

# European Economic Policy

**Topic 10. Why can studies on satisfaction and behaviour help us design European policies?**



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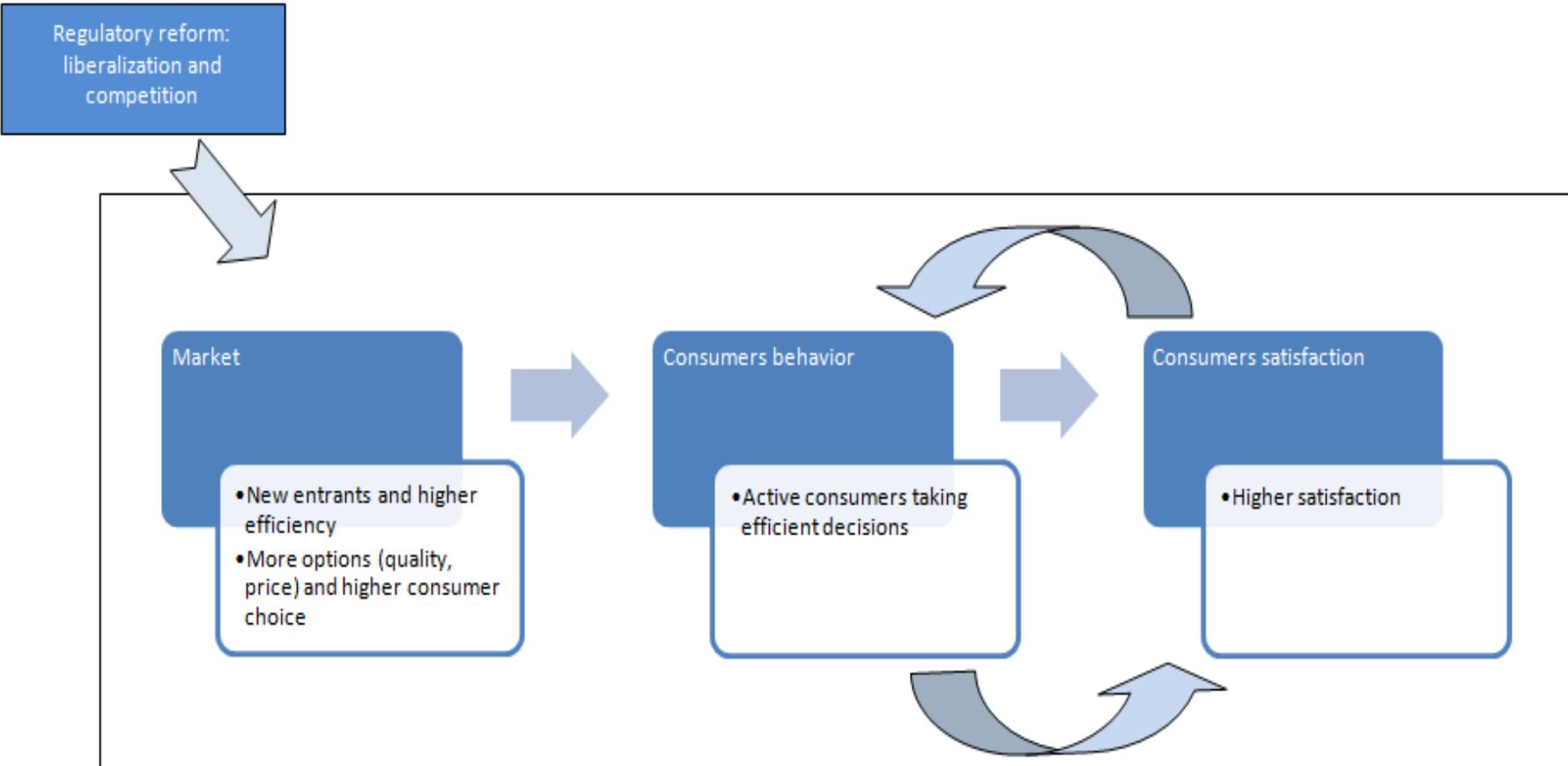
# Structure

- 1.** Public services reforms in the EU: motivations and concerns.
- 2.** Regulating public services from the consumer perspective.
- 3.** Public services from the citizen/consumer perspective: the social dimension.
- 4.** Case study: energy and telecommunications in the EU.
- 5.** Conclusions.

# Public services reforms in the EU: motivation and concerns

- **Market-oriented reform of public services:** electricity, telecommunications, railways, water, financial services, health, etc.
- **Aims:**
  - Market integration and competition: lower prices and higher choice for consumers.
  - Citizens, as homogeneous rational consumers (*homo oeconomicus*), optimal decisions in the markets.
  - Benefits for all the citizens as consumers (welfare and satisfaction).

# Public services reforms in the EU: motivation and concerns



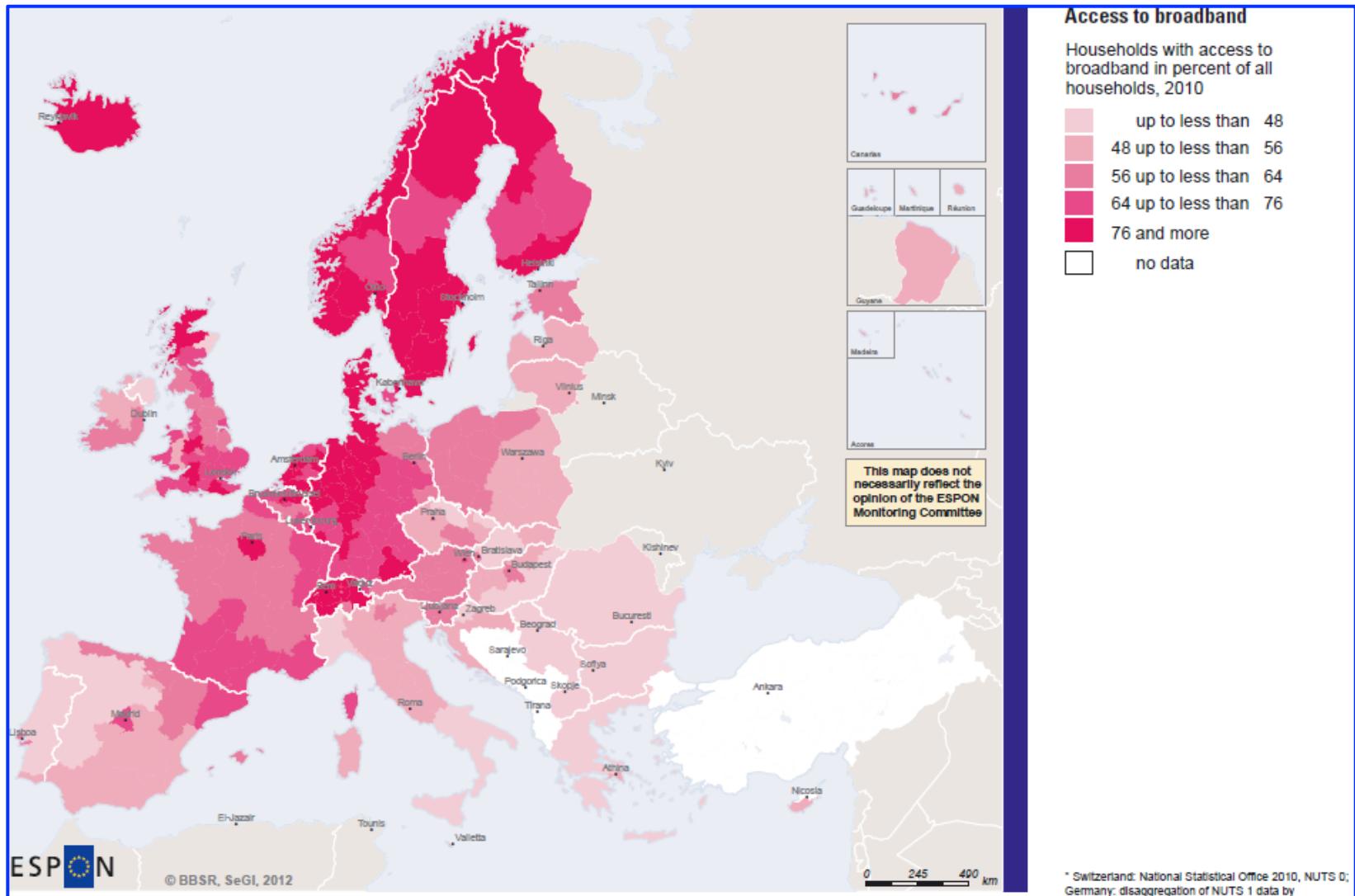
# Public services reforms in the EU: motivation and concerns

- Importance of public services:
  - Beyond its delivery to an individual consumer: effect on the wider society.
- In Europe, “**Services of General Interest**”: services that have a “general interest” dimension:
  - Including **public infrastructure services (Services of General Economic Interest)**: electricity, water, telecommunications, transport, etc.
  - To protect certain values (i.e.: universality, equity, etc.).
  - “**Essential**” service: lack of it for an individual or a group is considered a problem, to be remedied by some intervention.
    - Key role in equity, inclusiveness, social cohesion.

# Public services reforms in the EU: motivation and concerns

- **Discussions and policy** about access to public services:
  - **Geographical dimension:** access to services in all geographical areas (i.e.: remote or sparsely populated areas).

# 1. The territorial role of public services



Source: BBSR (2013).

# Public services reforms in the EU: motivation and concerns

- Discussions and policy about access to public services:
  - **Geographical dimension:** access to services in all geographical areas (i.e., remote or sparsely populated areas).
  - **Social dimension:** access to services may be too expensive (or too difficult) for some citizens (“vulnerable”).
    - I.e.: avoiding cut off from electricity or water, promoting internet access to job seekers, or telephone to the elderly.
- How do markets really function for citizens as consumers after regulatory reform?

# Regulating public services from the consumer perspective

- Citizens opinions as “consumer satisfaction”. Increasing attention from governments, regulators, international institutions, firms, consumer associations...
  - Concerns from the consumer perspective:
    - Affordability.
    - Universality.
    - Problems to switch and also on switching.
    - Complaining.

...
  - Specific regulatory policies from the consumer perspective (OECD, US Government, UK, European Commission, etc.).
- Empowering consumers:** more active and confident consumers may facilitate competitive functioning of the markets.

# Regulating public services from the consumer perspective

- New regulatory approaches from the consumer perspective.
- **Behavioural Economics:** psychological biases in decision making:
  - Bounded rationality and limited selfishness.
  - Use of heuristics (mental shortcuts). E.g.: reliance on an “anchor”.  
[Critical Thinking - Cognitive Biases: Anchoring](#).
- Biases in decision-making: loss aversion and impatience, status quo bias, choice overload...
- Inertia, risk aversion... **Disempowered consumers**.

# Regulating public services from the consumer perspective

## How can we measure this?

- **Revealed preferences:**
  - Observable choices of individuals.
  - Traditionally used in economics:
    - Advantages: understood to represent objective information.
    - Disadvantages:
      - Difficulties when obtaining information.
      - Do not allow the analysis of:
        - Some decisions. (I.e.: a citizen who does not consume).
        - Or if a decision leads to maximize satisfaction (behavioural economics: biases in decision making).

# Regulating public services from the consumer perspective

How can we measure this?

- **Stated preferences:**

- Individuals opinions about their perceived satisfaction.
- Advantages:
  - Enable the analysis of other aspects beyond decisions.
  - Citizens “voice” should be taken into account in non-competitive markets (experience goods).
- Disadvantages:
  - Subjective information alone may not be enough.
  - Survey design and biases.

# Public services and citizens/consumers: the social dimension

- Citizens' social, cultural and economic environment may influence behaviour, leading to heterogeneous outcomes.
- Differences between socio-economic groups: difficulties with understanding tariffs and choices available and behaviour in the markets.
- **“Vulnerable consumers”.**  
But:
  - To clarify the concept of “vulnerable consumer”.
  - To define which kind of regulations could be justified, and how they should be designed.

# Public services and citizens/consumers: the social dimension

- “**Vulnerable consumers**”: those at a disadvantage due to characteristics not controllable by them (Andreasen and Manning, 1990).
- **Citizens potentially vulnerable as consumers.**  
Socio-economic characteristics representative of potential vulnerability:
  - Age (elderly/very young).
  - Low incomes.
  - Not working.
  - Long-term disabled.
  - Low educational attainment.
  - Rural dwellers.
  - Ethnic minorities.

# Public services and citizens/consumers: the social dimension

- What regulation is justified?:
  - “**Paternalism**” (Thaler and Sunstein, 2003): policies which, preserving freedom of choice, steer the choices of affected parties to make them better off.
  - “**Asymmetric paternalism**” (Camerer *et al.*, 2003): regulation focused on those boundedly rational, but minimizing their effects on the others.
  - UK, EU: considering asymmetric paternalistic regulation to address vulnerability issues (OFGEM, 2012; Stearn, 2012; EP, 2012).
- But further empirical evidence is required on the relations between socio-economic characteristics, behaviour and satisfaction.

# Case study: energy and telecommunications in the EU

- **Objective:** to analyze differences in satisfaction and behaviour as regards public infrastructure services depending on socio-economic characteristics.
- **Context:** European Union. 12 EU countries where comparable information exists.
- **Services:**
  - Energy: electricity and gas.
  - Telecommunications: fixed phone, mobile phone and Internet.
- **Focusing on characteristics representative of vulnerability:**
  - Employment (not employed).
  - Age (over 64 and over 74).
  - Education (basic education).

# Case study: energy and telecommunications in the EU

- **Combined analysis of stated preferences and revealed preferences:**
  - Revealed preferences, actual choices in the market.
  - Stated preferences, further aspects (i.e.: results of decision making).
  - Complementary analysis of both sources: to maximize their strengths, to minimize their limitations and to enrich data interpretation.
- **Hypotheses:**
  - **H.1.** Socio-economic characteristics condition satisfaction with the price of the services.
  - **H.2.** Socio-economic characteristics associated with lower price satisfaction are also related to expenditure on services.

# Case study: energy and telecommunications in the EU

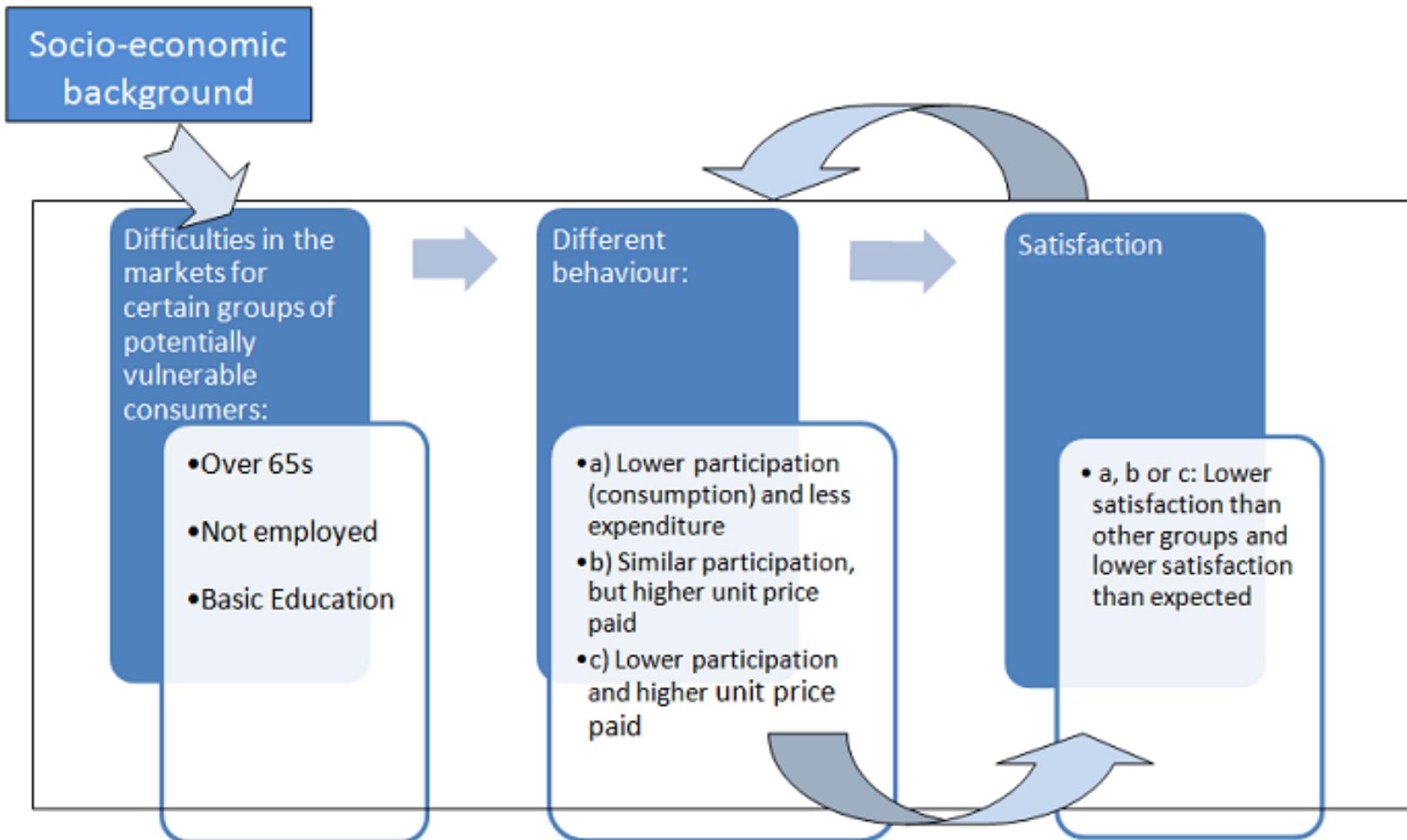
- **Stated preferences:**

- Eurobarometer 65.3.
- Dependent variable: probability of satisfaction with the price of each service (electricity, gas, fixed telephone, mobile telephone, Internet).
- Additional estimations on: probability of subscribing and probability of satisfaction with the price when subscribing.

- **Revealed preferences:**

- EUROSTAT HBS.
- Dependent variable: logarithm of households' expenditure on a category of services (energy, telecommunications).

# Case study: energy and telecommunications in the EU



# Results

## Satisfaction with price (stated preferences)

		Electricity	Gas	Fixed tel.	Mobile t.	Internet
	Variable	Marg. Eff.	Marg. Eff.	Marg. Eff.	Marg. Eff.	Marg. Eff.
Country	BELGIUM	0.112***	0.183***	0.109***	0.212***	0.080***
	DENMARK	0.161***	-0.124***	0.128***	0.273***	0.121***
	ESTONIA	0.033	-0.108***	-0.138***	0.211***	-0.180***
	FINLAND	-0.256***	-0.382***	-0.225***	0.263***	0.033
	GREECE	0.195***	-0.086***	0.187***	0.242***	-0.099***
	HUNGARY	0.032	0.164***	-0.030	0.223***	-0.205***
	IRELAND	0.002	-0.108***	0.051**	0.193***	-0.157***
	LATVIA	0.066***	0.019	-0.167***	0.097***	-0.252***
	LITHUANIA	0.252***	0.309***	0.018	0.266***	-0.020
	SLOVAKIA	0.145***	0.331***	0.074***	0.262***	-0.256***
	SPAIN	0.087***	0.183***	0.053**	0.159***	-0.014
Employment	NOOCUP	-0.017	-0.042**	-0.007	-0.068***	-0.049**
Age	LESS35	0.009	0.011	0.014	0.072***	0.109***
	50TO64	-0.016	-0.016	0.020	-0.017	-0.064***
	65TO74	-0.011	-0.027	0.035	-0.147***	-0.249***
	MORE74	-0.022	-0.002	0.052	-0.270***	-0.315***
Education	EBASIC	-0.042*	-0.041*	-0.087***	-0.082***	-0.195***
	ESECOND	-0.035*	-0.032	-0.043**	0.004	-0.105***
Control variables	ONEPERS	-0.019	-0.014	-0.047**	-0.056**	-0.062***
	THREEPERS	-0.023	-0.007	0.024	0.032	0.077***
	FOURPERS	-0.060**	0.013	0.023	0.003	0.070***
	MOREFOURP	-0.039	-0.039	0.026	-0.002	0.023
	NOHOUSEPR	-0.101***	-0.014	-0.108***	-0.085***	-0.092***

Notes: Standard errors in parenthesis. Statistical significance at 1% (\*\*), 5% (\*\*), 10% (\*).

Fuente: Clifton *et al.* (2014).

# Results

## Expenditure on services (revealed preferences)

		Energy	Telecomm.
	Variable	Coeff.	Coeff.
	<i>Constant term</i>	1.575***	-4.430***
<b>Country</b>	<i>BELGIUM</i>	0.146***	-0.895***
	<i>DENMARK</i>	-0.059***	-0.155***
	<i>ESTONIA</i>	-1.359***	0.189***
	<i>FINLAND</i>	-0.897***	0.064**
	<i>GREECE</i>	-0.921***	0.522***
	<i>HUNGARY</i>	0.152***	0.783***
	<i>IRELAND</i>	-0.487***	0.160***
	<i>LATVIA</i>	-1.266***	0.098**
	<i>LITHUANIA</i>	-1.114***	0.032
	<i>SLOVAKIA</i>	-0.508***	-0.219***
	<i>SPAIN</i>	-0.427***	0.077***
<b>Employment</b>	<i>ONECUP</i>	0.012	-0.049***
	<i>NONECUP</i>	0.003	-0.203***
<b>Age</b>	<i>RP LESS35</i>	-0.152***	0.101***
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	<i>RP MORE74</i>	0.178***	0.071***
<b>Education</b>	<i>RP EBASIC</i>	0.029**	-0.175***
	<i>RP ESECOND</i>	0.036***	-0.031**
<b>Control variables</b>	<i>NMEMBERS</i>	0.431***	0.604***
	<i>NMEMBERS2</i>	-0.028***	-0.041***
	<i>NOHOUSEPR</i>	-0.268***	-0.001
	<i>lnSPENDEQ</i>	0.443***	1.003***

Fuente: Clifton *et al.* (2014).

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## Expenditure on services (revealed preferences)

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# Results

## Probability of use (stated preferences)

		Electricity	Gas	Fixed tel.	Mobile t.	Internet
	Variable	Marg. Eff.	Marg. Eff.	Marg. Eff.	Marg. Eff.	Marg. Eff.
<b>Country</b>	<i>BELGIUM</i>	0.012	-0.037	-0.137***	0.050***	0.069***
	<i>DENMARK</i>	0.016**	-0.310***	0.007	0.089***	0.300***
	<i>ESTONIA</i>	-0.037**	-0.285***	-0.404***	0.048***	-0.115***
	<i>FINLAND</i>	0.010	-0.510***	-0.398***	0.113***	0.230***
	<i>GREECE</i>	-	-0.521***	0.051***	0.014	-0.279***
	<i>HUNGARY</i>	-0.024*	0.286***	-0.352***	-0.020	-0.277***
	<i>IRELAND</i>	0.001	-0.189***	-0.013	0.059***	-0.045*
	<i>LATVIA</i>	0.008	-0.057**	-0.357***	-0.026	-0.218***
	<i>LITHUANIA</i>	-0.016	0.073***	-0.542***	-0.037**	-0.198***
	<i>SLOVAKIA</i>	0.016*	0.363***	-0.363***	-0.013	-0.303***
	<i>SPAIN</i>	-0.031***	0.079***	-0.078***	0.006	-0.147***
<b>Employment</b>	<i>NOOCUP</i>	0.004	-0.015	-0.040***	-0.089***	-0.043**
<b>Age</b>	<i>LESS35</i>	-0.010	0.010	-0.061***	0.101***	0.112***
	<i>50TO64</i>	0.011	0.058**	0.122***	-0.120***	-0.086***
	<i>65TO74</i>	0.008	0.055	0.171***	-0.312***	-0.294***
	<i>MORE74</i>	-0.008	0.066*	0.180***	-0.518***	-0.359***
<b>Education</b>	<i>EBASIC</i>	-0.009	-0.031	-0.105***	-0.091***	-0.262***
	<i>ESECOND</i>	-0.015*	-0.004	-0.046***	-0.013	-0.144***
<b>Control variables</b>	<i>ONEPERS</i>	-0.008	-0.024	-0.107***	-0.049***	-0.121***
	<i>THREEPERS</i>	-0.003	0.051**	0.051***	0.011	0.066**
	<i>FOURPERS</i>	0.002	0.068**	0.094***	-0.029	0.139***
	<i>MOREFOURP</i>	-0.003	-0.011	0.064***	-0.038	0.093***
	<i>NOHOUSEPR</i>	-0.010	0.085***	-0.152***	-0.034**	-0.133***

Notes: Standard errors in parenthesis. Statistical significance at 1% (\*\*), 5% (\*\*), 10% (\*).

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# Results

## Satisfaction with price (stated preferences)

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	<i>IRELAND</i>	-0.487***	0.160***
	<i>LATVIA</i>	-1.266***	0.098**
	<i>LITHUANIA</i>	-1.114***	0.032
	<i>SLOVAKIA</i>	-0.508***	-0.219***
	<i>SPAIN</i>	-0.427***	0.077***
<b>Employment</b>	<i>ONEOCUP</i>	0.012	-0.049***
	<i>NONEOCUP</i>	0.003	-0.203***
<b>Age</b>	<i>RP LESS35</i>	-0.152***	0.101***
	<i>RP 50TO64</i>	0.125***	0.109***
	<i>RP 65TO74</i>	0.166***	0.090***
	<i>RP MORE74</i>	0.178***	0.071***
<b>Education</b>	<i>RP EBASIC</i>	0.029**	-0.175***
	<i>RP ESECOND</i>	0.036***	-0.031**
<b>Control variables</b>	<i>NMEMBERS</i>	0.431***	0.604***
	<i>NMEMBERS2</i>	-0.028***	-0.041***
	<i>NOHOUSEPR</i>	-0.268***	-0.001
	<i>InSPENDEQ</i>	0.443***	1.003***

Fuente: Clifton *et al.* (2014).

# Results

## Expenditure on services (revealed preferences)

		Energy	Telecomm.
	Variable	Coeff.	Coeff.
	<i>Constant term</i>	1.575***	-4.430***
<b>Country</b>	<i>BELGIUM</i>	0.146***	-0.895***
	<i>DENMARK</i>	-0.059***	-0.155***
	<i>ESTONIA</i>	-1.359***	0.189***
	<i>FINLAND</i>	-0.897***	0.064**
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Fuente: Clifton *et al.* (2014).

# Results

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		Energy	Telecomm.
	Variable	Coeff.	Coeff.
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	<i>NONEOCUP</i>	0.003	-0.203***
<b>Age</b>	<i>RP LESS35</i>	-0.152***	0.101***
	<i>RP 50TO64</i>	0.125***	0.109***
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<b>Education</b>	<i>RP EBASIC</i>	0.029**	-0.175***
	<i>RP ESECOND</i>	0.036***	-0.031**
<b>Control variables</b>	<i>NMEMBERS</i>	0.431***	0.604***
	<i>NMEMBERS2</i>	-0.028***	-0.041***
	<i>NOHOUSEPR</i>	-0.268***	-0.001
	<i>InSPENDEQ</i>	0.443***	1.003***

Fuente: Clifton *et al.* (2014).

# Results

## Probability of use (stated preferences)

		Electricity	Gas	Fixed tel.	Mobile t.	Internet
	Variable	Marg. Eff.	Marg. Eff.	Marg. Eff.	Marg. Eff.	Marg. Eff.
<b>Country</b>	<i>BELGIUM</i>	0.012	-0.037	-0.137***	0.050***	0.069***
	<i>DENMARK</i>	0.016**	-0.310***	0.007	0.089***	0.300***
	<i>ESTONIA</i>	-0.037**	-0.285***	-0.404***	0.048***	-0.115***
	<i>FINLAND</i>	0.010	-0.510***	-0.398***	0.113***	0.230***
	<i>GREECE</i>	-	-0.521***	0.051***	0.014	-0.279***
	<i>HUNGARY</i>	-0.024*	0.286***	-0.352***	-0.020	-0.277***
	<i>IRELAND</i>	0.001	-0.189***	-0.013	0.059***	-0.045*
	<i>LATVIA</i>	0.008	-0.057**	-0.357***	-0.026	-0.218***
	<i>LITHUANIA</i>	-0.016	0.073***	-0.542***	-0.037**	-0.198***
	<i>SLOVAKIA</i>	0.016*	0.363***	-0.363***	-0.013	-0.303***
	<i>SPAIN</i>	-0.031***	0.079***	-0.078***	0.006	-0.147***
<b>Employment</b>	<i>NOOCUP</i>	0.004	-0.015	-0.040***	-0.089***	-0.043**
<b>Age</b>	<i>LESS35</i>	-0.010	0.010	-0.061***	0.101***	0.112***
	<i>50TO64</i>	0.011	0.058**	0.122***	-0.120***	-0.086***
	<i>65TO74</i>	0.008	0.055	0.171***	-0.312***	-0.294***
	<i>MORE74</i>	-0.008	0.066*	0.180***	-0.518***	-0.359***
<b>Education</b>	<i>EBASIC</i>	-0.009	-0.031	-0.105***	-0.091***	-0.262***
	<i>ESECOND</i>	-0.015*	-0.004	-0.046***	-0.013	-0.144***
<b>Control variables</b>	<i>ONEPERS</i>	-0.008	-0.024	-0.107***	-0.049***	-0.121***
	<i>THREEPERS</i>	-0.003	0.051**	0.051***	0.011	0.066**
	<i>FOURPERS</i>	0.002	0.068**	0.094***	-0.029	0.139***
	<i>MOREFOURP</i>	-0.003	-0.011	0.064***	-0.038	0.093***
	<i>NOHOUSEPR</i>	-0.010	0.085***	-0.152***	-0.034**	-0.133***

*Notes.* Standard errors in parenthesis. Statistical significance at 1% (\*\*\*) , 5% (\*\*), 10% (\*).

Fuente: Clifton *et al.* (2014).

# Conclusions

- **Heterogeneity of citizens as consumers.** Social context and social environment:
  - **Less-educated:**
    - Telecommunications, lower satisfaction and lower expenditure: reduced participation.
    - Energy, lower satisfaction and higher expenditure: poorer decision-making.
  - **Not employed:**
    - Newest telecommunication services (mobile ph., Internet): lower satisfaction and reduced participation.
  - **Elderly:**
    - Newest telecommunications services: lower satisfaction and reduced participation.
    - Inertia in favour of using fixed phone. Higher expenditure: poorer decision-making.

# Conclusions

- Regulatory policies, to take into account the specific needs of vulnerable consumers (ECCG, 2013).
- But heterogeneity may require variable policies, rather than “one-size-fits-all” approaches: default options providing easy and comparable information, personal attention...
- Different socio-economic contexts, but also different sectorial, national and regional/territorial contexts.
- Empirical analysis as a base of regulatory policies.

# References

## Key Reference:

- J. Clifton, D. Díaz-Fuentes & M. Fernández-Gutiérrez (2014): «*The impact of socio-economic background on satisfaction: evidence for policy makers*». Journal of Regulatory Economics, vol. 46 (2), pp. 183-206.

## Additional references for further reading:

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