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## **Welfare effects of vouchers: Evidence from sheltered housing in Finland**

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# Outline

1. Background and motivation
2. Voucher system in Finland
3. Cost-sharing in the voucher system
4. Data and Methods
5. Results
6. Conclusions



# 1. Background and motivation

- The utilization of vouchers in social and health care has been increasing in Nordic countries
- In Finland, for example, the growth has been quite significant during the last 8 years

## Share of Finnish municipalities applying vouchers in health and social care

2004	10,9 %
2007	25 %
2012	53 %

Sources: Rätty (2004), Volk and Laukkanen (2007), Sitra (2012)



# 1. Background and motivation

- Vouchers
- ✓ are subsidies granted to consumers and
- ✓ can be used to purchase a restricted set of goods and services (not a pure cash transfer, cf. personal budget)
- Principal aim of vouchers is to provide more choice for consumers
- Possible consequences of vouchers:
  - ✓ Improved consumer welfare
  - ✓ Increased competition among service providers, leading to
    - lower prices and better quality
    - more cost-efficient service provision



# 1. Background and motivation

- Little is known about the effects of vouchers in practise
- Evidence (or experience) from Finland and Denmark (Volk and Laukkanen, 2007, Ankestyrelsen, 2005):
  - ✓ vouchers increase consumer satisfaction
  - ✓ satisfaction seems to associated with increased autonomy
- There seem to be no studies on the effects of vouchers on welfare, competition, prices, costs and quality
- Our aim is to examine the welfare effects of vouchers among users of sheltered housing services in Finland
  - ✓ Preliminary findings



## 2. Social and health care vouchers in Finland

- Three main players in the Finnish voucher system: municipalities, clients and (public and private) providers
- Municipalities
  - ✓ select the services to which vouchers are applied (e.g. assisted living, dental care)
  - ✓ set the value of voucher (can be fixed or dependent on income)
  - ✓ select qualified service providers
  - ✓ decide whether or not a voucher is offered to a client (some social benefits rule out vouchers)



## 2. Social and health care vouchers in Finland

- Clients
- ✓ decide whether or not to accept a voucher offered by a municipality
- ✓ choose the most preferred service provider, if they accept the voucher
- ✓ use service provider chosen by the municipality, if they do not accept the voucher
- There are two possibilities in the last case:
  - ✓ Public production
  - ✓ Competitive tendering



## 2. Social and health care vouchers in Finland

- Service providers
- ✓ Produce services demanded by clients using vouchers (only private providers)
- ✓ Participate in competitive tendering processes organized by municipalities (private providers)
- ✓ Produce services demanded by municipalities (public providers)



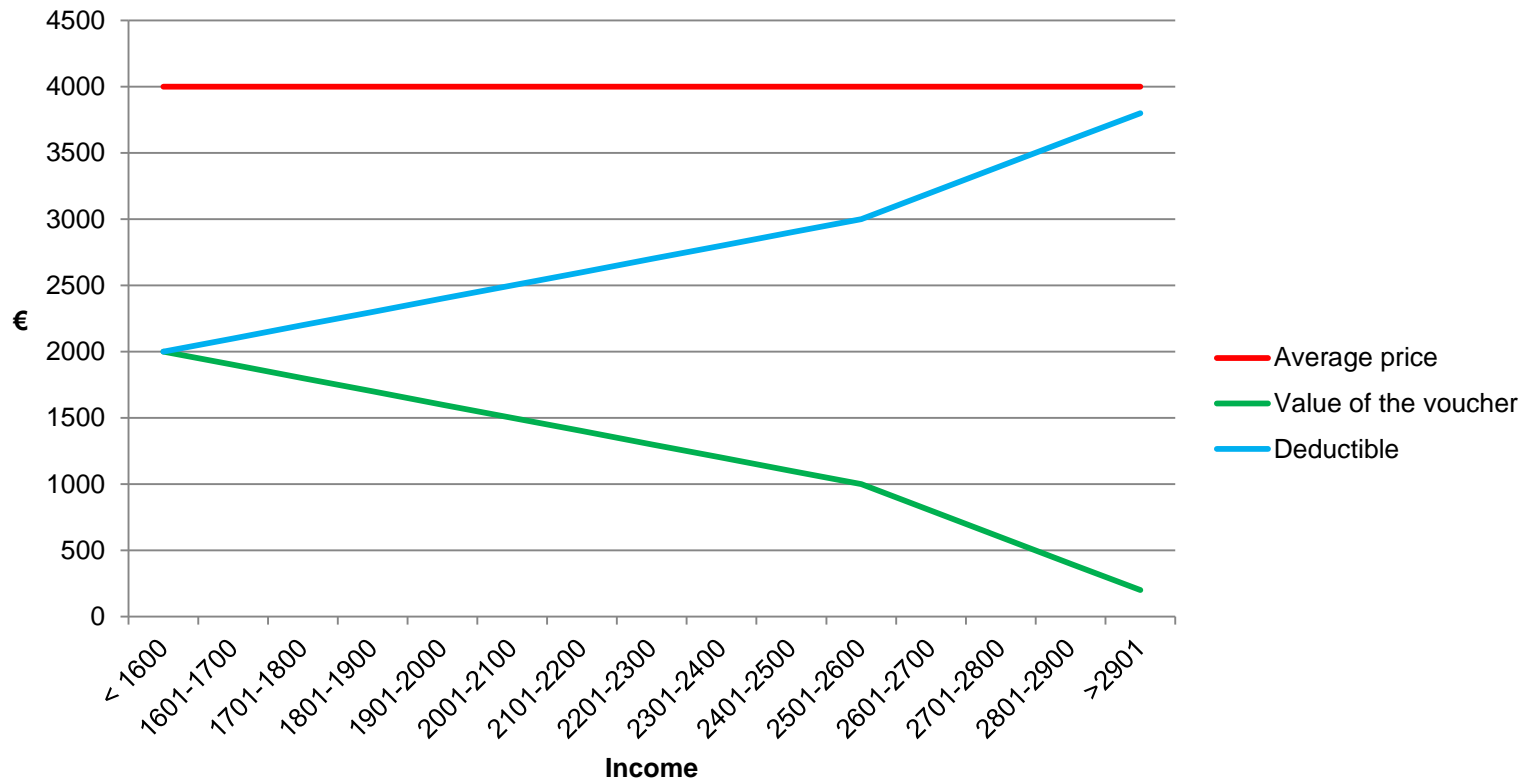


### 3. Cost-sharing in the voucher system

- Types of vouchers:
- Means-tested voucher (or income-dependent)
- ✓ The value of the voucher depends on client's income
- ✓ The lower is the client's income, the higher is the value of the voucher
- Fixed-valued voucher
- ✓ The value of the voucher is fixed for all types of clients
- In both cases, client pays the difference between the price and the value of the voucher (deductible)



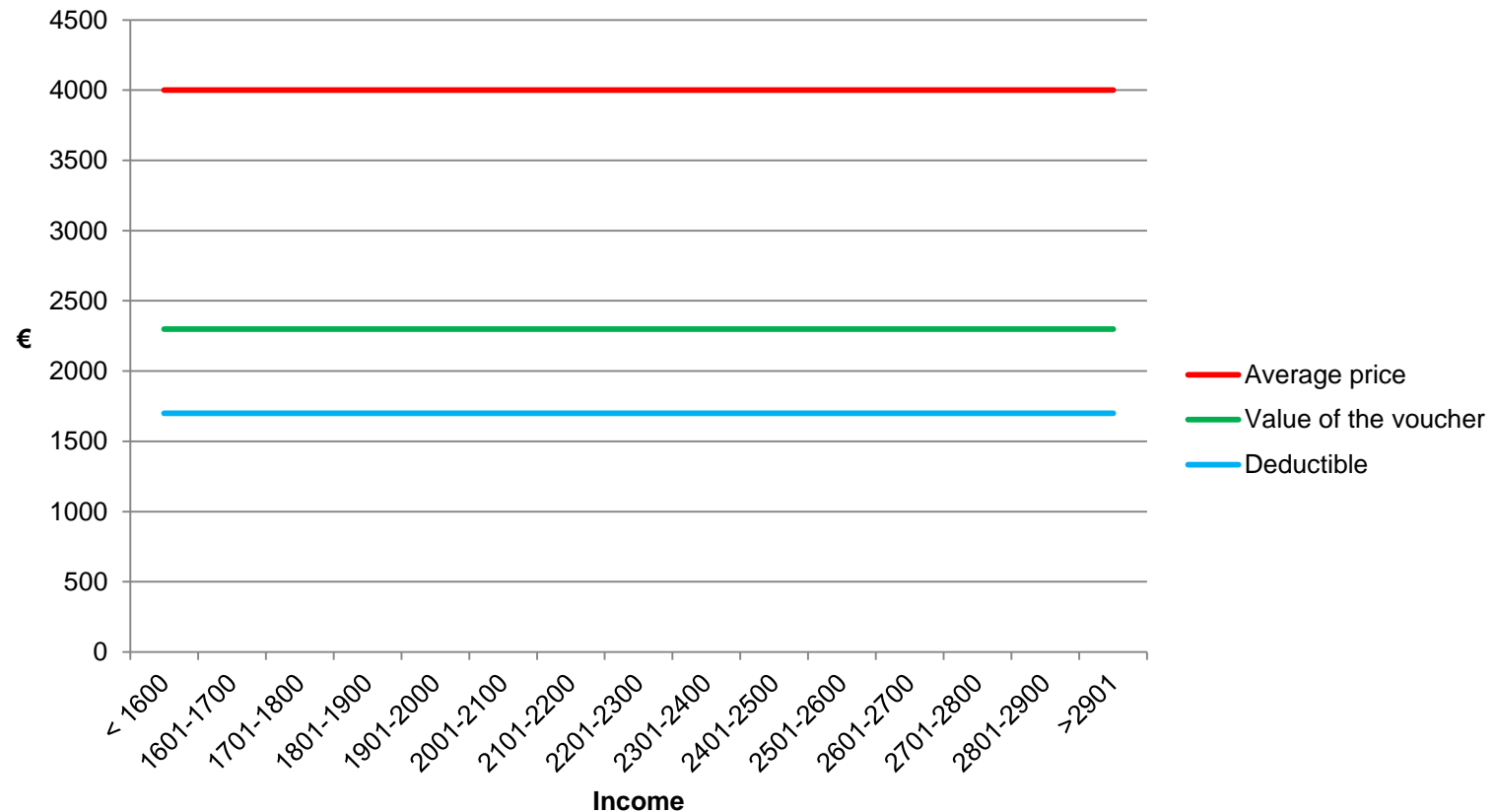
# 3. Cost-sharing: Means-tested voucher



Voucher for private sheltered housing services in Helsinki, Finland  
Average price of private providers 4000 €/month in 2011



# 3. Cost-sharing: Fixed-valued voucher



## 4. Data and methods

- **Research objective:** To measure welfare effects of vouchers
- Welfare quantified using ASCOT, a measure of social care-related quality of life (SCRQoI)
- ASCOT was translated into Finnish using forward-backward translation technique in spring 2011
- Care home questionnaire CHINT3 was applied to randomly chosen clients in sheltered housing units in Helsinki area
- Questionnaire was answered by clients' relatives together with clients (in case functional capacity of clients was good enough)



## 4. Data and methods

- ASCOT has 8 dimensions:
  - Control over daily life
  - Personal cleanliness and comfort
  - Food and drink
  - Personal safety
  - Social participation and involvement
  - Occupation
  - Accommodation cleanliness
  - Dignity
- Scores has been estimated by Netten et al. (2011).
- English scores were applied (no Finnish scores exist)



## 4. Data and methods

- Access to administrative data records in Helsinki area:
  - ✓ information on clients' use of vouchers, age, gender and income
- Sample:
  - ✓ 60 clients using vouchers were chosen randomly
  - ✓ clients using vouchers were matched by propensity score matching (Rosenbaum and Rubin, 1983) to 60 clients using services organized by Helsinki city
  - ✓ Matching criteria: age, gender and income



## 4. Data and methods

- Questionnaire CHINT3 was mailed to 120 clients
- 46 questionnaires were returned
- ✓ treatment group n = 25
- ✓ control group n = 21
- Response rate 49.5 % (of those clients who were able respond)



# 5. Results

Respondents		
	Clients using vouchers	Clients using municipality services
n	25	21
Female (%)	92 %	76 %
Age		
Mean age	87	89
CI 95 %	2,45	2,76
Income		
n	24	21
Mean income	1619,37	1513,78
95 % CI	227,28	247,40
Rava-index		
n	24	11
Mean	3,08	3,16
95 % CI	0,181	0,291

**Matching successful:** No statistically significant difference between the two groups

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## 5. Results: needs

With services: Clients using vouchers expressed **lower** level of needs than the clients using services organized by the municipality

Control over daily living

	Treatment group (n = 23)	Control group (n = 20)
No needs, %	0,57	0,35
Some needs, %	0,30	0,30
High needs, %	0,13	0,35



## 5. Results: needs

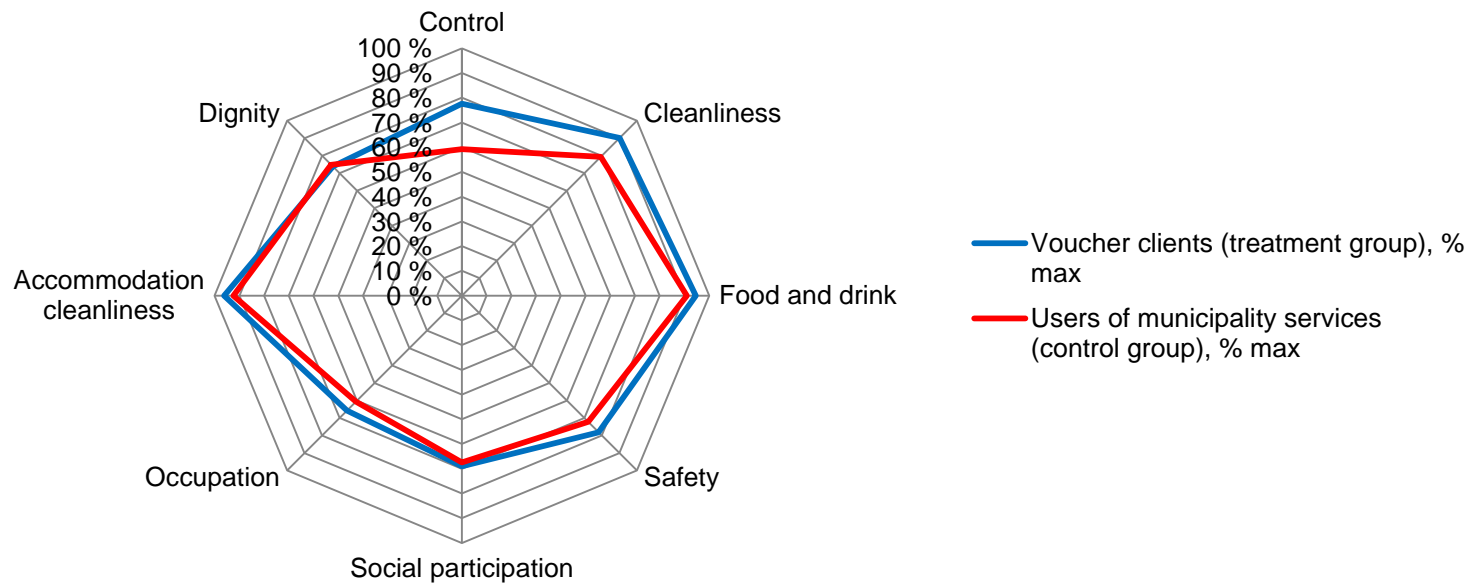
With no services (expected): Clients using vouchers expressed **higher** level of needs than the clients using municipality services

Control over daily living

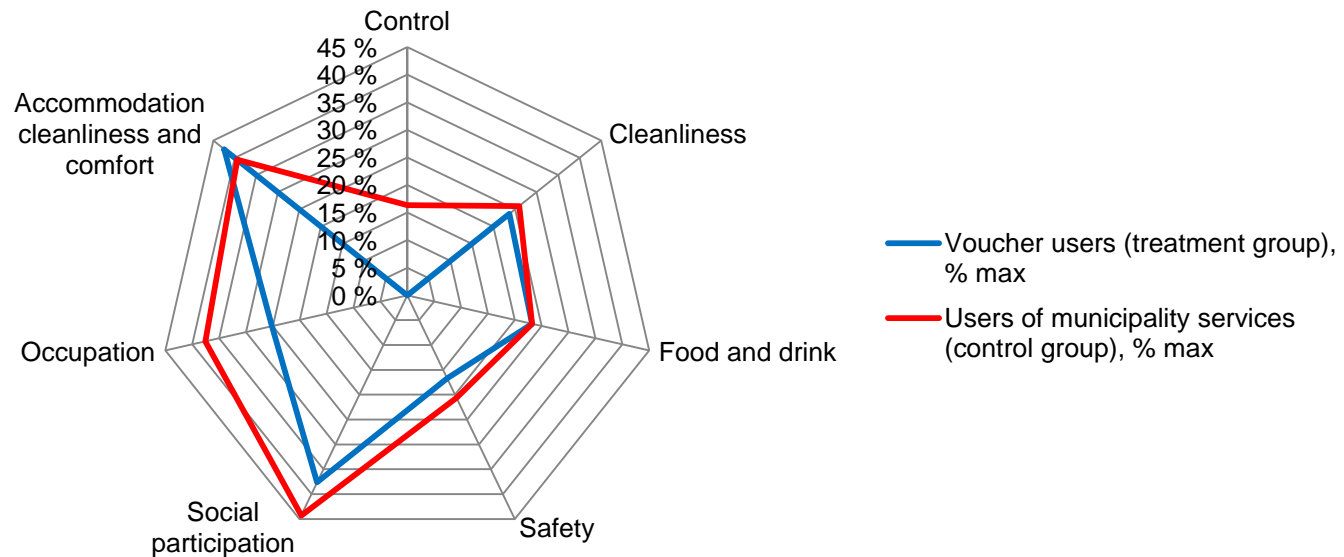
	Treatment group (n = 20)	Control group (n = 35)
No needs, %	0,00	0,00
Some needs, %	0,10	0,53
High needs, %	0,90	0,47



# 5. Results: current SCRQoL (with services)



# 5. Results: expected SCRQoI (with no services)



## 5. Results

- Gain in social-care-related QoL (benefit of service) =  
SCRQoIG = current SCRQoI – expected SCRQoI
- ✓ Treatment group (users of vouchers, n = 14):  
$$\text{SCRQoIG1} = 0.6902 - (-0.0733) = 0.7635$$
- ✓ Control group (users of services organized by municipalities, n = 7):  
$$\text{SCRQoIG2} = 0.5899 - 0.0099 = 0.5800$$
- Utility gain is higher among the users of vouchers



# 5. Results

- However, the difference SCRQoIG1-SCRQoLG2 differs significantly from zero (one-sided t-test) only at the 10% level of significance ( $p = 0.084$ )
- Due to low  $n$ , power of the test is low (and the probability of type II error is high)



## 6. Conclusions

- Positive but weak welfare effects associated with vouchers:
- ✓ Effectiveness of sheltered housing services is higher for the users of vouchers than for patients using services organized by a municipality
- Similar results from studies concentrating on consumer satisfaction (e.g. Volk and Laukkanen, 2007)



## 6. Conclusions: Remarks for the future

- Number of observations is small and the power of t-tests comparing treatment and control groups is low
- ✓ Imputation to increase n?
- Relatives as respondents:
  - ✓ Distorted incentives: Relatives may express the situation without services (expected SCRQoI) worse than it really is, if they fear that answering “no needs” would jeopardize their relatives possibility to receive a voucher
    - ✓ Use of nurses to answer the questionnaire
  - ✓ However, average functional capacity is lower in the treatment group than in the control group supporting the claim that the observed difference are “real”





Thank you for your attention!

