

Public attitudes, consumers' willingness to pay, and the role of markets – is it possible to make ends meet?

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Four questions to be addressed

1. How do animal ethics orientations among consumers differ?
2. What is the relative importance of legislation and labelling?
3. How much does animal welfare matter to consumers compared to other attributes and how much will they pay?
4. How do consumers react at time of crisis?



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Animal ethics orientations (AEO)

In moral philosophy different
ethical theories can be found

These are theoretical constructs



However, some forms of these may
also exist as social realities

Thus, it is unlikely that all
consumers have the same view of
animal ethics

And this may affect their behaviour
as consumers

RESEARCH ARTICLE

A multidimensional measure of animal ethics orientation – Developed and applied to a representative sample of the Danish public

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Abstract

We present a questionnaire-based measure of four animal ethics orientations. The orientations, which were developed in light of existing empirical studies of attitudes to animal use and ethical theory, are: animal rights, anthropocentrism, lay utilitarianism, and animal protection. The two latter orientations can be viewed as variants of animal welfarism. Three studies were conducted in Denmark in order to identify the hypothesised orientations, evaluate their concurrent validity, and report their prevalence and relevance in animal-related opinion formation and behaviour. Explorative factor analysis (Study 1) and confirmative factor analysis (Study 2) successfully identified the four orientations. Study 2 revealed good measurement invariance, as there was none or very modest differential item functioning across age, gender, living area, and contrasting population segments. Evaluation of concurrent validity in Study 2 found that the orientations are associated with different kinds of behaviour and opinion when the human use of animals is involved in the hypothesised directions. In Study 3, a representative population study, the animal protection orientation proved to be most prevalent in the Danish population, and as in study 2 the four orientations were associated with different behaviours and opinions. Remarkably, the animal protection orientation does not lead to increased animal welfare-friendly meat consumption, the main reason for this being non-concern about the current welfare status of farm animals. We argue that the developed measure covers a wide range of diversity in animal ethics orientations that is likely to exist in a modern society such as Denmark and can be used in future studies to track changes in the orientations and to understand and test hypotheses about the sources and justifications of people's animal-related opinions and behaviours.

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anthropocentric orientation:

"We have the right to use animals because humans are intellectually superior to animals."

animal rights orientation:

"The use of animals by humans should be prohibited by law."

animal welfarism:

"Using animals for important human purposes is acceptable if it is done so that the animals in a way that as far as possible looks after animal welfare"

Our study of animal ethics orientations and their relation to pork consumption

Focus on the correlation between AEO and consumption of welfare pork

Key features:

Populations in three countries (DK, S and D) studied

AEO is combined with assesment of attitude strength

Segmentation is done



animals



Article

Moral Convictions and Meat Consumption—A Comparative Study of the Animal Ethics Orientations of Consumers of Pork in Denmark, Germany, and Sweden

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Simple Summary: In western Europe, national animal welfare legislation since the 1980s in combination with EU legislation has served to ensure minimal requirements for the welfare of farm animals. For many consumers, however, these requirements do not go far enough. Market-driven initiatives where farmers, processors of animal products, and retailers raise the standards via labelling schemes and price premiums may further improve the welfare of farm animals, but such initiatives are only viable solutions if there is sufficient consumer support. To find out to what extent such support exists, we studied the relationship between animal ethics orientations and consumer demand for welfare-enhanced pork in Denmark, Germany, and Sweden. In all three countries, we identified a consumer segment that endorses the ideal behind schemes to enhance farm animal welfare, i.e., that it is ethically justified to eat meat provided the animals enjoy a good level of welfare. Consumers in this segment are highly concerned about animal welfare, and also purchase welfare pork more often than other consumers. More than one fourth of consumers in all three countries belong to this segment; therefore, we believe that market actors can be reassured that there will be persistent consumer demand for welfare-enhanced meat.

Abstract Background: The relationship between animal ethics orientations and consumer demand for meat with high standards of animal welfare, and the way this relationship plays out in different countries, is not well understood. Using pork as a case study, this comparative study aims to identify the animal ethics orientations that drive purchases of welfare meat in Denmark, Germany, and Sweden. Methods: Cross-sectional questionnaire data from representative samples of approximately 1600 consumers in each country were collected. A segmentation of pork consumers (using latent profile analysis) was carried out. Results: In all three countries, two subgroups were concerned about farm animal welfare: the first subgroup was driven by animal rights values; the second subgroup by animal protection values, where the main principle was that “it is all right to use animals as long as they are treated well”. Other consumer groups are less concerned about farm animal welfare and display little or no preference for welfare pork. Conclusions: In all three countries, dual demand for welfare pork exists. The findings of this study can be used, among others, to understand the marketability of enhanced welfare animal products and the potential for market-driven animal welfare improvements.



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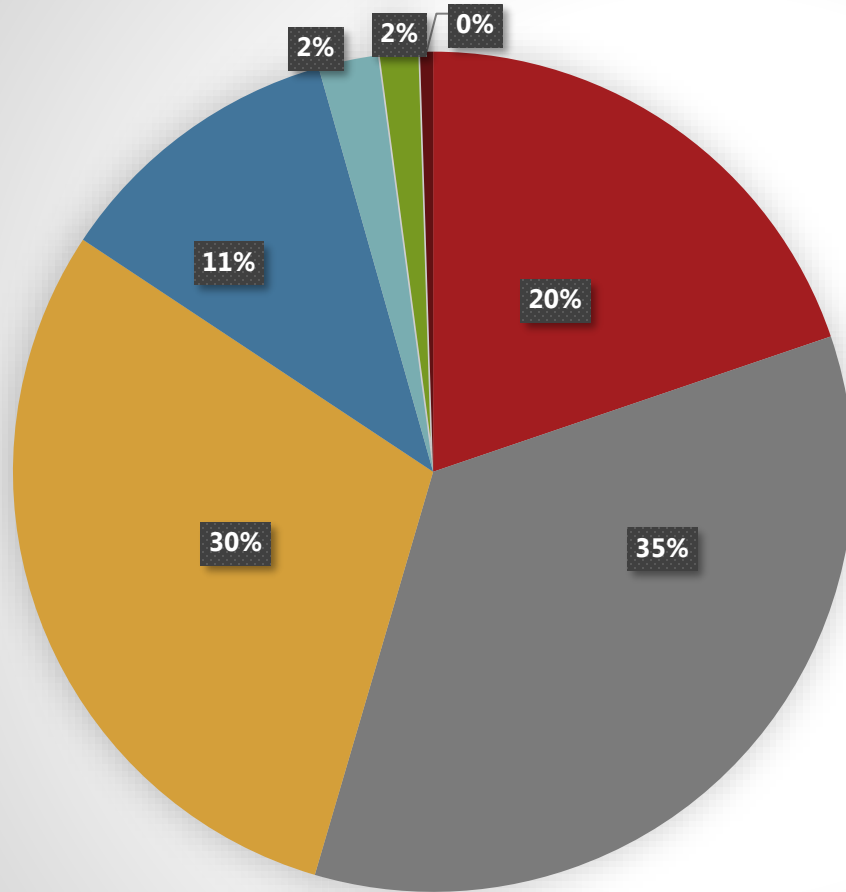
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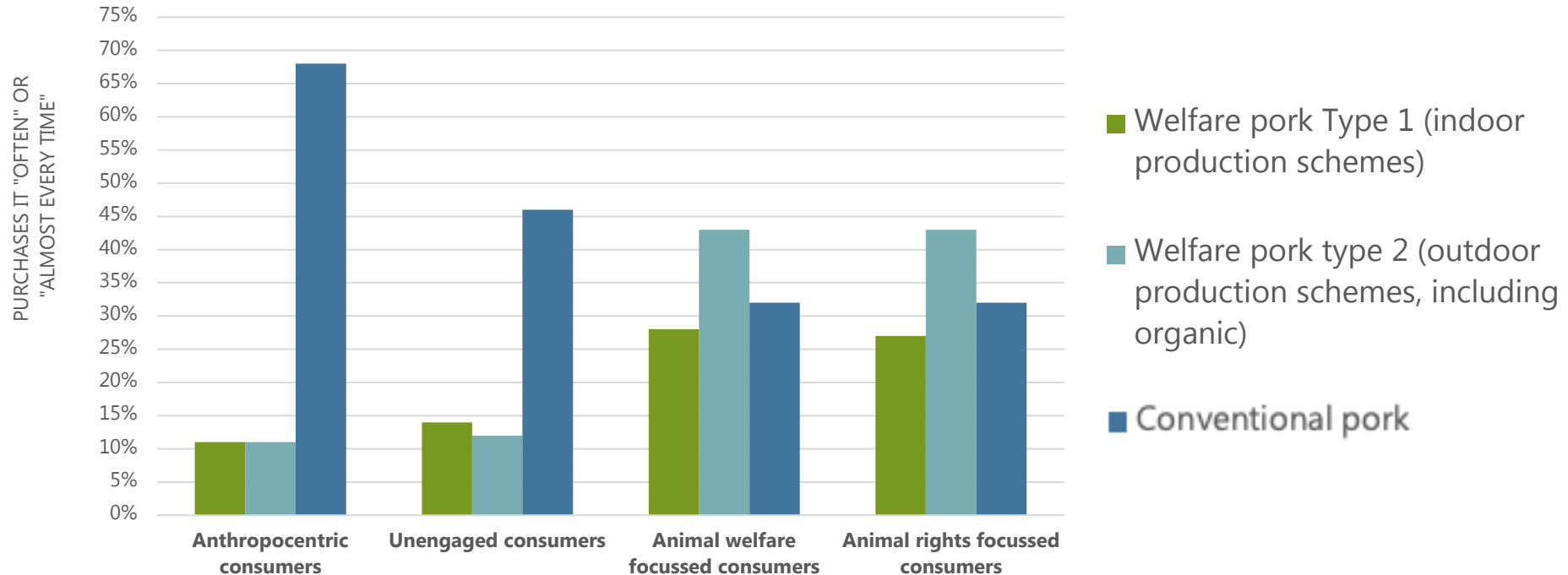
Denmark

(n=1612)



- Anthropocentric consumers
- Unengaged consumers
- Animal welfare focussed consumers
- Animal rights focussed consumers
- Neither eats nor buys pork
- Vegetarian
- Vegan

Stated frequency of pork purchases in four consumers segments in Denmark (n=1536)



Consumers differ in their moral views

Consumers in the countries studied differ in their views on animal ethics

A large group does not care

Among those who care the largest group accept animal production as long as animals do not suffer unnecessarily

Some don't think animals have moral standing

And some think they have rights

Ethical views affect consumption

However, a big gap between moral stance and actual practice



Four questions to be addressed

1. How do animal ethics orientations among consumers differ?
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4. How do consumers react at time of crisis?



Why a benchmark for animal welfare?

- In Europe and the rest of the Western world a pluralist system has developed:
 - Animal welfare legislation
 - State supported labels
 - Private labels
 - Industry standards
 - ...
- Through this combination, conditions for farm animals may improve
- However, difficult to measure and compare across initiatives and countries




Bedre Dyrevelfærd



The Benchmark approach

Overview over initiatives in five countries

Resource based parameters organised within a number of dimensions of welfare that influence the welfare of pigs

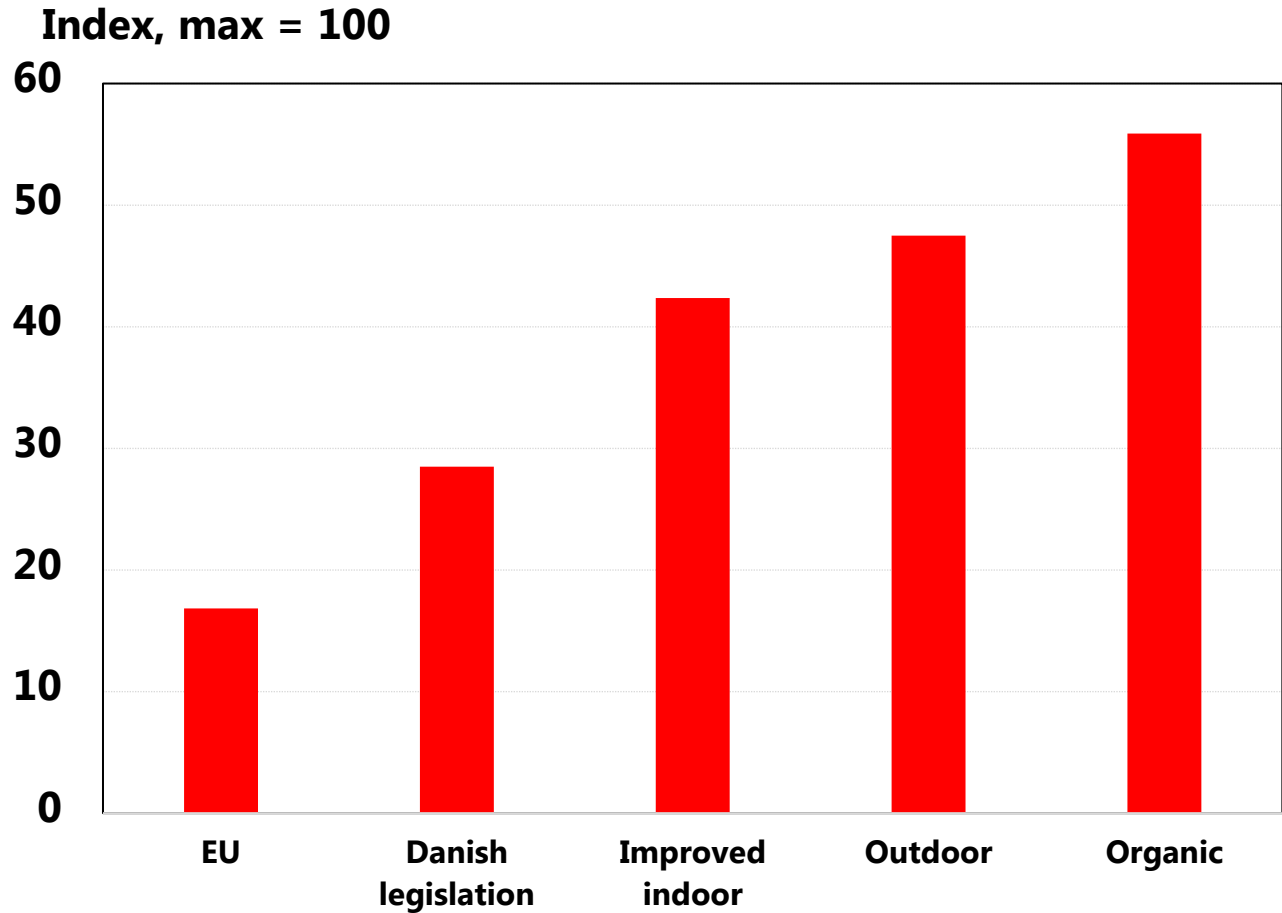
Expert opinion to value and weigh the welfare effect of each of these parameters

For each welfare initiative Benchmark values are calculated on a scale from 0 to 100

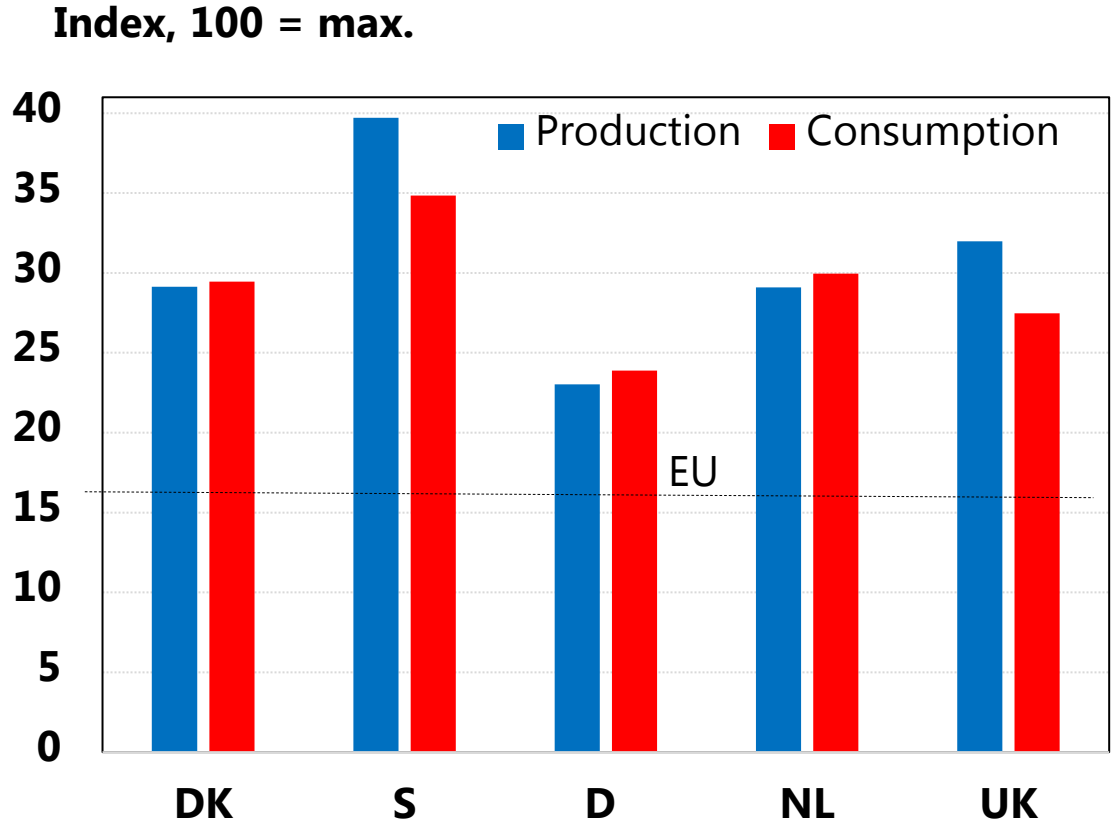
Benchmark value for each country's production and consumption of pork is calculated on a scale from 0 to 100



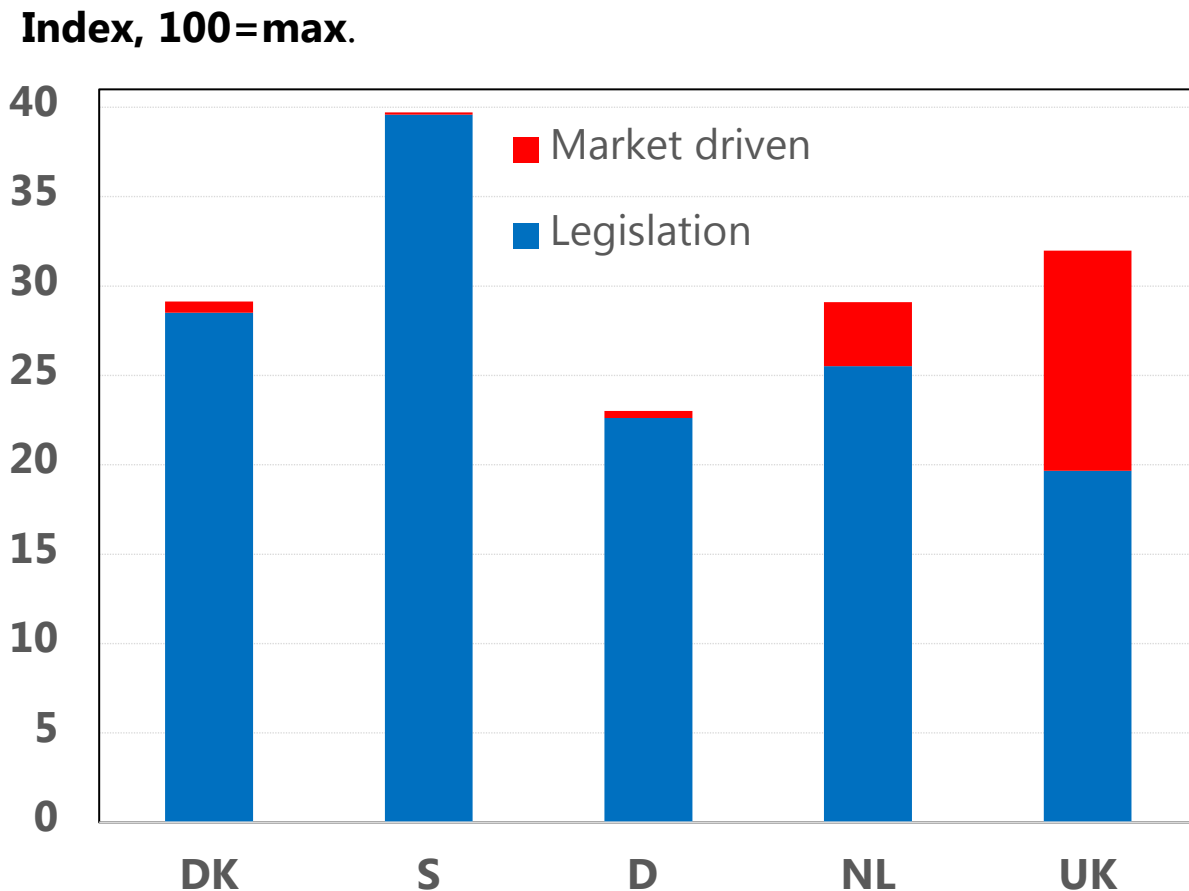
Benchmark for different forms of pig production (2023)



Benchmark scores pig production and pork consumption in 5 countries (2023)



Relative weight of market driven initiatives and legislation in the 5 countries (2023)



Legislation and labelling complement each other

Animal welfare legislation is important to ensure a minimum

However, due to free trade across borders the effect of ambitious legislation may be offset

Labelling can increase welfare output

CSR and branding may boost these developments

Labelling can inspire future legislation



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Willingness-to-pay for reduced carbon footprint and other sustainability concerns relating to pork production – A comparison of consumers in China, Denmark, Germany and the UK

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Consumer analyses

Survey among consumers in Denmark, Germany, United Kingdom and China

Around 1500 respondents in each country (Feb 2022)

Focus on attitudes and WTP for sustainability-related improvements of pork

- **Climate impact** (from pig production)
- **Animal welfare** (indoors)
- **Food safety** (50% reduction in the use of antibiotics, guaranteed free from Salmonella and other harmful bacteria)
- **Environment** (preserving rain forest)
- **Economy** (consumer WTP)

Here we compare improved pork with standard pork without improvements. Both types of pork are produced in your home country. How much would you be willing to pay extra for the improved pork? Percentage of population shown.

	Denmark	Germany	UK	China
0%	8	5	11	11
1-2%	7	5	9	7
3-5%	13	13	16	19
6-10%	26	22	19	25
11-20%	20	21	9	19
21-50%	9	11	5	5
51-100%	2	2	3	2
More than 100%	1	0	1	0
Don't know	7	6	7	2
I don't eat pork	7	15	20	10

**Roughly 10%
have WTP > 20%**

You have stated a positive WTP. Please try to state how much each of the 5 improvements is worth to you.

You have 100 points that we want you to distribute across the 5 improvements ..

	Climate impact	Animal welfare	Reduced antibiotics	No Salmonella etc.	Preserving rain forest
Denmark	18.3	25.7 +	19.3	18.9	17.7
Germany	16.1	27.7 +	19.9 +	19.2 +	17.1 +
UK	17.2	25.8 +	16.2	23.0 +	17.9
China	17.2	18.7 +	23.2 +	24.0 +	16.9

'Imagine that you must choose between two types of pork. They cost the same and are slightly more expensive than the cheapest standard pork. The first type of pork is produced with improved animal welfare whilst the second type of pork is produced with lower impact on the global climate. Imagine that you must choose between improving the welfare of the pigs and reducing the climate impact. What would you choose?'
(% of respondents shown).

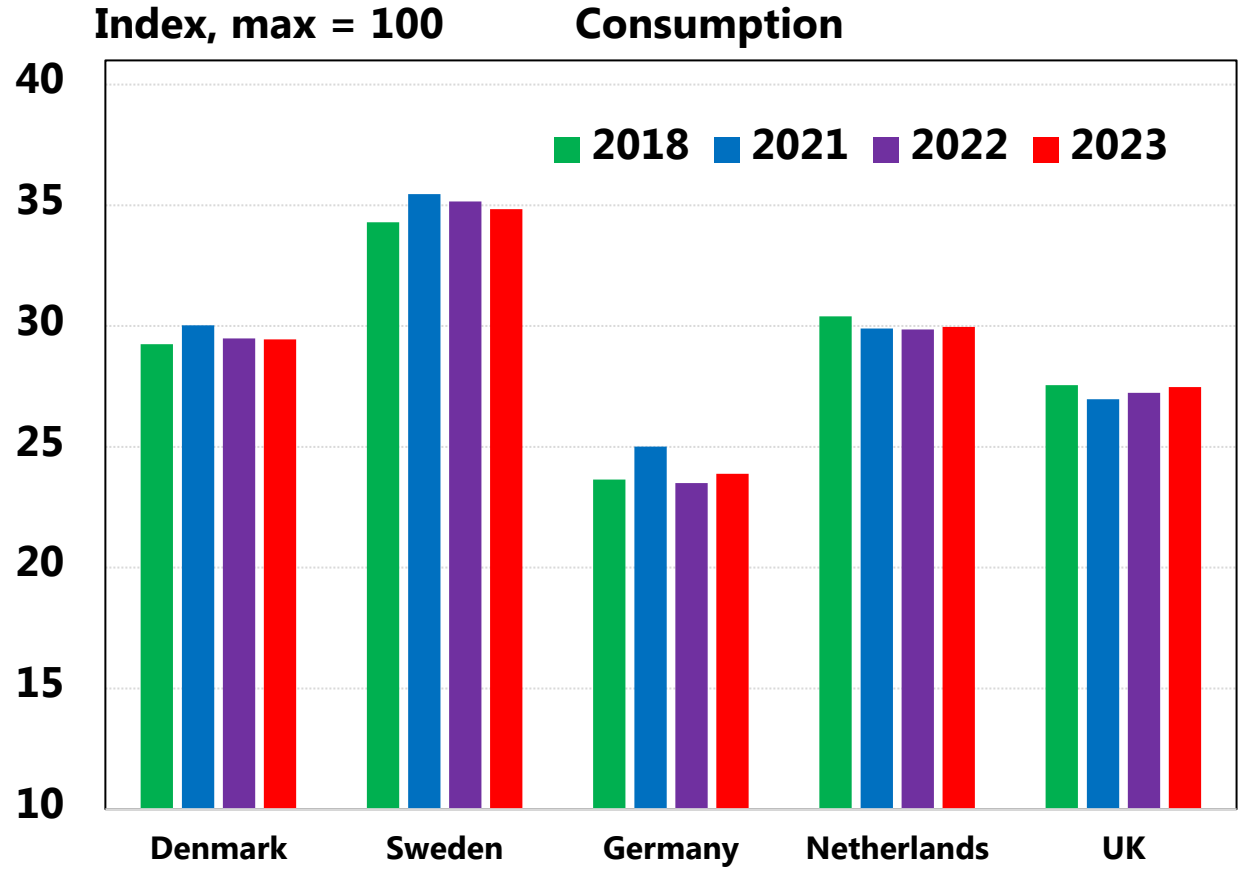
	Denmark	Germany	UK	CH
Definitely lower climate impact	6	4	9	10
Probably lower climate impact	11	7	11	26
Probably better animal welfare	24	27	22	27
Definitely better animal welfare	25	32	24	10
I would not choose any of them – I choose the cheapest pork	5	5	7	7
I cannot choose – both are very important	24	20	20	18
I don't know	6	6	7	3

Four questions to be addressed

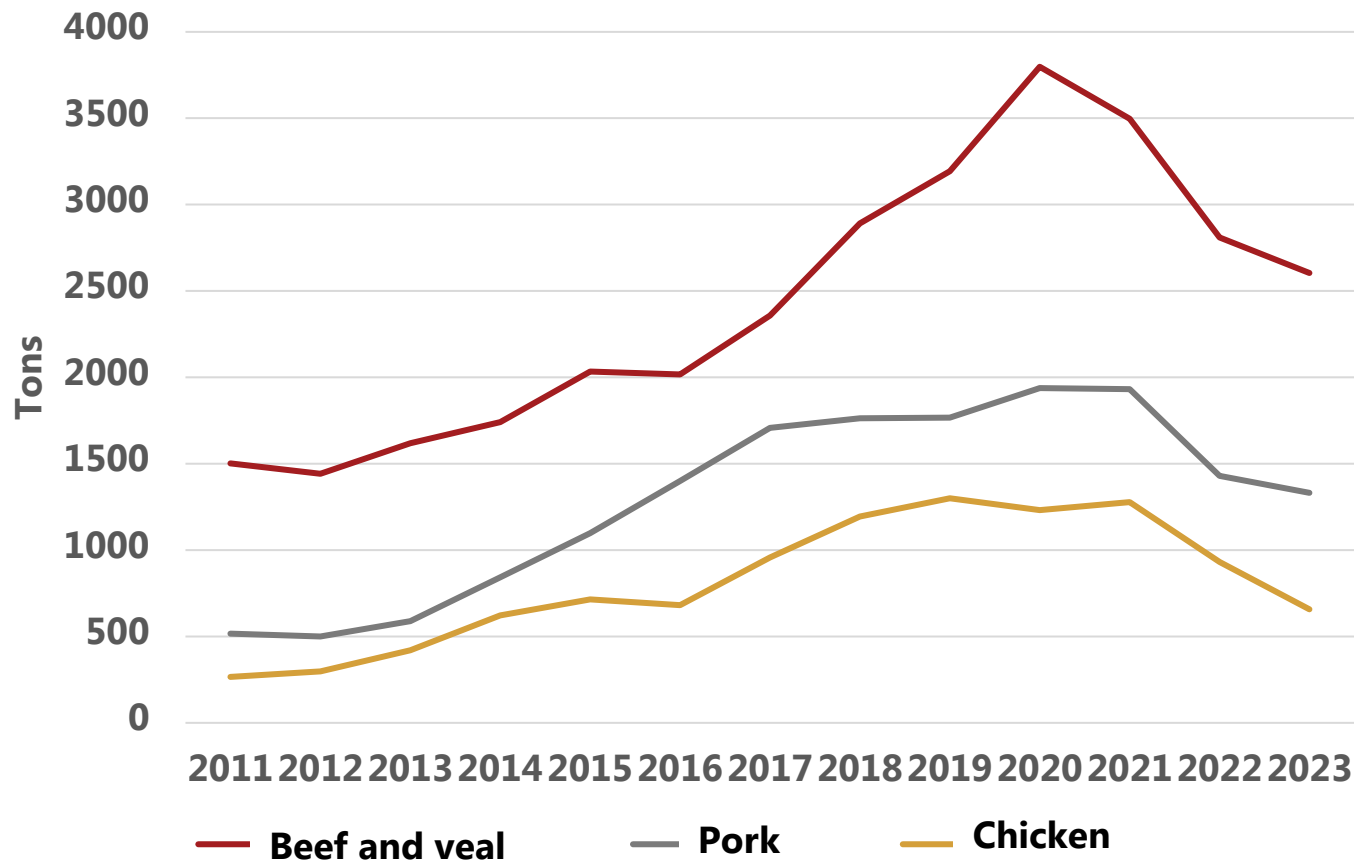
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Development in
benchmark for
pork
consumption
2018-2023



Danish consumption of different sorts of organic meat 2011-2023 (Source: Statistics Denmark)



Four questions to be addressed

1. How do animal ethics orientations among consumers differ?

They differ a lot

2. What is the relative importance of legislation and labelling?

They complement each other, but legislation is more robust

3. How much does animal welfare matter to consumers compared to other attributes and how much will they pay?

A lot (at least in Europe), but they will not pay very much for it

4. How do consumers react at time of crisis?

They downtrade and prioritize their own economy

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