## |CCR| International Conference on Consumer Research

# Workshop Report

**Challenges for Consumer Research and Consumer Policy in Europe** *September 29-30, 2014* 

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#### Imprint

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Workshop 1: What's on the European Consumer agenda? (Part I)

September 29, 2014 13:30-15:30

#### Session 1.1: The digital revolution

Chair: Prof. Dr Franziska Boehm | University of Münster

## Abstract 1: A more European approach to net neutrality: EU policy, national measures and a look at developments in the USA

Author: Shane McNamee (Bayreuth, Germany) | University of Bayreuth

Net neutrality (short for network neutrality), coined by Columbia media law professor Tim Wu, is a difficult concept to define; the basic idea of net neutrality is the principle that ISPs and governments should treat all data on the Internet equally, without discriminating or charging differentially by user, content, site, platform, or mode of communication - an extension of the longstanding concept of a common carrier. There are two main categories of net neutrality; 'positive' net neutrality, opposes where ISPs charge more for a better quality of service; and 'negative' net neutrality, opposes where ISPs throttle or block certain services. These issues have come to the forefront of discussion within the EU, primarily under the blanket of harmonisation of telecommunications.

The European Commission has issued a number of declarations, communications and press releases addressing issues surrounding net neutrality, however has primarily delegated the implementation of the 2009 reforms to National Regulatory Authorities (NRAs) and the Body of European Regulators of Electronic Communications (BEREC). The concept is often more specifically defined and regulated at national level. The European Commission and Parliament have also often diverged in their approaches to this question. The Telecoms Package review from 2007-2009 and reforms in 2009 updated the EU's position on net neutrality, phrased as a protection of an 'open' and 'neutral' Internet.

A cornerstone of this discussion is the suitability of the market as a regulating force for net neutrality; the idea being that an effectively competitive market will ensure that consumers have the option of choosing a provider who better protects net neutrality. It is questionable as to whether this approach is effective enough in Europe, and certainly seems to not have been effective in the USA. There has traditionally been less of a call for direct regulation in Europe due to a perceived abundance of competition and to a great extent European telecommunications are market-regulated.

There is room for further clarification and harmonisation of rules pertaining to net neutrality within the EU, as well as scope for more robust protection in light of developments both to the infrastructure as well as service-models of high-speed Internet.

### Abstract 2: Consumer policy action in growing possibilities of manipulation of consumer interest by uncontrollable data analysis by companies

Authors: Prof. Dr Michael Schleusener, Dr Sarah Stevens, Prof. Dr Monika Eigenstetter and Prof. Dr Silvia Zaharia (Krefeld and Mönchengladbach, Germany) | Hochschule Niederrhein (University of Applied Sciences)

Today consumers leave their traces and their data in each electronic transaction and even when carrying around their mobile telephones. These data are collected and from the combination of the data

conclusions about current and future behaviour of consumers can be drawn. These conclusions help companies to influence consumers in a more effective way than ever before, without being noticable to consumers. The threat is that consumers' minds are manipulated in such a manner that they believe to have made a decision under their own free will. Therefore the main objective of this research is to get a better understanding of the possibilities to protect consumers against manipulation. It is a contribution to the consumer policy discussion.

The study included secondary studies to determine the short-and medium-term risk potential, an expert survey, qualitative focus groups, the identification of different types of consumers and their respective behaviour patterns and Recommendations for political and social framework for the protection of different types of consumers.

The ways consumers deal with digital technologies are described in five heuristics: "Total refusal", "Partial refusal", "Reduction in the complexity", "Reliance on own research" and "Ingenuous adaptation". Consumers with different levels of vulnerability exist and they need protection in different ways. Five escalation levels of adopted threats have been developed and tested. Four types of consumers were identified. The expected perceived threat from the expert survey was compared with the perceived threat by each of the four types of consumers. With regard to the heuristics, a correlation between the perceived threat and a kind of illusion of control of consumers about the disclosure of data and information about themselves is conceivable. Finally, the four types of consumers were contrasted with the heuristics. Different interests of consumers can be effectively represented and recommendations for the protection of different types of consumers can be given.

## Abstract 3: Consumer Informatics: Some consideration on theoretical foundation and on outlining a research agenda

Authors: Prof. Dr Gunnar Stevens (Siegen, Germany) | University of Siegen and Dr Alexander Boden (Sankt Augustin, Germany) | FIT Fraunhofer Institute for Applied Information Technology

Computers have permeated all spheres of life and the appropriate design and competent use of information systems has gained an important role for modern economy. The well-established discipline of Information Systems demonstrates that this is evident for business and organisations. However, computers have not just radically changed the production sphere, but the proliferation of online sales, auctions, rating, or sharing platforms also changed the sphere of consumer practices. In particular, the digital age opens up great new opportunities, but also new risks for consumers that been only selectively researched so far. In behavioural science, some effects on the consumer are partially evaluated. In contrast in design science, little research has been done on how information systems, infrastructures, and related legal frameworks could and should be designed from a consumer point of view. First step towards closing this gap, we argue for an full-fledged Consumer Informatics (Verbraucherinformatik) defined as the field which systematically investigate the design and appropriation of information systems that supports people's consumption practices and everyday life economies in order to increase the consumer literacy and consumer responsibility. In addition, as underlying concepts, metaphors, guiding principles etc. implicitly or explicitly frame the problem/solution spaces of design, we should reflect careful ly on what we means with consumers and the theoretic, normative, and empirical foundation. Coming from the Scandinavian design school of Participatory Design, we argue for practice-theoretical informed design action research methodology that take household ecologies and related domestic practices as the primate unit of analysis and design. Still, we also argue for the benefits of methodological and theoretical pluralism. Moreover, even if it has a strong design impetus by definition, consumer informatics will be an inter-disciplinary endeavour by its very nature.

#### Summary: The digital revolution

Author: Dr Dominik Schäfers | University of Münster

In session 1.1. "The digital revolution", under the direction of Prof. Dr Franziska Boehm of the University of Münster, speakers and participants addressed the challenges that the digital revolution poses to consumer research and consumer policy.

Shane McNamee of the University of Bayreuth started with a presentation in which he discussed the concept of net neutrality and its protection in EU law and national jurisdictions. At the outset, McNamee defined the concept of net neutrality established by the American legal scholar Tim Wu. Generally speaking, net neutrality describes the notion that on the internet all kinds of data, originating from public as well as private agencies, as internet service providers, are to be treated equally, particularly without differentiating by user, content of the data, means of communication, or potential payment by users. Two specifications of net neutrality can be distinguished: positive and negative. Positive net neutrality is affected when internet service providers charge additional fees for improved service quality. If in contrast specific services are blocked or treated subordinately, negative net neutrality is concerned. Internet service providers and the industrial sector advocated for confining positive net neutrality, as to allow for technical advancements for user groups willing to pay for additional services. The phenomenon of negative net neutrality would require its practical exercise to be monitored; in this context, mobile internet providers are accused of blocking VoIP services.

After this basic introduction, McNamee retraced the discussion on net neutrality on the European level. In this respect, he expressly criticized the European Commission's approach, which since 2009 had not taken any substantial measures to secure net neutrality by regulatory intervention. The Commission's perception, that competition was the best guarantor for net neutrality, had proven to be unsustainable. Furthermore, the Commission's reluctance ran contrary to the European Parliament's efforts, which declared itself in favour of enhanced regulation to guarantee net neutrality, and was inconsistent with public opinion, at least in Member States where net neutrality has already been subject to broad public debate.

McNamee reminded the audience to not restrain the continuing debate to using buzzwords as 'the holy grail of the internal market' but to increasingly take account of the crucial importance that net neutrality holds for modern society. At the same time he noticed that net neutrality should not be enforced at any costs. He emphasized, that the 'unregulated, unmanaged, completely free internet' occasionally referred to, never existed in reality. In this context McNamee also recognized the need for 'traffic management' as well as potential benefits of 'specialist high speed internet services'.

The adjacent discussion revolved inter alia around the question to what extend EU competition law was already in a position to guarantee net neutrality. McNamee stressed that the established record tends to argue against the assumption that competition and competition law are adequate means to take account of the significance of net neutrality. The question was raised, whether an undifferentiated equal treatment of all data would not be arbitrary in itself, as data streams that are different in nature would be treated equally without objective reason. According to McNamee, this is not an objection in principle to the concept of net neutrality, but a matter of its specific implementation, particularly concerning positive net neutrality.

Subsequently, Prof. Dr Michael Schleusener and Dr Sarah Stevens of the University of Applied Sciences Niederrhein presented the results of a study that they had conducted in cooperation with their fellow professors Prof. Dr Monika Eigenstätter and Prof. Dr Silvia Zaharia. The purpose of the study was to identify measures to protect consumers from being manipulated by business companies using modern information technology. Based on data that consumers leave behind when using credit cards, social networks, or the internet in general, corporations were capable of drawing inferences about consumers' future conduct and of manipulating this conduct systematically. The specific danger inherent to this manipulation was that consumers often were unaware of the possibility of such manipulation and therefore might misinterpret their externally controlled actions as being autonomous decision-making.

Initially, the authors of the study placed specific emphasis on identifying the (technical) means that are available to business companies in manipulating consumer behaviour. Furthermore, they examined to which extend different consumer groups need different levels of protection, e.g. due to varying degrees of knowledge and proficiency. In this respect they delineated four consumer groups.

The authors distinguished five scenarios of varying degrees of threat to consumers. On the lowest level were 'personalized advertisements', followed by 'advertisements and linkage with social networks', and 'smartphone geo location and non-transparency'. On level 4 they placed 'reactive services', while on the highest level of danger were 'proactive services'. By means of an 'expert survey' they estimated how different consumer groups assessed the threat on the different levels respectively. Afterwards they compared the results with statements of the respective consumer groups. In doing so, it became apparent, that the threat the consumers perceive crucially depended on the extent to which they are prone to the illusion that they can control the data streams collected and processed. So consumers feel less threatened by scenarios 3 and 4 than the experts anticipated, due to their misconception that they are capable of controlling the 'amount of personal data used'.

In conclusion, Schleusener and Stevens pointed out that in light of the advancing technical development, chances to protect consumers from manipulation are constantly declining. Consumers would benefit from several apps and services they are using to a degree that they were willing to accept the disadvantages and risks that come with it. In the discussion, participants referred to the concept of consumer 'inertia' known in behavioural economics which implies that consumers prefer to make simple and convenient decisions rather than considering potential risks. This insight could indeed serve as an important impetus in the protection of consumers as protective mechanisms are likely to succeed if they are equally simple and do not demand a great amount of intellectual activity from the consumer. Nevertheless, the speakers pointed out that it is impossible to protect consumers from manipulation in each and every instance; especially since in some cases they were asking to be manipulated. In the course of the discussion it was stressed that legislative measures to protect consumers from this kind of manipulation would pose major challenges to the private law system. An intervention in an unconsciously 'manipulated' decision envisioned by the speaker seems incompatible with the concept of private autonomy prevalent in German private law.

In closing, Prof. Dr Gunnar Stevens of the University of Siegen introduced the audience to a field of research that bears potential in solving the problem of consumer manipulation, with a presentation on 'Consumer Informatics: Some considerations on (the) theoretical foundation and on outlining a research agenda' that he compiled in cooperation with Dr Alexander Boden of the Fraunhofer Institute for Applied Information Technology (FIT).

Stevens pointed out that consumer informatics still represent a largely unknown field of research that had been disregarded by the public, evidenced by a lack of search results for the term 'consumer informatics' on search engines. Neither consumer research nor 'computer science' had so far dealt with consumer informatics. In this respect there was a huge backlog demand, especially since the 'digital consumer' is of crucial importance to the economy, and business enterprises make considerable effort to understand consumer behaviour especially in connection to the internet.

Subsequently, Stevens addressed a more precise definition of the term. He clarified that it was not synonymous to 'business informatics'. Rather, it pertained to 'the systematic research and design of information systems that support consumption practices and household economies'. The primary objective of consumer informatics therefore was to optimize consumers' decision-making process notably by removing information asymmetries e.g. by means of consumer-information-apps. As an example he mentioned gas-price-apps, which allow for indicating in real-time which of the adjacent gas station is offering the lowest price. Stevens regarded this sort of consumer information services as a successful example of consumer informatics-oriented legislation. The German legislator had recently implemented government-certified consumer information services that obtain information on gas directly from the newly established Market Transparency Unit for Fuels (Markttransparenzstelle für Kraftstoffe). Stevens emphasized that such information-apps have great practical benefits. Initial operating experience showed that consumers were willing and intellectually capable of utilizing such means of information and employing them in a rational and effective manner. Admittedly, this depended considerably on the information services' configuration and mode of operation, which is why these two parameters demand special consideration.

#### Session 1.2: Political consumerism in the EU

Chair: Prof. Dr Sigrid Baringhorst | University of Siegen

#### Abstract 1: Success factors of grassroots movements for sustainability

Authors: Janina Grabs, Gesa Maschkowski, Niko Schäpke and Dr Nina Langen (Bonn, Germany) | University of Bonn

Grassroots organizations as a form of civil society movements may play a crucial role in societal sustainability transitions. Despite their similarities regarding the overall goal, they differ dramatically in their accomplishments in engendering change and often struggle to keep their organisations relevant and their members engaged. The purpose of this study is (i) to organise the interdisciplinary theoretical literature presenting motivations for grassroots involvement and explanatory factors for successful behaviour change; (ii) to explore why individuals (co)-found a grassroots initiative; and (iii) to identify the success factors as perceived by the actors, as well as the conditions needed to scale-up the movement. A cross-disciplinary comparison revealed that explanatory factors for grassroots involvement and sustainable behaviour change can be categorised into individual-level, interpersonal, group- and societallevel causes. Particular concepts within these levels – such as self-efficacy, perceived responsibility, or social learning - emerged repeatedly and under slightly different names in separate disciplines. Based on these findings, we carried out semi-structured interviews with the founders and/or leaders of three sustainable food initiatives and determined which success factors are most relevant to their specific context. Results indicate that the co-founders of the grassroots initiatives explain their courage and self-efficacy by referring to past positive mastery experiences as well as by setting very low, realistic expectations. The underlying motives for action include curiosity, anger, the enjoyment of community, and the wish to act according to one's own values. Success factors of particular relevance were the possibility of experiencing tangible results and positive group processes, as well as the expansion of social capital. According to these insights, the upscaling of grassroots initiatives necessitates the creation of opportunities for community-based experiences of empowerment that address broad segments of society.

#### **Abstract 2: How can we help you? Rethinking the contribution of Culture Studies to Consumer Research** Author: Dr Dirk Hohnsträter (Hildesheim, Germany) | University of Hildesheim

After a long period of critical opposition to consumerism, Culture Studies are now shifting towards a more balanced approach, acknowledging ambivalences and looking for more appropriate ways to analyse the highly complex consumer culture of our time. However, given the many divers positions within the field, the specific contribution of Culture Studies to consumer research has yet to be outlined. My paper elaborates the idea that a reformulated, well understood notion of difference can serve as a fruitful vantage point for Culture Studies scrutinising consumer culture. This expanded and deepened notion of difference has three dimensions: First, it enables historical comparisons (e.g., the department store of the 19th century vs the Apple Store), second, it analyses how meaning is constructed by means of comparison (i.e., by designing, exposing and using products in different ways), and third, it not only observes differences within consumer culture but also analyses how elements excluded by consumerism may re-entry into it. The third aspect is, of course, the crucial one and an attempt to scrutinise phenomena like the so-called "moralisation of markets" (Stehr) not only on a theoretical level but also by closer examination of products and other aesthetic artefacts. How do products actually integrate aspects formerly excluded from consumer culture? And how do the arts reflect the ever growing complexity of consumerism?

#### **Abstract 3: Towards democratic consumption and shared responsibilities in transnational value chains** Authors: Prof. Dr Jörn Lamla and Stefan Laser (Kassel, Germany) | University of Kassel

It is a commonplace both in academic as well as public discourses that today's worldwide consumption is excessive and, therefore, destructive. Consumption is expanding and transforming rapidly; but so is its political reflection. A new consumer democracy (Lamla 2013) is emerging. However, methodological and theoretical adjustments are required to unveil transnational dimensions of political consumerism. Our goal is to evaluate sustainability using a new toolbox which embraces an experimentalist approach. For the workshop, we will present new thoughts for Europe's role in a changing world. The example of hazardous electronic waste will be used to explain eminent challenges.

Our leading hypothesis is that transnational value chains are the units one has to analyse. They may be defined as collective practices of heterogeneous actor-networks which together stabilise the production and consumption of goods. These collective practices induce problems if they produce excessive outputs. No sole actor thus is responsible for a problematic situation but the whole program of a value chain is. However, these value chains may be programmed anew with regard to sustainable outcomes. Sustainability, then, is a specific task a public strives to achieve.

We will focus on the value chain of electronic waste to exemplify the insights of a transnational consumer democracy. The democratic experimentalism suggests interesting questions:

Who can develop power and influence in the arena of electronic waste? Who has a legitimate right to be included but is persistently ignored? Which changes influence existing value chains in a positive manner, thus making them more sustainable? And on the other hand: Which processes do quite the opposite, hence generating rebound-effects? Apart from the arena, we propose, one may also look for processes which want to leave the "old" trajectory completely behind. Hence, a stimulating question for consumer research appears: Are there laboratories in which new value chains are being designed? To be more precise: Are there certain laboratories European politicians should endorse?

#### Summary: Political consumerism in the EU

Author: Dr Mundo Yang | University of Siegen

Nina Langen presented results from a short term project on grassroots consumer projects. Together with her colleagues (Janina Grabs, Gesa Maschkowski and Niko Schäpke), she studied three cases in North-Rhine-Westphalia, a local project of Consumer Supported Agriculture (CSA), a Foodsharing-Inititiative, and a Carrotmob-Network. All three grassroots initiatives dealt with the issue of sustainable food. The young researchers conducted document analysis and expert interviews.

In terms of identity and motivational background, the study revealed a strong Leitmotif of aiming at societal change. The goal to achieve authentic sustainability motivates grassroots activists to go beyond mere window dressing efforts and to avoid rebound effects. Furthermore, activists follow the idea of being a change agent and try to help empowering local networks for sustainability. Frequently, activists emphasized the ideals of cutting back consumption levels, maintaining sufficiency, and stopping the commodification of all aspects of life.

The practice of these three projects for sustainable food consists of three main parts. First, activists emphasized the importance of individual action which is understood as civic engagement and a source

of personal happiness. Second, the development of a group dynamic which overcomes situations of helplessness and isolation is of high importance for the success of these sustainability projects. Successful collective action for sustainable food needs a strong orientation towards values such as mutual trust, recognition of social diversity, empathy and responsibility-taking for all beings. Also political support, strong social networks and the availability of resources are crucial preconditions. Third, and regarding the outcomes of these projects, activists referred to the further development of sustainable concepts, namely of Community Supported Agriculture, Foodsharing, or Carrotmobs. The realization of good ideas, hereby, is of central importance. Complex issues of sustainability need to be translated into simple and comprehensible practices in local contexts.

Questions and answers following this speech addressed the high importance of methodological questions. Particularly with regard to the preliminary character of the research funding for this study, the audience emphasized the importance of further research which also makes use of participant observation and more long-term qualitative research on projects for sustainable food.

In his speech, Dirk Hohnsträter presented thoughts for a reconceptualization of the relationship between culture and consumerism. Traditionally, this relationship was described negatively. Starting with the works of Marx, and later the cultural pessimism of the Frankfurt School, consumer culture in developed capitalist societies was seen as a threat to personal as well as collective autonomy. Nowadays, Culture Studies within the German speaking realm take a rather balanced stance. Hohnsträter, hereby, referred to the works on Wolfgang Ulrich, Nico Stehr, and Jörn Lamla. In his specific account, he took a deeper view on the entrance of sustainable values – in general counter-values – into consumer culture. Values of sustainability, according to Hohnsträter, predominantly path their way into consumer culture through innovative designs and aesthetics. While earlier works lamented the infiltration of market values into everyday life, he reconstructed the opposite direction in three parts: First, historical examples like the WELEDA brand show how decades ago, yet alternative consumer culture established on markets in form of well known sustainable market products. Second, different aesthetic strategies developed on the level of marketing and commercials. For example, the value of transparent production chains is issued in terms of a market-compliant "100 per cent" promise in commercials for sustainable products. Third, sustainable corporations try to anchor their products into the material culture of consumers. The branch of outdoor clothes in this regards shows the complex mutual infiltrations of practices close to nature such as hiking and camping, values of sustainability, and profit-oriented marketing strategies.

In the subsequent questions and answers, particularly the attempt to combine complex theoretical concepts with historical as well as current empirical cases was lauded. Other commentators aligned the presentation into the growing numbers of studies on questions of "corporeality" and aesthetics of sustainable consumption.

The presentation of Jörn Lamla and Stefan Laser approached the possibilities for empirical research applying the theoretical account of Consumer Democracy (Verbraucherdemokratie). In the first part of the presentation, Jörn Lamla reconstructed his account of a pragmatist theory of democracy which according to him is best suited to analyse the field of consumer politics in the sense of a Consumer Democracy. Lamlas main sources hereby were the works of John Dewey and Bruno Latour. In a pragmatist fashion, both understand democracy as a project of collective problem solution which is neither fixed to specific institutional settings nor bound to national borders. The question of democratic action arises in this account whenever problems – may there be of human or material (environmental, technical) nature – arise which can't be denied to be of public concern. Evolving public problems, such as the environmental and social consequences of global consumer culture urge for an issue-specific assemblage, meaning the

establishment of networks of cooperation aiming at solving global problems such as climate change.

In order to demonstrate the empirical relevance of the Consumer Democracy approach, Stefan Laser, in the second part of the presentation, discussed first conceptualizations for the area of electronic waste management in India. Particularly the analysis of value chains attached to the transportation of electronic waste from developed countries to India promise to reveal yet invisible structures of a transnational Consumer Democracy. Laser suggests changing the analytic focus from existing political entities such as nations and their mutual relations to Actor-Networks (Latour) which evolve from the problem-oriented actions of NGOs, media, unions, scientists, and governmental bodies on the question of e-waste. This way, empirical research can address the important role of the refurbishment business in India. Particularly Indian small business companies have specialized on the recycling of electronic products, and this way, these actors may contribute to the global problem of electronic waste management in innovative ways. Both presentations inspired many questions and comments. The use of Bruno Latours methodology was seen as adequate and up to date. Also, commentators supported the application of democratic theory on the field of sustainable consumption.

#### Session 1.3: Vulnerable consumers

Chair: Prof. Dr Hanna Schramm-Klein | University of Siegen

#### Abstract 1: Consumer vulnerability among elderly people

Author: Dr Lisbet Berg (Oslo, Norway) | National Institute for Consumer Research

This paper investigates some factors that are assumed to stimulate to unfortunate consumer practices. More precisely, whether or not, reduced capabilities make elderly people particularly vulnerable in selected market situations.

Building on Amartya Sen's capability approach, the level of individual resources is operationalised by each individual's set of capabilities. According to Sen, capability is a kind of power that gives freedom (Sen 2009, 271). A persons' capability is his or her overall resources – such as knowledge, available time, physical abilities, social network, financial situation, etc. – i.e. everything that determines a persons' advantages and opportunities. In our understanding, gender and age in itself cannot be considered as capabilities. What is interesting, though, is whether or not capabilities are unevenly distributed according to e.g. age, gender or class. Initially, this paper intends to map probable individual vulnerability drivers, distinguishing between 16 different capabilities – or rather the lack of such. Are capabilities evenly distributed in the population, or are some groups, like the elderly, expected to be more vulnerable than others according to their lack of capabilities? What distinguishes the elderly's capability pattern?

Three markets with different characteristics and different requirements to consumer competences are given a closer look; that is the food market, the financial market and the consumer electronics market. Do the elderly consumers master these markets differently than younger generations?

Eventually, we investigate whether or not reduced capabilities among elderly people actually do make them more vulnerable in specific market situations. In the analysis we also separate between unfortunate consumer practices seen from (i) the consumers, (ii) the functioning of the markets, and (iii) seen from the global climate and environment situation.

Methodologically, we build on 2.103 telephone interviews among Norwegian consumers that are between 18 and 100 years old. The data were collected during spring 2014 by Response analyse and the elderly was oversampled.

## Abstract 2: The effects of consumer socialisation on impulsive buying behaviour among adolescents: Data from South Korea

Authors: Jung Eun Kim and Prof. Dr Jinhee Kim (College Park, USA) | University of Maryland and Ji-Ha Kim (Seoul, South Korea) | Korean Educational Development Institute (KEDI)

The purpose of the study was to examine the effects of financial socialisation, as well as personal traits related to the impulsive buying behavior of adolescents. The current study used the 3rd wave data from the KEEP (Korean Education and Employment Panel) survey, which began in 2004. Respondents were high school juniors, with the final sample including 1,739 individuals (male n=867 and female n=872) after screening. Three major agents of socialisation, namely parents (parents' financial practices such as saving/preparing ahead for children's college expenses and giving their children pocket money), peers (whether the major activities and most common topics of conversation with friends were related to shopping/making a purchase), and school (the level of helpfulness of economic/finance related education

in school) were included in the model, as well as personal traits/characteristics (future orientation, job experience, stress level and self-efficacy) based on previous research.

Regression analyses was conducted using STATA 12.0 statistical program software. Prior to the main analysis, pretests to verify whether the data met the regression assumptions were undertaken. In addition, multicollinearity and influential observations/outliers were checked. Results revealed that almost half of respondents exhibited the tendency of impulsive purchasing behavior, with girls showing a higher tendency compared to boys. Among the major agents for consumer socialisation, school and parents/ family effects were found not to be significant, while peers showed a significant and relatively greater influence. As for personal traits, the experience of working for money, self-efficacy, severity of stress/ concern, and the interaction term between self-efficacy and stress level were significant. In addition, gender differences were found and additional analysis by gender was performed. Implications for policy makers/practitioners were identified.

#### Abstract 3: The role of empowerment in enhancing financial capability among the young

Authors: Laura Luukkanen and Prof. Dr Outi Uusitalo (Jyvaskyla, Finland) | Jyvaskyla University School of Business and Economics

The importance of advancing financial capability is widely recognised. Financial literacy and capability have been studied especially among potentially vulnerable consumer groups, including young people. However, the learning outcomes from initiatives and educational programmes directed at the young are mixed. Moreover, previous studies have established that the mere provision of information is not necessarily the most effective way to help consumers to become financially capable. Thus, further research is needed in order to establish the best practices in enhancing the ability of the young to master their daily financial activities. This study examines the prospect of empowerment by exploring the dimensions of financial empowerment as a "bottom-up" approach to financial capability. These dimensions entail the presence of financial choices, the ability to participate in financial life, the provision of adequate financial information, the inculcation of financial attitudes, the possession of relevant financial skills, and the development of financial knowledge. In addition, the study addresses the potential for synergy between consumer protection and financial empowerment. Within the dimensions of empowerment, the paper highlights two routes towards empowerment, one via context change and the other via cognition change. Based on the empowerment routes, the paper suggests strategies implying bottom-up thinking, which facilitates empowerment of the young to become financially capable actors in society. The study employs data from focus group discussions with young people aged 15-26, interviews with the public, private and non-profit sector actors participating in the promotion of young people's financial capability and secondary material to analyse the financial empowerment of young people in the Finnish context.

#### Summary: Vulnerable consumers

Author: Robér Rollin | University of Siegen

The term "vulnerable" consumers refers to consumers that have difficulties to deal appropriate with the challenges of the market or the economy. This difficulties could arise from excessive indebtedness, medical conditions, or lack of literacy, communication, or social support. Such consumers are particular endangered to be excluded from the cultural as well as economic life of the community, and could have problems to choose or access essential products and services which are suitable for their needs.

Research in this field often address factors which can increase the risk of consumers being vulnerable and make suggestions how to support "vulnerable" consumers in this regard. These factors include consumers' individual circumstances and needs (i.e., age, access to education and welfare, medical condition), consumer policies, and actions of other market players. In this context, the presentations in this session discussed consumer vulnerability among different consumer groups (elderly people, children, adolescents) as well as in different consumption domains (financial decisions, impulse buying behaviour).

In the first presentation, Lisbet Berg focused on elderly consumers. In particular, her study investigated individual capabilities and market situations as possible vulnerability drivers for this consumer group. Lisbet Berg assumed that old consumers lack more capabilities than others and that this lack of capabilities increases consumer vulnerability. Hence, elderly consumers should experience consumer vulnerability more often than other consumer groups and should stimulate more often to environmental vulnerability. She tested her assumptions in a pilot study with 18 qualitative informant interviews and a large scale computer assisted telephone survey with 2,100 participants between 18 and 100 years. The study focused on three markets that she assumed are mastered differently by different age-groups; that is the food market, the financial market and the consumer electronics market. The study based on a combination of sociological- and behavioural economics-approaches. The results supported her assumptions that old consumers lack more capabilities than others and that this lack leads to consumer vulnerability. This, however, had no impact on the experience of consumer vulnerability nor the stimulation of environmental vulnerability. Furthermore, the lack of capabilities had no effect on thoughtless and environmentally hostile practices. Based on these results, Lisbet Berg argued that old, single people from the Working Class, as well as single parent families, lack more capabilities than others. However, the lack of capabilities can act as vulnerability drivers as well as vulnerability preventers. Hence, the number of capabilities has no strong effect on vulnerability. As main vulnerability drivers for elderly consumers, the study identified lack of time, lack of economical awareness, poor calculation skills as well as bad household financials. Lisbet Berg concluded that especially young consumers are vulnerable as consumers and young men as well as families with small children contribute to environmental vulnerability.

While Lisbet Berg found young consumers especially vulnerable in the consumption context, the second presentation focused on this consumer group. Jung Eun Kim analysed in their study the effects of consumer socialization on the impulsive buying behaviour among adolescents. The authors argued that impulsive buying can have significant impacts on adolescent's financial situation and can result in consumer bankruptcies and major life crisis of adolescents. This should be of particular interest for consumer policy since marketing strategies target especially adolescents as consumers. Jung Eun Kim argued that consumer socialization and self-efficacy could have an impact on impulsive buying behaviour of adolescents. Hence, both factors could be potential starting points for supporting adolescents in their buying behaviour. To find support for their assumptions, the authors presented results of a longitudinal survey with 1,739 Korean adolescents as participants. While almost half of the respondents exhibited

the tendency of impulsive buying behaviour, the results show that girls have a higher tendency of impulsive buying behaviour than boys. Especially, the effects of consumer socialization were partially supported: In particular the effects of peers have been confirmed. Where as other socialization agents were insignificant, consumer socialization thorough school and family- based education was inevitable considering the significant effect of peers. From this, the authors concluded that teachers and parents need to pay attention to their students and children in order to prevent adolescents from negative consequences of impulse buying behaviour.

In the final presentation if this session, Laura Luukkanen focused on the role of empowerment in enhancing financial capability among younger consumer groups. Given complex financial products and changes in the marketplace, the abstract nature of money as well as young people as a potentially vulnerable group, the authors argued that financial capability is a key life skill. Hence, the aim of Luukkanen is to propose guidelines for empowering young people in financial issues management. As a step to attain that goal, the authors presented the results of a study that focused on the role and possibilities of empowerment in enhancing consumers' financial capability. For this they conducted discussions with young people aged 15-26 years, interviewed representatives from educational, public, private and non-profit sectors as financial actors as well as analysed educational material on financial capability promotion. Laura Luukkanen concluded from the results of this study that actors involved in the promotion of financial capability should focus on influencing the context. This could be done by creating an environment where it is possible for the young to become financially capable. In addition, young people can be supported by altering the cognitions by encouraging young people to use their own ability to become financially responsible citizens.

Afterwards the following issues were highlighted in the discussion:

Regarding to the presentation "Are elderly people vulnerable as consumers?" several questions are addressed to the author Lisbet Berg, like the followings.

In the current study vulnerability was measured by the question: Can you buy everything you need? Are their any other marketing scales for vulnerability, which are maybe more appropriate for this research topic?Can it be assumed that the findings are only specific for the Norwegian inhabitants? What could be the main cultural and political differences compared to other countries like Spain or Italy. How can this study and concept be applied to other countries respectively cultural areas? Are there any differences between elderly people who live in a city or in a village?

Thereupon Lisbet Berg emphasized that the vulnerability drivers are based on qualitative informal interviews and only assignable to Norway as well as the findings, given that the Norwegian inhabitants never suffered by the current European financial crisis. This is a special situation for Norway in contrast to other countries. Furthermore, the study does not discriminate between different places of residence.

With regard to the presentation "The Effects of Consumer Socialization on Impulsive Buying Behaviour of Adolescents" the following comments are addressed to the author Jung Eun Kim:

The audience discussed very energetic whether or not impulsive buying behaviour is always a bad habit. The study emphasizes the assumption that it is important to understand why adolescents buy goods impulsively. The findings should help to prevent this impulsive behaviour. During the discussion many audience members confirmed that this is not always necessary. Impulsive buying is only a problem if adolescents can't self-regulating their purchase behaviour. Else wise this behaviour conduce the typical needs. Furthermore, many questions are addressed to the empirical method itself. As shown the adjusted R-squared is comparatively very low. This fact indicates that there are more variables, which could explain the depended variable. Further research should be conducted in order to address this limitation.

The following arguments are expressed after the presentation of Laura Luukkanen:

The discussion was mostly dedicated on the options to test the framework in practice. Furthermore, the possibilities for teachers and family members to support the financial empowerment were the focus of talks. The discussion ends with consideration about a quantitative empirical model to test the hypothesis with a large number of participants.

#### Session 1.4: Sustainable consumption

Chair: Prof. Dr Christa Liedtke | Wuppertal Institute for Climate, Environment and Energy and Folkwang University of the Arts, Essen and

Dr Carolin Baedeker | Wuppertal Institute for Climate, Environment and Energy

## Abstract 1: Mindfulness of the stone-age mind? Contrasting evolutionary cognitive biases and mindfulness in the context of sustainable consumption

Author: Prof. Dr Sabrina V. Helm (Tucson, USA) | University of Arizona

In the context of fostering pro-environmental behaviours, some emphasise that harnessing unconscious "Stone-Age" psychological biases is most effective and scalable. Examples of such biases include people's tendency to (i) prioritise self-interest over collective interests, (ii) be shortsighted and valuing the present more than the future, (iii) seek relative status, (vi) copy what others around them are doing, and (v) care about sensory information and ignore threats and dangers they cannot see, smell or touch. Many interventions designed to promote sustainable behaviours have not been successful because they tended to ignore important facets of human evolved psychology that helped us solve recurring challenges in our ancestral past. However, this perspective conflicts with a notion of mindful consumption which is premised on consciousness in thought and behaviour about consequences of consumption, and posits that mindful individuals' behaviours are carefully reflected and result from a deliberate and conscious choice. In order to tackle the problem of overconsumption, the consumer's mindset pertaining to his or her attitudes, values and expectations surrounding consumption behaviour needs to evolve. Mindfulness, in general, can be understood as the state of being attentive to and aware of what is taking place in the present and is associated with positive effects on learning, mental and physical health, wellbeing, and behavioural regulation. The goal of the current research is to develop a model integrating evolutionary-psychological perspectives of natural/biological decision-making biases and approaches for increasing mindfulness based on the proposition that both perspectives have common grounds and may complement each other. Cultivating mindfulness in a consumption context may provide a mechanism to tackle overconsumption and its detrimental effects on consumers (e.g., depression due to overspending or materialism), and the environment (e.g., resource waste, pollution). Additionally, from a public-policy perspective, it is important to recognise the active role of consumer-citizens in determining whether interventions based on increased mindfulness or based on unconscious biases are more likely to succeed.

## Abstract 2: Role of money, materialism and perceived ethical and social responsibility in promoting sustainable consumption

Authors: Prof. Duraipandian Israel (Jamshedpur, India) | XLRI School of Management and Sharad Agarwal (Jamshedpur, India) | Indian Institute of Management Ranchi

The marketing practices of the corporations have led to the emergence of consumption across the globe. The companies however claim to be socially responsible citizen and promote sustainability through their numerous initiatives. To be able to adapt sustainable and suitable product development and relevant communication strategies to the needs of society, it is necessary to know more about the basic consumption orientations, current consumption habits, their antecedents and future consumption aspirations. In order to contribute towards filling that knowledge gap, we explore the relationship of materialism, perceived ethical and social orientation (PRESOR) and importance of money with the sustainable consumption orientation of young consumers in the emerging economy, India.

Scholars in the past have found strong positive correlations between materialism and consumption habits of the consumers. While many marketing efforts encourage materialism, Muncy & Eastman (1998), notes that the encouraged materialism may have negative societal effects. Companies across the globe proactively indulge and advertise their socially and environmentally responsible behaviour towards the society. The consumers now care for the environmental and societal impact of the products they use and the processes used to produce those products. Companies have now started promoting their products as 'green' or 'environment friendly' as they put 'recyclable' or other environment friendly symbols on their products.

In our research, we explore the role of materialism, money and perceived ethical and social responsibility (PRESOR) of the young affluent Indian consumers on their attitude towards sustainable consumption behaviour. For each of the constructs studied in our study, we use the established scales from the literature and on the data acquired through survey of 238 respondents, we use exploratory and confirmatory factor analysis (structural equation modelling) to explore the hypothesis proposed in our study.

#### Abstract 3: Equality and sustainable consumption in capability perspective

Authors: Dr Ortrud Leßmann (Hamburg, Germany) | Helmut Schmidt University, University of the Federal Armed Forces and Torsten Masson (Leipzig, Germany) | Helmholtz Centre for Environmental Research

Viewing sustainable consumption from a capability perspective shifts the emphasis of research to the question how and how far individuals can contribute to sustainable development by making choices about their life today. Thus, the focus is on individuals and the concept of sustainable consumption goes beyond market activities to include any behaviour aiming at fostering sustainability. For operationalizing the concept we suggest combining the capability approach (CA) with the theory of planned behaviour (TPB) which is well established for investigating sustainable consumption. The approaches bear some similarities, but differ in that the CA attaches more importance to autonomy and the way they model social influence (TPB proposes direct influence while CA highlights the indirect influence). We develop this proposal in several steps: First we briefly introduce the CA and the TPB, and then merge both approaches in an empirical model. Testing the model based on cross-sectional data of the German Socio-Economic Panel (GSOEP-IS) confirms the model and points to further research demand with respect to the indirect effects of norms, the motivational role of autonomy and the policy implications of the findings. Based on this model of sustainable consumption the paper analyses how (in-)equality and sustainable consumption are linked. We analyse first the influence of inequality on individual variables, then on the model as a whole to identify patterns of personal characteristics, predictor values and actual behaviour and finally we take the growing uncertainty ("precariousness") in society into account. Last not least, we view the capability of sustainable consumption can be seen as an area of (in-)equality itself. Thus, the aim of the paper is also to inform public policy about the in- or exclusion of groups in contributing to sustainable development.

#### Summary: Sustainable consumption

Author: Alexandra Seibt | Wuppertal Institute for Climate, Environment and Energy

#### Introduction

The European Union acknowledges that sustainability is an issue that affects us all and seeks to integrate environmental sustainability with economic well-being and social identity. A shift towards sustainable consumption and production (SCP) patterns is one of the key objectives of the EU that aims to decouple environmental degradation from economic growth and to move towards a low resources economy. Sustainability can only be successful if it is understood as a crosscutting issue and therefore consequently reflected at all levels of economic and social activity, which means also in all political resorts – bottom up and top down as well as in between and between different competencies. However, European activities in the area of consumer policy, in particular the activities of the Department Health and Consumers (SANCO), illustrate that there is a lack of a coherent and shared vision as well as a systematic approach regarding the development and promotion of sustainable consumption patterns. Although SANCO points out in its Consumer Programme 2014 - 2020 that rising consumption has led to an increased pressure on the environment and natural resources, the programme does not present possible solutions for consumers. For the majority of the population it is almost impossible to achieve a more sustainable lifestyle, because sustainable solutions are often limited and in many cases the framework structure, the infrastructures, the loss of quality, surcharges and additional procurement costs make sustainable lifestyle and consumption choices unattractive, time-consuming and complex. A challenging task for the EU consumer policy is to foster sustainable behaviours, to stimulate sociotechnical innovations and to make sustainable actions easier and more accepted and desirable by society's mainstream.

#### Presentations

All of the speeches made clear that many interventions designed to promote sustainable behaviours have not been successful in the past. Therefore the speakers presented new approaches that aim to foster sustainable behaviour. Although the presentations viewed the topic "sustainable consumption" from very different perspectives, they have the common aim to gain a deeper understanding of human behaviour and change processes in order to develop interventions that are more suitable to foster sustainable behaviour.

Mrs Helm from the University of Arizona pointed out that important facets of human psychology have not been taken into account to promote sustainable behaviours.

In the context of fostering pro-environmental behaviours, some emphasize that harnessing unconscious "Stone-Age" psychological biases is most effective and scalable. Examples of such biases include people's tendency to (1) prioritize self-interest over collective interests, (2) be shortsighted and valuing the present more than the future, (3) seek relative status, (4) copy what others around them are doing, and (5) care about sensory information and ignore threats and dangers they cannot see, smell or touch. However, these biases can conflict with a notion of mindful consumption which is premised on consciousness in thought and behaviour about consequences of consumption, and posits that mindful individuals' behaviours are carefully reflected and result from a deliberate and conscious choice. The goal of the current research is to develop a model integrating evolutionary-psychological perspectives of natural / biological decision-making biases and approaches for increasing mindfulness based on the proposition that both perspectives have common grounds and may complement each other. Cultivating mindfulness

in a consumption context may provide a mechanism to tackle overconsumption and its detrimental effects on consumers (e.g., depression due to overspending or materialism), and the environment (e.g., resource waste, pollution).

Professor Israel, from the Xavier School of Management in Jamshedpur, picked up the challenge of materialism. His research group investigates the relationship of materialism, perceived ethical and social orientation (PRESOR) and importance of money with the sustainable consumption orientation of young consumers in the emerging economy, India. Nowadays, consumers care increasingly for the environmental and societal impact of the products they use and the underlying production processes. Companies across the globe have recognized this and therefore they proactively indulge and advertise their socially and environmentally responsible behaviour towards the society, for example by promoting their products as 'green' or 'environment friendly'. His research group aims to investigate basic consumption orientations and habits of young affluent Indian consumers and their attitude towards sustainable consumption behaviour.

Dr Leßmann shifted the emphasis of research to the question how and how far individuals can contribute to sustainable development by making choices about their life today. She spoke about sustainable consumption from a capability perspective that focuses on the question what humans needs for a good and fulfilling life and what skills are necessary for a successful life. For operationalizing the concept Leßmann and her colleague Schmidt suggest combining the capability approach (CA) with the theory of planned behaviour (TPB) which is well established for investigating sustainable consumption. The approaches bear some similarities, but differ in that the CA attaches more importance to autonomy and the way they model social influence (TPB proposes direct influence while CA highlights the indirect influence). Based on this model of sustainable consumption the paper analyses how (in-)equality and sustainable consumption are linked. Furthermore, the paper aims to inform public policy about the in- or exclusion of groups in contributing to sustainable development.

#### **Conclusions and Recommendations**

A shift focus is needed from raising awareness and educating consumers to enabling consumers to participate and co-create options for behavioural change. More active participation of consumers is necessary to develop strategies that will be accepted and, in particular, realizable by citizens. To be able to adapt sustainable and suitable product development and relevant communication strategies to the needs of society, it is necessary to know more about the basic consumption orientations, current consumption habits, their antecedents and future consumption aspirations.

From this it follows that a greater emphasis should be placed on households, real-life experiments ("Living Labs") as well as on the analysis of consumptions patterns and lifestyles. Furthermore, explorative research approaches like open observation or participative co-creation are rarely used. To achieve viable outcomes better networking between the laboratories, the innovations, technical solutions and sustainability arena is needed.

In the discussion the general question arose to what extend politics can enable sustainable social practices or are allowed to influence consumer behaviour towards a specific direction. When is consumer behaviour considered as private and as an expression of freedom and individuality and when is regulation by the legislature appropriate? It is a challenging task for the EU Consumer Policy to create a sense of responsibility on consumer side for a more sustainable lifestyle without patronising consumers. Based on the discussion, the keystones of developing a research infrastructure for user integrated development of

sustainable products and services, improving access to such a research and innovation system, enhancing and speeding up research and development of resource efficient, competitive and socially acceptable products and services, and improving networking amongst European researchers were formulated.

#### Challenges and Recommendations for European Policy on Sustainable Consumption in short:

- Sustainable consumption has become a buzzword of today's society, but a clear and consistent under standing of the term is missing. At the EU level for example, new concepts like collaborative consumption (from the other perspective sharing economy) should be clarified and more profound discussion about production and consumption patterns is needed.

- The micro level research should be deepened and more data about sustainable behaviour and the perception of the sustainability discourse should be collected – for example by conducting more household questionnaires combined with ethnografic studies which deepen the understanding of individual and social collective practices. Also the diverse lifestyles and situations of different social groups should be taken into account, which would enable the EU and its member states, to develop customized approaches concerning the promotion of sustainable behaviour. Cultural diversity builds the fundament of caring natural diversity, so an argumented hypothesis.

- Sustainability can only be successful as a crosscutting issue. Therefore a network should be established that links the DGs with each other and fosters a closer cooperation of the DGs concerning sustainability. Such structures have to be mirrowed on all level of societal activity – countries and local communities as well as in science and greening our economies.

- Evidence based decision making should play a more important role in European politics, in particular in the fields of sustainable consumption and behaviour change. Furthermore, a closer cooperation between policy-makers, researchers and consumer should be initiated to develop practical and realistic proposals and strategies to foster sustainable behaviour.

– Last but not least there will never exist sustainable consumption without materializing of low resource ideas in sustainable product-service systems via sociotechnical innovations. Only the integrative view and development of low resource production and consumption patterns / systems will be able to generate and design future oriented sustainable lifestyles and infrastructures. The consumption research and policy has to integrate the production perspective which both belongs to the same interlinked system. Workshop 1: What's on the European Consumer agenda? (Part II)

September 30, 2014 09:00-11:00

#### Session 1.5: Challenges regarding product, service and food safety

Chair: Prof. Dr Monika Hartmann | University of Bonn

## Abstract 1: Pre-sliced or do it yourself? Determinants of children's acceptance of convenience fruits and vegetables

Authors: Jan-Paul von Germeten and Dr Stefan Hirsch (Bonn, Germany) | University of Bonn

Previous research shows that the method of preparation can influence children's fruit and vegetable (F&V) acceptance significantly. The purpose of this study is to analyse the drivers of children's acceptance of industrial pre-sliced and single packed F&V within the framework of the EU School Fruit Scheme (SFS). Furthermore, it was analysed how the acceptance of pre-sliced F&V influences the choice for pre-sliced vs non pre-sliced F&V. 60 schoolchildren receiving normal F&V in the framework of the SFS were surveyed regarding the preparation and characteristics of F&V. After an intervention period of six weeks with pre-sliced F&V the survey was conducted again with complementing questions concerning pre-sliced F&V and its packaging. The survey results indicate that the acceptance of F&V significantly decreased in the intervention classes while acceptance in a control group (n=58) only decreased marginally. In total four models have been estimated to determine the drivers of acceptance of pre-sliced F&V. The results show that F&V characteristics regarding to sensory and packaging aspects as well as cultural and social aspects have a significant influence on acceptance. Furthermore, the analysis shows that the presliced F&V acceptance has a significant influence on the choice for pre-sliced F&V. In contrast, a positive attitude towards F&V preparation influences the choice for these products negatively. In accordance with the results a general distribution of pre-sliced F&V cannot be recommended in the framework of F&V intervention programs. However, if a distribution of pre-sliced F&V is considered in the framework of a school F&V intervention program, it should be taken into account that children react sensible to quality changes and packaging characteristics.

## Abstract 2: Negotiating consumer responsibility for political issues: Contested food consumption and everyday agency in a Danish context

Author: Prof. Bente Halkier (Roskilde, Denmark) | Roskilde University

Food consumers are not only mobilising in relation to consumer issues, they are also attempted mobilised by other societal actors in relation to a variety of societal issues and political challenges. Thus, food consumers are attempted involved as potential citizen-consumers (Jacobsen & Dulsrud 2006). In Denmark, strategic communication aimed at consumers play an important part of the governance of food issues. Behaviour change campaigns seem to have framed ordinary food consumers as individually responsible for helping to solve problems with risk, quality, health and environment by way of changing their food routines in their everyday lives. The question is however, how consumers concretely handle such ascriptions of responsibility in their everyday lives. The research literature of the field sees citizens and consumers to be very different phenomena regarding their social constitution (Holzer 2006; Soper & Trentmann 2008). In this paper, I present three distinct ways of negotiating responsibility for political food

issues among consumers in everyday life: Empowerment, governmentality and do-ability. Empirically, the typology builds on a comparison of patterns in four different qualitative studies of Danish consumers' handling of political food issues in everyday life (Halkier 2010). Theoretically, the paper is based on a practice theoretical approach to consumption, media-use and everyday agency (Warde 2005).

Reference online available: www.vz-nrw.de/iccr-schedule

#### Abstract 3: Counterfeiting as a social issue: Should anti-counterfeiting discourses state it explicitly?

Author: Dr Anne-Flore Maman Larraufie (Paris, France) | SémioConsult and École Supérieure des Sciences Économiques et Commerciales (ESSEC Business School)

Counterfeiting has been described by officials as the new plague of our century, with negative consequences on social welfare, states' economies and brands' equities. Official entities and big companies regularly try to convince consumers not to engage knowingly in this illegal trade. We aim at understanding how they could communicate more efficiently, using the social argument.

The analysis of official communication on counterfeiting reveals first that social consequences of the illegal trade are systematically mentioned and advanced as strong arguments supporting anticounterfeiting measures. The official action can be broken down in the 6 traditional facets of the Actantial Model (Greimas), and change depending on the set objective. The dominant one (with objective to educate on the socially-negative consequences of counterfeiting (object); official entity behind the campaign (sender); social welfare (receiver); the campaign (helper) and simple ignorance (opponent). Other objects identified are: Changing consumers' attitude towards counterfeiting; retaining people from buying fakes; denunciating accomplices to the illegal trade and convincing people that real products are those manufactured in a socially responsible.

The semiotic analysis of anti-counterfeiting ads leads to 2 semiotic squares. One is built based on the tone conveyed by the ads: Accusing vs explaining & making fun vs describing. Each tone implies specific consumers' feelings/thoughts and actions: Active vs passive reaction & showing interest vs dilettante attitude.

Thus, while objects are similar in both discourses, the themes are not at all the same, with some from official discourses not at all used when communicating with the general public. Tones used are quite consistent however. Re-aligning both would help public entities (Unifab, CNAC...) being more efficient in their communication strategy.

#### *Summary: Challenges regarding product, service and food safety*

Author: Dr Johannes Simons | University of Bonn

The three presentations of the session contributed to the general question of influencing consumers' behaviour. One of the contributions addressed the issue of enhancing a healthier diet by increasing the convenience level of offered fruit and vegetables the other two contributions dealt with communication and its impact on consumer behaviour.

The first presentation summarised the results of a study that analysed the drivers of children's' acceptance of industrial pre-sliced and single packed fruit and vegetables within the framework of the EU School Fruit Scheme. Furthermore, it was analysed how the acceptance of pre-sliced fruits and vegetables influences the choice for pre-sliced versus non pre-sliced products.

The results were based on a field experiment in a pre-post, intervention-control design. Data were collected in a baseline and a follow-up questionnaire. To analyse the influence of higher level of convenience three models were estimated with preference for convenience fruit and vegetable, the difference between the preference for convenience and normal fruits and vegetable and the choice for or against convenience fruit and vegetables as dependent variables.

Study results show a positive rating of fruits and vegetables in general. Factors influencing the preference for pre-sliced fruit and vegetable can be arranged into two groups: (1) quality of the products and (2) saving of time and effort due to the higher convenience level. Regarding quality the models confirmed that children react sensibly to sensory characteristic that were perceived worse with pre-sliced fruits and vegetable.

With respect to convenience level children's preference for pre-sliced fruit and vegetables is also influenced by saving time for preparation, as indicated by the convenience theory. Moreover perceived insufficient skills for preparing fruits and vegetables influences the preference for pre-sliced fruit and vegetables positively. In contrast, waste caused the higher level of convenience negatively influences the preference for pre-sliced offerings.

The discussion focused on the general problems of dietary patterns, children's acquisition of skills for preparing fruits and vegetables and the importance of health education. More specific with the question has been raised whether money should be invested in more expensive pre-sliced products which may reduce efforts or it may make more sense to use the funds to support schools with limited capacities by involving children in the process or fruits and vegetable preparation. The study was conducted in the frame of the EU School Fruit Scheme within one school. Thus, it was discussed to which extend the results can be generalised and that, therefore, additional research would be beneficial to get a deeper insight into the relevance of the convenience level for the consumption of fruits and vegetables.

The second presentation by Bente Halkier addressed reactions of consumers on campaigns that intend to make them change their behaviour. It analyses the way consumers react if they are regarded as individually responsible for helping to solve problems with risk, quality, health and environment by way of changing their food routines in their everyday lives.

The presentation summarised results from three different studies conducted in Denmark addressing the way that (1) parents of pre-school children handle risk issues, (2) female readers of lifestyle magazines deal with quality issues and (3) Pakistani Danes treat health issues. The empirical results build on focus groups, individual and family interviews text-analysis, auto-photography and participant observation.

The evaluation of the studies led to three different types of reactions if consumers are urged to change their behaviour in order to contribute to solving risk, quality, health and environment problems.

- Empowerment: Taking food political issues as an occasion to expand already existing "kitchen-table agendas".

- Governmentality: Resistance to react on the underlying food-political issues and the implied self-disciplining.

- Do-ability: Looking at the practical and social feasibility of implementing requirements into their everyday life.

Regarding the efficiency of behaviour change campaigns focusing on individual responsibility the results give evidence for the challenges involved in these types of campaigns as a policy instrument. Challenges consist in everyday agency being different from expectations among policy makers: More mixed, more about little changes interwoven into reproduction of routines, and everyday citizen-consumers as not necessarily paying straight attention to public debates and issues in media, but rather being more loosely connected with public debates and issues.

The discussion touched upon several issues. First, whether these types based on qualitative data, and thus being an analytical generalization, might be found as quantitative tendencies as well. Second, to which degree these types of reactions resembled some other theoretical types of everyday agency. Third, to which degree such a tendency to individualisation of responsibility for collective societal problems could be found in other national settings, and whether such a tendency to individualisation of political responsibility could be related to specific institutional configurations in such settings.

The third presentation by Anne-Flore Maman Larraufie dealt with communication in the frame of anticounterfeiting campaigns. It underlying study aimed at understanding how to communicate more effectively.

Two studies were carried out, the first to understand how official entities address the general public on counterfeiting and the second to understand how they translate their concerns into communication campaigns. To systematically analyse campaigns against counterfeiting the Actantial Model and critical visual analysis as well as Structural Semiotics were applied.

The analysis of official communication on counterfeiting reveals first that social consequences of the illegal trade are systematically mentioned and advanced as strong arguments supporting anticounterfeiting measures. Additionally other objects were identified like changing consumers' attitude towards counterfeiting, retaining people from buying fakes or denunciating accomplices to the illegal trade and convincing people that real products are those manufactured in a socially responsible.

The semiotic analysis of anti-counterfeiting ads leads to a semiotic square based on the tone conveyed by the ads: Accusing versus explaining and making fun versus describing. Each tone implies specific consumers' feelings as well as thoughts and actions: Active versus passive reaction and showing interest versus a dilettante attitude. Communication leading to action should be designed by making fun of and accusing counterfeiting.

The discussion addressed the evaluation of overall welfare of counterfeiting. In case that it is unknown to consumers' it can be classified as consumer delusion. In that respect it decreases market transparency and prevents consumers to choose the product according to his or her preferences. In case that counterfeiting is known to consumers they choose the product consciously and deliberately. In that case consumers have no direct benefit from anti-counterfeiting campaigns.

#### Session 1.6: Information overload – knowledge deficit

Chair: Prof. Dr Birgit Weber | University of Cologne

#### Abstract 1: Consumer today: Homer Simpson or Superman?

Author: Christophe Bernes (Paris, France) | National Institute for Consumer Affairs

To be a responsible, aware and informed consumer means now that she or he is lawyer, scientist, economist, journalist, engeneer, etc., all together and in same time, dealing also with her or his environment. In a way, this consumer would be much more closer to Superman than Homer Simpson who is now much more in the real life. Too much consumer information or ununderstandable consumer information? All structures (businesses, government, NGOs) playing a role in consumer information should be aware of what consumers understand at the end.

Of course main messages delivered by businesses to consumers are produced with a profit aim. Marketing and Communication services of businesses are already very good to analyse these messages.

But what about messages delivered by government or NGOs? Of course main messages delivered by government or NGOs are at higher level of quality, credibility and seriously produced in a way of general interest, in a way of responsible living for some of them. But do consumers understand these messages? Through the example of a Public channel TV Program dedicated to consumer issues, we analysed some of them that they didn't produced the effect searched. We would like to present the results of focus groups organised with consumers watching a selection of 70 films from a Public channel TV Program on consumer issues.

This analysis tries to show why the message is rejected, or why is the message not understood, or why is the message contre-productive.

Following this analysis, we can draw some basic rules in the art of producing efficient messages, delivered by government or NGOs, on responsible living in order to have tomorrow more better informed, aware and responsible citizens.

## Abstract 2: A problem-oriented concept of consumer protection policy: Current controversies among ordoliberal ideas and behavioural economics

Author: Prof. Dr Lothar Funk (Düsseldorf, Germany) | University of Applied Sciences

Ordoliberalism, a German school of economic thought originating in the 1940s, has been traditionally wide-spread among German economists and lawyers after World-War II and influenced very much the (West) German concept of consumer policy. At least modern ordoliberals accept that a focus foremost on competition policy is insufficient. The economics of information has had strong influence on recent amendments of modern ordoliberal-guided consumer-protection policy. Increasingly, academics and institutions that can be regarded as adherents to German ordoliberal thinking support also taking into account behavioural economics in consumer policy if sober theoretical and empirical analysis demonstrates beneficial effects to individuals and society. Moreover, also 'nudging' can under certain conditions lead to superior results for society without the side-effects alleged by libertarians that usually oppose state interventions beyond protection of classical liberty rights. Quite a few criticisms in the anti-interventionist libertarian debate against soft paternalism are highly questionable as the paper will demonstrate. Furthermore, it is unclear whether a consistent anti-paternalism (as supported by many

libertarians) is really reasonable and if it is sustainable at all. Today there is not only a case for embedding the ideas of behavioural economics into ordoliberal approaches of consumer protection policy as long as justified criticisms against potential side-effects of nudging are taken into account. Indeed, there is a need to do this in order to ensure problem-oriented solutions for consumers and to achieve better wellbeing for society in the future.

#### **Abstract 3: Financial Literacy and Financial Stress**

Authors: Prof. Gianni Nicolini (Rome, Italy) | University of Rome "Tor Vergata" and Prof. Brenda Cude (Athens, GA USA) | University of Georgia Athens

Previous studies on financial literacy support the hypothesis that people with greater financial knowledge show positive behaviours such being more responsible in the use of debts, participating more in the stock markets and being more ready for retirement. On the base of these evidences the development of financial education programs has bloomed, trying to support financial consumers by a better knowledge on financial topics. Anyway the role of financial literacy on financial outcomes could be mediated by other relevant factors, such a drop in income or unexpected medical expenditures. These events could be followed by financial difficulties even when people are financial literate. In the meanwhile financial literacy could be relevant in a different manner, playing a role that is not only related to objective financial difficulties and that could be relevant from a psychological perspective. In this paper the authors analysis the relationship between financial literacy and financial stress, testing the hypothesis that the role of financial literacy in explaining financial stress could be different between people with different levels of income. Using data from the FINRA National Financial Capability Survey 2012 on a large sample of American adults, different measures of financial stress (subjective and objective) and different methodologies (regressions, factor analysis and cluster analysis) are used to analyse the role of financial literacy on financial stress. Results suggest that measuring financial stress by the evidence of financial difficulties, higher levels of financial knowledge reduce the likelihood of financial stress.

#### Summary: Information overload – knowledge deficit

Author: Ulrike Danier | University of Cologne

Mr Christopher Bernes from the National Institute for Consumer Affairs researches about the efficacy of a French Public channel TV program which gives qualitative consumer-information to the television-viewer in form of short TV-spots. The Institute in cooperation with NGOs produced these spots. He referred to important role NGOs and government play for high quality consumer information. The main question of his research was asking about the reasons why the messages of the short films are possibly not understandable for the viewing public. The main focus of the research was on the dissonances between what the message delivered to the customers and the way they understand the message. The TV-spots were discussed in focus groups to find out these differences between what people understand, what they appreciate, rejected and expected. The main result was the division of three main types of dissonances: 1. The message is counterproductive. 2. Rejection of the message. 3. The message is misunderstood. Reasons for counterproductive spots where the intrusion into the privacy which give the impression of being justified on experts or the feeling that big brother is not so far. Than the moralism of a message can show a negative effect of understanding the message. As a reason for that Bernes argued that the

more the one feels involved and the more one is target, one gets less sensitive. The third type describes the reasons why messages possibly are misunderstood. Reasons for that are inaccuracies and blurring information, too many information in one or the information is too vague itself. Some other reasons are that the message is counterproductive or too difficult, too simple or too complex or the explanations are too technical. The main conclusion was, that it is always better to give the focus on memorization and understanding the information more than on the format.

The main focus of the discussion was on the methodological design of the study. There was a question about the choice of focus groups and their special dynamics and the reason that no qualitative interviews were choose. Second point was the social background of the television viewers of these short TV-spots. Bernes answered that 60 percent are women, average between 40 and 64 years old. Bernes last conclusion was that we have to be very careful to add more and more information.

In his talk Mr Lothar Funk discussed libertarian paternalism as a concept of consumer protection policy under the focus of controversial economic schools of thought especially ordoliberalism and behavioural economics. Funk gives a summary of the German public debate about soft paternalism, which is discussed as an enemy in parts of German economists who regard themselves as ordoliberals. He pointed out that ordoliberalism had an enormous influence on the traditional concept of German consumer policy furthermore indicates that the public debate shows the tendencies towards more laissez-faire neoliberalism. In his analysis of the academic arguments he indicates that there are also 'ordoliberal' academics and institutions that prefer sober theoretical and empirical analysis to examine possible benefits to individuals and society in using outcomes of behavioural economics. He argued that in times where economic axioms of a free market with the assumption of rational man lost their former appeal it is necessary to think about implementing nudge in a democratic society. In Funk's confidence it is necessary to think about the implementation of the ideas and results of behavioural economics into a concept of traditional economic consumer protection policy to achieve better well-being in the future. The discussion pointed out that consumers are pro nudging by tendency especially in health questions. Furthermore there was the hint that marketing still uses nudging and that the use of nudge can produce a higher awareness of decision processes in consumer protection policies. Funk suggested the problem that the focus of nudge is more on the individual action and more psychological whereas ordoliberalism is about rules. A last important point was the advice to the necessity of criteria in which situation it makes sense to choose between no, soft or strong paternalism.

Mr Gianni Nicolini's talk examines the hypothesis that there is a relationship between financial stress as a personal point of view and financial literacy to come across as knowledge and ability. Using data from the FINFRA National Capability Survey on 2012 he pointed out that the focus of his and Prof. Cude's survey was on the importance of different levels of income. Nicolini and Cude created multiple-choice questions and started an analysis in every income rage. As a result more than 50 percent do not show financial stress behaviour. Furthermore the results show that on an objective perspective one feels less stressed with a higher income. Financial literacy can help especially by higher income because it produces more awareness, Nicolini's conclusion was. But in consequence higher financial literacy can produce more financial stress in correlation to a lower income. Financial knowledge can be helpful but not the solution especially in the lower income range. The cluster analysis shows that income and financial literacy are both relevant to explain financial stress but income is more relevant than financial literacy. The relevance of financial literacy changes when the analysis is replicated in single income ranges.

The main focus of the discussion was on the methods and the correlation between financial literacy and tendencies in the society to give the responsibility to the consumer. The conclusion was that financial literacy is still necessary.

#### Session 1.7: Consumer Rights not fully respected in practice

Chair: Prof. Dr Peter Krebs | University of Siegen

## Abstract 1: Vulnerable consumer experience of complaints: Challenges for ADR development in hybrid public/private services in Europe

Authors: Carol Brennan and Jane Williams (Edinburgh, United Kingdom) | Queen Margaret University Consumer Insight Centre

The implications of recent research on vulnerable consumer experiences of complaints in the care sector in the UK will be explored in light of developments in the European Union regarding consumer alternative dispute resolution (ADR) and its application to hybrid public/private services.

The Directive on Alternative Dispute Resolution for Consumer Disputes COM (2011) 793 and the Regulation on Online Dispute Resolution for Consumer Disputes COM (2011) 794 are due to be implemented by the end of 2015. The Directive will require Member States to ensure that all contractual disputes arising from the supply of goods or services to a consumer can be submitted to an ADR body. In addition the Regulation on online dispute resolution (ODR) requires that consumers and businesses have access to an online platform which will transfer cross border complaints to an ADR entity competent to deal with the dispute in the member state.

So what are consumers looking for in relation to redress and customer satisfaction with complaint handling? The literature on justice theory suggests that distributive justice is not the only factor that consumers take into account in relation to customer satisfaction with complaint outcomes; interactional and procedural justice are also important to the outcome of complaints Drawing from interviews with complainants, the research found that while consumers wanted an apology, that was not enough; compensation was not a priority; and people wanted 'hard' outcomes (such as updating care plans) and 'soft' outcomes (such as providing services with dignity). Consumers thought it was worth complaining where the recommendations led to service improvement. Other research has suggested that consumers see complaining to a third party, such as an ombudsman, as a significant escalation in a complaint and do so with an expectation that an organisation will take enforcement action. Despite this, complaint and so with an expectation that an organisation will take enforcement action. Despite this, complaint handling bodies have been wary of being seen as regulators and been reluctant to proactively take on such roles.

Where complaints cross the public/private divide, ADR mechanisms will be more effective if they provide a strong voice for consumers. The Care Inspectorate is a body which combines both a regulatory and complaint handling role, providing an interesting model which may be more appropriate in these sectors.

#### Abstract 2: Innovative regulatory tools for a more efficient consumer law

Author: Dr Stefanie Jung (Siegen, Germany) | University of Siegen

The need for consumer protection is not debated in Germany. Only the level of consumer protection is discussed. Compared to other countries Germany is setting high standards in consumer law. But despite all the political efforts and regulatory initiatives consumer rights are still not fully respected in practice. This is partly due to the regulatory tools chosen to implement consumer protection. First, this presentation will demonstrate weaknesses of common regulatory tools in the field of consumer law. Second, this presentation will analyse some innovative regulatory tools and mechanisms that might help to improve the effectiveness and efficiency of consumer law.

In specific terms, this presentation will address topics such as information obligations and default rules. More standardised information may help consumers to make better decisions, especially if standardised information prevents information overload at the same time. But research results in the field of behavioural economics show that people do not always relate abstract data to their personal situation. In those situations standardised information is not taken into account by consumers. The lawmaker can try to fight this deterred perception of reality by obliging companies to provide consumers with personalised information.

The lawmaker is also working a lot with default rules in consumer law. The problem with default rules is the information gap between the parties. Business is aware of the advantages and disadvantages of the default rules and will use this knowledge in its favor. One remedy is to let only one party – here the consumer – be able to opt out. But the lawmaker can also regulate the opt-out itself for example by requiring disclosure and records if the parties agree to opt-out. The higher these standards in case of an opt-out, the more likely it is that the parties will stick to the default rules. This is why this regulatory tool can be called "sticky opt-out".

## Abstract 3: Re-thinking EU digital policies: Integrating consumers' interest in the Single Market for digital content products

Author: Agustin Reyna (Brussels, Belgium) | The European Consumer Organisation/Bureau Européen des Unions de Consommateurs (BEUC)

EU "digital" policies require the integration of consumers' interest within different measures adopted (or to be adopted) by European legislators in order to stimulate the establishment and functioning of the Single Market. Several areas of EU law lack an holistic approach when referring to consumer protection in the digital environment; as illustrated by the discrimination between copyright protected content supplied on-line (e.g. via downloading or streaming) and off-line in tangible media.

The purpose of this paper is to examine both how the current legal framework addresses this differentiated market and future regulatory perspectives:

Firstly, we will transversely assess EU consumer law and copyright rules, which are two areas of the acquis communautaire that converge when defining the legal regime applicable to B2C contracts for the supply of digital content.

Secondly, we will critically examine how the European Commission has dealt with this problem within the Common European Sales Law proposal, which explicitly includes in its material scope contracts for the supply of digital content.

The quoted aim of this proposal is to be 'optional' and an alternative to national regimes of contract law, but it could potentially be seen as a first step towards the codification of EU consumer contract law as opposite to the traditional approximation of laws. This process raises sensitive questions related to the future of the consumer acquis and the practical value of regulating consumer rights in optional contract law regimes.

Finally, after identifying any gaps in the current legislation and considering the appropriateness of the Common European Sales Law to address consumer rights in digital content contracts, we will conclude with an examination of whether further harmonisation is needed in this sector, with a particular focus on the field of guarantee rights.

#### Summary: Consumer Rights not fully respected in practice

Author: Sascha Stiegler | University of Siegen

#### Introduction

Consumer rights only show to advantage if they are extensively implemented in practice. It is not enough that consumer protection only occurs on the legislation lever. To this effect consumer rights are not fully respected in practice. The three presentations held in this session picked up different fields where there is still a lack of effective consumer protection and how european and national regulation can reduce this. It is also shown how the actual need for consumer protection should be integrated in the law making process and what has to be, in context with the addressed aspects, done to form an appropriate consumer protection level in practice.

The session started out with a presentation by Carol Brennan and Jane Williams about the vulnerable consumer experience of complaints and the challenges for ADR development in this context due to the Directive on Alternative Dispute Resolution for Consumer Disputes. In the last years there was a significant increase in complaints by consumers. But there are still a high amount of "silent sufferers" which are not directly complaining to the polluter.

The question that arises there from is what consumers are actually looking for when they complain. Distributive justice is not the only factor that consumers take into account in relation to customer satisfaction with complaint outcomes. Interactional and procedural justice is also important to the outcome of complaints. Consumers not only want compensation, they also want hard and soft outcomes that lead to service improvement. By complaining to third parties they are rather looking for some kind of enforcement than an advice by an ombudsman. This is transferred to the special case of consumer vulnerability. A vulnerable consumer is someone who, due to their personal circumstances, is especially susceptible to detriment, particularly when an organisation or business is not acting with appropriate levels of care. In the field of care inspectorate vulnerable consumers seek especially for respect and compassion and that through their complain to third party organisations but also certain outcomes which arise from the complaint. So where complaints cross the public / private divide, ADR mechanisms will be more effective if they provide a strong voice for consumers. The Care Inspectorate is a body which combines both a regulatory and complaint handling role, providing an interesting model which may be more appropriate in these sectors.

In the discussion the speakers pointed out that the ADR-Directive is a good tool to enforce the need for special complaint mechanisms for consumers. A soft regulation would in fact be the better approach than hard regulation regarding vulnerable consumers. They also made clear that you don't have to do everything by legislation in this field. In Scotland was just an urgent need for a change and legal ombudsman replaced the courts for questions of consumer complaints.

The presentation of Stefanie Jung dealt with the need for consumer protection in specific areas and how certain regulatory tools catch up with this. In many cases consumers are not able to handle the information given by the contracting party. One reason for this information processing is information overload. There are two basic strategies for the legislation to fighting this information overload. The law maker can either set limits for the amount of information given to the consumers or oblige companies to use standardized fact sheets for providing the consumer with information. The first regulatory tool is less intrusive than the second one. Standardized fact sheets do not leave any room for companies to present further information

or present this information in a different way. An information limit on the other hand is a more flexible instrument.

Standardization of information does not only reduce information overload but also helps consumers to compare offers and thus contributes to more competitive markets. In order to achieve transparent markets the law maker can oblige companies to make points of reference available for consumers. The law maker can also decide to not only standardize information but the products themselves. However such a regulatory tool intervenes much more in the market and therefore, should only be carefully used. The standardization of products does not have to go so far, that differently structured products are forbidden. In many cases it will be sufficient to only require companies to offer the standardized product as well. But research results in the field of behavioural economics show that people do not relate abstract data to their personal situation. In those situations standardized information is not taken into account by consumers. The law maker can try to fight this phenomenon of reality by obliging companies to provide product use information. In this manner in order to make personalized information effective, business should be obliged to exchange client information upon request of the consumer so that other companies are also able to provide the consumer with personalized information.

Another point is the temporal aspect relating to efficient consumer protection. Sometimes companies put pressure on clients to sign auxiliary conditions, for example concerning the usage of personal data. If the law maker wants to fight this phenomenon he can unbundle the main product from the auxiliary condition. The law maker could stipulate that companies are only allowed to obtain the written consent of the consumer 24 hours after he entered into the contract. Business would have to offer the client something in return for their personal data. The time constraint could reduce the pressure on clients and helps them to make a conscious decision. As a consequence companies will have to pay the "real price" for personal data.

Stefanie Jung also talked about the Problem of (sticky) opt outs. To really let the consumers make a choice if he or she wants to buy extras, the possibility for companies to use sticky opt outs should be reduced in order to foster an informed and deliberate decision. Consumers should rather have the possibility to opt in to an offer than have to opt out in order not to buy certain extras.

The third presentation by Agustín Reyna dealt with the question how consumers are and should be protected in contracts for the supply of digital content by EU law. Currently there are two main areas of EU law which define the legal regime applicable to contracts for the supply of digital content: The copyright law and the consumer law. But there is a certain area of conflict between these two. The copyright law sets restrictions of consumers' use of digital content, while the consumer law attempts to protect consumers by the use of digital content. Within the Consumer Rights Directive digital content is by the first time seen at EU level as an object of massive consumption. However, Mr Reyna stated, the directive does not include what should be the fairness benchmarks defining the standards required for consumers to access and use digital content. Against this background, this problem could be addressed from two perspectives: First by introducing some flexibility in copyright law via the three-step test national courts could assess whether the restrictions asserted by rights holders on digital content are justified under different fairness benchmarks found in other EU and national laws. Secondly by developing a conformity test for digital content products which could provide criteria for establishing when the digital products are not in conformity with the contract and the consumers' reasonable expectations. It seems that application of the conformity test of the Consumer Sales Directive could be appropriate for digital content downloaded and accessible on a permanent basis. This is the approach followed by the European Commission in the proposal for a Common European Sales Law (CESL).

In this context of the CESL the question arises what EU law-making model fits best for digital content products? The CESL is an optional contract law instrument and seen as an optional law for consumer rights. But an optional regime for consumer contracts would merely overextend the contractual freedoms of right holders by simply allowing them not to opt for the second regime. Consequently, they would be setting aside those obligations not covered by the consumer acquis but included in the optional law, as in the case of consumer guarantee rights. In this regard optional law is compatible with copyrights' freedoms, but does not embrace with a high degree of consumer protection, so Reyna. In so far the acquis remains undeveloped. Despite the European Commission has begun to favour optionality over harmonisation.

#### Conclusion

- Regulation mechanisms and tool must stronger commit to the needs of the consumers. There is an urgent need for consumer specific law making.

- There have to be explicit and clearly defined rules on the European and national level in order to make consumer protection recoverable and widespread. Only this ensures a multi-layer consumer protection.

- Consumer protection has to enforced more efficient in order to fulfil practical and effective consumer rights.

#### Session 1.8: Specific challenges: Financial Markets

Chair: Prof. Dr Christian Wey | Heinrich Heine University Düsseldorf

## Abstract 1: Consumer bankruptcy as new measure of social and consumer policy in Europe: General characteristics, national varieties, and the problem of social exclusion

Author: Jan-Ocko Heuer (Bremen, Germany) | University of Bremen

The growth of consumer credit markets in Europe has had positive effects on private households and economic growth but also contributed to the rise of consumer over-indebtedness. In response, many countries have introduced consumer bankruptcy laws which enable insolvent individuals a financial 'fresh start' via discharge of debts. This paper discusses consumer bankruptcy as new measure of consumer policy, shows the variety of approaches to consumer debt relief, and highlights the problem of exclusion of insolvent households from relief in European consumer bankruptcy systems. The first part discusses consumer bankruptcy as combination of economic regulation, social policy, and consumer protection. The second part outlines the variety of consumer debt relief regimes in Europe and beyond. Based on detailed case studies and a new dataset, four approaches to consumer bankruptcy are discerned: (i) a 'market model' which views consumer bankruptcy as a means of risk allocation in the credit market (USA, CAN); (ii) a 'restrictions model' which is based on notions of insolvency as deviancy and imposes restrictions and disqualifications on debtors (GBR, AUS, NZL); (iii) a 'liability model' which insists on the debtor's responsibility for debt payment and imposes behavioural obligations on debtors and hampers relief for 'no income, no assets' debtors (DEU, AUT); and (vi) a 'mercy model' which restricts relief to debtors affected by economic shocks (DNK, FIN, NOR, SWE, FRA, BEL, NLD). Finally, it is shown that the European consumer bankruptcy systems exclude many insolvent households from debt relief, but that they differ regarding normative foundations, mechanisms of exclusion, and types of debtors excluded. It is argued that exclusion of over-indebted households harms debtors and societies, and that this problem can be tackled by strengthening consumer bankruptcy's function of regulating the credit market, not by bringing welfare policies into consumer debt relief.

#### Abstract 2: Credible or biased? An analysis of insurance product ratings in Germany

Authors: Stephanie Meyr (Munich, Germany) | Ludwig-Maximilians-Universität Munich, Munich Risk and Insurance Center, Patricia Born (Tallahassee, USA) | Florida State University and Sharon Tennyson (Ithaca, USA) | Cornell University

Although the quality of rating markets has been academically debated for various types of product and credit ratings this is not the case for insurance product ratings. This article provides the first empirical investigation of the quality of insurance product ratings with an emphasis on the potential sources of bias that undermine the credibility of ratings. Rating certificates for certain insurance products (e.g., life and disability insurance) were established in the German insurance market after deregulation in 1994. These ratings play an important role by increasing customer awareness of differential product quality, thereby encouraging more optimal insurance purchases. However, their capacity for enhancing market transparency and improving consumer protection depends critically on whether they are credible. In this paper, we consider potential conflicts of interest and other common agency problems that might lead to systematic biases and imprecision in rating outcomes. Using prior analysis of other rating types as a guide, we test a series of hypotheses regarding factors that may explain the variation in rating outcomes over time and across rating agencies. The empirical analysis employs a unique panel-data set containing

rating data for disability insurance products over a fifteen year period. The ratings data from two rating agencies are combined with additional financial data on the supplying insurance companies. Our initial results suggest that the market structure and governance of the German market seem to avert major concerns regarding the credibility of insurance product ratings, as compared to other rating markets.

#### Abstract 3: Special challenges regarding financial markets

Authors: Prof. Dr Rolf H. Weber and Rainer Baisch (Zurich, Switzerland) | University of Zurich

Patterns based on biases and heuristics as studied by behavioural researchers should be taken into account when formulating up-to-date regulation; but ...

• ... the traditional disclosure-paradigm is based on the assumption that transparent and effectively

processed information will enable the investor to make well-founded investment decisions.

• ... having this type of a homo oeconomicus in mind, financial market laws used to be designed for responsible and knowledgeable actors.

• ... despite the fact that the European regulatory approach within MiFID requires a suitability test, German private investors lost money with Lehman certificates; therefore, regulators are still stengthening rules and their surveillance.

#### Approach

Assessement of the effectiveness of a regulatory approach in financial markets embracing the objectives to ...

- ... enforce a Code of Conduct to be developed for financial intermediaries assuming a certain behaviour is shown by retail investors,
- ... optimize the documentation for financial products sold to retail investors,
- ... and perform a mandatory suitability test prior to any investment advice as well as an ongoing assessment of the suitability of the recommended financial instruments.

#### **Objective and intention of proposal**

The study is going to shed light on the MiFID II regulation reflecting the results of behavioural research and the experiences under MiFID I:

• Does the design of legal measures for transparency sufficiently takes into consideration, whether an investor is capable and (under the behavioural aspects) willing to assimilate the information made available to him?

- Will the modified suitability requirements at the point of sale lead to better investor protection?
- Is enforcement through documentation appropriate to modify the business models of the financial industry?

• If financial intermediaries are deterred through tough regulation, who will serve retail clients in the future?

## Summary: Specific challenges: Financial Markets

Author: Miriam Thöne | Heinrich Heine University Düsseldorf, DICE

Especially since the crisis consumer behaviour on financial markets has received increasing attention, as inadequate consumer protection was a major contributor to its unfolding. This development is accompanied by a growing concern that consumers are ill-prepared to make sound investment decisions in increasingly complex financial markets.

To provide further insights into these developments, this session's focus was set on three different areas of research regarding financial markets: consumer bankruptcy, insurance product ratings and financial product advice. Speakers presented results of data analyses, empirical estimations and interdisciplinary approaches to investigate the following questions: How can different personal bankruptcy laws be classified and which is the best approach to dealing with household over-indebtedness? Are insurance product ratings in Germany inflated and if so, what is the reason for the bias? How can investors become better informed about risk and returns of financial products?

In response to the growing consumer credit market and in the aftermath of the financial crisis, many countries have changed and strengthened regulations on household bankruptcy, enabling the discharge of debt and hence a financial "fresh start". Their legal approach to consumer over-indebtedness, however, differs with respect to debt relief. To differentiate between the various approaches, the first presenter created four categories of bankruptcy laws according to economic, social and other aspects. Based on the analysis of these categories the presenter found that some approaches can cause distortion of economic incentives for insolvent households, especially when the repayment periods among differ among debtors. It was further argued that social and economic exclusion of insolvent households should be kept to a minimum, thereby facilitating a fast reintegration into the economy. Reforms should therefore be directed at ensuring quicker relief benefits and improving professional debt counselling to tackle social exclusion. The following discussion showed, that the categorization according to varying bankruptcy laws could serve as the foundation stone for further research on economic incentives for indebted consumers and how the different approaches shape the credit market.

Also the insurance market is in the focus of ongoing debates about deregulation. The market is typically characterized by asymmetric information and according to economic theory at risk of failing. A possible remedy is the quality certification of products which, however, may be inflated, due to a lack of outside control. Using data covering the German market for life insurances the second presenter tested the possible biasedness of insurance product ratings with the help of an econometric setup. Even though ratings are typically not commissioned in Germany, the analysis revealed that larger insurance companies have higher ratings and that ratings are more biased with increasing market complexity. Both effects are not necessarily the result of intentional rating inflation, and further research needs to be conducted to understand whether the bias is to the detriment of consumers. After further discussion the conclusion was reached that since both households and companies rely on insurance product ratings, ensuring a credible quality reporting mechanism is important. As the market can never be free of regulations due to the prevailing asymmetric information, regulation should be such that the benefits of free competition can be maintained while preventing market failure.

Also the market for financial products has grown considerably more complex and contentious over the past years. One major challenge for regulators is the lack understanding the average consumer has of the extensive range of financial products offered. Previous efforts to tackle the problem by improving transparency through increasing information available to the investor has not brought the desired success.

One reason for this is that rather than behaving in accordance with standard economic theory, consumers increasingly decide on how to invest their assets based on emotions, pursuing a do-it-yourself strategy. In addition to this, bank counsellors often focus on extracting excess rent from their customers instead of helping them make well-founded investment decisions. This became especially apparent during the global financial crisis. When counselling consumers, banks should take these developments into account and regulation should be aimed at ensuring product-investor suitability through other means than merely increasing the amount of information conveyed to the consumer. To properly evaluate current efforts to increase transparency and suitability the final presenter proposed to analyse both the Markets in Financial Instruments Directive I and II.

The results of the research presented and the discussions that followed can be summarized in three separate statements:

- Private bankruptcy regulations should enable over-indebted households a fresh start by limiting punishment by social and economic exclusion, as society will benefit more from a fast economic reintegration.

- Even though empirical evidence suggests that the German market for insurance products does not suffer from severe problems of inflated product ratings, there still are sources of bias that could weaken the ratings' credibility.

- Since increasing information on financial products available to consumers does not necessarily improve their investment decisions, regulators should put greater focus on suitability-tests to improve counselling by banks.

Even though the topics presented in this session were not directly related to each other it can be noted that they were united in addressing the problem of asymmetric information on financial market as one major source of consumer detriment. Due to the growing complexity of the financial products, however, the issue of transparency becomes increasingly urgent. Both behavioural aspects and economic incentives need to be taken into account when designing regulations to tackle the problem. Without a doubt, continuing research is needed in this important area of consumer policy to help guide regulators and policy makers. Empirical studies are particularly instructive for better understanding consumer institutions and how they perform. The empirical approach based on reliable data is also suitable to integrate research from different disciplines which mirrors the interdisciplinary character of consumer protection research.

#### Workshop 2: Parallel sessions: Horizons for European consumer research (Part I)

September 30, 2014 11:30-13:30

## Session 2.1: Europe in a changing world – Inclusive, innovative and reflective societies

Chair: Prof. Dr Christoph Strünck | University of Siegen

## Abstract 1: From Consumer to Citizen – an approach of consumer research as an instrument for the emancipation of consumers

Authors: Prof. Dr Renate Hübner (Klagenfurt, Austria) | Alpen-Adria University, Prof. Dr Karl Kollmann (Vienna, Austria) | Vienna University of Economics and Business, Prof. Christian Fridrich (Vienna, Austria) | College of Education Vienna and Nina Tröger (Vienna, Austria) | Chamber of Labour

We are critical of the current position of consumer research since it rests on a Market – Purchase paradigm which reduces consumers to their role as buyers or customers, and thus contributes mainly to the repair of market weaknesses. This narrow focus neglects people's need for self-determination in their own lives, which requires action competences that go beyond market transactions. Our type of understanding of the consumer includes consumer acts also outside the market and their corresponding contexts. A few theses are base of this approach of consumer research fostering societal transformation towards sustainability, which are to be presented at the ICCR 2014 Conference.

The number of areas of life which are non-market-led or market-free are steadily decreasing, since more and more areas are undergoing marketisation: Education, health, leisure time, sport, etc. In all these areas individuals are becoming customers, and consequently part of customer loyalty and customer analysis programmes. These developments invade the private sphere of every individual in order to discover further more market opportunities and so to make them usable "through becoming a product". In this growing embracing of every field of life through markets we see dangers, firstly of humans becoming dependent solely on buying and shopping, secondly of all fields of life functioning — and being forced to function — according to the logic of continual growth, given the growth paradigm inherent in the current, dominant economic theory, which in turn and thirdly, accelerates the destruction of the basis of our way of life.

Consumer research which is oriented towards sustainability and the emancipation of the consumer would have to be based on two pillars: An extended understanding of consumption and a non- behaviourist concept of the consumer.

#### Abstract 2: The collaborative consumption – emerging research area and preliminary findings

Authors: Prof. Dr Maciej Mitręga and Agnieszka Małecka (Katowice, Poland) | University of Economics

Collaborative consumption (CC) as the consumer phenomenon getting increased research attention is strictly connected with sustainable development and, more specifically, sustainable consumption as the mega-trend in current economy (McDonald, Oates, Young & Hwang 2006; Sanne 2002; Tanner & Kast 2003). CC is of the special importance especially in the time of the economic crisis which is now dominating force in the global economy. Sustainable consumption and CC are similar but not the same constructs. We propose CC to be treated as the building block of sustainable consumption, complementing some

other aspects. Namely, we define CC as sharing products or services between two people or more in order to either save some money or manifest given ideology, i.e. ecology friendliness or pro-social behaviour (Ozanne & Ballantine 2010; Leismann et al. 2013).

Our study is "work in progress" and it is devoted to identify the motivations behind consumers' propensity to consume collaboratively. The study is based on the explorative online survey among individual customers. We assume that consumers' motivation divides CC into few types: Savings-driven CC (i.e. join renting an apartment to save some money), pro-social CC (i.e. joint renting an apartment to share more time with friendly people) and pro-ecology CC (i.e. sharing rented apartment to prevent the planet from the waste of its natural resources). We hypothesise that Polish customers involved in CC are driven mainly by the economic and the pro-social reasons.

#### Abstract 3: Politics and media practices in the everyday life of German consumers on/offline

Author: Katharina Witterhold (Siegen, Germany) | University of Siegen

Optimistic views on the democratizing impact of the Internet assume that it potentially alters the relation between citizens and governments, between producers and consumers as well as between consumers. New (social) technologies not only provide ample information and knowledge resources on ethical aspects of production and consumption, they also foster platforms for interactive discursive practices and community building as well as innovative technical infrastructure for new forms of collaborative shopping. The paper highlights the varying interrelations between social relations and biographical dispositions that influence consumer and political behaviour on the one hand and the complex interrelation between media, consumer and political practices of ethical and/or political consumption in everyday life on the other hand. It is based on some findings of a research project on "Consumer Netizens" conducted at the University of Siegen following an ethnographical research methodology. About 30 German consumers who consider themselves to be ethically or politically consuming were asked to write diaries on their political consumption, participation and media use and afterwards interrogated individually as well as in focus groups. An important finding is the interrelation of media use, consumption patterns and modes of participation in respect to dimensions of on/offline, private/public and individualistic/collectivistic action. The paper gives an overview on some types of consumer citizens/netizens which differ in their daily political consumption practices, their self-understanding as political consumers, and their political/ economic use of the Internet. Concluding from the empirical findings the paper ends with addressing some considerations for further research. It also discusses some implications for future consumer policies supporting consumers as political actors.

## Summary: Europe in a changing world – Inclusive, innovative and reflective societies

Author: Anne-Kathrin Schwab | University of Siegen

## Summary of the contributions

The first input from Renate Hübner and Nina Tröger was a critical evaluation of the ongoing consumer policy and shed a different light on the role of consumers. The buying behaviour and buying decisions play a significant role. A sharing system or sharing economy has to be differentiated and the economic acting has to be rethought carefully. Furthermore sufficiency and need have to be distinguished. After all

the questions about good and sustainable research, about degrowth, collaborative consumption in micro and macro economics was raised.

The second contribution from Maciej Mitręga and Agnieszka Małecka was about an ongoing research about the internet platform Blablacar as a sharing and collaborating consumption. The question about sustainable, ecological or economic motives and the emotional commitments that take place within that action are the central foci of the research as well as milieus and demographic groups of users and the way of getting into contact with each other during the ride sharing.

The third and last contribution of this session about inclusive, innovative and reflective societies was about political consumers on the internet. The digitalization of political consumption defined the term consumer netizens, relating to the way of consumption of an informed citizenship. Katharina Witterhold distinguishes four types of political consumers in her ongoing research project by the way of action in online or offline status in private or public sphere. The first type is acting within the private sphere in everyday life. Type two is more visible, especially in online practices. The third type is a strategic technical innovator, scans for information and even starts campaigning. The fourth type is active on- and offline, public and private, who is actively taking part in local initiatives.

## Outlines and deeper discussion of the contributions

In the session the three contributions stimulated the thoughts into different directions. The first contribution by Renate Hübner and Nina Tröger touched the aim of provocative thinking about the current understanding about consumers and consumption that are following the market principles and the principles of the current market system. The claim of that contribution was to apply for a re-thinking of the economic action as an acting concept instead of a behavioural approach including the consumption concepts of non-market processes and the combinations of consuming and producing. Furthermore it was claimed for a research about risks of emancipation from markets. What does it mean to emancipate from the markets? Examples of losing anonymity or easiness are probably only at the surface. The economic action and behaviour has to be re-though on an institutional and structural as well as on an individual level. The challenge of combining sustainability research and consumer research was outlined on the line of knowledge production and a normative claim: what shall be changed - the behaviour or the framework, respectively the structure? For a more sustainable consumption, the idea of exponential growth as well as the framework of the economic idea has to be rethought or even changed. The principle of efficiency of the society as driving force has to be discharged.

The contribution by Maciej Mitrega and Agnieska Malecka from Katowice included a view on the actual action of how collaborative actions work in practice. What are the joint motives of using ridesharing opportunities? How are these practices connected with new technologies and communication forms? What are the commonalities of couch sharing, ride sharing regarding green, social and economical motives. Within that research, the social enjoyment, the expected relationships, the eco consciousness regarding environmental problems as well as the economic factors were taken into account within that research as well as the results of factor analysis. The research results were connected to psychological theories, such as evolutional theories of short term benefits and prevailing even the civilization goes further.

The discussion asked for interpretations of the users – how they frame their behaviour, conceptualize the behaviour as a group and how they get into that community by interaction. Which generation is building up that trust? Thus maybe a qualitative research with participating observation might give further insights into the behavior and the construction of reality of the group of consumers.

The contribution of Katharina Witterhold from Siegen led into a typology of political consumers and the challenges of consumer research by digitalization. The research project Consumer Netizens gives insights into the different types of practices of political consumers and their way of being informed and gaining knowledge as well on- and offline. Therefore she used different qualitative methods by triangulation of survey methods and thus analysed participation diaries, semi-structured interviews, focus group discussions and online surveys for her results of four types of political consumer practices. Practices of knowledge she defined within a practical theory perspective, as routines embedded in everyday life and social structure and knowledge as a result of bodily appropriation. Well informed citizens are defined as reflecting on their routines, identifying important topics for themselves, gaining knowledge about selected topics by appropriating information, developing strategies to distinguish between true or false, reflecting their practices on the background of that knowledge to decide between right and wrong. The differentiation of the political consumers are taken by the lines of disposing in active parts of consumer policy, resources of time and competency in participation, issues of consumer policies regarded as important and preferred opportunities of on- and offline participation.

Suggestions for a succeeding consumer policy by the researcher is a fostering of a dialogue between consumers in Europe for instance as a free European Consumer Social Network, the acknowledgement of political consumers as experts for consumption and consumption politics in order to allow them to take a more active part in consumer policy. Experimenting with technical innovations by political consumers should be promoted in order to assess the impact of their consumption. Consumption discourses shall be enhanced to non-buyable goods. As well as online and offline opportunities for political consumption should be enhanced.

## Perspectives and outlook of the session

Having these different perspectives on "Europe in a changing world - Inclusive, innovative and reflective societies" we look at the inputs as a normative perspective of: What has to be changed in consumer policy and how can it be joint with a sustainable view towards consumption, markets and the system in general? The second approach focuses on the question of the motives of the consumers of ride sharing as a contribution to the research of shared economies and collaborative economies.

The third perspective aims on how consumers can be distinguished according to their practices and knowledge and what that means for future consumer research and political consumption on- and offline.

# Session 2.2: Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bioeconomy

Chair: Prof. Dr Carola Strassner, MBA | University of Applied Sciences Münster

#### Abstract 1: The role of values and attitudes in determining organic consumption

Author: Dr Jana Diels (Berlin, Germany) | ConPolicy – Institute for Consumer Policy

Despite its continuous expansion, the market for organic products remains rather small. Still, marketing organic products constitutes an attractive and profitable retail strategy since, as a reaction to repeated food scandals, customers have shown an increased awareness of issues such as food safety and have further been demonstrated to pay substantial price premiums for green products. Against this background, the necessity to better understand decision-making vis-à-vis organic products is underlined.

This paper seeks to corroborate the prevailing contention found in experimental research that preferences for organic products are primarily driven by health and environmental motives. To this end, it integrates comprehensive purchase data in five categories (butter, milk, yogurt, soap and face care) and corresponding survey data concerning households' demographics and attitudinal measures.

PLS structural equation modeling reveals a positive relationship between attitudes towards organic products and customers' relative preference for buying them. That is, the more favorable a person perceives organic items in contrast to normally produced products, the more likely this person is to eventually buy them. Further, it shows that the preference for buying organic items is indeed influenced by individuals' concern for their health and the environment but that this influence is only of indirect nature. As such, the results demonstrate that the impact of health and environmental consciousness on relative preferences for organic products is significantly mediated by individuals' attitudes towards these products. That is, customers with strong concern for their health and for the environment also tend to have a positive attitude towards environmentally friendly products. However, these customers do not necessarily exhibit an increased probability of actually buying them. The results provide a greater and more realistic understanding of what drives green consumption behaviour.

# Abstract 2: It's complicated: The environmental rebound effects of switching to vegetarianism: A microeconomic analysis of Swedish consumption behaviour

Author: Janina Grabs (Uppsala, Sweden) | Swedish University of Agricultural Sciences

In order to reduce our environmental footprint, policy-makers have increasingly focused on influencing individual-level consumption choices. Recent years have seen a special focus on sustainable eating patterns, in particular the environmental benefits of a vegetarian diet. However, reliable conclusions on this issue need to take full-scale behaviour changes into consideration. This can be achieved using the concept of the indirect rebound effect, which describes the amount of potential environmental improvements not realised due to the re-spending of expenditure saved during the initial behaviour shift. This study aims to quantify the potential environmental savings stemming from the shift of an average Swedish consumer to vegetarianism, as well as the most likely rebound effects, in terms of both energy use and greenhouse gas emissions. To this end, it estimates Engel curves of 117 consumption goods, derives marginal expenditure shares from them, and links these values to environmental intensity indicators. Results indicate that switching to a vegetarian diet could save an average Swedish consumer 16% of the energy use and 20% of the greenhouse gas emissions related to their food and drink consumption.

However, if they re-spend the saved income according to their current preferences, they would forego 96% of the potential energy savings and 49% of the greenhouse gas emission savings. These rebound effects are even higher for lower-income consumers, since they tend to re-spend on more environmentally intensive goods. Yet, the adverse effect could be tempered by simultaneously purchasing organic goods or by re-spending the money exclusively on services. Thus, consumption advice should shift to promoting holistic sustainable lifestyle changes.

#### Abstract 3: Exploring the concept of mildfulness of consumption

Author: Prof. Dr Sabrina V. Helm (Tucson, USA) | University of Arizona

Mindfulness can be understood as the state of being attentive to and aware of what is taking place in the present. Increasing mindfulness of consumption has been suggested as a pathway to tackle overconsumption, a main driver of climate change, in that the consumer's mindset pertaining to his or her attitudes, values and expectations surrounding consumption behavior needs to evolve. MC not only addresses decisions made once a purchase need is elicited (e.g. choice of appliances with the energy star; "green" labels) but involves consideration whether a purchase is needed at all, and how consumers create new sustainable consumption and conservation options to fit their lifestyle. The goal of the current research project is to better understand mindfulness in the context of consumer wellbeing andenvironmental sustainabilityand investigates how MC can be conceptualised, and what are mechanisms/interventions that increase consumers' mindfulness of consumption practices, as well as their effects on self, others, and the environment. The research compares the two theoretical perspectives on mindfulness (i.e. the Western socio-cognitive based approach and the Eastern Buddhist-meditation based approach) in the context offood overconsumption/food waste.

# Summary: Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bioeconomy

Author: Melanie Lukas | Wuppertal Institute for Climate, Environment and Energy

The objective of this research and innovation challenge is to facilitate the transition towards a highly sustainable use of biological resources. Primary production and processing aims to satisfy deman from a wide range of industries and, ultimately, consumers. Consumer demand can be translated through consumer behaviour to daily consumption routines. The aim is to support a more sustainable way of consumption, as one step to accelerate the transition to sustainable consumer behaviour in Germany, Europe, and globally.

The session discussed the possible role of consumer research in relation to this challenge as well as the potential inherent in changing consumption patterns. Furthermore, it was discussed how values, attitudes and routines may shape consumer behaviour, and how challenging a ,break in routines' might be.

Jana Diels explored the complexity underlying organic consumption. Still today the leading values and attitudes are not discovered in-depth and it is unclear how strong values influence daily consumption behaviour in detail. Therefore a research study following this question was applied to the setting of organic products in retailing. The market for organic food is stagnating around a market share of 4 percent in Germany, thus a great potential for growth is still obvious. But how do consumers think and act, if they

shop for organic products? Until now many qualitative research studies focused on values when shopping for organic products and do not allow a generalisation, whereas quantitative studies often suffer from the gap of a transformation of intentions into purchasing behaviour or from a social desirability bias.

The presented quantitative approach on values and attitudes, and their potential to guide organic food consumption was applied to close this gap between qualitative and quantitative research. Therefore a GfK consumer panel from 2006 was used and three main hypotheses were established about the influence of values and attitudes in consuming organic products.

The research was then able to establish that the values of health and environmental consciousness, as underlying consumer values, do not have an effect on consumers' preference for organic products. However, consumers' attitudes towards organic products significantly affect their preference for organic products and the effect of health and environmental consciousness on consumers' preferences for organic products is fully mediated by their attitudes. Interestingly, the demographic variables (e.g. age, gender) did not have any effect. Finally the study pronounces that the attitude affects behaviour. If consumers have positive attitudes towards organic products, they will buy organic products. This is an important aspect to promote organic consumption behaviour because attitudes may be changed more simply than values.

Janina Grabs presented a short speech on her research question about which secondary environmental rebound effects occur by switching to a vegetarian diet. The study was done with datasets of Swedish consumers. Based on the analysis, a switch to vegetarianism could save 4 percent of total GHG budget (20 % of food GHG load) and 1.8 percent of energy use. Re-spending the saved money may eliminate 49 percent of GHG savings and 96 percent of energy savings and thus produces a high rebound. In comparison to the average, lowest-income consumers have the highest rebound due to their high spending for consuming in general. In conclusion, and to promote the positive impulse coming from these results, a switch to a vegetarian diet may end up by an absolute reduction of 4 percent of the GHG budget. This is a large potential due to the fact that consumers may switch to a vegetarian diet easily compared to a switch in mobility or housing. Further it is interesting, that even 50 percent of the saved budget is ,really saved'. Sabrina V. Helm gave an introduction to the concept of ,mindfulness' and used the concept to explore 'mindful consumption' and the routines which produce food waste.

As a status quo, overconsumption is one part of living, especially in the United States. Routines are the main drivers of a resource-intensive consumption. The connection between the concept of mindfulness consumption and consumption behaviour was postulated. Interestingly, the issue of food waste makes people feel guilty and they pretend to avoid it, wherever it is possible. But, infrastructure and the system encourages overbuying. Furthermore, shoppers in the United States shop infrequently, but in high quantities and their houses have large kitchens, where they can easily put more food in storage and purchase in bulk. Apparently a heterogeneous range of individual and infrastructural factors shape routines. Using the concept of mindful consumption as a more reflective way of consuming or even rejecting may be a way to face this challenge. Mindful consumption relates to consumption avoidance as well as selective acquisition and usage of goods and services that avoid routines or habituation (overcoming auto-pilot behaviour).

Mindful people, for example, have a flexible mindset and the ability to adapt new ideas. Thus, the concept may be applied to the research topic of food waste to change routines and try to encourage individuals to think about daily options and reduction potentials. Finally some future questions were presented, e.g. identifying decision-making biases and routines that lead to food waste (planning activities, inventory management and appropriate storage procedures) as well as barriers, facilitators and points of intervention - understanding how mindfulness-interventions serve to break with routine. Do

messaging, nudges, pledges, competitions increase food waste awareness and motivate consumers to change wasteful routines? How can decreased food consumption (increased household food efficiency) and economic development be aligned? Is the concept of mindfulness of consumers aligned with current perspective on responsible consumers?

In the discussion, the following issues were highlighted:

The value of research on attitudes and values was considered. Attitudes have a great influence on consumption behaviour and therefore positive attitudes towards organic consumption have to be supported to increase its market share.

An essential conclusion about behavioural changes was identified by the plenum: A change in one action field of consumption may lead to other resource-intensive activities, thus a change in one field of action has to be reflected and further steps have to follow, to prevent rebound comprehensively.

Consumption research activities have a great need of current primary data, which is often not available to scientists without a charge.

Consumer researchers are eager to contribute to the formulation of research topics and calls with are orientated to real-world settings.

The plenum highlighted the importance of working with inter-disciplinary settings in order to address sustainability societal challenges. Challenges are complex and will be addressed more adequately when economical, ecological, social and cultural dimensions are engaged from the outset.

Overcoming the "autopilot-consumption behaviour" will be one future challenge. A responsible consumer will think about the individual consumption situation and might think about his or her own idea of consuming something and may reject consumption in the longterm.

Finally, all scientific results have to be matched with the real-world settings to put results in a comprehensive context.

All in all, one member of the plenums admits the challenge to overcome the climate crisis by using additional strategies overcoming with are also adaptable to the financial crisis, e.g. concepts of degrowth, is one challenge to face also in consumer research.

Following questions consumer researchers should be aware of:

– What are the future challenges when coming to a more sustainable lifestyle, which is promoted by using and consuming less?

- Which kind of changes of this kind are acceptable to the wider societal population and to specific actors?

- How can longterm changes in lifestyles be promoted and communicated in a fruitful manner?

## Session 2.3: Secure, clean and efficient energy

Chair: Prof. Dr Christoph Weber | University Duisburg-Essen, IBES

#### Abstract 1: Is Europe a paradigm of consumer behaviour for urban Chinese? An aspect of residential energy consumption

Authors: Guiying Cao (Laxenburg, Austria) | International Institute for Applied System Analysis, Junlian Gao (Beijing, China) | China University of Mining and Technology and Xiangyang Xu (Beijing, China) | China University of Mining and Technology

Household consumption is of great significance for environment impacts, which could be mitigated through changing the composition of energy services. This paper provides the locus of responsibility for CO2 emissions addressing on the household consumption in comparison with selected European countries. In China the direct and indirect CO2 emission from household consumption is accounted about 40% of total carbon emissions from primary energy utilization 2011. The increase of household consumption per capita, residential building, dramatic increasing car users all contribute to an increase of direct carbon emissions, which are derived by the increasing income of per capita of in urban regions. Consequently, the expenditure of household has promoted household energy demand. Hence the total household energy consumption plays a large role in determining the CO2 emissions. In this paper, we intend to analyse the Chinese urban residential energy consumption and its impact on emission with focusing questions: What is the residential trend of urban Chinese? What are the main drivers behind the household energy consumption in China and selected EU countries? Is energy consumption in the household sector decreasing in Europe? What is the consumers' responsibility for sustainable growth? For analysis, the input-output table is employed to calculate the indirect residential energy use and residential emissions for urban Chinese household. In the analysis, direct energy and indirect energy use, structure of energy sources, and direct and indirect emissions will be addressed. The data sources are from household survey and energy statistics from 1990 to 2011. To compare with selected European countries, data are drawn from Energy statistics (Eurostat) and IEA Energy Balances. In the analysis, direct energy use and indirect energy use, the Direct Energy Use and Energy Structure, and direct and indirect emissions will be addressed.

# Abstract 2: Implicit pricing of energy facility presence on real estate markets: Literature review and future directions

Authors: Sandra Ifrim and Tim Böker (Düsseldorf, Germany) | Heinrich Heine University

This work examines if costs of living near non-fossil fuel power plants are being incorporated into real estate values. When combined with the theory of disamenities, lancastrian consumer theory suggests that house buyers charge a financial compensation for living near such a facility – the implicit price. Against the background of the nuclear phase out, the search for a nuclear waste repository and the increasing energy production from renewable energy sources the quantification of this implicit price is of particular interest. This paper provides an overview of the existing empirical literature on the property value impact of nuclear, wind and biomass power plants. Evidence speaks for an implicit price ranging from -2% to -10% for nuclear power plants. If any implicit price is detectable at all for wind energy facilities its range changes to -1.11% to -0.047%. Further research is required to determine the implicit price of biomass plant presence.

## Abstract 3: Sustainable Use of Washing Machines: The challenge of increasing machine capacities and smaller family sizes

Authors: Emir Lasic and Prof. Dr Rainer Stamminger (Bonn, Germany) | University of Bonn, Christian Nitsch and Arnd Kessler (Düsseldorf, Germany) | Henkel AG & Co. KgaA

Two opposing trends are observed in Europe: Increase of the washing machine's rated capacity and the decrease of the household size (hence a decrease of laundry that has to be washed). Taking into consideration those two trends, the question arises: What kind of consumer behaviour is necessary to use the washing machines with a higher rated capacity in a more sustainable manner?

To answer this question, real life washing machines are tested and the data from the tests is used to develop a model of a washing machine ("virtual washing machine").

Furthermore, a model that reproduces to some extent the household's washing behaviour ("virtual washing household") is also developed.

By conducting parallel simulations of the usage of the virtual washing machine by the virtual washing household and by varying device-, household- and behavioural parameters an optimal parameter combination with the lowest environmental impact can be determined.

The basis for the "virtual washing machine" is the data received by testing nine washing machine of different rated capacity (5 kg, 6 kg, 7 kg, 8 kg and 11 kg). All tests are conducted in accordance with EN60456:2005 with some modifications regarding the washing temperatures, load size and detergent dosage.

"Virtual washing household" is designed in such a manner that a washing cycle is conducted when the household has enough laundry collected, so that the capacity of the washing machine can be used. It also offers a possibility to conduct an "emergency washing cycle" when the time needed for accumulating enough laundry (to use capacity of the washing machine) exceeds the waiting time acceptable by the consumer (so-called "maximal laundry waiting time"). This model offers a high range of possibilities to simulate some of the consumer's behavioural patterns.

As result it turns out that the consumer has either the chance to collect long enough textiles of a specific type to utilise the capacity of his washing machine or he has to combine loads of different kinds and wash them together. Both alternatives are discussed in terms of resource consumption and CO2 equivalents emissions compared to the basic behaviour.

## Summary: Secure, clean and efficient energy

Author: Andreas Dietrich | University Duisburg-Essen, IBES

In the session speakers and participants from different backgrounds were brought together to exchange knowledge and ideas about how consumer behaviour can contribute to achieve the objectives of a clean, secure and efficient energy system. The session comprising three presentations covered a broad range of topics. Each presentation was followed by discussions emphasizing the perspectives for energy related consumer research.

Guiying Cao (Laxenburg, Austria) | International Institute for Applied System Analysis | Is Europe a paradigm of consumer behaviour for urban Chinese? An aspect of residential energy consumption.

The first presentation by Guiying Cao dealt with the consumption patterns of urban Chinese, the associated energy consumption and the question whether Europe may serve as a paradigm for Chinese urban consumers. Since 1990 the residential trend in China has been characterized by a sharp increase in urban density; simultaneously the income per capita has grown nearly tenfold. This development was accompanied by a strong structural change of urban household expenditures. In particular the use of income for transportation and communication has become more important while the share of expenditures for food has declined, although being still the most relevant. Compared to this, European households spend much more of their income on housing while the expenditures on food are relatively low.

Consumers cause energy consumption and environmental impacts both directly, e.g. by the use of fuel in personal cars, and indirectly, by paying for the production of goods. In 2011 the per capita direct energy use of European and other industrialized countries amounted to approximately 3.5 - 8.5 million tons of oil equivalent. Although the direct energy use of the urban Chinese population was much lower (circa. 1.5 million tons per capita) the effects are of great significance due to the large number of people and the different structure of the residential energy use, that is characterized by a relatively high percentage of coal and oil. It was shown that the main drivers behind the household energy consumption in China are income, centralized heating area and energy efficiency. With regard to the indirect energy use it was found that the related CO2 emissions per capita doubled since the 1990's and that the main contribution to this is due to the increasing expenditures for housing consumption and for transport.

Guiying Cao pointed out that, in particular, the fast growing number of cars in China represents one of the major challenges to limit energy consumption and emissions in the future. She draw comparisons to the steadily tightened CO2 performance standards for new cars and to the successful overall reduction in greenhouse gas emissions in the EU. Even though China's government has plans to decrease CO2emissions, China could learn from the European countries and adapt successful strategies. In the discussion, the following issues were highlighted:

- Pollution abatement and energy efficiency strategies on production are necessary, but not sufficient. Increasing emphasis has to be put on consumption.

- A promising way to reduce environmental impacts of consumer expenditure is through the encouragement of more sustainable consumption patterns.

- Consumers' responsibility for sustainable growth should be promoted by actions and policies, with a special focus on information and education.

Sandra Ifrim (Düsseldorf, Germany) | Heinrich Heine University | Implicit pricing of energy facility presence on real estate markets: Literature review and future directions.

In the second discourse, held by Sandra Ifrim, the subject matter was not classical consumer behaviour but rather consumption that is non excludable. Residents who live near power plants might be affected by the proximity and visibility of the facilities. Furthermore the exposition to noise and odour can be understood as consumption that can only be excluded by moving away. From a financial point of view, the question arises how the monetary impact of these disamenities on the property values can be measured and if this information can be useful for political decision makers, project planners and property owners. Focusing on nuclear, wind and biomass power plants a literature review (2001-2014) was conducted, aiming at studies that use hedonic pricing as methodological approach to put a figure on the so-called implicit price.

As a first result it turned out that empirical literature for Europe is very scarce. Even after taking into account the USA and Japan the study sample included only 13 articles. With regard to biomass or biogas

power plants no literature could be found at all. Moreover, most analyses refer solely to the proximity of the plants. Therefore the monetary relevance of other characteristics like visibility, noise or odour is difficult to determine. It became apparent that the implicit prices of living near a nuclear power plant are clearly negative, reflected in reduced property values down to -10 percent. In contrast to this wind turbines seem to be rated significantly better, showing no or only very small price cuts. However, the meaning of property values, used as proxies in most studies, should be critically assessed because transaction prices observed on markets can be highly distorted. In addition Sandra Ifrim underscored that consumer preferences differ to a great extent, also depending on the subjective perception, the country and the residential location. Due to this heterogeneity it is not rational to make general statements about ranges of implicit prices, as individual assessment is needed instead.

Following this, the session members exchanged their views with a priority on actual debates in the context of the German energy transition. The topic of impacts of energy facilities on property values is closely related to the discussion about public acceptance of power plants and grid infrastructure. Against the background of practical relevance it would be very interesting to carry out more research focusing on the disamenities of overhead lines, affecting a very large number of residents. Resulting into a cost benefit analysis this kind of investigation is strongly needed for planning and decision support. An exemplified case is the question of either building an overhead line or a much more expensive, but not visible underground cable. It was also discussed whether there might be positive monetary consequences for consumers and how this could contribute to the acceptance of energy facilities in residential areas. One possibility would be that homeowners could participate by investing into windfarms or grid infrastructure and achieve a reasonable profit. As perspectives for energy related consumer research can be seen:

- Until now there has been conducted too little research about the implicit pricing of energy facility presence on real estate markets for European countries and especially for Germany.

- Taking into account the heterogeneity of implicit pricing, methods should be improved to the aim of a case-specific assessment. The direct attribution of monetary impacts and their reliable valuation poses a particular challenge.

- Impacts on the property value are closely linked to the public acceptance of the energy technologies. In times of technological change this field is of growing importance.

- To support stakeholder's decisions effectively, research results must be transferable into practicable solutions.

Emir Lasic (Bonn, Germany) | University of Bonn | Sustainable Use of Washing Machines: The challenge of increasing machine capacities and smaller family sizes

The third presentation by Emir Lasic addressed the question what kind of consumer behaviour is necessary to use washing machines in a more sustainable manner. The survey has been prompted by the fact that on the one side manufacturers tend to produce washing machines with higher rated capacity. In the year 1997 in Germany the average capacity was 4.8 kg, whereas in 2014 machines with a load of 8 kg represent the main market segment. On the other side the average number of people living in a household decreased from 2.2 in the year 1991 to 2.0 in 2012. Based on empirical data a mathematical model with different washing machines, households and their behaviour was developed. The model calculates the consumption of energy, water and detergent, each converted into CO2 equivalents.

The results of the simulations indicate that a sustainable use requires a fully loaded drum and that the consumers' willingness to wait is one of the main drivers for that. If there is no waiting time, the use of a washing machine with for example 5 kg rated capacity causes emissions of 50 kg CO2 equivalent per

year in a single person household. The use of an 11 kg machine leads to a much higher consumption of resources, expressed in 80 kg CO2 equivalent per year. If people wait for one week the amount of laundry that can be collected is higher and the capacity can be used more efficiently. In case of a one week waiting time and a two person household it was shown that there are no differences in emissions between 5, 8 or 11 kg machines. Extending the waiting time up to two weeks means that neither the household size (one or two persons) nor the machine capacity cause significant mismatches in an efficient utilization of resources. Therefore the sustainable use of washing machines with higher rated capacity is possible when consumers are ready to change their behaviour and to postpone their action. Alternatively they can combine different loads or choose the lower temperature. Another result of the simulations was that people who buy larger machines can only benefit from time savings if they are willing to wait. If waiting time is zero the number of washing cycles does not change, therefore the expenditure of time for (partly-) loading, programming, starting, washing and emptying remains nearly unchanged.

The first point in the discussion addressed the issue why the rated capacity of washing machines has grown. Emir Lasic explained that the size of the machine is the most obvious distinctive feature and people tend to buy bigger ones if the other features are nearly the same. Furthermore, due to economies of scale, the specific amount of water and energy consumption is lower and for manufacturers it is easier to meet the EU energy label requirements for A++ or better with larger washing machine sizes. The leading question in the discussion was: How could the results of the simulation be translated into a change of consumers' behaviour? It was suggested that more detailed information should be placed on energy labels and also in manuals. There should be a distinction between the number of persons in the household or the amount of laundry, so that consumers can calculate and compare individual energy consumption and costs. It was underlined that CO2 emissions might not be a suitable key figure for this purpose, monetary savings could be more attractive for consumers instead. It was pointed out that efforts to change consumers' behavior by providing information has been successful in the past, leading to a decrease in average washing temperature from 50 – 60 °C down to about 45 °C today. In addition to this a fully loaded drum should be promoted. The essence of the session's third topic can be formulated as following:

- The average consumer does not exist. For a promotion of sustainable behaviour detailed research as well as detailed information is necessary.

- The establishment of sustainable consumption patterns requires changes in consumers' behaviour. In times of information overflow new strategies of awareness-raising are needed.

– Joint research projects with manufacturers offer the opportunity to connect consumer research with producers and other stakeholders in this field.

## Session 2.5: Health, demographic change and well-being

Chair: Prof. Dr Claudia Hornberg | Bielefeld University

#### Abstract 1: The same but not the same – Challenges in comparing patient opinions

Authors: Prof. Dr Michaela Geierhos and Sabine Schulze (Paderborn, Germany) | University of Paderborn

What people mean when saying that some things are the same but not the same is that they might wait the same number of days for a doctor's appointment but are not equally satisfied with this period. For example, public health patients requesting an internist's appointment or a rehab appointment have to wait about 61 days. When rating these doctors with a numerical score, internists reviewed on jameda.de receive a grade of 2.0 (good) while rehabilitation physicians get a grade of 2.4 (still good). Why is the same waiting period sometimes a cause of complaint and sometimes not? What service quality dimensions seem to be crucial for patients?

Therefore, on the one hand, we investigate quality independent factors that affect the satisfaction level. We thus try to answer the following questions: (i) Do elderly people complain more frequently, quicker or more intensely than younger ones do? (ii) Are persons with higher income more likely to complain than people with lower income? On the other hand, we want to clarify the so-called patient myths such as (iii) Do private patients really spend less time in the waiting room than public health patients?

In order to answer these questions, we analysed about 240,000 freely available review texts on jameda. de and docinsider.de using natural language processing techniques. Results so far show, for example, that 28% out of all discussed dimensions in jameda's reviews are about "kindness" while "waiting time" appears only in 7% of all review texts. Moreover, patient data confirms that in general, private patients rate their doctors better than public health patients but the gap between the grades differs dependent on the medical specialist.

Consequently, our results are proposed to provide especially older people that are searching for health care service providers with reliable information that allows them to judge the quality of reviews and thereby encourage them to use the Web 2.0 as a valuable decision support.

#### Abstract 2: Alleviating self-objectification in women: The self-affirmation strategy

Authors: Alexander Gunz (Manchester, United Kingdom) | Manchester Business School and Prof. Dr Christine Logel (Waterloo, Canada) | Renison University College, University of Waterloo

Self-objectification theory holds that women internalize a vantage point of themselves as objects, seen by others (Fredrickson & Tomi-Ann 1997). This has negative physical and mental effects (e.g., Fredrickson et al. 1998; Richins 1991), but few effective solutions — Commercial media and advertisers make too much money from objectifying imagery to voluntarily eliminate their usage of it. The present paper presents empirical evidence that a simple psychological manipulation (i.e., self-affirmation) may help women reduce harmful preoccupation with their appearance. Self-affirmation (or "values-affirmation") is a procedure that asks participants to write about the value (such as relationships, or religious beliefs) that they identify as most important to them. This has long been known to help people resolve many types of internal struggle (Steele 1988), such as reducing impulsiveness (Schmeichel & Vohs 2009) and cognitive dissonance (Steele 1988). Recent work has also shown that it can reduce women's body dissatisfaction, even though the manipulation never directly mentions appearance (Logel & Cohen 2011). The current study extends this finding, showing that it also reduces women's preoccupation with their appearance.

In a pre-post test with 100 young women, an affirmation had a moderately strong effect in reducing endorsement of items such as "I usually spend a lot of time getting ready before going out", "When I look good, I am confident in social situations", "It is important to constantly improve my physical appearance", "My female identity is defined by my physical appearance", and "When I look good, I am confident in social situations". This is remarkable given the trait-like wording of the items. A planned follow up study (to be run in time for the conference) adds measures of self-esteem contingency on appearance, persuasiveness of adverts for cosmetics (vs control products), and the willingness of women to opt for extreme hypothetical cosmetic surgery procedures, and a new control manipulation with a highly emotive message aimed directly at body-image concerns.

Reference online available: www.vz-nrw/iccr

## Abstract 3: Consumer protection in EU public health policies: Degrees of paternalism in vaccination and tobacco policies

Authors: Dr Remi Maier-Rigaud (Cologne, Germany) | University of Cologne, Institute of Sociology and Social Psychology

The paper compares the degrees of paternalism present in vaccination and tobacco policies at EUlevel. The main thesis is confirmed that applying both, the perspective of goods theory as developed by information economics and extended to include merit goods as well as the perspective of specific consumer risk-groups, yield the result that vaccination and tobacco display striking common features suggesting similar degrees of paternalism in EU policy.

Tobacco is a private good with negative externalities and credence good features. These characteristics as well as the heightened vulnerability of young people are accounted for in the revision of the Tobacco Products Directive. In particular cigarettes are considered gateway drugs for children and young adults. Accordingly, the revised Directive is less restrictive for products that are predominantly consumed by older consumers. For example, exceptions to the prohibition of products with characterising flavors are made for cigars, cigarillos and pipe tobacco because they are primarily used by older consumers.

Similarly, vaccinations are private goods with externalities (however positive ones) and, as applies to pharmaceuticals in general, exhibiting credence good characteristics as well. This is endorsed by EU policy. For example, Member States are encouraged to ensure maximum coverage rates for the main childhood vaccines and strategies are developed to foster education and vaccination advocacy by health care professionals. Also to some extent analogous to the group-sensitivity of EU tobacco policy, risk groups are identified including older people and people with chronic medical conditions for which a vaccination rate of 75% is deemed desirable concerning seasonal influenza and should be reached by the 2014/15 winter season.

The comparison of these two public health fields is based on document analysis and should yield preliminary generalizations. Ultimately, a general typology of paternalist intervention in consumer policy is proposed, combining the perspective of goods theory with the perspective of specific consumer risk-groups.

## Summary: Health, demographic change and well-being

Author: Dr Remi Maier-Rigaud | University of Cologne

Prof. Dr Michaela Geierhos and Sabine Schulze (Paderborn, Germany) | University of Paderborn | The same but not the same – Challenges in comparing patient opinions

The aim of this research project comparing patient opinions as expressed on the online platforms jameda. de and docinsider.de is twofold: Deeper insights into patient opinions and dissatisfactions should help providers to enhance their services. Moreover, the reliable results of the analysis should provide guidance for doctor's choice by users. In particular older persons should be encouraged to use the Web 2.0 as decision support tool.

Both platforms have in common to offer patients the possibility to express their opinions on individual doctors using open text and grades. However, the platforms differ in focus in so far as they exhibit a different variety of doctors. The analysis of 240.000 reviews freely available on the two platforms yields several results: First of all, a high level of patient satisfaction can be observed. Second, reported patient satisfaction is affected by quality dependent as well as quality independent factors such as the perceived kindness of the doctor. Moreover, younger patients are more critical than older patients. Finally, a comparison of review texts and numerical scores suggests that complaint behaviour is not consistent.

## Discussion

First, it was discussed who uses these platforms and how widespread it is used in Germany. Little is known about the users, because the reviews are anonymous. Of course, the plain names of doctors are visible and both platforms are run by private for profit companies financed through advertising. These platforms are relatively new phenomena (jameda.de started in 2010), but they are increasingly used in particular by the age group between 30 and 50 years. However, frequently patient opinions are delegated to family members of this age group who review doctors as agents for their children or their old parents. The companies only provide the platforms for discussion without reviewing the entries. Recently the possibility to comment on reviews has been added.

Second, some shorter questions were raised. The authors clarified that the waiting times reported are subjective and not necessarily objective. Also it was emphasized that no gender-effect was found apart from obvious differences concerning the type of medical specialists more relevant to women and men respectively. Also it was mentioned that some medical specialists such as plastic surgeons received relatively more attention in terms of ratings than other doctors. A possible explanation is that these kind of health services are typically paid directly out of patients pockets without reimbursement by health insurers.

Alexander Gunz (Manchester, United Kingdom) | Manchester Business School | Alleviating self-objectification in women: The self-affirmation strategy

Starting point of this study is self-objectification theory according to which women internalize themselves as objects seen by others from a young age on. This is used and reinforced by media and advertisers for commercial purposes. In particular marketing strategies use the discrepancies between actual and desired states.

The empirical study confirms that simple psychological manipulations in the form of self-affirmation strategies help to reduce the discrepancies and internal struggles (e.g. reducing impulsiveness and

cognitive dissonances). Self-affirmation asks participants to write about values they identify most with. The findings confirm that self-affirmation reduces women's preoccupation with their appearance, thereby reducing self-objectification. Relating to marketing, the study shows that glamour advertisements are less convincing after self-affirmation strategies have been applied. Control groups with other types of advertisements unrelated to objectification of women show no different reaction / rating by participants following self-affirmation. Still it remains open how long the effect of self-affirmation lasts and whether it can help reduce self-objectification in women in a sustainable way.

## Discussion

The question was raised, whether these findings are transferable to men and what research projects relating to men should be conducted. It was acknowledged that men are less concerned by self-objectification. However there are clear signs that this is currently changing with an increase of cosmetics and even plastic surgeries dedicated to men.

Dr Remi Maier-Rigaud (Cologne, Germany) | University of Cologne | Consumer protection in EU public health policies: Degrees of paternalism in vaccination and tobacco policies

The aim of this research project is twofold: First, it wants to identify the forms of paternalism present in EU policies in the fields of vaccination and tobacco. Second, it asks normatively, what intensities of paternalism would be justified in the two fields from the perspective of economic goods theory including information economics. Focusing on the example of vaccination against seasonal influenza and the recent Tobacco Products Directive first results indicate a differential paternalism with stronger paternalism targeted at risk groups in both fields. Despite a general focus on informational policy, tobacco policy is comparatively more paternalistic due to prohibitive elements such as the ban on characterizing flavours. From the normative standpoint of goods theory this is surprising because vaccination has stronger externalities and credence good features that would suggest stronger paternalism compared to tobacco policy. This is even more surprising from the perspective of EU integration, since the clear cross-border aspect of vaccination would suggest a stronger involvement on the EU-level.

## Discussion

The main point raised in the discussion recommended further specifying the area of vaccination analyzed, because vaccination is a broad and heterogeneous field, including highly important and largely uncontested and more controversial vaccinations. Also it was confirmed that information policies in the field of vaccination is a pressing policy concern since there is a resurgence of old diseases due to vaccine fatigue. This can be explained by the public good element inherent in vaccines and leading to sub-optimal demand for vaccination as well as incomplete or distorted information on the side of consumers, who would need evidence-based updating of their knowledge on the benefits and risks involved with vaccination.

Workshop 2: Horizons for European consumer research (Part II)

September 30, 2014 14:45-16:45

Session 2.4: Smart, green and integrated transport

Chair: Claus Seibt | Wuppertal Institute for Climate, Environment and Energy

## Abstract 1: Why do people switch to environmentally friendly modes of transport? Project USEmobility ,Understanding Social behaviour for Eco-friendly multimodal mobility'

Author: Jolanta Skalska (Berlin, Germany) | Pro-Rail Alliance

The decision in favour or against a certain means of transport is complex and depends on many influencing factors. The EU-funded project USEmobility: 'Understanding Social behaviour for Eco-friendly multimodal mobility' (January 2011 - February 2013) analysed the individual reasons that lie behind selecting a mode of transport. Over 10,000 persons that already changed their mobility behaviour were surveyed in 6 European countries about the reasons behind their modal choices. Such approach - an 'ex-post' analysis - is rarely chosen in the public transport research. USEmobility focused on regional and local mobility since short- and medium-distance travel is the biggest part of people's daily mobility. The ebb and flow between public transport and motorised personal transport was of particular importance.

USEmobility showed that in choosing their mode of transport, users behave far more dynamically than one would expect when examining today's modal split, which appears to be rather static. Further surprising insight of the project was how strongly changes in people's personal situation (relocation, a new job, birth of children etc.) influence changes in their choice of means of transport. In all surveyed countries mobility pragmatists comprised a considerable segment of surveyed persons (on average more than a quarter), considerably bigger than the strictly car oriented group.

USEmobility elaborated recommendations with steps and measures towards more sustainable mobility in the future. The insights gained in the project could help decision makers in politics, as well as in transportation companies, to develop a transport system that motivates more people to opt for public transport and multimodal combinations. At the same time, better understanding the reasons for change provides valuable support for civil society organisations willing to take action in the field of sustainable transport. More details at: www.usemobility.eu.

# Abstract 2: Intergrated ticketing to support changing mobility patterns in wider urban areas: User and consumer aspects and operators perspectives beyond public transport

Author: Herwig Schöbel (Vienna, Austria) | AustriaTech – Federal Agency for Technological Measures

The realisation of seamless multimodal mobility and transport solutions still represents a significant challenge for improving public transport. Nevertheless, an emerging number of multimodal information systems have already been realised providing by today very valuable support for individual journey planning and daily mobility. In addition, integrated ticketing schemes are allowing for the user of mobility services smarter access to a system of various transport and mobility providers with just one single ticket (conventional paper ticket or/and an electronic ticket).

In many European cities and conurbation zones integrated ticketing schemes in public transport have been implemented successfully and have attracted additional customers, among them numerous former monomodal car users. The progress of ICT applications in the transport sector is facilitating multimodal door-to-door mobility solutions. Electronic ticketing schemes (e-ticketing) are therefore expected to support an increasing modal share in public transport and a less car oriented mobility behaviour.

Transport operators are strongly focusing on the implementation of cost efficient ticketing systems. They have already identified with progressing digitalisation e-ticketing as an enabler to easily generate electronic journey data sets of their customers. The analysis of these data sets is on the one hand side allowing the design of more customer-tailoured mobility services for both the qualitative offer and the pricing. On the other hand side this data is of high value for marketing communication; in particular by merging individual mobility data (route data) with personal data. Doing so, benefits for customers are not necessarily guaranteed. Most recent technologies for electronic ticketing are built upon GPS tracking of individual mobile smart phones (location based services - LBS). LBS and electronic fare management (EFM) therefore tackle basic questions regarding data protection and privacy and are inducing significant demand regarding data security. High awareness already exists in the supplying industry in order to guarantee adequate technological solutions on data security. Nevertheless, today´s discussions on the introduction of EFM solutions for e-ticketing are mainly focused on operative solutions and on the design of suitable business models. End user and consumer interests as well as protection and security for "users as consumers" are poorly involved and considered in the debate.

# Abstract 3: Future Trends of carsharing – Opportunities for multimodal urban mobility from a consumer and provider perspective

Authors: Regine Rehaag and Gabriele Tils (Cologne, Germany) | KATALYSE Institute

A new paradigm of sustainable urban mobility implies a shift from individual to public means of transport. Therefore multimodal and networked offers of public transport are required as well as the willingness of the citizens to change their mobility behaviour.

Collaborative consumption such as carsharing is regarded as an indicator for shifting consumer behaviour. In Germany snowballing numbers of carsharing users (from about 260,000 in 2012 to 730,000 in 2014) corroborate this trend. At the same time new types of mobility offers ranging from sharing concepts like peer-to-peer sharing to business models (free-floating) came to the mobility market. Carsharing ('public vehicles') is just one option. Key challenge is the integration of multimodal mobility offers and providing convenient servicetools, which help citizens to find the best modal split for their individual needs.

Stabilisation and dissemination of new practices of sustainable consumption depend on their compatibility with daily life requirements. For this reason it is crucial, to highlight the consumer perspective (KonsumentInnenperspektive see Hayn et al. 2005). Group discussions with consumers are the empirical basis to gain insights into consumer needs and barriers concerning sustainable mobility offers (short range public transportation, car- and bicycle sharing) a research desideratum according to Wappelhorst et al. (2013: 2). Matching consumer and expert perspective (empirical basis in-depth interviews) will result in recommendations for local stakeholders and decision makers how to address citizens in an efficient way and how to develop customer oriented sustainable mobility offers, preferably taking in account social differences and social inclusion.

Reference online available: www.vz-nrw/iccr

## Summary: Smart, green and integrated transport

Author: Miriam Müller | Wuppertal Institute for Climate, Einvironment and Energy

In his introductory remarks, Claus Seibt the moderator of the session, pointed at two actual trends in person mobility and transport. These two trends involve particular consumer research and protection issues. Mobility and transport in urban areas is increasingly expected to shift from monomodal car travelling to mulitmodal transport behaviour using on one hand public transport and including walking and cycling.

On the other hand carsharing / renting and bike sharing options are replacing or complementing individual car ownership of an increasing number of "consumers".

Expectations are raised, that in particular in urban environments with a paradigm shift to public transport, walking and cycling and decreasing car ownership sustainable urban transport systems can be achieved. Public policy is supporting services to make mulitmodal travelling as attractive and flexible, than using the car, including nudging car owners not travelling by car in urban environments. From a consumerism perspective the shift to "mobility services as main of transportation" is raising a wide range of issues: (Re)liability and interconnection time accuracy in public transport systems, data protection and privacy issues with traveller information and e-ticketing relying on real time, location based, personalized user data or novel sharing systems raising consumerism concerns regarding business model transparency and liability.

In her presentation, Jolanta Skalska presented the results of the EU funded research project USEmobility. The project is aiming at identifying factors influencing individual decisions shifting from car travelling to multimodal mobility and public transport. A survey addressing around 10.000 persons in metropolitan areas across Europe was performed. The survey was mainly addressing persons, who recently shifted their daily travelling or commuting behaviour instead of using an own car to travelling by metropolitan / regional train services to urban city centres.

Almost half of the survey participants shifted within the last five years from travelling by car to multimodal mobility options. The car is mainly used for first / last mile from home to the rail station. In urban centres for first / last mile tram, bus or metro including walking are mainly taken. The general outcome of the survey was, that most people are open to change their travel behaviour and choice of transport mean. Form a consumer research perspective three main drivers for shifting to multimodal travelling behaviour were identified: Change of personal circumstances, attractiveness and reliability of public transport and increasing costs for individual car use.

Main factors for influencing a modal shift to public transport are hard factors (journey time, costs, accessibility). But also soft factors like comfort, e.g. to better relax in train commuting, played a role. An effective public policy measure to support modal shift to public transport is proactive consumer information, e.g. welcome packages of regional transport authorities to persons recently moving to the territory. The survey results were similar across all six European countries, the survey was performed in.

In the discussion about the project outcome it was stated that an even closer look at individual mobility patterns is crucial in order to better understand mobility behaviour. Approaches in sustainable consumption research like the capability concept of Amitya Sen and better understanding, that particular limits in workaday journey time routines are main driver for transport choice, will support interdisciplinary research. Consumers voice (Falk) regarding transport choice (car or multimodal travel) in workaday routines depends at first on sound and reliable door- to-door travelling time.

In his presentation, Herwig Schöbel presented results of the European funded project Rail4See focusing on integrated electronic ticketing (e-ticketing) to support changing mobility patterns in metropolitan regions across Europe. At the European policy level the White Paper Transport 2011 is asking for a framework for a European multimodal transport information and travelling assistance system up to 2020. Information and communication technology applications (ICT) for traveller information and assistance and e-ticketing services play a mayor role to support multimodal transport behaviour.

There are already practical solutions for traveller information and assistance and integrated e-ticketing at the local and regional level in most metropolitan regions across Europe. A territorially more advanced example of integrated e-ticketing exists in the Netherlands: 19 public transport authorities and 10 regional transport providers have implemented a national integrated e-ticketing system. The clearing concept for the transport operators is based on distance travelled in the area of an operator. Since June 2014 e-ticketing in the Netherlands has replaced the paper ticket. Consumer benefits are no more queuing at ticket counters; the fare for using different public transport services are integrated into one ticket. E-tickets in the Netherlands do not require any knowledge of fares travelling in and to a particular territory as the ticket automatically selects the best price. Negative effects are the higher complexity for users: an e-ticket holder needs to check in and check out the public transport service he is currently using. Furthermore there is less transparency regarding actual costs per trip or information on any extra costs per trip.

From a consumer protection perspective one of the main challenges regarding new ICT based traveller information and integrated e-ticketing systems are next to the decline of cost transparency (see above) data protection and privacy issues. The systems are based on location (GPS) as on individual mobility data and regarding e-ticketing additional person data. Personal, location and route data can be merged to gain perfect user and consumer profiles. Such profiles are higly profitable for direct marketing: commercials can e.g. be customized and directed to consumers in relation to their actual profile and current location. To provide these data for direct marketing is already discussed to additionally finance public transport. For consumer protection, trustee schemes have to be implemented to protect users and consumers. Regarding privacy, a "non data usage option" has to be offered and transparency provided regarding personal and location based data handling. A reliable regulatory European framework or a European wide trustworthiness quality label (standard, certificate) regarding usage, handling and storage of data collected and distributed by multimodal traveller assistance and e-ticketing systems is highly important action.

In her presentation, Gabriele Tils gives first insights into today's trends and practices in car sharing gained from a public funded research project running till November 2014. The results are based on focus group discussions with car sharing users and potential "car sharers" in the future, in-depth-interviews and stakeholder workshops. Changing consumer demand trends towards sharing and renting services (sharing economy) instead of owning particular everyday artefacts is an emerging phenomena in recent years. In particular the number of station based- and free floating car sharing services in Germany have significantly increased in the past years.

According to the "Bundesverband Carsharing" there has been a significant increase in car sharing services, especially in free floating car sharing. Since 2014, the number of cars in free floating car sharing services has exceeded the number of cars in station based car sharing systems. While research has demonstrated that end users of station based car sharing create positive environmental effects by reducing private car ownership and car travelling, the environmental effects of free-floating car sharing are discussed controversially. In most cases users or free floating car sharing are still owning or at least having access to privately owned cars or they are as well registered to station based car sharing schemes. Free floating

car sharing is offering a restricted travelling range within a particular district or at least does not allow to leave the car outside the district behind. A constant debate is, if car sharing options in districts with good access to public transport are pulling people away from PT. Positive effects of free floating car sharing are that they meet a lot of consumer needs and wants (flexibility, convenience) and are creating visibility and awareness.

The result of the research project demonstrates different aspects why users and consumers engaging to car sharing: flexibility and individuality (door-to-door mobility), relief of costs of ownership, time and stress (no search for parking), convenience and good service quality. Environmental friendliness and sustainability issues are not high ranking criteria to register to car sharing. Changes in life or the end of lifespan of a privately owned car are in many cases a good opportunity to register to a car sharing scheme instead of renewing individual car ownership.

In order to facilitate car sharing alternatives in urban areas, car sharing must become a widespread practice and easy to achieve consumer choice. Prominet barriers are individual concerns regarding the spontaneous availability of a car and the perception of reduced personal freedom in mobility. With free floating car sharing schemes this spontaneity can be obviously regained, at least in urban areas where a high density of car sharing vehicle fleets across all inner city districts can be provided.

A consumer research perspective on car sharing as one of the most prominent areas in sharing economy is very significant. Consumer information on car sharing services have to be provided taking individual mobility "needs and wants" into account. In the 1990s a simple calculation was valid: For a yearly car travelling distance of less than 12.000 km costs of own car (cost of ownership and operation) were estimated higher than participating and car travelling below this distance in a sharing scheme. Today car sharing services are much more diversified. Interested consumers have to be well informed regarding their individual mobility behaviour. Consumer information platforms have to point out customized solutions for individual mobility patterns.

In addition contractual and liability issues related to car sharing services have to be better taken into account with newly upcoming car sharing or car pooling systems ervices and the business models behind. How protected are consumer in case of accident or minor vehicle damage with professional car sharing providers? How protected are they in case of disruption in infrastructure and not being able keeping the time they have reserved or rented a car? Consumer protection issues with novel car sharing options using individually owned cars in the fleet or "professional car sharing services among neighbours" have likewise to be addressed.

## **Discussion and Outlook**

The different presentations in the session demonstrated that the voice of consumers has to be better heard and taken into account. A discussion came up, if the individual user addressed in mobility research is more than a consumer. Mobility behaviour is not alone an issue of choice but determined by structure and daily routine demand. People have to come to work or education – they have not really a choice.

Time series based statistics regarding the use of public transport in Germany presented in the USEmobility project did impressively show, that in the time course of several years the modal share of public transport stayed rather balanced at the same average level. Individual choice to shift to public transport is for many persons in the metropolitan areas in Germany already exhausted: most people having a good and attractive multimodal choice are already into multimodally workaday routine travelling.

Mobility is more than transport, not alone addressing travelling but including decision making about travelling. In urban areas daily routine journeys are ranging in average up to 5-7 km one way. The daily

commuting distance in wider urban areas ranges up to in average 23.5 km, looking at actual commuter statistics across Europe. In both cases workaday journey time may not much exceed more than 90 minutes. Multimodal transport options are attractive if they are allowing journey time within a similar time range than car travelling. They can be additionally attractive being less costly than the use of an individual car. In case of walking and cycling additional benefits are provided in physical exercise (active mobility). But, the multimodal transport chain has at least to be as reliable for workaday travelling, as flexible, and allowing self empowering action in case of delay and disruption, like travelling by car.

Car sharing offers are expanding. A new paradigm of a sharing and service economy is already proclaimed in the person mobility and transport sector. Due to decreasing financial capabilities of many households and increasing costs of car ownership and use a "novel pragmatism regarding individual car ownership" gets increasingly visible. In urban areas it is meanwhile more attractive not owning a car, or if still owning not moving it most of the time. Local public authorities are nudging this trend with parking space getting scarce in densely populated districts. The shift towards sharing and service economies in the mobility sector is rasing new consumer protection issues. Ever new service offers are arising like recently the UBER apps and other options.

## Session 2.6: Climate action, resource efficiency and raw materials

Chair: Prof. Dr Wiltrud Terlau | Bonn-Rhein-Sieg University of Applied Sciences and Founding Director of the International Centre for Sustainable Development (IZNE)

## Abstract 1: Preparation methods of convenience food and their impact on energy consumption and consumer satisfaction

Authors: Dr Jasmin Geppert, S. Conin and Prof. Dr Rainer Stamminger (Bonn, Germany) | University of Bonn

Along with work and living conditions, nutritional behaviour of consumers has changed within the last decades. The main focus of food consumption patterns today is on dietary and health aspects as well as on convenience. This is the reason why convenience products have continuously been on the rise during the last years in Germany and other European countries. One of the fastest growing and most innovative food markets is the sector of chilled food comprising all food products that have to be stored at refrigeration temperatures of 8 °C or below. For consumers, a reduced workload with regard to food handling and food preparation and an assured success of the dishes may be seen as the main advantages of these products. At the same time, the products need to fulfil high sensory requirements to be successful in the long term. The quality of a certain chilled food product is significantly influenced by the way it is reheated in domestic kitchens. There is a common advice to apply heating methods that affect sensory and nutritional aspects of the food as little as possible. Some of these methods are indicated on the packaging of a product. But the consumer does normally not know, which of these alternatives is the best with regard to sensory, nutritional and energetic aspects.

The objective of the present project was to investigate the impact of different heating methods of chilled food on sensory, nutritional values and energy consumption. By way of example, all investigations were carried out using carrot-potato stew as a chilled food product. Besides sensory tests and measurements of energy consumption, the content of  $\beta$ -carotenoids was analysed as an indicator for nutritive changes during the heating process. Following package cooking instructions, the stew was heated by using a hot water bath, a microwave and an oven.

The comparison of the different heating methods has revealed remarkable differences in nutritional and sensory aspects as well as in energy consumption. The most significant differences (up to 500%) were observed concerning the energy consumption. To heat up one portion of the stew, between 76 Wh (microwave) and 398 Wh (oven) of energy was consumed. In view of these results and the importance of the topic on everyday life, it seems to be advisable to intensify the research in this field and to improve information for consumers.

## Abstract 2: How relevant is obsolescence - result of an empirical survey

Authors: Laura Hennies and Prof. Dr Rainer Stamminger (Bonn, Germany) | University of Bonn

A depreciation or aging process caused artificially is called planned obsolescence. This is often represented negatively for the consumer. The possibilities of the planned obsolescence are variously and for the consumer extremely non-transparent. Such obsolescence can be also sustainable if the expectations of the consumer are met.

An Internet-based survey was designed in which consumers were questioned about equipment they already disposed of. Five goods stood in the focus: Washing machine, notebook computer, water boiler,

television set and hand stirring equipment. Inter alia, the life time of the goods and the reasons of replacing them were investigated. The data elevation was carried out on an Internet-based interview portal in the time period from 12-1-2013 up to 4-6-2014. The interview was filled out by 1295 participants. The evaluation is completed at present.

# Abstract 3: Climate change impacts on agriculture, food prices and consumer welfare: Evidence from Israel

Authors: Iddo Kan, Ayal Kimhi and Jonathan Kaminski (Rehovot, Israel) | Hebrew University of Jerusalem

Having a reliable measure of the effects of climate change on agriculture and food prices is particularly important as governments and international organisations alike are called upon to revise current policies in order to adapt to climate change, and to integrate agricultural policies with a broader set of policies targeting sustainable development and natural resource management. Furthermore, taking food prices into consideration is extremely important given its relevance to the critical issues of poverty, food security and malnutrition around the world.

The purpose of this paper is to model and simulate the impact of climate change on agriculture, food prices and consumer welfare. Our modelling approach consists of three stages. First, we estimate farmers' response to climate change, in terms of crop portfolios, farmland allocation and quantities produced, using spatial climate variability. Second, we use the first stage results to derive aggregate supply of agricultural products, and interact it with a demand model to derive equilibrium food prices and quantities, from which we can compute consumer welfare. Finally, we simulate the model using climate change forecasts in order to obtain future food price and consumer welfare responses to climate change. We estimate the model using Israeli data for the years 1990-2000 and simulate the impact of projected climate changes for the years 2000-2060. Simulation results show that consumer welfare is expected to decline as well, as food consumption declines while food prices rise. Quantitatively, over the 2000-2060 period, Israeli consumers are expected to lose welfare equivalent to 1.6 billion dollars due to the changes in food supply. In contrast, if free food imports were allowed, consumer welfare would not have changed, but the loss in agricultural profits would exceed 4 billion dollars.

## Summary: Climate action, resource efficiency and raw materials

Author: Dr Darya Hirsch | Bonn-Rhein-Sieg University of Applied Sciences, IZNE

This report focuses on the conference session 2.6. dedicated to Climate Action, Resource Efficiency and Raw Materials. The report mainly contains the key elements of the presentations. Important corner stones of the discussion are made accessible and results are documented. The session contributions were as follows: Starting on the micro level (research on causes for the obsolescence with an analysis of the physical life span and useful life of washing machines, electric kettles and hand mixers as well as some recommendations for reaching a long or dependable life span and research on convenience food, preparation methods of convenience and consumer satisfaction) and continued on the macro level (climate change impacts on agriculture, food prices and consumer welfare: Evidence from Israel).

Current global challenges such as climate change, lack of resources, desertification, land degradation as well as loss of biodiversity can ultimately be due to human actions. Reasons are excessive production and consumption of goods and services (life-style), along with using and consuming natural resources, causing emissions and waste products. Demand in the form of consumption and supply in the form of production are closely intertwined. A more reflected consumer behaviour, technological and organizational innovations as well as political interference might be the first steps towards finding an optimal balance between demand and supply. However, behaviour and behaviour changes are complex processes. The overall objective of such changes / measures / steps is to achieve a sustainable consumption.

The session was in line with the H2020 Societal Challenge 5 (SC5) with the objective "to achieve a resource and water efficient and climate change resilient economy and society, the protection and sustainable management of natural resources and ecosystems, and a sustainable supply and use of raw materials". In order to meet the needs of a growing global population within the sustainable limits of the planet's natural resources and eco-systems, measures for climate protection and protection of ecosystems gain in importance. Changes will spread into every aspect of economic life – from what we consume, to the way we produce energy, the technologies we use, where we locate firms, and how we produce and distribute goods. An important concern for many people in this respect is the impact of climate change policy on employment. In the short term, jobs will shift from high-carbon activities to low-carbon activities. Such structural adjustments are often associated with innovation, job creation and growth.

## **Statement by Laura Hennies**

Obsolescence is not equal to normal wastage as shown in the bathtub curve (see explanation later in the text below), nor does obsolescence apply to predetermined breaking points for safety. One distinguishes between **technical obsolescence**, which means a lack of quality of a component or material, **functional obsolescence**, which means new features forces purchase, as well as **psychological obsolescence**, i.e. trends in lifestyle inspire desire.

The hypothetical failure rate of a machine can be explained based on the so-called bathtub curve, where time versus failure rate is illustrated. In the first period the failure rate is high because of early drop outs, while the second period is characterized by random breaks. In the third period, the failure rate increases due to wear out (eventually the repair cost exceeds the replacement cost). However, in the case of obsolescence, it may not be due to normal wear out when a device reaches the end of its life.

Contrary to the belief that the ideal lifespan should last as long as possible, there are several studies which show a limited lifetime of devices (Chalkley et al. 2003, Young 2007, and Stamminger et al. 2005). The presentation gave a short introduction of the "Project Obsolescence". The "Project Obsolescence" contains a "Waste yard Project", which analyses washing machines, electric kettles and hand mixers in waste yards, a "Fatigue Test Project", which devotes itself to testing three low priced hand mixing devices with the focus on predetermined breaking points NOT for safety, and an "Online Questionnaire Project"- a questionnaire to raise significant data as well as information on life time, useful time and maintenance history (price, use frequency, repair).

This contribution presented the "Online Questionnaire Project", where the following methodology was chosen: Online questionnaire (SoSci tool) on: washing machine, laptop, electric kettle, television, hand mixer, accessible with current browsers. The same questions were asked for all devices. Respondents were recruited via the press office of Bonn University and an article in a daily newspaper called "Kölner Stadt-Anzeiger" (printed and online version). A non-representative sample contains 1075 participants (47 % men, 53 % women) with an age span from 18 to 86 years (the average is 41 years).

The results showed that in the case of washing machines, frequent usage reduces its life span and expensive brand machines run longer. In the case of laptops it was found that they have an average life time of 5 years; however the life span does not increase in dependence of the price. Another result was that a frequent use of laptops leads to a shorter life span. The survey results on electric kettles showed that the life span of the devices increased with their price. Consumers prefer to buy cheap kettles. The life span of electric kettles does not depend on frequency of usage.

In the discussion, the following issues were highlighted:

- Relation between obsolescence and warranty of a device.
- Role of water hardness for kettles and washing machines.
- Role of social desirability in the answers and its interpretation in the survey.

#### **Statement by Jasmin Geppert**

The presentation started with the statement that the nutritional behaviour of consumers has changed over the last decades due a demand for high mobility and flexibility as well as changes in the traditional family structure (Stix 2000, and Werner et al. 1983). In the convenience food consumption, the main focus lies on dietary and health aspects, convenience and simplicity (Ohlsson 1995). The consumers of convenience food are especially singles and people in the age bracket of 20 to 54 (Nielsen Company 2010). According to Pichert, there are advantages of convenience products from the consumer's perspective such as reduced workload as well as assured success of the dishes (Pichert 2001). Consumers expect from convenience food easy handling and a high nutritional and sensory quality (Pichert 2001). However, the quality of convenience products depends on reheating methods in domestic kitchens, since heating methods affect sensory and nutritional aspects. The optimum is to change the food are as little as possible. Reheating methods have an influence on energy consumption, equipment needed, time exposure and uniformity of heating.

The literature review showed that there is a lack of studies concerning reheating methods of convenience products with regard to nutritional, sensory and energy aspects. Also little is written on vitamin retention of fresh and frozen vegetables during a heating process (Bernhard and Schlich 2006). The vitamin content strongly depends on the preparation method. Also, studies concerning energy consumption and cooking methods showed that energy consumption is highly dependent on the heating method and it is possible to save up to 50 percent of energy with the same equipment (Oberascher et al. 2011).

The objective of the presented study was to investigate *how the method of reheating affects the nutritional and sensory quality of convenience food and the total energy use*. Convenience products, namely a chilled carrot-potato stew, were compared with the freshly prepared carrot-potato stew. Sensory tests, measurements of energy consumption as well as the  $\beta$ -carotenoid content were analysed. The chilled dish recommended three different ways of preparation: microwave, water bath and convection oven.

Sensory tests and the measurement of  $\beta$ -carotenoids were carried out by three replications.

The results showed that the highest energy consumption was caused by the oven (due to preheating to  $160 \degree C$  (~ 60 % of energy use), the lowest by the microwave.

The preferred temperature for food consumption (60 °C) was only reached by heating the dish in a water bath. The sensory profile of the freshly cooked product was totally different from the chilled food heated in the microwave or water bath. The dish prepared in the microwave had a relatively high amount of  $\beta$ -carotenoids.

The presentation concluded that preparation methods of food products have a high impact on energy consumption, product temperature and sensory and nutritional quality. More research is needed to optimise instructions on packaging. Moreover, information on energy consumption about the different preparation methods on the package could help consumers to chose the most efficient method.

Further research could be based on experiments with e.g. other food products (convenience and selfprepared), other quality parameters (vitamins, antioxidants). Also, life cycle analysis of convenience products including production phase and storage might be of research interest.

In the discussion, the following issues were highlighted:

- Good to re-introduce cooking experience.
- Modification of package instructions to identify an optimal heating method.

- Self-preparation is not worst case / energy wasting; The convenience food often does not include production phase, industry, and storage phase (4°C).

#### Statement by Ayal Kimhi

The presentation described initially the motivation of this research, dealing with the climate change impacts on agriculture, food prices and consumer welfare. Influencing factors are current food prices and the effect of climate change in general (projected changes in the surface air temperature, change in precipitation by end of the 21st century, and change in crop yield).

For the analysis it is important to apply the right methodology. There are different prediction approaches for modelling farm responses to climate change, such as **production approach** (experimental effect of climate change on yields); **programming approach** (computed effects (micro level) on food supply and prices. Disadvantage: decisions are not made globally); **Ricardian approach** (empirical effects of climate change on farm profits or land values. Land use approach: empirical effect) and **integrated approach** (climate change effects, how farmers react, some crops could become more profitable, elements of programming approach to estimate the changes in the agriculture). The integrated approach models how the climate change will affect agriculture directly, i.e. a farmer changes the crop portfolio. It is an indirect effect, when a farmer reacts to changing prices with further changes to the crop portfolio and a new equilibrium is reached.

Kaminski, Kan, and Fleischner (AJAE 2013) have developed a structural model of land allocation among crop-technology bundles as a function of climate variables (regional level (7 crop-technology bundles) for methodological reasons).

The presenter described the contribution made to the previous research, done by Kaminski, Kan and Fleischnerby adding the market equilibrium component, estimating land allocations at village level and allowing for corner solutions in land allocation.

Moreover, the advantages for Israel in this line of research were mentioned such as spatial climate gradient, small country (spatially uniform prices), fruits and vegetables are protected from competing imports, so prices are determined internally, modern agricultural sector that applies state of the art adaptation technologies, availability of land allocation data, availability of past and future (1960-2060) high resolution (25 km2) climatic data (Krichak et al. 2010).

According to the climate change forecast for Israel, a temperature rise is expected and precipitation will go down after 2035. One differentiates between sub-periods: until 2035 and after 2035.

The research is carried out, based on the simulation of a partial equilibrium, where predicted climate

variables in the estimated land-share equations are substituted and a price index that equates the demand and the supply quantity indices for each bundle<sup>1</sup> is sought.

 $\min_{\boldsymbol{\varphi}_{t}^{p}} \sum_{j=1}^{J-1} \left( \varphi_{j}^{q} \left( \varphi_{jt}^{p} \right) - \varphi_{j}^{y} \left( \mathbf{z}_{t} \right) \right)^{2}$ s.t.  $\boldsymbol{\varphi}_t^p \leq \overline{\boldsymbol{\varphi}}^p$ 

Import prices

Two scenarios are compared: **Free trade**, where current local prices of all agricultural products are equal to their world counterparts (without tariffs), which remain constant, and **restricted trade** (tariffs), where prices of vegetables and fruits are determined by an equilibrium in the local markets.

In 2035 fruit yield is expected to go down due to low precipitation, while the vegetable harvest will go up, due to seasonal irrigation. The yield is changing by 50 percent. In the scenario of a restricted trade (more reasonable), the change is more moderate. Since the quantity will do down, prices will go up. In the freetrade scenario, declined profits for farmers until 2060 are expected (25%). Also, under this scenario, the consumer welfare will go down (farmers are only 1% of the population).

The presentation summarized that the integrated approach takes into account partial equilibrium effects of price changes and changes in crop portfolios at the village level, including corner solutions. Crop portfolio effects are not so large, price effects need to be considered.

The presentation recommended modifications in the water policy and the quota systems, since the major driver is the anticipated lack of precipitation and using recycled water for fruits, but not vegetables (for vegetables, tertiary treatment is needed). Also, water saving as mitigation technology and tariff policy (reducing import tariffs may protect consumers but hurt farmers)were suggested.

In the discussion, the following issues were highlighted:

- Reliability of the forecast after 2035
- Consideration of price forecasts in the simulation
- Presentation of research results to policy makers<sup>2</sup>
- Limited data availability (esp. on agriculture in Israel)

- Price protection (import tariffs, subsidies for water allocation) as governmental support. It is possible to change the model.

 Crops in a bundle are composite goods: their prices change proportionally. The demand function for some crop I in bundle j is:

$$Q_t^{lj} = B^{lj} \left( p_t^{lj} \right)^{\rho}$$

The demand index in bundle j (Laspeyres):

$$\varphi_{t}^{qj}\left(\varphi_{t}^{pj}\right) = \frac{\sum_{l=1}^{L} p_{l}^{lj} B^{lj} \left(\varphi_{t}^{pj} p_{l}^{lj}\right)^{p^{qj}}}{\sum_{l=1}^{L} p_{l}^{lj} B^{lj} \left(p_{t}^{lj}\right)^{p^{qj}}}$$

2 Ministry of Agriculture is funding this research. No implementation of the recommendations so far.

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#### Session 2.7: Secure societies

Chair and Rapporteur: Prof. Dr-Ing. Christoph Sorge | University of the Saarland

**Abstract 1: Traditional vs "share economy"-based trust systems and their impact on buying decisions** Authors: Bastian Dinter, Prof. Dr Lothar Funk (Düsseldorf, Germany) | University of Applied Sciences and Prof. Dr Sven Pagel, Christian Seemann (Mainz, Germany) | University of Applied Sciences

Consumer protection is often related to overcoming informational deficiencies on the side of potential customers as well as contributing to overcome market failures. Consumers need to be able to distinguish between high and low-quality goods or services. This is why they "may also solicit the services of information intermediaries, [...] that specialise in evaluating goods and services produced [...], and publish and distribute product or company ratings" (VanHoose 2011, 130). Current problems have been highlighted recently in the quality press in order to increase public awareness of a field which has been neglected in governmental policies and among academics.

It is often noted that seemingly nearly "everything has changed" in the "knowledge economy" (Boyes 2012, 270 f.). One issue is an easier access to information at low costs on the Internet: Sharing is the defining activity of Web 2.0. A related problem to this shift in communication is the question of information quality.

This paper compares the roles of traditional consumer organisations and recommendation providers (such as "Stiftung Warentest") to customer-based recommendation approaches during the purchasing process based on an experiment:

What are the reasons for using traditional or collaborative seals of quality? Are they substitute or complementary to each other? May we see "crowding- out" effects in shared services replacing traditional evaluations? What institutional strategies will be appropriate to avoid biased information leading to negative effects for customers?

To gain a conclusive answer, this paper will summarize the current state of research on trust in reviews, giving new insights into what kind of review creates credibility and how this affects decision making.

Reference online available: www.vz-nrw/iccr

## Abstract 2: Consumer interfaces in the smart grid – Dawn of a privacy divide?

Authors: Timo Jakobi and Prof. Dr Gunnar Stevens (Siegen, Germany) | University of Siegen

The widespread introduction of intelligent metering systems has meant a massive invasion of end users' privacy. This report analyses potential implementation scenarios from the perspective of dedicated users. In doing so, the danger of a privacy divide will be shown. We suggest that this could be avoided by taking greater account of socio-economic aspects while drafting safety precautions and regulatory guidelines which would enable secure, accessible and utilisable solutions for the general populace.

## Summary: Secure societies

Author: Dr Ronald Petrlic | University of the Saarland

Prof. Dr Lothar Funk and Prof. Dr Sven Pagel started their talk with their main research question "Do quality labels influence purchase decisions? In which manner?".

Then they started to talk about the theoretic foundation of their work. The Internet allows customers to provide feedback for services / products. The question is how to signal quality of a product in a reasonable way. From a public policy perspective, the goal is to overcome potential market failures (moral hazard, lemons market, etc.). Somehow, the information asymmetry between customers and suppliers needs to be overcome: Reputation is one way to achieve that. The suppliers' goal is assumed to establish and maintain good reputation. The customers can use information intermediaries to get suppliers' reputation values. The authors especially looked at two different forms of reputation in their work: Certificate marks and Online communities. Abuse can be detected when both methods of reputation interact with each other.

The authors started to work out which types of quality signals exist. The focus was on extrinsic signals, e.g., customer reviews and approvals (from Stiftung Warentest, for example). There are a number of different customer reviews: Homemade pictures, experience with products or services, self-written texts, homemade videos, etc. Quality signals may be the quality of online reviews, the number of customer reviews, and the valence of reviews.

In a next step, the research question was further broken down into

- Research question 1: Are there differences between traditional quality approvals and web-based customer reviews regarding the influence on purchasing intentions?

Research question 2: Do customers still trust in traditional quality labels?
In order to answer those questions, a user study was performed. The pilot study, with a sample size of 49, consisted solely of students.

The first question to the students was: "In general I trust StiftungWarentest/a customer review and its test results / ratings?".

The result was that:

- More students were undecided concerning the customer reviews; not so much students were undecided concerning Stiftung Warentest

- The highest portion of the students agreed (and strongly agreed) that they trust Stiftung Warentest (not so many students agreed to trust customers' ratings)

Another question was: "In general quality labels (Stiftung Warentest or customer reviews) have an influence on my purchase intention? The students responded that those quality labels do have a high impact. Moreover, the authors found out that quality approvals are good for within 1 ½ years (older approvals are not perceived as helpful). The minimal number of available customer reviews shall be 24. Then, the authors performed an online shopping experiment. The scenario was as follows. The students were asked to decide which chocolate they would buy from a chocolate online shopping site. Three different products (chocolate bars) that were very similar in terms of nutrition aspects were presented:

- one with a label from Stiftung Warentest

- one with stars representing users' ratings
- one without any label.

The authors could not find any significant impact of quality signals on customer choice, which seems to be a little bit contradictory to what students responded before. As the authors argue, this may be due to the fact that chocolate is a low-cost product and not so much research is done before buying such a product.

Funk and Pagel ended their talk with stating the following implications for consumer policy:

- It occurs the question if quality labels protect the consumers
- Profitability pressure of quality foundations lead to sensationalistic service journalism.

The audience had a couple of comments for future studies / research:

- Stiftung Warentest might be more appreciated for technical checks and might not be known so much for reviews concerning ecological aspects, taste, etc.

- The experiment was done by presenting just stars (no text comments) to the users, but the authors noted before that in the literature it is noted that text comments are important

- It was questioned whether experiments with students are even the right thing to do, because students would ask other people, check Facebook pages, etc. before buying products

- Another question from the audience was which kinds of quality signals are easier to manipulate? No real answer could be given to that question, however mutual checks, i.e. to have both forms of reputation, could help, as the authors noted.

Prof. Dr Stevens started his talk with presenting the basics of privacy protection and IT Security. He pointed out the principle of data avoidance (privacy-by-design approach), for example. Then he talked about the "privacy paradox": Users are getting increasingly worried about their data but the usage of services that ask for personal data increases at the same time.

In their work, the authors mainly focused on the "BSI Schutzprofil", which is the German regulation operating smart meter infrastructures. It is about the protection of data collection, transfer, storing and the possibility for users to control who has access to the data collected by smart meters.

Different implementation scenarios were investigated in the work:

- Energy supplier's proprietary portal
- Standardized cloud service
- Single purpose display
- Home energy management system.

An evaluation of those scenarios was performed in terms of security, comfort, and cost. One of their major findings in their assessment was that scenarios with low security typically have low cost and those with high security have high cost.

The major goal that Prof. Stevens pointed out in his conclusion is that it is important to have accessible privacy, i.e. an increased privacy level for the "normal" user.

The talk was followed by a long discussion. The comments from the audience were:

– Regulations in smart metering seem to be bad; what kinds of evidence are they based upon? Someone responded that the initial goals of smart metering are very questionable – as is the study that points out all the advantages of smart metering. The lobby is big as well: Communication companies are pushing smart metering now. The European commission is pushing the roll out. However, no one asks about the good points for the consumers.

- The author stated that one problem might be that IT security guys are in general not interested in consumers (prices, etc.). This argument was supported by someone from the audience: In Germany, the smart meters are very expensive (more expensive than in other countries) because the security / privacy needs to be paid for.

- Another participant wanted to know whether you can take the smart meter with you if you move to another place? The smart meter is rented — you don't own it.

- The debate is still going on; so far, mostly technicians participate (no consumer researchers for example) - 5 regulations in Germany will come (but the process is not open).

– Someone from the audience noted that Ernest and Young proposed that everybody should pay a certain amount ("Zwangsumlage"  $8 \in$  per year) in order for smart metering to kick off — but this plan should be gone now...

- The chair explained that he wouldn't support the opinion of the audience that privacy makes the smart meters expensive, because the BSI Schutzprofil is far behind actual research on privacy

- It is also unclear how to deal with "authorized" people who see the electricity profile of their home: They see the profiles of their kids, partners, etc.

The session ended with most participants being rather skeptical whether smart metering is a good thing and the general opinion was that it should be everybody's own choice whether he / she wants to install a smart meter in his/her home — but no one wants to be forced to buy and install a smart meter.

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