

PUBLIC STATED PREFERENCES FOR PHARMACEUTICAL FUNDING DECISIONS IN PORTUGAL

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2. OBJECTIVE

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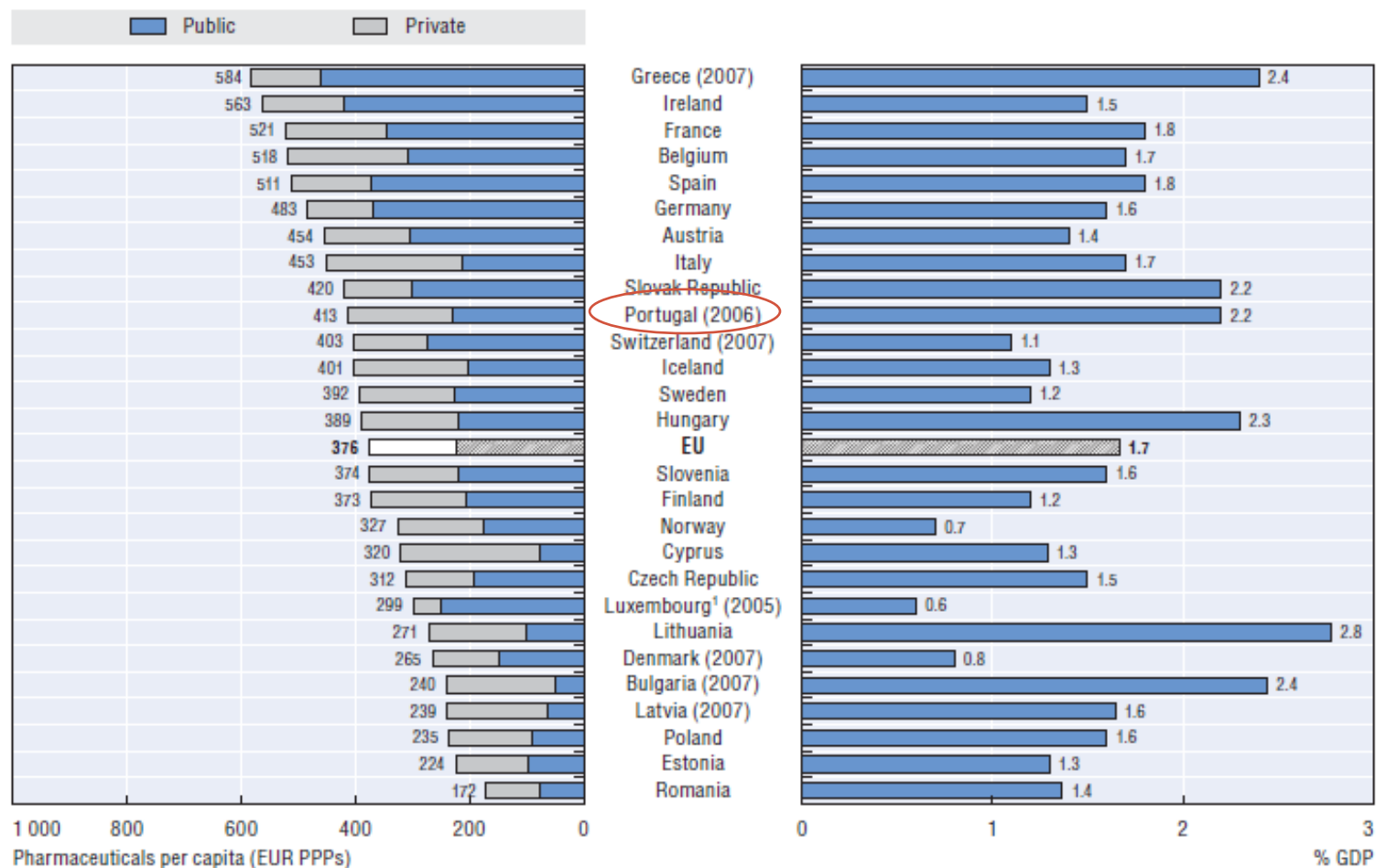
4. METHODOLOGY

5. VALUE/ORIGINALITY

1. Background

Portuguese Pharmaceutical Expenditure

Table 1 – Expenditure on pharmaceuticals per capita and as a share of GDP, 2008



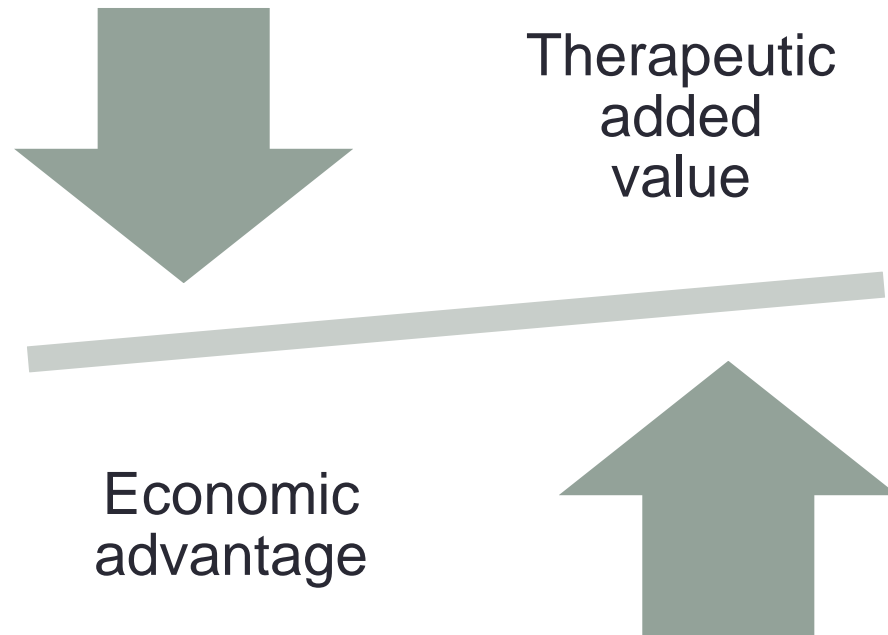
1. Prescribed medicines only.

Source: OECD Health Data 2010; Eurostat Statistics Database; WHO National Health Accounts.

1. Background

Reimbursement grants

- The Portuguese ministry of Health evaluates the reimbursement applications for new medicines
- The decision process:



1. Background

Relevance of SP in Healthcare

Limited market data available → enable to determine RP

Insurance – consumers do not face market prices

Agency relationships – no consumer preferences

Goods not yet in the market

Why DCE?

- Simple choice task which would allowed to determine public preferences
- Arising methodology
- Preferences for multiattribute goods
- Consistent with economic theory

2. Objective

This study aims to understand public for allocating resources for pharmaceuticals in Portugal.

3. Limitations

Intrinsic to the methodology

Time:

I. Attribute and levels determination

II. Piloting

III. Sampling

4. Methodology

- 4.1. Literature review
- 4.2. Design of the DCE
- 4.3. Qualitative test
- 4.4. Sampling
- 4.5. Survey administration
- 4.6. Data analyses/Results
- 4.7. Conclusions

4. Methodology

4.1. Literature Review: definition of the attributes and its levels

ATTRIBUTES	LEVELS	SOURCE
Severity of the disease for which the treatments are indicated	Not severe Severe Very severe	Maria et al. 2007., , 2007; Koopmanschap 2010; Diaby, 2011; Green, C. and Gerard, K. 2009
Prevalence of the disease in Portugal	High (>5%) Moderate (1% to 5%) Low (<1%)	Maria et al. 2007
Medicine's Efficacy	High (>70%) Moderate (50% to 70%) Low (<50%)	Maria et al. 2007; Diaby, 2011; Whitty 2008; Whitty 2011
Government costs (per person treated)	500, 1 000, 5 000 ,10 000 50 000, 100 000	Whitty 2008; Whitty 2011

4. Methodology

4.2. DCE Design

Full factorial design for multiple choice

- N=Full factorial combination of profiles
- C=size of choice set

$$FF=(N \times (N-1))/C$$

- 3 attributes (A) at 3 levels (L) and 1 attribute (A) at 6 levels (L) =
33 x 61 = 162

$$(162 \times 161)/2 = 13\ 041$$

4. Methodology

4.2. DCE Design - coding

Attributes	Levels	CODE
A1 (severity)	Not severe	0
	severe	1
	very severe	2
A2 (prevalence)	high	0
	moderate	1
	low	2
A3 (efficacy)	low	0
	moderate	1
	high	2
A4 (cost)	100 000	0
	50 000	1
	10 000	2
	5 000	3
	1 000	4
	500	5

4. Methodology

4.2. DCE Design - coding

	A1	A2	A3	A4
Choice 1	0	0	0	0
Choice 2	2	0	1	1
Choice 3	2	1	0	2
Choice 4	0	2	2	3
Choice 5	1	2	1	4
Choice 6	1	1	2	5
Choice 7	1	1	1	0
Choice 8	0	1	2	1
Choice 9	0	2	1	2
Choice 10	1	0	0	3
Choice 11	2	0	2	4
Choice 12	2	2	0	5
Choice 13	2	2	2	0
Choice 14	1	2	0	1
Choice 15	1	0	2	2
Choice 16	2	1	1	3
Choice 17	0	1	0	4
Choice 18	0	0	1	5

Fractional factorial

- Sloans website:

<http://www2.research.att.com/~njas/oadir/>

- MA.18.3.6.6.1

- Match with “shifted”:

0000 → 1111

2011 → 0122

(..)

4. Methodology

4.2. DCE Design – example of the choice task

CHOICE 1: Please compare the following medications and tick (☑) which medication you think should be REIMBURSED:

	Medication A	Medication B
Severity of the disease	Severe	Not severe
Prevalence	Moderate	High
Medication's efficacy	Moderate	Moderate
Additional cost (per person treated)	1 000€	500€
Please tick a box	Medication A <input type="checkbox"/>	Medication B <input type="checkbox"/>

4. Methodology

4.3. Qualitative pilot test – 1st design proposal

- 10 “pre-pilots” using *think aloud protocol*
- Two versions were tested:

Version 1: Negative question on which medicine do you think that shouldn't be reimbursed.

Version 2 Positive question on which medicine do you think should reimbursed

Version 1

Question: Not reimbursed
Cost attribute: Government
cost saving

vs.

Version 2

Question: Reimbursed
Cost attribute: Government costs
per person treated

4. Methodology

4.3. Qualitative pilot test

Results → Version 1 

One Inconsistent answer

More often turned back to check the example

Respondents seemed more confused

4. Methodology

4.4. Sampling

Sample frame - citizens of a representative parish of the city of Braga (São Vitor)

Sample size

- Governed by statistical criteria and expected response rate (10%)

4. Methodology

4.5. Survey administration – Mail

4.6. Data analysis – Stata: clogit regression model

4. Value/Originality

- First study in Portugal reporting stated preferences for pharmaceutical funding
- Willingness to pay reflected on public expenditure
- Sample of general population

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