heart of this thesis, the tiered label is the recommended option. However, if a logo label is deemed to be more suitable, despite its zoocentric drawbacks, the Organic labelling scheme provides an existing blueprint for the legislators as to how to introduce a high animal welfare label in a swift manner.

Further, a general informative and educational promotion campaign about farm animal welfare is recommended to be launched in combination with information and advertisements of an EU-wide label, to convey to the consumers what it signifies, and to create the 'added value' to increase the consumer WTP. A similar information campaign have already been funded by the EU,¹¹⁶ for the purpose of informing consumers of the meaning, description and logos related to the EU's three policy schemes regarding quality of food products.¹¹⁷

Therefore, it is argued and concluded that while an EU-wide farm animal welfare label and an accompanying campaign would be a roundabout way of doing it, it would nonetheless have the effect of improving the competitive strength of the farmers in the 'stricter' Member States by motivating the

¹¹⁵ European Commission 'Organic Certification' (*Agriculture and Rural Development* 14 February 2014) <http://ec.europa.eu/agriculture/organic/organic-farming/what-is-organic-farming/organic-certification/index_en.htm> accessed 28 July 2016

¹¹⁶ E Dimara, D Skuras 'Consumer demand for informative labelling of quality food and drink products: a European Union case study' (2005) 22(2) *Journal of Consumer Marketing* 90,91

¹¹⁷ Products of Protected Designation of Origin (PDOs); Protected Geographical Indication (PGIs); Traditional Speciality Guaranteed (TSGs) Regulation No. 3, Article 10

consumers to help finance the higher welfare by paying a price premium. Additionally, an EU-wide campaign and label creates the opportunity to promote and improve farm animal welfare in general. Such an approach would consider of the animals, producers, retailers and consumers interests, while also being understandable for the consumers. Consequently, the domestic farmers in Sweden and England would be in a stronger competitive position through the support of the consumers, and therefore would be able to maintain their higher animal welfare standards, to the benefit of millions of animals.

6 Conclusion

This thesis critically analysed the EU minimum legislation for farm animal welfare, and its implementation in Sweden and England, two Member States, for which there are empirical findings that they require a higher farm animal welfare standard than the EU legislative minimum, but at the same time observe their domestic farmers' production shrinking due to financial struggles. After an in-depth exploration of the EU regulatory framework and its transposition into the domestic legislation of the two selected Member States, and a critique whether the welfare goals are negated by the economic ones within the legislation, the study sought to answer the following:

1. What is the connection between the two selected Member States' higher concern for farm animal welfare and their farmers' dire financial condition?
2. How can the 'stricter' Member States' farmers regain competitive strength within the EU regulatory framework, abiding by the rules of the Internal Market, and without negating the achieved welfare standards?

Answering these questions may initially seem a simple task that starts with farm animal welfare and the plain fact that it costs money to provide. In general, the higher the standard, the higher the cost of providing it. Therefore, if a Member State requires a higher farm welfare standard compared to the other EU Member States, domestic farmers have higher production costs than their European counterparts. Higher production costs subsequently mean that the farmers must receive higher remuneration for their produce, if they wish for their profession to remain financially viable. However, due to the Internal Market and the provisions that regulate it, goods move freely between Member States, including agricultural produce. Produce from minimum compliant Member States are therefore free to enter the domestic markets of stricter Member State. These imported products are capable of retailing at a lower price, due to the lower production costs.

Consequently, the domestic farmers' products at the retail point are in direct competition with cheaper imports from other Member States. The price-conscious consumer is then likely to choose the cheaper option, as the products look similar to the untrained eye.

Nevertheless, upon closer scrutiny, answering the questions becomes a more complicated issue with many variables, the first of which is the EU legislation and the dual classification of farm animals in law. In primary law, Article 13 TFEU explicitly states that animals are sentient beings, they have feelings, and that the EU and Member States are required to pay full regard to their welfare requirements. Meanwhile, Art 38 TFEU classifies farm animals as agricultural products and under EU law, agricultural products are considered to be goods, intended for trade within the Internal Market. This dual status in law causes inherent tensions.

As a cornerstone of the Internal Market, the Free Movement of Goods policy is underpinned by extensive legislative provisions, both general and specific legislation, regulated in harmonising Directives. The general principle of the Free Movement of Goods ethos requires that farm animals, and all produce originating from them, must freely move within the Internal Market. Individual Member States are therefore prohibited from imposing overt or covert trade barriers (Article 34 TFEU). While Article 36 TFEU contains justifications for potential trade barriers, including the protection of 'animals' health and life', they do not apply to protecting farm animal welfare, nor supporting domestic farmers. This thesis argued that the animals' health and life are distinct concepts from welfare, and that welfare cannot be used as a justification under Article 36 TFEU. Additionally, as farm animal welfare is an area of law which is harmonised, the Court held in *Hedley Lomas* that permitting a justification of animal welfare under Article 36 TFEU would undermine the harmonised legislation. Therefore, it is concluded that there is no Treaty provision which Member States may rely upon to restrict or ban the imports of cheaper produce from other Member States, as it would contravene the ethos of the EU.

As farm animal welfare is a harmonised area of law, the relevant provisions become yet more complex. It must be emphasised that the harmonising approach selected for farm animal welfare is a minimum one: the Directives outline *aims* which the Member States must achieve by implementing them in a manner they see fit. This flexibility in the implementation of the Directives into the Member States' domestic legislation is a strong point of minimum harmonisation in the EU, as there is a plethora of different legal systems in which the legislation must be implemented. However, due to the absence of core definitions in the farm animal welfare Directives, the flexibility provided is also a problem. As explored in Chapter 1, the very concept of farm animal welfare is not defined in law, nor is there an agreed definition of the concept in the related scientific fields. Indeed, there is a debate among scholars even on how to measure animal welfare. The lack of definitions, therefore, creates a multitude of different potential interpretations of what animal welfare entails among the different Member States. Thus, rather than harmonising, the effect may be an agreement to disagree, which is a fundamental problem with the minimum harmonising Directives. The resulting increase in differentiation in regulatory requirements impacts on the farmers' competitive strength, as different standards must be complied with.

The second major problem is that the minimum harmonisation Directives contain a provision granting derogatory power to the Member States. All four Directives analysed in this thesis explicitly grant individual Member States the permission to implement, or maintain, stricter legislative standards than those required by the Directives. If a Member State requires a higher standard of welfare in law, the affected domestic farmers' production costs are likely to rise, as higher standards of welfare cost more money to provide. This will put the domestic farmers at a competitive disadvantage, compared to the farmers' in other Member States, particularly when their produce faces direct competition at the point of retail. At the same time, the derogatory power permitting stricter domestic laws is *crucial* from a zoocentric perspective, as it improves the welfare of millions of animals annually.

Therefore, as animal welfare is at the heart of this thesis, it must be emphasised that –despite its problems– the minimum approach which allows for stricter national standards is positive and *must not* be replaced or repealed.

To determine the extent to which the situation for the Swedish and English farmers is a result of the minimum harmonising Directives, it was first necessary to carefully analyse and critique the Directives per se. The analysis in Chapter 3 found several issues within the Directives, and the issues begin with the framework Directive of 1998. Directive 98/58 establishes general principles and aims, with a main purpose of incorporating the European Convention for the Protection of Animals Kept for Farming Purposes into EU law. The Convention was influenced by the Five Freedoms in its drafting and considers both ethological and physiological needs. Despite the intention to incorporate the Convention, Directive 98/58 emphasises on physiological needs, at the expense of ethological needs. This pronounced imbalance is subsequently repeated in the three species-specific Directives. Additionally, as the core concepts within Directive 98/58 are left undefined, its framework role affects the other Directives too, as the undefined concepts –including animal welfare– are carried throughout their legal text.

The species-specific Directives contain highly detailed provisions regulating fine details of animal husbandry specific to each species. Nonetheless, despite applying to different species they all essentially cover the same topics: space (or the lack thereof), housing requirements, environmental enrichment and physical interventions. The common denominator of these covered topics is the increased cost. Providing more space increases the costs, as does a higher building standard. Environmental enrichment is expensive to provide, and commonly requires more space for the animals to be effective. Physical interventions are permitted, largely to negate the effects of undesirable behaviour and vices such as aggressive pecking and tail-biting, which occur as an expression of their frustration, since the

animals are crowded together in barren/insufficiently enriched environments and their ethological needs remain unsatisfied. However, it is cheaper to dock the tails and trim the beaks than providing more space and a sufficient quantity of appropriate environmental enrichment. Similarly, castration of piglets is performed for economic reasons, to avoid boar taint, before the piglets' seventh day of life. Anaesthetics and prolonged analgesia, which have a high cumulative cost, are required after the seventh day. For poultry, physical interventions are prohibited after ten days. These age-limits are both based on outdated scientific theories, according to which nerve systems of piglets are not fully developed before the seventh day, and that the horn material in poultry beaks is insensitive. Although these theories have been disproven by a large body of researchers, the provisions remain in the Directives.

To summarise the EU Directives, it is concluded that the balance between physiological and ethological needs within the Directives is heavily tilted towards the physiological. It is also concluded that the balance between animal welfare and economic aims is in favour of the economics. Those requirements within the Directives which could make a noticeable difference to the animals' welfare are effectively negated by the economic aims in all four Directives, thus the legislation emphasises in the economic aspects of farming.

The findings of the imbalances within the EU Directives, as well as the established welfare standard within their provisions, enabled the analysis and the critique of the selected Member States' legislation. As Member States are *de facto* compliant, the examination of the domestic legislation identified which measures in each domestic legislation exceed the requirements stipulated by the EU. Identifying how far the domestic legislation goes above and beyond the EU minimum was necessary, as the stricter domestic standard increases the production costs for the farmers. The increased costs subsequently reduces the competitive strength of the domestic farmers against cheaper import.

The analysis showed that the Swedish farm animal welfare legislation is significantly stricter than the EU minimum standard. The Swedish Administrative Specifications, which are legally binding, for pigs and poultry contain provisions which are not only stricter, but also pre-date the EU legislation by over a decade in some cases. The early introduction of high standards in Sweden means that the Swedish farmers have had higher production costs than their European counterparts for a long period. This is evident in official statistics, as the production rates are generally in decline while the imports (from other Member States) are increasing.

Contrastingly, the English legislation is in essence a verbatim implementation of the Directives, as the regulatory approach in England is to encourage private, voluntary initiatives to improving farm animal welfare standards, rather than establishing strict legal standards centrally. This is commonly done through private, voluntary labelling schemes in England – and a large proportion of the farmers are members of at least one labelling scheme. Complying with the standards of a labelling scheme enables a small but important price premium on the produce, which aims to increase the remuneration for the farmers. English and Swedish farmers are pressured financially and therefore such price premiums are vital for the financial sustainability of farming. As with Sweden's case, the English self-sufficiency in foodstuff is in a general decline, while imports from the other EU Member States are increasing.

While the legislation at both the EU level and the domestic level (in Sweden and England) could be improved from a zoocentric perspective, by prioritising the animal welfare over economic considerations, one must remember that it is essential for a farmer to make a profit to continue farming. As such, the domestic produce must be able to compete against imports from other Member States, despite the higher price it commands, caused by higher welfare standards. Legislative changes, both on an EU and a national level, are difficult and may take a long time. Therefore, the

last Chapter (5) of this thesis sought to evaluate which measures can be taken, within the current regulatory framework, to improve the competitive strength of the farmers who comply with a stricter animal welfare standard. It is concluded that the consumer, as the final purchaser of the end products, has a central role in supporting the farmers. Therefore, main consumer issues relating to their ability to support farmers were highlighted: the general information deficiency among consumers concerning food's origin and modern farming practices is the biggest challenge. Without an understanding of farming practices, different husbandry systems and the different levels of welfare, the consumers' willingness to pay (WTP) a premium for such produce will not increase. While the WTP approach has significant problems regarding its credibility, it remains a vital tool in assessing the effects and potentials of product differentiation. Product differentiation is an important tool when it comes to informing the consumers' and aiming at influencing their purchase behaviour. If pork chops from a pig, which was reared in an enriched environment, spent time outdoors and was able to root around and 'behave like a pig should', is clearly distinguished on the retail shelves from pork chops from a pig, which was reared in a barren, crowded indoor environment and never saw daylight, then the consumers' understanding of why the first pork chops command a price premium increases. The WTP can also be used as a guide and indicator of which kind of product differentiation is the most effective in communicating such differences to the consumer.

Labelling, ie providing information on food packaging, is a common way of conveying information about the product to the consumer. Indeed, the private voluntary schemes in England use this as their main tool of product identification. If a labelling system is carefully formulated and designed, it can be effective. While 'logo labels' are more recognisable and easier for the consumers to understand, the consumers must nonetheless know what they stand for, or they will be ineffective. Additionally, from an animal welfare point of view, the logo labels' weakness is that they do not incentivise the farmers to continuously work for an increased standard of welfare, as once the required level is complied with, no more improvements are needed.

Contrastingly, a tiered system has the potential of incentivising the farmers to continuously improve the standard. As each tier requires improvements and a higher standard of welfare, the retail price increases to match the incurring costs. Provided that the price increase goes directly to the farmer to cover such costs, then there is a strong incentive to slowly but steadily increase the standards too.

However, for the labels to be successful, the consumers must understand what they signify, and for that, information campaigns are necessary to educate the public. If the individual Member States attempt to promote and support domestic farmers by introducing a national label and then launch a campaign, it is likely to be held to be unlawful under EU law (Art 34 TFEU). It would amount to a trade barrier, as would a simple 'buy domestic' campaign. There are only two alternatives: either the source of such a campaign must be entirely private and wholly removed from any kind of state support or it has to be organised on an EU level.

This thesis concludes that the introduction of an EU-wide farm animal welfare tiered label is the most appropriate solution. This label should be developed and promoted, with the purpose of conveying to the consumer the standard of welfare the animal had been reared to, rather than focusing on its origin. It is proposed that the Organic labelling framework may be used as a blueprint in guiding the legislators in how to introduce the label.

Nevertheless, for this label to have the intended results, ie to support farmers who comply with stricter standards, the participating farms must be reimbursed in line with the price premium of the different standards' levels, to reflect the true cost of rearing the animals. Additionally, in order to improve the competitive strength of the farmers, it will be necessary to make adjustments according to the different financial situations of the different Member States.

An EU-wide tiered label would achieve multiple goals: it would support the individual farmers' competitive strength, it would aid towards levelling the playing field between the different Member States, and thus improve the proper functioning of the Internal Market, but most importantly, it would also act as an incentive to slowly, but steadily raise the standard of welfare for all farm animals in all EU Member States.

In addition to the introduction of an EU-wide label, this thesis recommends:

- A broader reading of Article 36 TFEU, or an amendment to the Treaty to include animal welfare as a justification within the Article, as it would increase the possibilities for the Member States to justify measures to protect domestic high animal welfare standards. Although it is recognised that such a change is highly desirable from a zoocentric perspective, it is unlikely to incur. Case law, such as *Headley Lomas* and *Jippes*, indicates that the Court is unlikely to broaden the strict interpretation of the Treaty Article.

- The introduction of a legal definition of farm animal welfare is needed, and it must take a holistic approach to ensure effectiveness. This thesis recommends the following definitions, as workable and satisfactory from a zoocentric perspective:

'Animal welfare' means that the animals' species-specific physiological and emotional needs must be met, and that natural behaviours, for which there are ethological needs, must be enabled, in accordance with the latest scientific findings.

'Measurement of animal welfare' means that both functioning-based and feelings-based methods are to be used in assessment of satisfaction of meeting the animals' welfare needs, as well the usage of both post-production and pre-slaughter data.

- Animal Welfare Payments under the Rural Development. Programmes need to be promoted and encouraged, as currently it is a missed opportunity to improve animal welfare on a EU-wide scale, as targeted funding is currently underused.

- Animal welfare would benefit from increasing its importance as a cross-compliance provision, and the severity of non-compliance sanctions.

- An EU-wide ban on any physical interventions without pain-relief on all farm animals is recommended.

- Providing species-appropriate environmental enrichment to *all* farm animals must become a legal obligation and strictly enforced.

- Enforcement of existing Directives in all Member States must be improved and become more uniform.

- Article 13 TFEU needs to be recognised as a 'generally applicable provision' within Title II to ensure that animal welfare is not negated for the benefit of financial objectives.

Of these recommendations, the most important ones –from a zoocentric perspective– is the introduction of a legal definition, a ban on physical intervention without pain-relief and ensuring that all farm animals have an enriched environment. From a legal angle, Article 13 TFEU must be given the importance it warrants as a general applicable provision in order to safeguard animal welfare against negation due to financial reasons. From an economic point of view, the introduction of an EU-wide label is undoubtedly the most important measure proposed. However, increasing the utilisation of existing mechanisms to promote animal welfare, such as encouraging the Animal Welfare Payments to be paid out to farmers, strengthening animal welfare as a cross-compliance criteria and improving enforcement of the law would also have a positive impact on the competitive strength of farmers

who provide a higher level of animal welfare. The proposed solutions would undoubtedly increase their competitive strength, while simultaneously ensuring that the higher standards of animal welfare they offer are not compromised.

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List of Abbreviations

AWA2006	– Animal Welfare Act 2006
AWP	– Animal Welfare Payment
BSE	– Bovine Spongiform Encephalopathy
CAP	– Common Agricultural Policy
CIWF	– Compassion in World Farming
CoP	– Codes of Practice/Code of Recommendations
DEFRA	– Department of Environment, Food and Rural Affairs
DG Santé	– Directorate General for Health and Food Safety (former DG SANCO)
DIP	– Decoupled Income Payment
EEA	– European Economic Area
EU	– European Union
FAWC	– Farm Animal Welfare Council
FMD	– Foot and Mouth Disease
LRF	– National Farmers' Association (Lantbrukarnas Riksförbund)
LU	– Livestock Unit
MEEQR	– Measures having the Equivalent Effect of Quantitative Restrictions
MS	– Member State
NGO	– Non-Governmental Organisations
PETA	– People for the Ethical Treatment of Animals
QR	– Quantitative Restrictions
RSPCA	– Royal Society for the Prevention of Cruelty to Animals
TD	– <i>Tibial dyschondroplasia</i>
TEU	– Treaty of the European Union
TFEU	– Treaty of the Functioning of the European Union
UK	– United Kingdom
US	– United States
WSPA	– World Society for the Protection of Animals
WTP	– Willingness to pay