



BIO-ECONOMY PERSPECTIVES IN GERMANY

Workshop: "It's the (bio)economy, stupid!"

7th-8th October 2020

Friedrich-Schiller University of Jena

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Mitglied der Helmholtz-Gemeinschaft

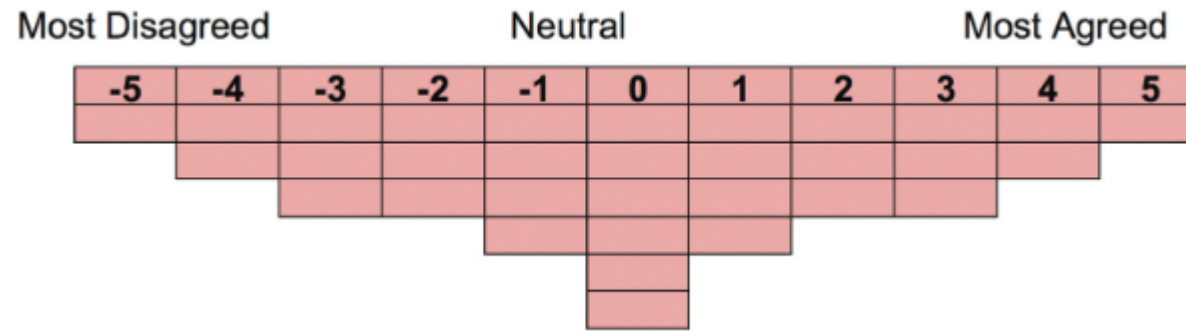


SCHEDULE

- Introduction: Bio-economy perspectives
- Empirical results in Germany
- Results of our own survey
- Outlook and conclusions

EMPIRICAL RESULTS IN GERMANY 1

Sorting statements within the Q Method



Technological progress

Not at any price

Sufficiency and close affinity to nature

Hempel et al. (2018)

EMPIRICAL RESULTS IN GERMANY 2

Representative survey conducted in July 2019:

- The idea to replace fossil energy sources by renewable ones is rather approved
- Expected downsides of this process are increase of monocultures and cultivation of more genetically modified crops
- In-vitro-meat is rather not appreciated
- Many people are ambivalent and unsure what to expect from bio-economy



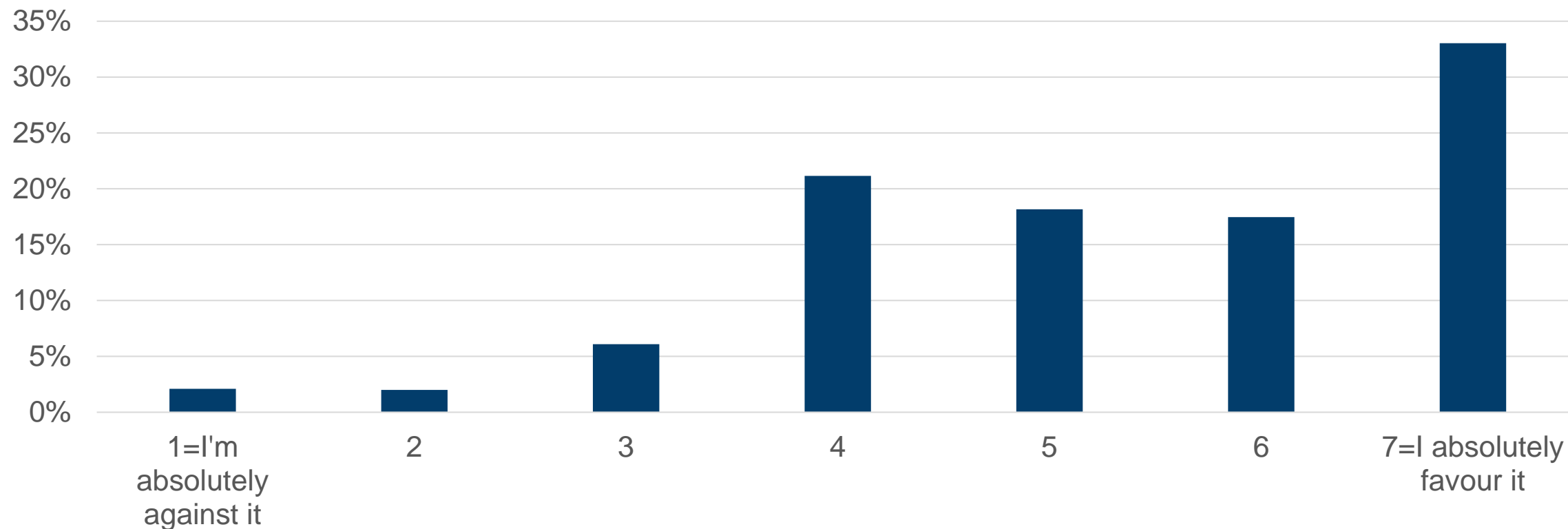
RESULTS OF OUR OWN SURVEY

Please indicate spontaneously your understanding of the term bio-economy.

Don` t know / no idea	49,5%
Ecological economy	11,7%
Biomass / Agriculture and energy	9,1%
Something with energy	6,5%
Something with nature / ecology / renewables instead of fossil resources	5,9%
Something with nature or ecology	4,5%
Environmentally friendly production	3,9%
Something with agriculture	2,3%
Something with bio	2,2%
Biomass / compost	1,2%
Other	3,3%

RESULTS OF OUR OWN SURVEY

Evaluation of the concept of a sustainable bio-economy



RESULTS OF OUR OWN SURVEY

EXPECTED CONSEQUENCES OF THE IMPLEMENTATION OF A SUSTAINABLE BIO-ECONOMY - ENVIRONMENT

	Can be reduced %	No impact %	Can be increased %	No answer %
(a) Plastic garbage in the environment and in the oceans	65.1	16.3	10.4	8.3
(a) Species extinction	49.3	20.8	19	11
(a) Loss of areas of unspoiled nature	41.2	18.7	29	11.1
(a) Carbon emissions	59.9	18.7	10	11.5
(a) Particulate matter pollution	57.7	22.6	8.9	10.9
(a) Nitrate load in the ground water	51.1	18.9	14.9	15.2

RESULTS OF OUR OWN SURVEY

EXPECTED CONSEQUENCES OF THE IMPLEMENTATION OF A SUSTAINABLE BIO-ECONOMY - ECONOMY

	Rather yes %	Rather no %	No answer %
(a) Creation of new jobs	64.4	20.4	15.3
(a) Improve the energy independence internationally (Reduction of the import dependence)	62.7	20.3	17.1
(a) Improve the economic performance and competitive ability (regional and international)	52.3	25.8	21.9
(a) Achieving an international role model function in terms of sustainability	69.7	15	15.4
(a) Improved access to new areas of research and education	72.4	11.4	16.3
(a) Ensure the energy security nationally (also grid stability)	57.4	22.5	20.2
(a) Ensure the technological lead internationally	56.4	20.1	23.6

RESULTS OR OUR OWN SURVEY

Impact factors for the evaluation of the concept of bio-economy

Dependent variable: evaluation of the concept of bio-economy

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Dependent variable: evaluation of the concept of bio-economy

Knowledge

- Understanding of the term bio-economy

- Familiarity with topics from the field of bio-economy

Behavior

- Pro-environmental behavior

Attitudes

- Preferred political party

- Application of different measures from the field of bio-economy

- Estimation of bio-economy as a solution for environmental challenges

- Estimation of bio-economy as a tool to reach economic goals

Socio-demographic variables

- Age

- Gender

- Highest education

- Place of residence

- Household income

RESULTS OR OUR OWN SURVEY

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OUTLOOK AND CONCLUSIONS

Altogether, results are mixed:

- The overall aims of bioeconomy are widely accepted
- However, once there are impacts of bioeconomy measures on the individual lifestyle, nature or environment, there is less acceptance of the measures.
- More easily accessible and understandable information about bioeconomy and a resource revolution is necessary.

SOURCES

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