

The background of the entire page is a photograph of a flock of sheep in a field. The sheep are of various breeds, including some with large, curved horns. The image is slightly faded and has a warm, golden-brown color palette. In the top right corner, the word 'cær.' is written in a black, serif font, with a small yellow circle at the end of the period.

cær.

# Intensive Animal Farming and Live Animal Export

Exposure of Australian Stock Exchange listed companies

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CAER's mission is to broaden the reach of ethical and responsible investment. To achieve this we provide, structure and add value to ESG information on companies and investment portfolios.

CAER's business activities focus on the provision of expertly assessed ESG information. Our team of analysts have a deep knowledge of the responsible investment market, and are able to provide our clients with expert insights in addition to high quality, well-structured global ESG data.

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## FOREWORD

The steep rise in ethical consumerism can be clearly demonstrated in two areas: the significant growth in the number of Australians who expect investment managers to take account of ethical considerations when investing their money; and the significant growth in Australians supporting vegan and animal-friendly products.

Institutional investors in Australia have been slow to react to the growing importance of animal welfare within their investment processes. There's a strong investment case for considering animal welfare in investment decisions, and an even stronger business case for it. Investment and asset managers who don't consider these issues will see their investors move to funds who do take account of animal welfare.

The potential size of this movement is significant. In 2015, Future Super commissioned Lonergan Research to assess the attitudes of Australians to a range of ethical issues and measured the strength of conviction around these attitudes. That is, does an investor care so deeply about an issue that they would consider switching an investment product if they found out it was exposed to that activity. 47% out of 18,574 respondents indicated that they would move to a super fund that did not invest in companies exposed to live animal export.

The level of conviction around switching super funds based on exposure to live animal export was the highest of all ethical issues surveyed. The next highest was 43% of respondents who would switch super funds to avoid investment in the mandatory detention of asylum seekers and 38% of respondents who would switch based on exposure to coal and other fossil fuels. The ethical issues of mandatory detention of asylum seekers and fossil fuels have already been subject to large and high-profile divestment campaigns.

The concerns around intensive agriculture and live animal export are not confined to people who have vegan and vegetarian diets. These are issues of animal cruelty, not of diet, and have wide-ranging impacts on the environment, human health, and welfare.

Future Super considers the welfare of animals in its investment process and specifically excludes companies exposed to intensive agriculture and live animal export. Our investment team also manage the assets for Cruelty Free Super, the only vegan-friendly super fund in Australia. It is our hope that this research paper is a step towards more institutional investors and asset managers considering these issues in their investment process.

**Adam Verwey**

Co-founder and director, Future Super Group

## INTRODUCTION

This report aims to engage institutional and individual investors to consider the risks related to intensive animal farming and live animal exports as part of their investment processes.

Responsible Investment is the practice of considering environmental, social, governance (ESG) or other 'ethical' factors as part of the investment process. Concerns relating to factory farming and live exports can be assessed within the social aspects of ESG disclosure. Issues relating to the effluent waste of intensive animal farming can be addressed under environmental risk.

Social risk considerations related to animal welfare include, but are not limited to, the use of factory farming methods, the implementation of animal welfare policies and the export of livestock (live export). Antibiotic use within factory farming can also be considered a social risk as there is evidence that over-use, and in particular prophylaxis use (the preventative use of antibiotics in healthy animals), contributes to the development of antibiotic resistance and superbugs in human populations. This has led to the World Economic Forum to announce that antimicrobial resistance is the next global challenge to human health.<sup>1</sup>

Investors, including individuals with superfund savings, can play a part in ensuring that the social and environmental risks related to intensive animal farming and live export are further addressed. This report aims to set out how animal welfare issues can be viewed as part of an ethical screen or ESG integrated investment process.

Funds that invest in companies with exposure to intensive animal farming or live export may face reputational damage, which may lead customers to change super funds. As animal welfare becomes an issue that is increasingly considered among consumers, this risk is likely to increase over time.

CAER has conducted research into the exposure of the Australian Stock Exchange (ASX) top 300 companies to intensive animal farming (with a focus on poultry and aquaculture) and live animal exports.<sup>2</sup> This research has differentiated types of exposure to intensive animal farming and live animal export.

In this report we summarise our findings and highlight practices where companies distinguish themselves from their peers. While we find that animal welfare is not yet a topic that is broadly and consistently measured and reported, there are some good practice examples in Australia. However, each company researched for this project could improve their disclosures relating to animal welfare.

With consumer demand playing a crucial role in the debate, there are multiple certification and classification schemes making it important for investors to understand the differences between them and identify which scheme or naming classification aligns with their ethical or ESG expectations. This will depend on an investor's responsible investment philosophy and approach. On the one hand, an investor may want to exclude any company with involvement in intensive animal farming or live export. On the other hand, an investor may want to invest in companies that implement a best practice approach with regards to animal welfare and engage with companies to improve their disclosures and practices. Taking either approach, an investor should be aware of where they have exposures to intensive animal farming and live export and respond to that risk accordingly.

**Figure 1** outlines the structure of this report which aims to assist readers in better understanding the type of intensive animal farming and live export related activities Australian listed companies may be exposed to.

Figure 1: Report Framework



## SCOPE

### What is covered

This report looks at **direct operations** associated with intensive animal farming, with a focus on poultry, aquaculture and live animal export. The report also assesses **associated operations** with a focus on the operation of port and transport lines, restaurants and food producers, and supermarkets that retail intensive animal products. Companies listed on the ASX were assessed on public statements and public policies relating to animal welfare and antibiotic use. Company environmental policies and associated reporting have also been reviewed.

### What is not covered

Numerous companies are exposed to intensive animal farming or live export through their value chain. For example, banks - and in particular regional banks with an agribusiness focus - may provide financial services and loans to private businesses involved in intensive animal farming. However, this research does not include financing of such activities. Private companies that have exposure to the associated issues were not assessed in this report. It would be difficult to expand a screen beyond this, due to lack of publicly available information.

Issues such as the retail of leather and fur are also not covered in this report. However, it is important to note that many listed companies worldwide are taking steps to remove themselves from the fur industry. Gucci, a subsidiary of Kering, is a recent example of a listed company that announced the implementation of a fur-free policy from 2018 onwards.<sup>3</sup>

Furthermore, the use of animals for the purposes of racing and betting has not been considered in this analysis. This could be an area for further research and potential engagement in the future as many of the listed Australian gambling companies have exposure to animal related betting activities.

Live export focusses on activities related to the export of animals for slaughter, husbandry or breeding. We do not consider other animal transport in this report (for more detail see *Definitions* below).

## DEFINITIONS

### Direct Operations

Direct operations can be broken up into two categories

- Intensive animal farming
- Live Export

#### Intensive animal farming

Intensive animal farming operations are defined as the farming of cattle, pigs, salmon, shrimps and cage hens in close, confined conditions. Activities that are considered to be a form of cruel treatment of animals, such as the plucking of down feathers from live birds, can also be considered intensive animal farming. However, this report only focuses on the intensive animal farming of poultry and aquaculture (salmon). This is because the intensive animal farming of poultry and salmon are the industries that have the highest exposure in the ASX.

#### Live export

This research differentiates animal transport from live export. This report covers live animal export and not other forms of animal transport.

- Animal transport** for the purpose of this report refers to export activities that relate to more general transport of animals for purposes other than the export for slaughter, husbandry, or breeding. Within animal transport, it is also important to differentiate between the transportation of pets and animals intended to be protected (e.g. transport for rehabilitation) and the transport of animals for the purpose of betting, racing and other activities that may have a detrimental impact on the welfare of animals.
- Live export** is defined as the export of animals for the purpose of selling live animals for slaughter, husbandry and breeding subjects. **Appendix 1** provides a breakdown of the countries that Australia exports live sheep, feeder cattle and breeding cattle.

Much of the attention on the treatment of animals during live export centres on feeder cattle and sheep destined for slaughter. For example, the terms of reference for the Independent Livestock Export Review conducted in 2011 set out to focus on the treatment of feeder or slaughter livestock (i.e. both cattle and sheep).<sup>4</sup> However, the review also investigated the treatment of breeder cattle after concerns of their treatment was raised during the reviews consultation period. It is also important to note that the standard for live export of sheep is different to the standards for cattle.<sup>5</sup> For example, the individual identification of sheep is not mandated domestically in Australia, and therefore accountability for sheep is difficult to maintain.<sup>6</sup> It is important to note that there are other species of animals, such as camels, that are exported from Australia which are not referred to in Appendix 1.

### Associated Operations

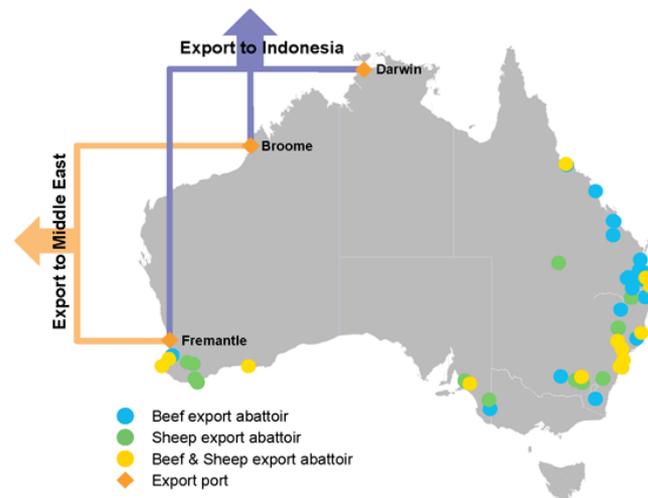
Associated operations are categorised as:

- Operation of port and transport lines for live export
- Restaurants and food manufacturers
- Supermarket retailers

## Operation of port and transport lines for live export

The operation of port and transport lines support the live animal export industry. The companies that operate and own these facilities, in turn, receive financial benefit from the live export industry. **Figure 2** shows a map of Australian export abattoirs and main live export ports.

*Figure 2 Map of Australian export abattoirs and main live export ports<sup>7</sup>*



## Restaurants and food manufacturers

This category includes restaurants that prepare and retail foods and products from intensively farmed animal products. This includes fast-food restaurants, food manufacturers, and food supplement manufacturers. This category does not include companies that produce a small proportion of revenue from the production of food products or the operation of restaurant facilities.

## Supermarket retailers

Supermarket retailers that sell their own-brand products containing intensively farmed animal products, or retail other intensively farmed animal products are covered by this category. Supermarket Retailers are highly exposed to the pressure of consumer demand.

## Standards and certifications

Standards are utilised to set norms or requirements for practice. Certifications are important tools that provide clear definitions as to how a certain product is made, and the standards that they follow. Certifications are increasingly important at a time when terms, such as 'organic,' are regularly used without consistency. However, it is important to note that many of these certifications have barriers. These barriers include but are not limited to the cost, time and effort required to receive these certifications. **Appendix 2** defines the different certifications and standards that relate to the intensive animal farming industries in Australia.

## BACKGROUND

### Investor considerations on intensive farming and live export

Loneragan Research conducted a survey on behalf of Future Super that addressed respondents' attitudes towards live export between March and April of 2015, which polled 18,574 people in Australia. This survey revealed that 78% of respondents were either extremely concerned, very concerned or quite concerned about animal cruelty in Australia's live animal export industry. The polling also states that 47% of respondents would prefer to invest in a superannuation fund that did not invest in companies that export live animals, including cattle to countries like Indonesia. 41% stated that they had no preference, and only 12% stated that they would prefer a super fund that does invest in these companies.<sup>8</sup> The results of this survey suggest that concerns regarding the animal export industry are not restricted to a small subset of the Australian population but are expressed by a large proportion of it.

In 2017, the Responsible Investment Association Australasia (RIAA) Consumer Poll found that the top issue Australians wanted to avoid investing in was animal cruelty (69%).<sup>9</sup> The RIAA Benchmark report, a report measuring responsible investment approaches taken in Australia and New Zealand, highlights that animal testing is often negatively screened from investments.<sup>10</sup> However, there is no mention of other animal welfare issues – such as live export or factory farming.

'Cruelty-free' investment products are uncommon in the financial industry. Nonetheless, the issue of animal welfare is something that is increasingly put on the agenda of responsible investors. Below we set out notable initiatives and papers looking at the issue of animal welfare from an investor perspective.

### Animals Australia

Animals Australia, an animal protection organisation with 40 member groups and over 2 million individual supporters, has launched an initiative to encourage their supporters to consider investing with super funds, fund managers and banks that have commitments in place regarding animal welfare. Research conducted by Roy Morgan Research on behalf of Animals Australia in 2016 found that more than half of Australians say they would be more inclined to invest in an institution that has an ethical investment policy which incorporates animal welfare.<sup>11</sup>

This initiative focuses on the exclusion of companies that are materially involved in the live export of animals and encourages supporters to engage with companies that are materially involved in intensive animal farming (poultry, pigs or fish). Animal Australia have produced a paper on *Why Ethical Investment Matters* which further details the human and environmental impacts of factory farming and live exporting.<sup>12</sup>

### AMP Capital Factory Farming Paper

In April 2017, AMP Capital launched an insights paper titled *Is Factory Farming Making us Sick?* The paper explores human resistance to antibiotics as influenced by antibiotic use in factory farms<sup>13</sup> and anticipates that regulatory intervention and reduced consumer demand for factory-farmed meat are likely to impact livestock producers, restaurants, and suppliers to food retailers.<sup>14</sup> The exposure of ASX-listed companies within those sectors is explored in further detail within this report.

## The Business Benchmark on Farm Animal Welfare

Dr Rory Sullivan and Nicky Amos have developed the *Business Benchmark on Farm Animal Welfare* (BBFAW). BBFAW is a framework for assessing the quality of companies practice with regards to animal welfare. There have been five BBFAW benchmarks published between 2012 and 2017.

BBFAW is designed to drive higher farm welfare standards in the world's leading food businesses and aims to provide investors with information to understand the business implications of farm animal welfare for the companies in which they are invested.<sup>15</sup>

BBFAW ranks 99 companies on their performance, however, only two of these – Woolworths and Wesfarmers - are listed on the ASX. In the BBFAW framework, there are six tiers for ranking companies, the highest being Tier 1 and the lowest being Tier 6. Wesfarmers is ranked at Tier 5 – 'On the Business Agenda but Limited Evidence of Implementation' – and Woolworths is ranked at Tier 4 – 'Making Progress on Implementation'.<sup>16</sup>

The 2016 Benchmark Report highlights how in the first years of the BBFAW, farm animal welfare was seen primarily as a source of business risk through increased costs and repercussions from media exposés of poor practices and NGO campaigns. Now companies position farm animal welfare in terms of the opportunities – financial and reputational – that can be delivered, and position farm animal welfare as an integral part of their approach to corporate responsibility rather than simply as a compliance requirement.<sup>17</sup>

There are growing signs that investors are prepared to act on animal welfare issues and the Benchmark Report points to the 22 institutional investors who signed the BBFAW 'Global Investor Statement on Farm Animal Welfare' as being one of them.<sup>18</sup>

## Farm Animal Investment Risk & Return

Farm Animal Investment Risk & Return (FAIRR) is an investor initiative that aims to put factory farming on the ESG agenda.<sup>19</sup>

FAIRR has commissioned research on issues relating to factory farming. Papers such the *Restaurant Sector and Anti-Biotic Risk*, *Factory Farming in Asia* and *The Future of Food: The Investment Case for a Protein Shakeup* are accessible on the FAIRR website to be openly utilised by investors. FAIRR also coordinated an allegiance of investors formed to engage with ten of the world's largest restaurants and fast food chains on antibiotic use in their supply chains. This research found that some companies, such as the Restaurant Group, have committed to the phasing out of prophylaxis use of antibiotics.<sup>20</sup>

FAIRR published a report in 2016 titled *Factory Farming: Assessing Investment Risks*.<sup>21</sup> This report states that animal factory farming is exposed to at least 28 different environmental, social and governance issues that could significantly damage financial value over the short or long-term. The report goes further to state that many of these risks are currently hidden from investors and can potentially affect the financial performance of companies across the food value chain. The report also highlights a knowledge gap that exists within the investment community about managing these risks and opportunities.

## INTENSIVE FARMING AND LIVE EXPORT - ESG RELATED RISKS

The reports, benchmarks and campaigns summarised above identify a range of risks that ESG aware investors should consider when reviewing their portfolios.

Exposure to the intensive animal farming industry can pose reputational risks to companies, and in turn, investors, as consumers become more conscious of animal welfare issues. For example, consumer pressure on Woolworths has led the company to set a goal to stop sourcing eggs from caged hens by 2025.<sup>22</sup> Reputational issues can also lead to loss of business and supply partnerships, loss of investor confidence and therefore affect the volatility of a company's share price.

From an operational perspective, the typical stocking density of intensive farming activities increases the risk for development and spread of diseases.<sup>23</sup> Antibiotics used to stimulate animal growth make the intensive farming model highly dependent on prophylactic antibiotic use, which has associated risks in the fostering of new diseases.<sup>24</sup> The industry is also highly susceptible to concerns regarding animal welfare and effluent waste management.

The livestock industry is also highly vulnerable to government and state legislation. Currently in Australia, animal welfare standards and guidelines are state and territory dependent. This makes it difficult to hold companies involved in intensive animal farming accountable to regulations. However, the states and territories are currently working to develop and implement nationally consistent animal welfare standards and guidelines.<sup>25</sup> Consistent standards and guidelines will make it easier for companies to implement company-wide approaches that cover animal welfare standards.

**Figure 3** highlights some of the potential environmental, social and governance risks of both intensive animal farming and live export industries. Companies that fail to adequately address their salient environmental, social or governance risks may experience negative financial implications.

*Figure 3 Environmental, Social and Governance Risks of Intensive Animal Farming and Live Export Industries*

Environmental	Social	Governance
<ul style="list-style-type: none"> <li>• Effluent Waste</li> <li>• Climate Change and Greenhouse Gas Emissions</li> <li>• Water Pollution</li> <li>• Water Scarcity</li> </ul>	<ul style="list-style-type: none"> <li>• Human health impacts - links to obesity, spread of disease and antibiotic overuse</li> <li>• Changing consumer demands</li> </ul>	<ul style="list-style-type: none"> <li>• Changes to regulation</li> <li>• Changes to subsidy support from governments</li> <li>• NGO campaigns</li> <li>• Shareholder demands</li> </ul>

## AUSTRALIAN COMPANIES EXPOSURE TO INTENSIVE ANIMAL FARMING AND MANAGEMENT OF ASSOCIATED RISKS

Companies on the Australian Stock Exchange are involved in a number of activities that relate to intensive farming practices. The following section highlights the type of Australian listed companies that have direct operations and indirect operations relating to intensive animal farming and live export, and examples of how companies manage the associated risks of these operations.

### Intensive animal farming

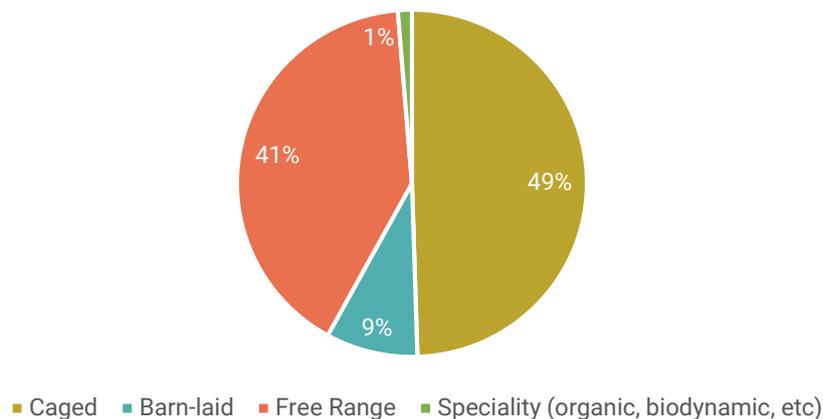
#### Direct Operations

##### Poultry

The poultry industry is heavily associated with intensive animal farming. **Figure 4** illustrates the types of eggs from grocery sales according to the Australian Egg Corporation's 2016 Annual Report.<sup>26</sup>

*Figure 4 Grocery Sales of eggs according to the Australian Egg Corporation 2016 Annual Report*

#### Australian Grocery Sales of Eggs



Furthermore, chicken meat is the most consumed meat in Australia. The Australian Bureau of Statistics has projected that chicken meat will remain the most consumed meat in Australia over the outlook period, with per person consumption projected to grow from 47.0 kilograms in 2015–16 to 49.6 kilograms in 2021–22.<sup>27</sup> Chicken meat is also exported from Australia. Papua New Guinea is the largest export market for Australian chicken meat accounting for 39% of exports in 2015–16.<sup>28</sup>

There are many standards and certifications in place that attempt to ensure better animal welfare practices within the poultry industry. Differences between the standards for chickens can be seen in **Table 1**. These standards and certifications are explained in more detail in **Appendix 2**.

**Table 1** Differences Between Egg Labels and Certifications<sup>29</sup>

	Cage	Barn laid and RSPCA Approved Indoor	Certified free range and RSPCA Approved Outdoor	Certified Organic
<b>Are hens confined in cages?</b>	YES	NO	NO	NO
<b>Are hens provided with a nest/perch?</b>	NO	YES	YES	YES
<b>Do hens have space to flap their wings/exercise?</b>	NO	YES (restricted) <sup>4</sup>	YES	YES
<b>Do hens have access to an outdoor range?</b>	NO	NO	YES	YES
<b>Are hens allowed to be 'debeaked'?</b>	YES	YES	MAYBE (depends on certification body) <sup>3</sup>	NO
<b>Are male chicks killed at birth?*</b>	YES	YES	YES	YES
<b>Are hens sent to slaughter from 18 months old?*</b>	YES	YES	YES	YES

Growth promotion using antibiotics, issues regarding stocking density and de-beaking are three factors in the industry which highly affect the welfare of chickens.<sup>30</sup> Companies that transparently and consistently address these issues throughout their operations (and suppliers) can be considered to be implementing best practice mechanisms.

On the Australian Stock Exchange, a company with direct operations in intensive poultry farming is Ingham's Group. Ingham's reports that 97% of its network of chicken and turkey broiler farms is outsourced to third-party operators, but the Company maintains ownership of the livestock and supplies their feed requirements. The company communicates to its investors that bird health, nutrition and welfare are managed through its sustainability framework.<sup>31</sup> It indicates that chickens and turkeys are at minimum barn-raised, cage-free and grown without the addition of hormones and that it follows antibiotic judicious use guidelines. This includes refraining from treating birds with antibiotics classified as 'critically important antibiotics' as defined by the World Health Organization (WHO). Furthermore, Ingham's states that antibiotics are used exclusively to prevent and treat disease in chickens and never used for growth promotion.<sup>32</sup> Ingham's states that all of Ingham's Australian meat chickens are raised on farms which are accredited by RSPCA against the Approved Farming Scheme Standard, which includes standards relating to stocking density (maximum stocking density of 34kg per meter square).<sup>33</sup>

A challenge for poultry producers, however, is managing not only their own operations but also ensuring adequate conditions regarding third party providers. Disclosures on approaches as well as reporting on conditions and regular audits would be considered best practice. Ensuring that third party providers are accredited by standards such as the RSPCA Approved Farming Scheme Standard is also recommended.

Ingham's has also received certifications from animal welfare organisations, in particular, all of Ingham's Australian meat chickens are raised on farms which are accredited by the RSPCA (Royal Society for the Prevention of Cruelty to Animals) against their Approved Farming Scheme Standard. A

number of Ingham's animals are raised as free range (around 11% of revenue is generated from the sale of free range poultry meat),<sup>34</sup> for which Ingham's reports there is strong consumer demand and which consequently command higher retail prices.<sup>35</sup> The Company's Australian free range farms are accredited by FREPA - the Free Range Egg and Poultry Australia, an accreditation organisation. The New Zealand free range farms are accredited by the SPCA (the SPCA does not accredit barn-raised farms).

### Aquaculture

Globally, the consumption and production of seafood has increased.<sup>36</sup> Furthermore, The Food and Agriculture Organization of the United Nations (FAO) predicts that farmed fish production will exceed wild fisheries production for human consumption by 2018, and more than half of the fish consumed globally will come from aquaculture by 2021.

Aquaculture in Australia is a growing industry.<sup>37</sup> According to an Australian Government Report on the Aquaculture and Fisheries industry in Australia, the top five aquaculture species groups, in terms of production value, are salmonids, tuna, pearl oysters, prawns and oysters.<sup>38</sup> An increasing demand for seafood couple with growth in the aquaculture industry has led to debate surrounding the environmental, animal health and welfare risks related to the industry.

The industry has advertised itself as being a positive alternative to wild fish, as it does not lead to the reduction in global fish stocks. This is a contentious argument, which is often disputed, because some fish farms still depend on wild populations to supply eggs or juveniles that the farmers raise for market or depend on small wild fish, like sardines, as food for the farmed fish. Moreover, the industry has faced allegations for mistreating animals, the misuse of antibiotics, and having exponential environmental damage from the fish-stock effluents.

Australian companies in the aquaculture industry have recently been under community scrutiny with the public debate focussed on the damage from effluent waste. In February 2017 the Environment Protection Agency (EPA) in Tasmania ordered Tassal Salmon to remove all of its stock from one of its farming leases in Macquarie Harbour on the west coast of Tasmania. This order followed a report by ABC Four Corners, which stated that all marine fauna within 500 metres of the World Heritage Area of the farm lease was dead. The intervention occurred a month after the EPA limited stock from 20,000 to 14,000 in the harbour.

While Tassal Salmon has Aquaculture Stewardship Council (ASC) certification for its aquaculture products, a report on behalf of the ASC found the company failed to comply with 19 certification requirements at two sites in Macquarie Harbour.<sup>39</sup> The report also alleged that these practices failed to comply with Tasmanian Marine Farming Licence conditions, legislation, community engagement and listing ecosystem function. Tassal Salmon was given three months to address the findings or face the possibility of losing its ASC certification. The company achieved re-certification in September 2017.<sup>40</sup>

Huon Aquaculture, another Australian listed aquaculture company, was fined \$260k in December 2015 for exceeding nitrogen input levels in the Huon River and Port Esperance by 277 tonnes or 42% over 12 months.<sup>41</sup>

Companies are starting to address and disclose more information on how they manage fish health. Tassal reports that it has internal 'Fish Health Management Plans' in place and a 'Zero Harm for Fish' program based on the UK RSPCA Freedom Food Animal Welfare Standards for Salmon.<sup>42</sup> Huon Aquaculture states that the company strives to keep fish healthy, well-nourished and low-stress.<sup>43</sup>

Huon Aquaculture manages disease control in salmonid production through their 'Veterinary Health Plan (VHP), Biosecurity and Antibiotic Use'.<sup>44</sup>

According to Tassal Salmon, antibiotics are only used on a small proportion of fish, and discloses the use of antibiotics through its sustainability reports. In 2016, one sea pen of salmon was treated with antibiotics.<sup>45</sup> Tassal reports that this equates to 0.16 grams of antibiotic use per tonne of salmon produced that year. Huon Aquaculture also commits that their fish are never fed growth hormones/growth promoters.

The expansion of the aquaculture industry poses many environmental risks. These risks include effluent waste and surrounding contamination, build ups of organic material near the fish farm impacting the flora and fauna of an area and changing sediment chemistry. Furthermore, the escape of exotic farmed fish from fish farms also can impact native fish stocks. For example, in January 2018, the NSW Department of Primary Industries reported that 20,000 kingfish escaped a Huon Aquaculture farm off Port Stevens after the pen was damaged by rough seas.<sup>46</sup>

The use of genetically modified organisms (GMOs) in the aquaculture industry has also been an issue of rising consumer concern. Both Tassal Salmon and Huon Aquaculture have confirmed that they do not farm GMO salmon. Huon Aquaculture has also confirmed that feed given to the fish does not contain GMO ingredients.<sup>47</sup>

## Associated Operations

### *Animal based food and nutritional supplements*

Companies that are involved in the operation of restaurants are exposed to the use of intensively farmed animal products. Most food outlets would make use of meat and egg products, which are sourced in high volumes, and unless specified otherwise, can reasonably be assumed to originate from intensively farmed production methods.

However, as consumer demand shift, we are starting to see large-scale food companies' change sourcing attitudes. For example, some fast food restaurants in Australia, such as Subway and McDonalds, have committed to phasing out the use of caged eggs.<sup>48</sup> Companies that manufacture processed foods often use intensively farmed products or use products with little to no information on how they are sourced. These companies may not have properly considered the risk in their supply chain or audit the animal welfare standards of their suppliers.

A reason for investors to look closer at sourcing and animal welfare issues is that if a case of animal cruelty from a supplier is found and promulgated in the media it has the potential to lead to reputational damages.

In contrast to some of its peers, Domino's Pizza Enterprises has a public animal welfare policy. Through this policy, Domino's Pizza sets out that it expects business partners to ensure that any animals involved in the goods or services they provide are treated in accordance with RSPCA's Animal Policies.<sup>49</sup>

Patties Foods is an example of a company that has an ethical sourcing commitment, however, there is no explicit reference to animal welfare standards.<sup>50</sup> Our research indicates that Patties Foods manufactures some products with RSPCA approved chicken however, it appears that this standard is not applied to all chicken or meat based products.<sup>51</sup> It is increasingly common practice for larger listed companies that operate restaurants or have activities in producing food to have an ethical

sourcing code or equivalent that extends to explaining the company's expected animal welfare standards.

Some food or nutritional supplement companies also produce goods that contain animal products. Blackmores for example manufactures vitamin, mineral, herbal and nutritional supplements containing animal products such as fish oil.<sup>52</sup> As such, measures being undertaken by Blackmores include transitioning to Marine Stewardship Council certified fish oil for products. Blackmores is also working with fish oil suppliers to enhance traceability across their fish oil range. It is unclear whether Blackmores source some fish oil products from farmed fisheries or wild caught fish.

### Supermarkets

Supermarkets are exposed to intensive animal farming through the retailing of associated products. Companies are taking steps to improve the welfare of animals involved in the making of their products, however, these improvements are usually restricted to their self-branded products. Information regarding products that the company sells outside of their own brand products is difficult to obtain.

Supermarkets sell meat and animal-based products to consumers, and as such have a role to play in setting standards relating to the supply and production of eggs and poultry, pork, beef, and seafood available in their stores. This can include, but is not limited to, guidelines surrounding the phasing out gestation stalls and cage eggs and policies concerning the slaughter of animals. The restriction of antibiotic use within policies and the provision of certified antibiotic-free meats is also considered best practice. Although policies covering antibiotic use are uncommon, companies such as Woolworths refer to certain products that have restricted antibiotic use. Woolworths states that their RSPCA Approved chickens have 'a Veterinary Health Plan and the usage of antibiotics is monitored during audit'.<sup>53</sup>

As a general guide, animal welfare related policies can refer to the 'five freedoms' set out by the RSPCA:

1. *Freedom from hunger and thirst:* by ready access to fresh water and a diet to maintain full health and vigour.
2. *Freedom from discomfort:* by providing an appropriate environment including shelter and a comfortable resting area.
3. *Freedom from pain, injury or disease:* by prevention through rapid diagnosis and treatment.
4. *Freedom to express normal behaviour:* by providing sufficient space, proper facilities and company of the animal's own kind.
5. *Freedom from fear and distress:* by ensuring conditions and treatment which avoid mental suffering.<sup>54</sup>

For example, Wesfarmers policies suggest their intention to ensure that the slaughters they fund are carried out as humanely as possible. The company states that their 'approach to animal welfare for Coles Brand farmed animals is based around... freedom from hunger and thirst, freedom from discomfort, freedom from pain, injury and disease... freedom from fear and distress.'<sup>55</sup>

Animal rights activists are also pushing companies to move beyond the five freedoms, towards the five domains, which covers the four physical/functional domains of nutrition, environment, health, behaviour and one mental domain.<sup>56</sup>

## Live export

### Direct Operations

#### *Exporters*

Live animal exporting has attracted much controversy in Australia over the past decade. Campaigns centred on footage showing mistreatment of live export cattle in an Indonesian abattoir in 2011 put a temporary hold on Australian live cattle export to Indonesia. However, Australia remains the world's largest exporter of livestock. Australia is the largest live exporter of sheep, and third largest exporter of cattle.<sup>57</sup> According to Live Corp, the live animal export industry contributes an average of A\$1 billion in export earnings to the Australian economy annually.<sup>58</sup> Appendix 1 indicates countries to which Australia exports live sheep, feeder cattle and breeding cattle.

The live export industry is not strongly linked to the overuse of antibiotics. This is because antibiotic use in the Australian cattle feedlot industry is tightly regulated by legislation. For example, fluoroquinolones are banned for use in livestock in Australia, but are permitted in the European Union and the United States. Furthermore, in Australia, there are only very few antibiotics used in both livestock production and human medicine.<sup>59</sup> An Antimicrobial Stewardship Framework is also underway for the Australian industry as a project of Meat & Livestock Australia funded by the Australian Government and the Australian Lot Feeders' Association.<sup>60</sup>

Of the listed companies with direct involvement in live animal export, all but one company provide no evidence of a company-wide animal welfare policy. Wellard, a company that reports it shipped 304,208 head of cattle and 80,143 head of sheep in fiscal 2017<sup>61</sup>, has implemented the following initiatives:

- On-board crew provide animal welfare and husbandry skills on the vessel. Wellard identifies and selects crew to undertake additional independent training, assessment, and accreditation in animal handling.
- An animal welfare officer is appointed by Wellard to oversee each voyage. Wellard has also created its own 'Wellard Animal Welfare Accord' to ensure consistency of animal welfare performance across their operations.<sup>62</sup>

Other companies involved in live export do not commit to animal welfare standards in a formal policy. However, they often disclose that they implement other initiatives, such as compliance meetings and engagement with industry stakeholders with an aim to improve animal welfare.

### Associated operations

#### *Ports and transport lines*

Logistics companies help with the logistics of transporting goods, including the operation of ports and transport lines, and have a history of involvement with the live animal export industry.

Port infrastructure is often part of direct infrastructure investments by institutional investors. For example, in 2013 Port Botany and Port Kembla were purchased by Industry Funds Management on a 99-year lease.<sup>63</sup> It is often difficult to assess whether ports are involved in live export, as terminals are often operated by independent stevedores. However, investments associated with port infrastructure or logistics are likely to have touch points with the live animal export industry if they operate in Australia.

Our research could not identify examples of animal welfare policies or public statements on companies that operate ports.

## Next steps for investors

This research aims to support engagement with fund managers on their current policies relating to animal welfare considerations and to encourage the implementation of animal welfare considerations within investment processes.

As with many themes in responsible investment, how investors deal with companies involved in live animal export and intensive agriculture strongly depends on the specific approach an investor has to responsible investment. Investors with a strong ethical basis that includes considerations on animal welfare, may come to the conclusion that certain investee companies should not form part of their portfolio. Others may consider intensive farming operations acceptable if certain minimum standards are met – in this case, investors are best served if they can clearly articulate minimum standards that companies should comply with or provide clear reporting against. In other cases, monitoring performance across a number of key indicators to ensure companies are not acting contrary to legal obligations and consumer demand, may be needed for investors to be satisfied that potential negative consequences from intensive farming and live export are managed.

Companies with direct exposure to intensive animal operations address and report issues relating to animal welfare. However, how these policies extend across the companies supply chain, and information regarding the management systems in place to execute these policies could be beneficial in understanding how different actors work on improving on-the-ground animal welfare.

Companies that generate a large proportion of revenue from the live export business must do more to address the social and environmental risks associated with the industry. Furthermore, companies must take responsibility for their association with live export and further address the risks associated with supporting the industry.

The majority of restaurant chains and manufacturers on the ASX do not have animal welfare policies. In particular, restaurant chains that focus on the retail of animal products need to do more to mitigate risks associated with retailing intensively farmed animal products.

Large supermarket retailers have animal welfare policies and are implementing standards and procedures to improve the welfare of animals involved in the making of their products, in particular with their 'own brand' lines. However, retailers do not disclose on the standards for their wider suppliers.

## Animal welfare is gaining attention

We note that there is a move to acknowledge and act on animal welfare issues among ASX listed companies. For example, in September 2016 ASX-listed company Elders announced it would sell their live export logistics business, North Australian Cattle Company (NACC). However, Elders stated that animal welfare was not a major driver to their decision to sell NACC, and rather the decision was motivated by profit considerations. In April 2018 Elders that they are selling their Indonesian feed lot and abattoir subsidiary, further illustrating their move away from the live export business. The company was heavily involved in this area which included the flying of cattle to China.<sup>64</sup>

Another example comes from Qantas and their commitment to no longer carry greyhound racing dogs on flights to Asia. This stance was taken in 2015 after the release of a damning report regarding the treatment of racing dogs in Asia.<sup>65</sup>

Woolworths and Wesfarmers have both been taking positive steps with regards to improving animal welfare standards for their own-brand products.

It should be noted however, that many of these moves have been led by consumer pressure rather than investor demand. And while it is positive to see companies responding to consumer pressures, investors are better placed to understand and analyse the difference between the path of least resistance compared to a systematic application of standards and properly integrated systems.

## Where to start?

Considerations regarding intensive animal farming and live export for investors and companies to address are as follows:

### Considerations for investors

- Identify where in your portfolio you may have exposure to direct or associated operations relating to intensive animal farming and live export
- Assess how the companies exposed are recognising and proactively responding to the risks associated with operations relating to intensive animal farming and live export
- Engage NGOs and research providers with regards to key issues relating to intensive animal farming and live export to gain an understanding of what is best practice and to identify potential opportunities for collaboration
- Once you recognise your exposure and have developed a set of questions, engage with the companies. Potential areas for engagement include improving animal welfare standards and practices, improving stocking densities, introducing a phase-out of confinement systems, the provision of pain relief and the elimination of the unnecessary use of antibiotics.

### Considerations for companies

- Be clear on exposures to intensive animal farming and/or live export.
- Define and explore risks related to this exposure in a saliency risk assessment disclosed to external stakeholders.
- Engage with NGOs on best practice.
- Companies with direct operations:
  - Construct a dialogue with fellow industry players on ways to implement best practice.
  - Create an animal welfare policy that aims to maintain best practice standards and clearly communicate these expectations internally and externally.
  - Create an environmental policy that considers the impacts of effluent waste.
  - Regularly review any policies to ensure their relevancy and alignment with best practice standards.
  - Audit operations to ensure compliancy with standards, and set up reporting structures that allow you to communicate on compliance and progress.
- Companies with associated operations
  - Have a supply chain policy that sets out minimum requirements or expectations for animal welfare standards.
  - Regularly review policies to ensure their relevancy and alignment with best practice standards.
  - Audit suppliers to ensure their compliancy with animal welfare standards.

These lists are not exhaustive. However, they providing a starting block for investors and companies on a journey to address their risks relating to intensive animal farming and live export. Further research regarding this field will help both investors and companies to further their understanding of the importance of addressing these risks.

## Appendix 1: Countries that Australia exports live sheep, feeder cattle and breeding cattle<sup>66</sup>

COUNTRY	SHEEP	FEEDER CATTLE	BREEDING CATTLE
Argentina	✓		
Bahrain	✓		
Brunei	✓	✓	✓
Chile	✓		
China	✓	✓	
Egypt	✓	✓	
Hong Kong			✓
India		✓	✓
Indonesia		✓	✓
Israel	✓	✓	✓
Japan	✓	✓	✓
Jordan			
Kuwait	✓	✓	✓
Korea		✓	
Lebanon	✓		
Malaysia	✓	✓	✓
Mauritius	✓		
Mexico		✓	✓
New Caledonia			✓
New Zealand	✓	✓	✓
Oman	✓		
Palestine	✓	✓	
Philippines	✓	✓	✓
Qatar	✓	✓	
Saudi Arabia	✓	✓	
Singapore	✓	✓	✓
Ukraine	✓		
United Arab Emirates	✓	✓	
United States	✓	✓	✓
Vanuatu	✓		
Vietnam		✓	

## Appendix 2: Certifications and Standards – Poultry, Pigs and Aquaculture

Certification/Standard	Definition
<b>Aquaculture - standards and certifications</b>	
Aquaculture Stewardship Certification (ASC)	The ASC works to incentivise aquaculture farms to follow best environmental and social process to increase the availability of certified responsible produced seafood. <sup>67</sup> The ASC has certification standards for abalone, bivalve, freshwater trout, pangasius, salmon, seriola and cobia, shrimp and tilapia.
ASC Salmon Certification <sup>68</sup>	<p>ASC certified salmon:</p> <p><i>Biodiversity</i></p> <p>ASC certified salmon farms minimise ecosystem impacts:</p> <ul style="list-style-type: none"> <li>- 'The development and implementation of an impact assessment to protect birds, marine mammals and sensitive habitats'</li> <li>- 'Protection of the ecological quality of the seabed, ensuring farms are not sited in High Conservation Value Areas (HCVA) and minimising fish escapes to an absolute minimum.'</li> <li>- Any lethal incidents involving wildlife must be publically disclosed</li> </ul> <p><i>Feed</i></p> <ul style="list-style-type: none"> <li>- 'Strict limits to minimise the use of wild fish as an ingredient for feed.'</li> <li>- Requires farms to 'ensure full traceability back to a responsibly managed source, preferably certified, both for wild fish and soy.'</li> </ul> <p><i>Pollution</i></p> <ul style="list-style-type: none"> <li>- Requires farms to 'measure various water parameters (phosphorus, oxygen levels, etc.) at regular intervals and remain within set limits.'</li> <li>- 'Responsible farming can only take place in water bodies that are classified as 'good' or 'very good' (e.g. by the EU Water Framework Directive). Copper release into the water must be minimised and monitored.'</li> </ul> <p><i>Diseases</i></p> <ul style="list-style-type: none"> <li>- Farms required to 'adhere to rigorous requirements to minimise disease outbreaks'.</li> <li>- Cooperate with other farmers in the area</li> <li>- Producers required to create a 'Fish Health Management Plan' – for biosecurity management developed under 'supervision of a veterinarian and implemented on the farm.'</li> <li>- Adhere to 'low levels of parasites (especially sea lice) and can only use certain medicines under very strict conditions'.</li> <li>- 'The use of medicine before a disease is diagnosed (prophylactic use), is prohibited.'</li> <li>- Keep a high survival rate in through good farm management</li> </ul> <p><i>Social</i></p> <ul style="list-style-type: none"> <li>- Strictly adhere to 'core principles of the International Labour Organisation (ILO)' - includes no child or forced labour</li> <li>- All farms are 'safe and equitable working environments' – working hours are regulated and decent wages are earned</li> <li>- Producers 'consult (indigenous) communities, inform them about health risks and provide access to vital resources'</li> </ul>
Marine Stewardship Council (MSC)	The MSC has an 'ecolabel' and fishery certification program that aims to reward sustainable fishing practice and influence consumer decisions to purchase sustainable seafood. <sup>69</sup>
UK RSPCA Freedom Food Animal Welfare Standards for Salmon	RSPCA Freedom Food for farmed Atlantic Salmon – Five Freedoms: <ol style="list-style-type: none"> <li>1. 'Freedom from thirst, hunger and malnutrition</li> <li>2. Freedom from discomfort</li> </ol>

	<p>3. Freedom from pain, injury or disease</p> <p>4. Freedom to express normal behaviour</p> <p>5. Freedom from fear and distress'</p> <p>Practices to provide 5 freedoms:</p> <ul style="list-style-type: none"> <li>- 'Caring and responsible planning and management</li> <li>- Skilled, knowledgeable and conscientious stockmanship</li> <li>- Appropriate environmental design</li> <li>- Considerate handling and transport</li> <li>- Humane slaughter'<sup>70</sup></li> </ul>
<b>Eggs - standards and certifications</b>	
Barn Raised	Barn-laid eggs are the same as cage-free according to the RSCPA <sup>71</sup>
Cage-Free	According to RSPCA Australia, cage-free eggs are barn-laid eggs. This means that 'hens are able to move in the large sheds' and 'all barns have nest boxes but not all have perches or litter'. <sup>6</sup> RSPCA Approved Farming Scheme standards require that 'hens in a barn-laid egg production are provided with nest boxes for laying their eggs, perches for roosting, objects to peck at, and litter for scratching, foraging and dust bathing'. <sup>72</sup>
Caged Eggs	Eggs laid by hens raised in small, barren wire battery cages. <sup>73</sup>
Free Ranged	Legal definition in Australia is that 'free-range eggs must come from hens that have meaningful regular access to an outdoor range, with a stocking density of up to 10,000 birds per hectare'. <sup>74</sup>
RSPCA Standard for Layer Hens	<p>Requirements in the RSPCA standards for layer hens:</p> <ul style="list-style-type: none"> <li>- No battery cages allowed</li> </ul> <p>Hens must have the following:</p> <ul style="list-style-type: none"> <li>- 'Clean, dry litter to use for dust bathing and foraging</li> <li>- Space to flap their wings, fly, stretch, socialise and avoid aggressive birds</li> <li>- Nests for egg laying</li> <li>- Adequate perch space</li> <li>- Environmental enrichment to enhance the environment and provide them with objects to peck</li> <li>- Constant access to water and nutritious food protection from predators and the elements</li> <li>- Clean air, free from high levels of ammonia and with minimal dust levels appropriate lighting levels.'<sup>9</sup></li> </ul> <p>Also:</p> <ul style="list-style-type: none"> <li>- Avoid overcrowding by setting a max stocking density (max number of birds per m<sup>2</sup> of space)</li> <li>- To avoid feather pecking and cannibalism, beak trimming is permitted but only under specific conditions</li> <li>- Well trained stock workers and alert to issues – records must be kept of conditions and health issues – sent to the RSPCA</li> <li>- Farms allow regular inspection (at least every 6 months) by RSCPA assessors.<sup>75</sup></li> </ul>
<b>Poultry for meat - standards and certifications</b>	
RSPCA Standard for Meat Chickens	<p>Standards developed 'improve the welfare of meat chickens in Australia on farm, during transport and at slaughter'.</p> <p>Some RSPCA meat chicken standards:</p> <ul style="list-style-type: none"> <li>- Sufficient food and water for the birds at all times</li> <li>- Chickens provided with: <ol style="list-style-type: none"> <li>1. 'good quality litter (at least 50mm deep), maintained in a dry and friable condition, to allow for the birds' behavioural needs to dust bathe, scratch and forage'</li> <li>2. 'Adequate perch space of at least 2.7m per 1000 birds'</li> <li>3. 'Environmental enrichment in the form of pecking objects'</li> </ol> </li> <li>- 'Maximum stocking density of 34kg per meter square'</li> </ul>

	<ul style="list-style-type: none"> <li>- 'Minimum 8 hours light and 4 hours continuous darkness in every 24-hour period'</li> <li>- 'Minimum average light intensity of 20 lux across the shed at bird height'</li> <li>- 'Ammonia levels must not exceed 15ppm'</li> <li>- 'Weak, ill or injured birds must be humanely euthanized without delay'</li> <li>- Monitoring of 'lameness, abnormal behaviour or disease, and action taken to rectify the situation if possible, and prevent it occurring in future flocks'</li> <li>- 'Accurate records of mortalities, routine management practices and health challenges must be maintained and available to the RSPCA.'</li> <li>- 'All persons involved in handling and catching birds must be appropriately trained and competent.'</li> <li>- 'Birds must be stunned prior to slaughter' <sup>76</sup></li> </ul>
<b>Pork - standards and certifications</b>	
Sow-Stall Free	<p>A sow stall (also known as a gestation stall) is a highly confining type of housing that pregnant pigs on some farms are kept in. A sow stall is roughly the length and width of a fully grown sow (a female breeding pig) and does not allow the sow to turn around or leave. The sow is traditionally housed in a stall for some or all of her pregnancy, which lasts for approximately 115 days.<sup>77</sup></p> <p>According to the RSCPA, sow-stall free means the pork product comes 'pigs that have been born to sows in group housing'. Sow-stall free describes a system 'where a sow may have been kept in a stall for up to 5 days following last mating up to one week before farrowing; however, other definitions allow only one day in a stall' which are called mating stalls. The industry in Australia has 'committed to phasing out sow stalls and moving all female breeding pigs (sows) to indoor group housing'.<sup>78</sup></p>

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