

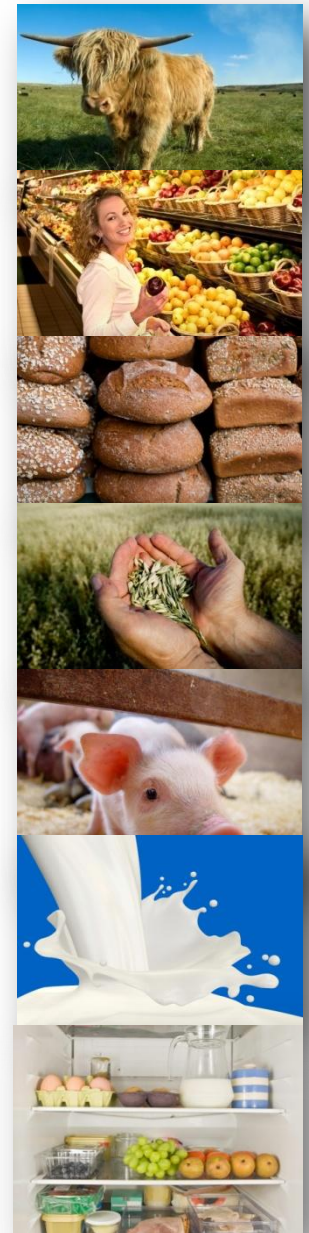
Market Orientation of German dairy farmers - Moving towards market liberalization

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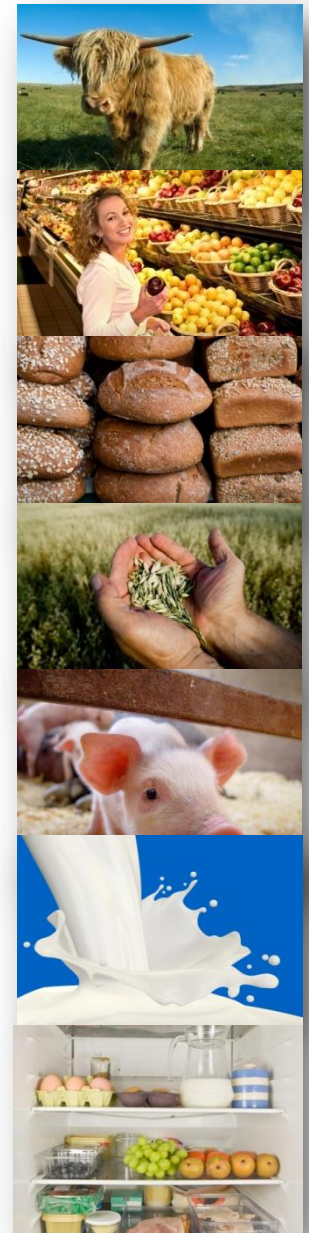
Outline

- Challenges in agriculture
- Market Orientation / Policy orientation
- Research design
- Results
- Conclusions



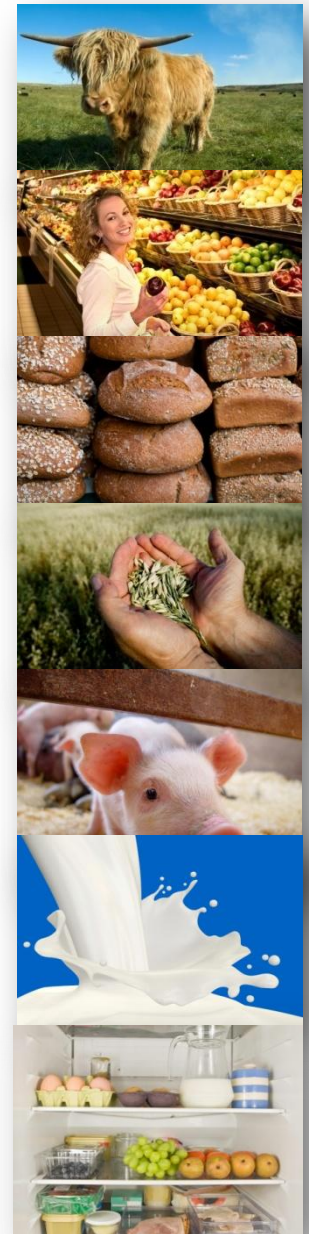
Challenges in agriculture

- Challenges from the environment of agricultural production:
 - ✓ Consumer demands
 - ✓ Environmental claims
 - ✓ Increasing competition
 - ✓ Growth and structural change
 - ✓ Concentration in food retailing
- Challenges arising from the CAP
 - ✓ Market Liberalization (e.g. abolition of the milk quota regime)
 - ✓ Development of new state-controlled subsidy programs (e.g. bioenergy)
 - ✓ Changing positions of agricultural interest groups



Research Question

Are all farmers ready to meet these challenges? Or are there differences especially among dairy farmers?



Market orientation

- What are the relevant **success factors** for firms and how does market orientation influence their performance?
- According to Kohli and Jaworski (1990): “Market orientation refers to the organizationwide generation, dissemination, and responsiveness to market intelligence”.
 - ✓ Behavioral approach
- In 1996 Grunert et al. adapted the marketing research approach to agricultural food supply chains.
- A higher market orientation can lead to a competitive advantage of the firm and within these to a larger success (Grunert et al. 1996).

Policy orientation / subvention orientation

- In 1996 Young and Westcott argue that a reduction of agricultural subvention accelerates the trend towards greater market orientation.
- Vast majority of farmers would adopt cross compliance for economic reasons (Spash and Falconer 1997).
- Increasing subventions for organic production trigger farmers to switch to organic production (in Finland) (Pietola and Lansink, 2001)
- The adaption of organic production depends upon the duration of support (subvention) (Schramek and Schnaut 2004).
- Five farmer groups of different policy orientations were found in 2006 (Davies and Hodge) for adaption of cross compliance.
- → Market Orientation and Policy Orientation in contrast to each other.

Sample

- Size: 532 farmers
- Located in: north-western Germany
- Survey period: 20.12.2010-13.01.2011 (and -20.05.2012)
- Students of the university of Göttingen recruited farmers to answer the survey online/paper.
- In addition online on the web site of the German journal top agrar.

Sample description

- Average age: 41 Years
- Gender: 92.7% male
- Farm managers: 69.1%
- Professional farms: 89.8%
- Acreage: 198 hectares
- Line of production:
 - arable farming: 38.6%
 - dairy farming: 33.1 %
 - fruits and vegetables: 2.0%
 - bioenergy: 3.5%
 - pork production: 22.8%
- Mainly well educated respondents (master, university): 62%

Attitude towards market pricing

	Arable farming	Dairy farming	Fruit and vegetable	Bioenergy	Pork production	Total
Policy makers should build a safety net (guaranteed price) for farmers.*	-0.22	0.13	-0.60	0.30	-0.27	-0.12
Prices should be freely determined by the market.***	1.06	0.57	1.38	0.50	1.16	0.91
My own company growth should not be the disadvantage of my colleagues.***	-0.13	0.53	-0.57	0.33	0.15	0.15
Production prices, which do not cover the production costs, should not be allowed.**	-0.66	-0.06	-0.50	-0.09	-0.39	-0.39
Growing or giving way: this is the right motto for agriculture.***	-0.13	-0.75	0.80	-1.00	-0.25	-0.35

Source: author s calculations, grouped medians with H-Test following Kruskall and Wallis (Bühl, 2008); *** $p \leq 0.001$, ** $p \leq 0.01$, ns = not significant; * $p \leq 0.05$; Scale from +2 = totally agree to -2 = totally disagree

Attitude towards subvention

	Arable farming	Dairy farming	Fruit and vegetable	Bioenergy	Pork production	Total
Agricultural markets have to be protected politically. ***	-0.14	0.38	-1.00	0.36	0.07	0.10
I am able to produce at internationally competitive prices.***	-0.04	-0.62	-0.25	-0.69	0.04	-0.25
Guaranteed prices are a useful tool for farmers.***	-0.65	-0.20	-1.00	0.00	-0.46	-0.45
Pricing should be done by companies without political influence.**	0.94	0.70	1.33	0.67	1.06	0.88

Source: author s calculations, grouped medians with H-Test following Kruskal and Wallis (Bühl, 2008); ***p ≤ 0.001, **p ≤ 0.01, ns = not significant; *p ≤ 0.05; Scale from +2 = totally agree to -2 = totally disagree

Results – Confirmatory factor analysis – Clustering variables

Factor political / state orientation, Cronbach s Alpha: 0,764	Factor loadings
Agricultural markets have to be protected politically.	0.744
Production prices, which do not cover the production costs, should not be allowed.	0.735
Guaranteed prices are a useful tool for farmers.	0.723
Policy makers should build a safety net (guaranteed price) for farmers.	0.695
We as farmers can request that consumers pay enough money for our products that we are able to survive financially.	0.662
Subsidies for famers make sense.	0.489

Factor Market orientation, Cronbach s Alpha: 0,632	Factor loadings
Prices should be freely determined by the market.	0.780
Pricing should be done by companies without political influence.	0.748
I am able to produce at internationally competitive prices.	0.630
Output prices may be below the cost of production for a short time.	0.624

Source: author s calculations

Results

Cluster 1 (n=157) 29.5 %: State oriented

- ✓ 51.7 % dairy farmers
- ✓ Especially dairy farmers and bioenergy production
- ✓ Organic farmers 62.0 % (26)
- ✓ 52.2 % are older than 45 Years
- ✓ 64.9 % cultivate less than 100 hectares

Cluster 2 (n=227) 42.6 %: Market liberal

- ✓ 39.4 arable farming; 27.0 % dairy farming; 29.8 % pork production
- ✓ Especially pork production
- ✓ Organic farmers 33.3 % (14)
- ✓ 58.8 % are older than 44 years
- ✓ 58.5 % cultivate more than 100 hectares

Cluster 3 (n=149) 28.0 %: Market oriented

- ✓ 47.5 % arable farming
- ✓ Especially fruit and vegetable production
- ✓ Organic farmers 4.8 % (2)
- ✓ 64.4 % are younger than 44 years
- ✓ 62.3 % cultivate more than 100 hectares

Cluster Analysis: Ward Algorithm, K-Means

Active Variables have a high degree of homogeneity, variance < 1

Active variables differ significantly
0.7975 eta coefficient displays a middle degree for differences between the clusters

63.55% of the variance of active variables could be explained

Discriminant analysis:

Wilks Lambda displays high significance for the model

98.3 % of grouped cases were classified correctly

Results

Cluster	Prices should be freely determined by the market.***	Pricing should be done by companies without political influence.***	I am able to produce at internationally competitive prices.***	Output prices may be below the cost of production for a short time.***
State oriented	-0.03 (0.891)	0.24 (0.794)	-0.86 (0.909)	-0.60 (1.067)
Market liberal	0.99 (0.613)	0.88 (0.644)	-0.22 (0.900)	0.29 (0.932)
Market oriented	1.56 (0.619)	1.53 (0.514)	0.41 (0.854)	1.01 (0.858)
Total	0.85 (0.936)	0.87 (0.822)	-0.23 (1.010)	0.23 (1.132)

Source: author s calculations, M = mean, SD = standard deviation (in brackets); *** $p \leq 0.001$, ** $p \leq 0.01$, ns = not significant; * $p \leq 0.05$; Scale from +2 = totally agree to -2 = totally disagree

Results

Cluster	Agricultural markets have to be protected politically.***	Guaranteed prices are a useful tool for farmers.***	Production prices, which do not cover the production costs, should not be allowed.***	Policy makers should build a safety net (guaranteed price) for farmers.***	We as farmers can request that consumers pay enough money for our products that we are able to survive financially.***	Subsidies for farmers make sense.***
State oriented	0.82 (0.747)	0.48 (1.066)	0.87 (1.136)	0.80 (0.979)	1.43 (0.762)	0.53 (0.924)
Market liberal	0.17 (0.803)	-0.40 (0.889)	-0.22 (1.087)	-0.10 (0.907)	0.93 (0.885)	0.22 (0.866)
Market oriented	-0.87 (0.824)	-1.21 (0.660)	-1.34 (0.694)	-1.01 (0.810)	0.05 (1.293)	-0.44 (0.925)
Total	0.07 (1.023)	-0.37 (1.097)	-0.21 (1.310)	-0.09 (1.131)	0.83 (1.117)	0.13(0.973)

Source: author's calculations, M = mean, SD = standard deviation (in brackets); *** $p \leq 0.001$, ** $p \leq 0.01$, ns = not significant; * $p \leq 0.05$; Scale from +2 = totally agree to -2 = totally disagree

Conclusions

- Up to now there has been little research on market orientation of farmers.
- First results show:
 - ✓ Differences between production sectors
 - ✓ Fruit and vegetable and arable farmers are more market oriented than dairy farmers.
 - ✓ For politicians and consultants this is an opportunity to influence dairy farmers to become more market oriented to cope with challenges in the CAP and the agricultural environment.
 - ✓ Especially dairy farmers have to change their point of view to deal with the markets and not to rely on the state and subsidies.
 - ✓ The results are not representative but give first indications for further research (measurement of MO, what influences the MO of farmers?).

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Thank you for your attention!

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