

 **TU**Delft



**Exploration of the quality and financial performance
of Dutch intramural health care real estate.**

Researchers



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- The population of Europe is aging. More people are getting older and more elderly get a very high age -> growing need for care.
- Costs of health care are increasing -> political pressure.
- The Dutch government changed the care system into a regulated market system:
 - more market, less government
 - i.e. less building regulations, no funding of real estate but integrated prices of care including real estate,
 - substitution of intramural care by home care where possible.

→ **Financial pressure: no governmental funding**

→ **Earnings for real estate by income from care activities**

- Higher consumer demands on functional and technical quality and experience value
- Due to extramuralisation: target groups with lower need for care disappear, people who stay or come in have a higher need for care
- Misfit between demand and current supply

→ **Qualitative pressure: need for better buildings**

Research question & Purpose

Research question

What is the current quality and financial performance of Dutch elderly health care institutions and what may be the impact of the changing context, now and in the future?

Purpose

To gain a better understanding of the quality and financial performance of Dutch (elderly) health care real estate and to explore what is needed to bridge the gap between the current supply and future demand.

Research Methods

- Online survey with 40 questions
- Survey send to 1.000 contacts by email
- Announcement of the survey on LinkedIn, different websites and a mailing by the branch organization
- Data collection in April and May 2017
- Multiple reminders by e-mail
- Contact by telephone with respondents for completing the questions

Response

Low response <-> preliminary conclusions

Quality questions (Q)

75 respondents

- 23 no answers
- 7 doubles
- 2 double doubles
- 3 partial answers
- 3 questionable answers

Sample 1:

- * 37 respondents
- * 277 objects

Financial questions (€)

75 respondents

- 23 no answers
- 7 doubles
- 2 double doubles
- 33 partial answers

Sample 2:

- * 9 respondents
- * 103 objects

Q & € Combined

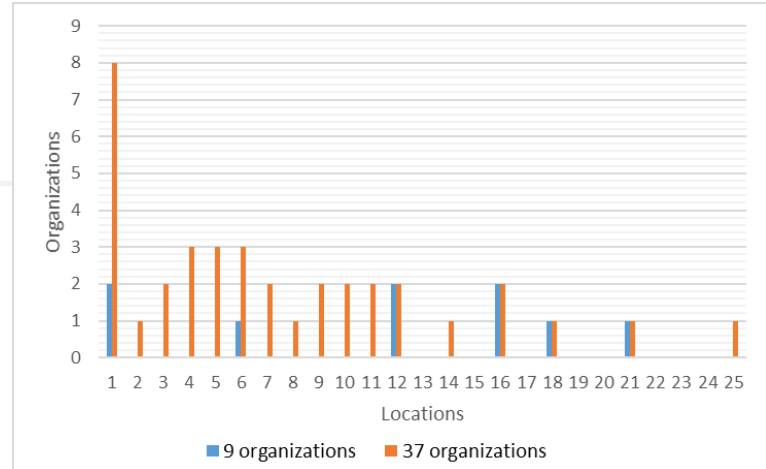
Sample 3:

- * 9 respondents
- * 103 objects

Respondents

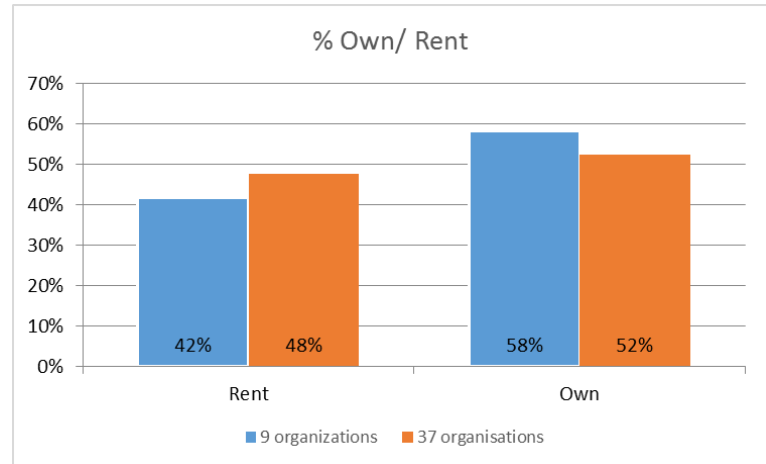
Sample 1 - 37 Organisations

- 277 objects
- Smallest: 1 object
- Largest: 25 objects
- Most: 1
- 48% Owned / 52% Rented



Sample 2 – 9 Organisations

- 103 objects
- Smallest: 1 object
- Largest: 21 objects
- Most: 1, 12 and 16 objects (equal)
- 42% Owned / 58% Rented



Survey Questions

To collect data on quality and investments

- **General questions (4)**
Name and address organization, names locations, own/ rent and description of strategy for each location
- **Qualitative questions (23), divided in 5 themes**
 - Functionality
 - Technical quality
 - Experience value
 - Location
 - Overall mark of the quality
- **Financial quantitative questions (13), divided in**
 - Parameters for Real Estate Exploitation (costst & returns)
 - Parameters for Real Estate NPV (cash flow)
 - Parameters for book value (financial statements 2016)

Scores on quality – based on sample 1

Two types of questions

a. Multiple choice questions

- Score in this question:
 - Max. score per question = 5
 - Min. score per question = 1
- Score in this question = $3 / 5 = 60\%$

b. Multiple Answer questions

- Score is this question:
 - 1 point – nothing marked
 - 2 points – only public
 - 3 points – Shared or Shared & Public
 - 4 points – Individual or Ind. & Public
 - 5 points – all three marked
- Score in this question = $4/5 = 80\%$

What are the measures of the private living space?

***5. Hoe groot is het oppervlakte van de woonruimte?**

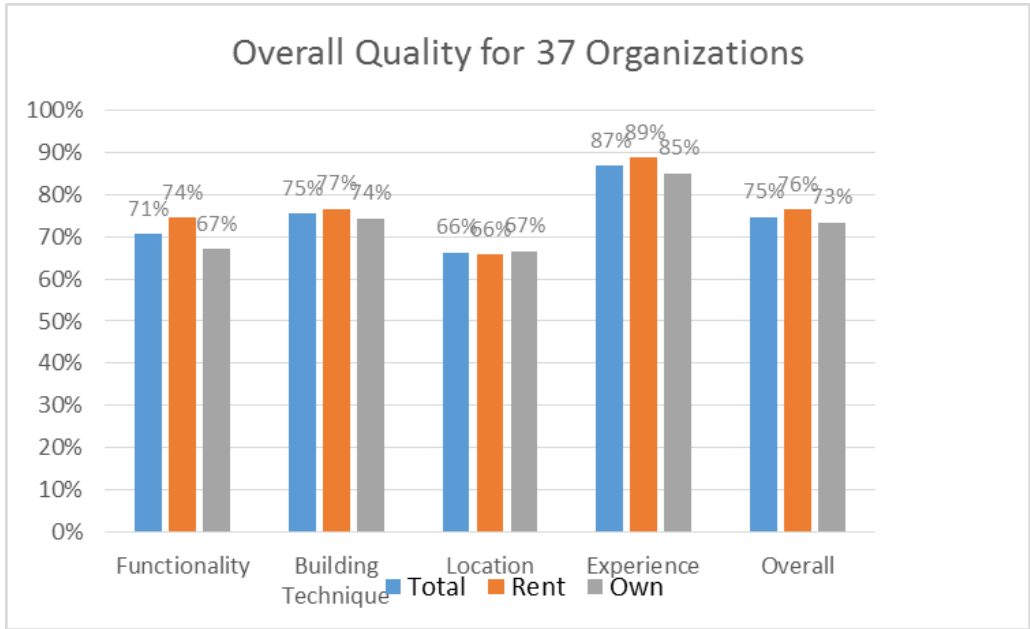
	Kleiner dan 24 m2 NVO	Tussen de 25-38 m2 NVO	Groter dan 38 m2 NVO
Building X	1 <input type="radio"/>	3 <input checked="" type="radio"/>	5 <input type="radio"/>

Does the house have an individual, shared or public outdoor space?

***8. Beschikken de woonruimten over een individuele, gedeelde en/ of openbare buitenruimte? (Meerdere antwoorden mogelijk)**

	Individueel	Gedeelde buitenruimte	Openbaar
Building X	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall mark of quality per theme



	Functionality	Building Technique	Location	Experience	Overall
Avarage	71%	75%	66%	87%	75%
Stanard deveation	0,1584	0,1618	0,1380	0,1773	0,1092
Min	23%	20%	23%	20%	39%
Max	100%	100%	100%	100%	97%
Median	71%	77%	67%	100%	76%

Sample 1 - 37 Organisations

- **Overall** 75%
- **Location** has lowest score
- **Experience** has highest score
- **Rented** buildings score higher, except for location (scores for rent and owned are equal); especially for functionality

Examples



Funct.	Tech.	Loc.	Exp.	Tot.
83%	100%	57%	100%	85%

Funct.	Tech.	Loc.	Exp.	Tot.
60%	43%	70%	40%	53%



Funct.	Tech.	Loc.	Exp.	Tot.
60%	43%	70%	40%	53%



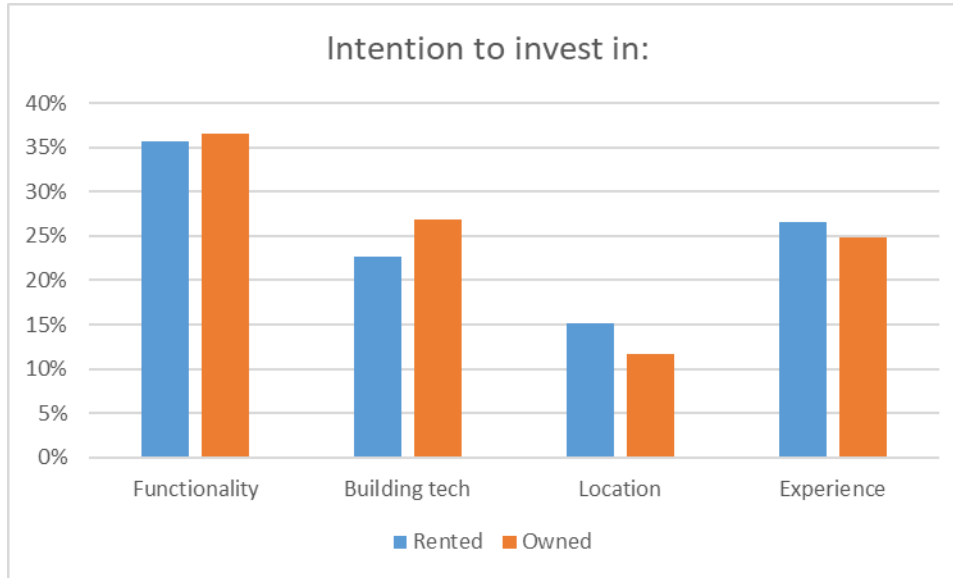
Funct.	Tech.	Loc.	Exp.	Tot.
54%	33%	57%	20%	41%



Funct.	Tech.	Loc.	Exp.	Tot.
91%	90%	47%	100%	82%

Intention to invest

Dependent of current quality



Investing	Rented	Owned	Average
Functionality	36%	37%	36%
Building tech	23%	27%	25%
Location	15%	12%	13%
Experience	27%	25%	26%

Sample 1 - 37 Organisations

- **Functionality** is most wanted to invest in
- **Location** is the least wanted to invest in (maybe due to out of influence).

Financial parameters

Based on Sample 2 - 9 organisations, 103 objects

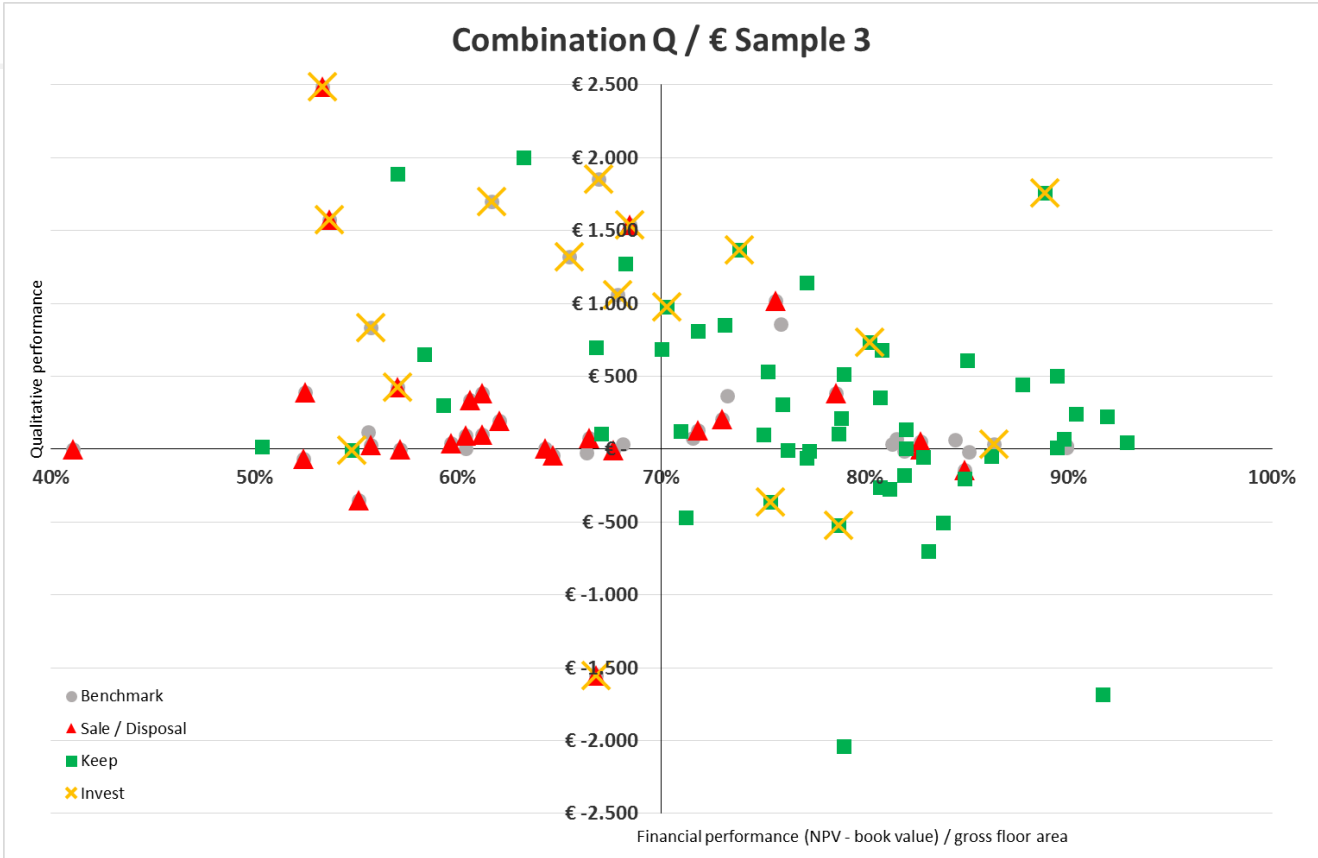
What happens when government reduces funding?

All objects - without reduction	m2	Capacity	Book value	Net Present Value
Sum	660.666	7.865	280.906.585	485.849.019
Mean	6.414	76	2.727.248	4.716.981
St.dev	4.630	52	4.713.944	6.722.512
Median	5.700	70	417.027	2.087.419
Range	21.246	250	29.325.000	40.400.943

All objects - 15% reduction	m2	Cap	Book value	Net Present Value
Sum	660.666	7.865	280.906.585	382.559.753
Mean	6.414	76	2.727.248	5.714.172
St.dev	4.630	52	4.713.944	5.739.782
Median	5.700	70	417.027	1.614.835
Range	21.246	250	29.325.000	37.553.033

- All = 103 objects = 100%
- no problem for 67 objects = 65%
- 29 objects show already negative numbers, and get worse = 28%
- **7 objects switch from positive to negative numbers** = **7%**
- Total loss of NPV, because of 15% reduction (decrease of 21%) = € 103,29 mln

Strategy- based on sample 3

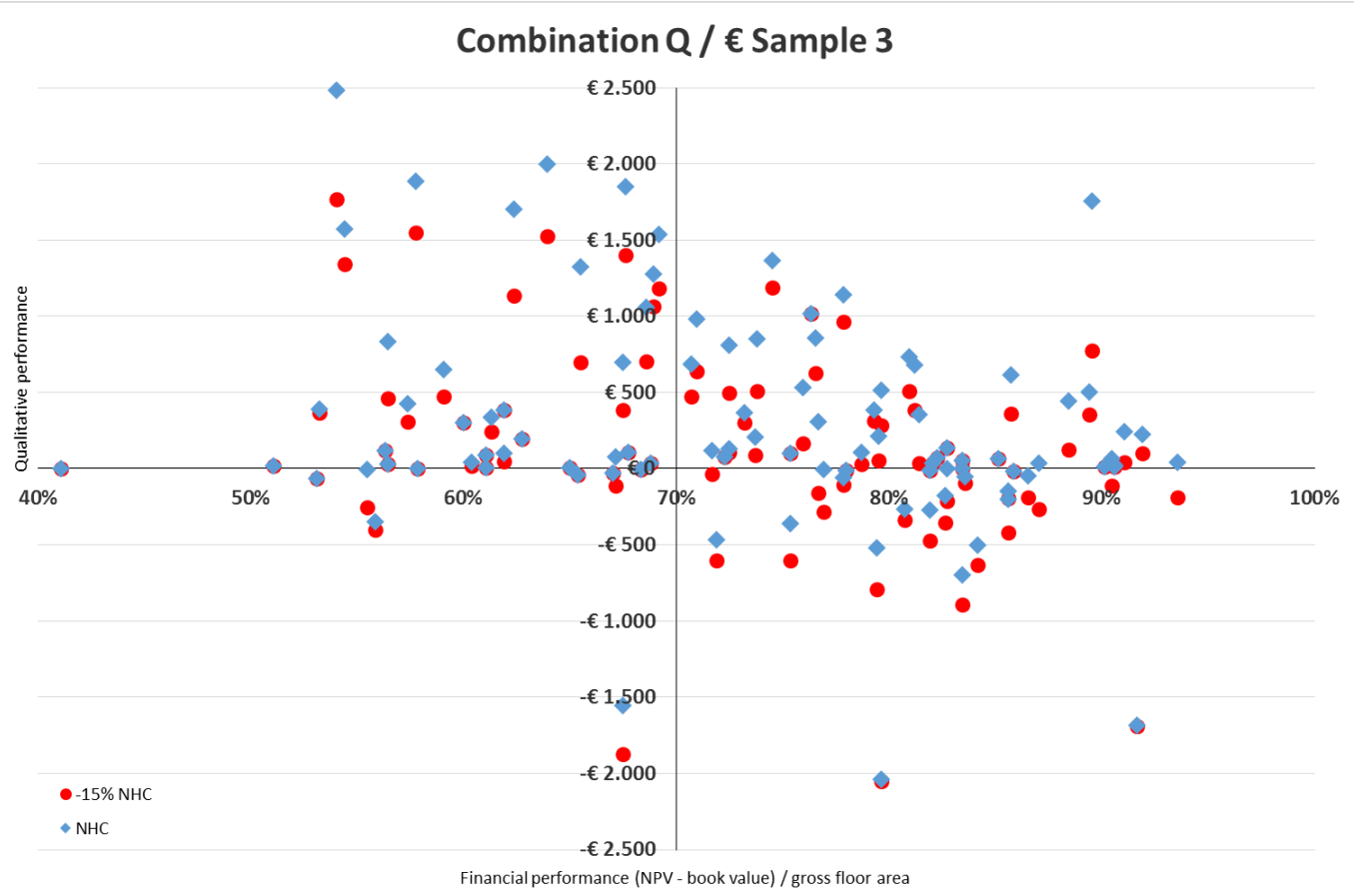


Sample 3 = 9 Organisations

Sample shown is without reduction of income. Strategy was an open question.

- ▲ 80% of strategies = Keep (52%) or Sell (28%)
- Improvements are only 20% of the strategies but is conflicting with the intention to invest in (36%).
- ✕ ✕ for 17,5% of all objects an investment budget is known/reserved, linked to different strategies.
- ▲ Most of Sell objects have low quality
- Most of keep objects have high quality

Combined data – based on sample 3

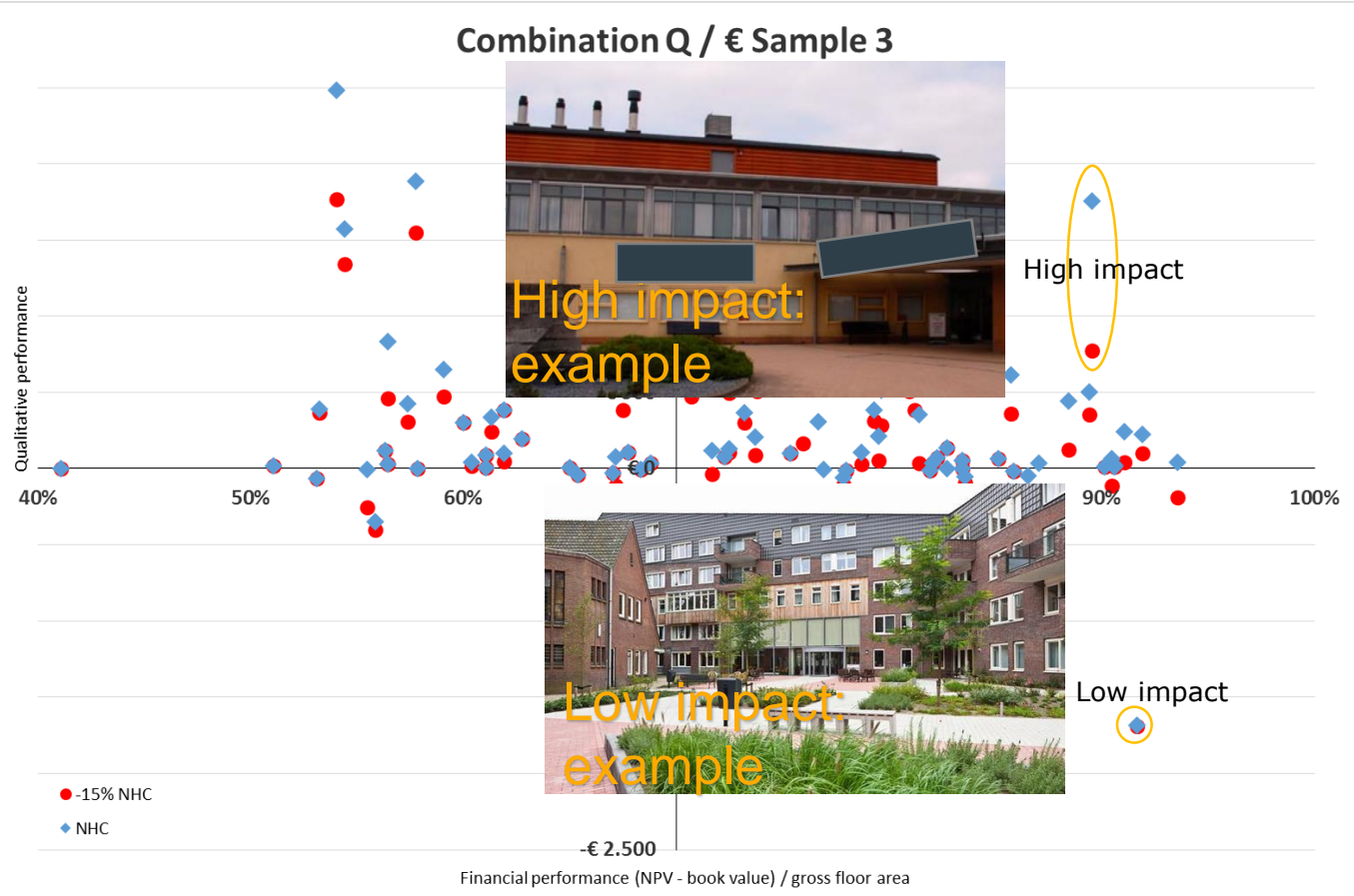


Sample 3 = 9 Organisations

- Influence of 15% reduction of income varies per object = high / low impact
- The highest impact of the reduction are objects with dementia target groups.
- The lowest impact occurs on objects with different target groups and logically with rental apartments in the complex.

NHC = Normative Housing Component for funding of intramural care locations

Combined data – based on sample 3



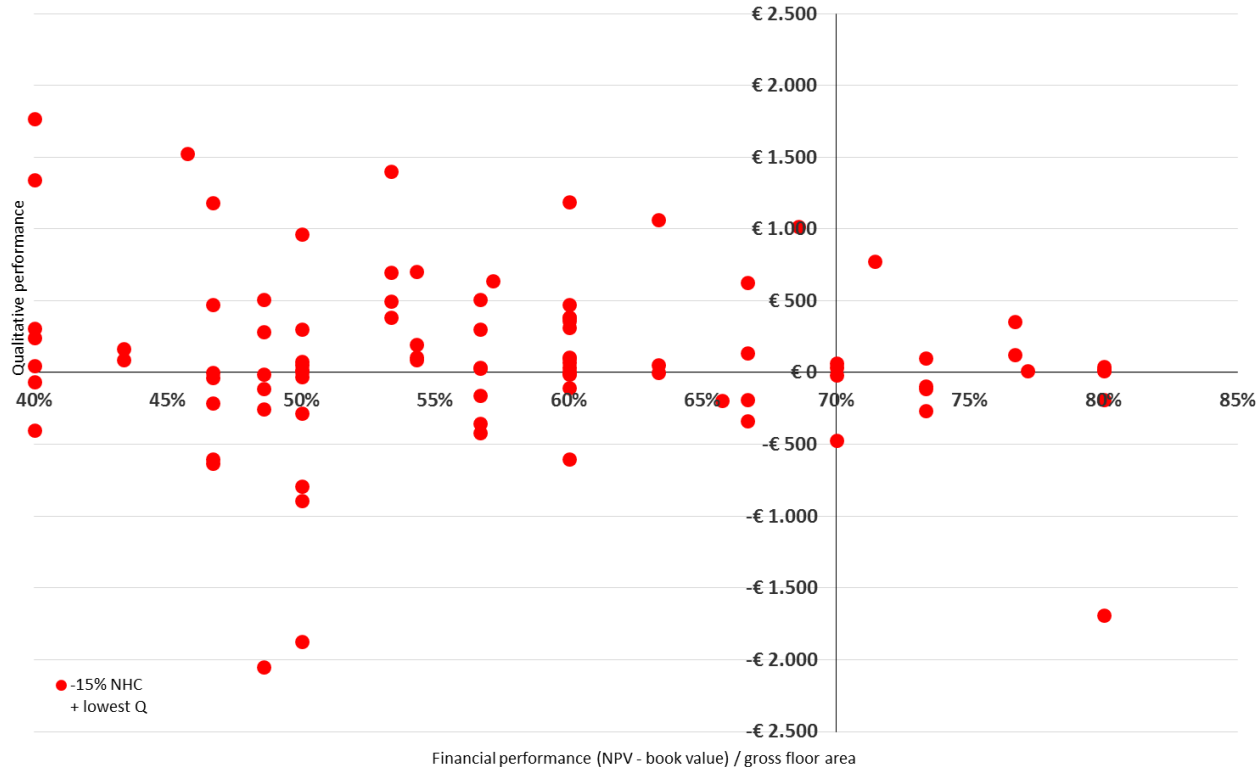
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NHC = Normative Housing Component for funding of intramural care locations

Combined data – based on sample 3

Combination Q / € Sample 3: lowest score on Q and €



Sample 3 = 9 Organisations
Worst score Q vs
Worst score € (-15% scenario)

- The diagram changes dramatically when the worst scores on the Quality are plotted. This is the lowest score on one of the aspects that is used as an indicator of the total score.
- This worst case scenario shows that most of the objects have one or more aspects that are insufficient.

Conclusion - available data

- Most participants do not have a thorough dataset: recording of data needs much improvement;
- Most potential respondents were unwilling to invest time to deliver the required data in the right order
- Possible reasons: lack of time, no sense of urgency, too many surveys, or priority to manage the annual report for the accountant
- The data is insufficient to draw sound conclusions about the sector as a whole, but give a good insight in the real estate stock of the respondents

Conclusion - dilemmas

- The changing demand regarding the quality (functional, technical) and experience value of elderly health care real estate is still not well understood
- The required investments that might come from these demands is not clear yet
- The reduction of funding lead to a great loss of NPV. Required investments have to be financed externally and earned back by incomes from health care production

Next steps

- Extension of data collection:
more respondents, some extra questions
- Extension of data analysis:
 - Correlations between current quality and willingness-to-invest
 - Correlations between partial quality scores and overall quality scores: what weights most?
- Workshop sessions to get feedback from the sector
- Policy recommendations

Contact



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