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Plná verze článku / Full paper

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A link between Municipal Spending on Housing and other factors explaining Housing conditions in a country

Author: Barbora Raková MSc

Date: August 2021

Big picture

Dissertation topic:

Direct and Indirect Instruments of Municipal Housing Policy

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Big picture

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Direct and Indirect Instruments of Municipal Housing Policy

Baseline information needs:

Housing policy systems

Stakeholders in Housing sector

Factors influencing Housing sector

Mechanisms of Housing Policies – how does it work

Roots of up-to-date problems in Housing sector

Roles of cities in Multilevel Governance of Housing

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Aim of presentation

COMMENTS

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REAL WORLD QUESTIONS TO CONSIDER

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COMMENTS

REAL WORLD QUESTIONS TO CONSIDER

SUGGESTIONS FOR RESEARCH:

DATA, METHODS, RESEARCH TEAM TO JOIN

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Outline

1)   Introduction – What, Why, How: Why Housing and Why Municipal, Analysis aims and starting points

2)   Methodology – Variables selection, Procedure

3)   Outputs – Results of analysis and how to understand them

4)   Summary – What to remember and What to do next

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What:
Impact of Municipal Housing Expenditure

Proportion of Municipal spending on Housing

Factors explaining Housing conditions in a country

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Factors explaining Housing conditions in a country

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What:
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Factors explaining Housing conditions in a country

What aspects of housing may be linked with the level of municipal spending on Housing and how.

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Why:
Municipal Housing: THE Topic for Future

– **Housing policy identified as an important topic for urban development**

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Municipal Housing: THE Topic for Future

– **Housing policy identified as an important topic for urban development**

– **Municipal governments are often reluctant to do much about it**
(Hulchanski, 2006; Lewis, 2016; Feather, 2018)

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Why:
Municipal Housing: THE Topic for Future

– **Housing policy identified as an important topic for urban development**

– **Municipal governments are often reluctant to do much about it**
(Hulchanski, 2006; Lewis, 2016; Feather, 2018)

– **Housing spending often viewed only as a National Government's task**

-> such a system is no longer sustainable (Feather, 2018; OECD, 2020)

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How: Quantitative analysis
Correlations matrix & Linear regression

— **Reasonable Variables selection**

— **Correlation matrices**

— **Quantitative model tested by a linear regression**

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2) Methodology – Quantitative analysis, Variables selection, Procedure

1) Introduction – What, Why, How: Why Housing and Why Municipal, Analysis aims and starting points

2) **Methodology – Analysis starting point, Data, Variables selection, Procedure**

3) Outputs – Results of analysis and how to understand them

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Analysis' starting point: municipal spending

Average of **1,35% of municipal budgets** are designated for housing programmes (Feather, 2018)

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Analysis' starting point: municipal spending

Average of **1,35% of municipal budgets** are designated for housing programmes (Feather, 2018)

Is this little?
Is this sufficient?

Does it matter?

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Data introduction & weaknesses

— OECD database on Housing (OECD, 2020a, 2020b)

— Years 2017 & 2018

!!! Drawback - only data for 21 observations !!!

!!! This study is just to set a baseline for further investigation !!!

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Dependent variable

Abbreviation	Relevance for inclusion in the model
% Housing in Local Budget	City spending on affordable housing (Basolo, 2016)
	Need for Municipal involvement in Housing (Feather, 2018)

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Explanatory variables - social aspects

Abbreviation	Relevance for inclusion in the model
% Household's expenditure on Housing	Social aspect – well-being of people (Hulchanski, 2006)
Mortgage owner - %Household Cost/Income	Support for upper class (Hulchanski, 2006)
Rent - %Household Cost/Income	Support for lower class (Hulchanski, 2006)
% GDP on Housing Allowances	A social factor of housing policy (Hulchanski, 2006)
GDP per capita	Author's addition

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Explanatory variables – political priority

Abbreviation	Relevance for inclusion in the model
% Housing in National Budget	Various levels of Government and their role in Housing (Hulchanski, 2006; Feather, 2018)
Construction - % New Dwellings/All	Land policy as a crucial factor for development Debrunner & Hartmann (2020); Kang & Groetelaers, (2018); Lawson & Ruonavaara, (2020); Turner, 2017, Lewis, (2016)

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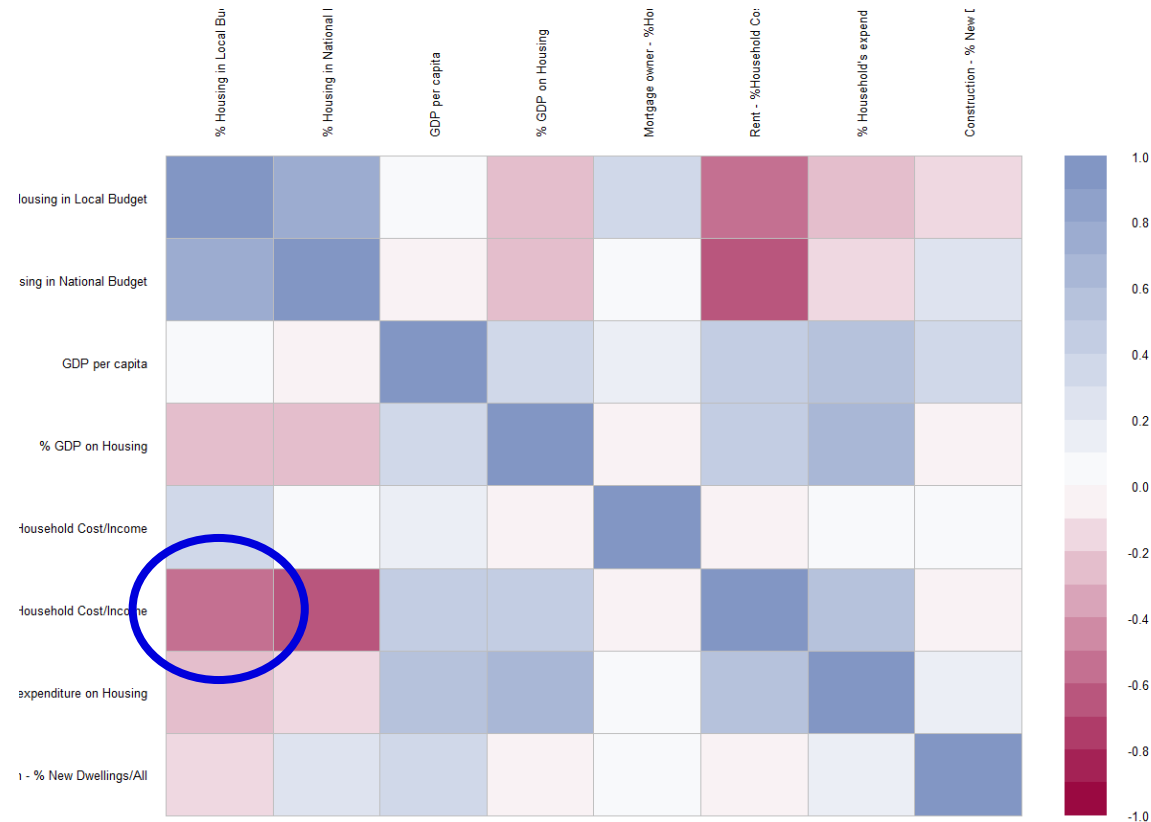# 3) Outputs – Results of analysis and how to understand them

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Correlation matrix N. 1

Fig 1: Correlation matrix of data selected for analysis of Municipal Spending (see first column/row)

Local Budget Housing

National Budget Housing

Renter's spending on Housing

Source: Author's calculation with use of data from OECD (2020a,b)

Correlation matrix N. 2

Fig 2: Scatterplot Matrix of data selected for analysis of Municipal Spending (see first column/row)

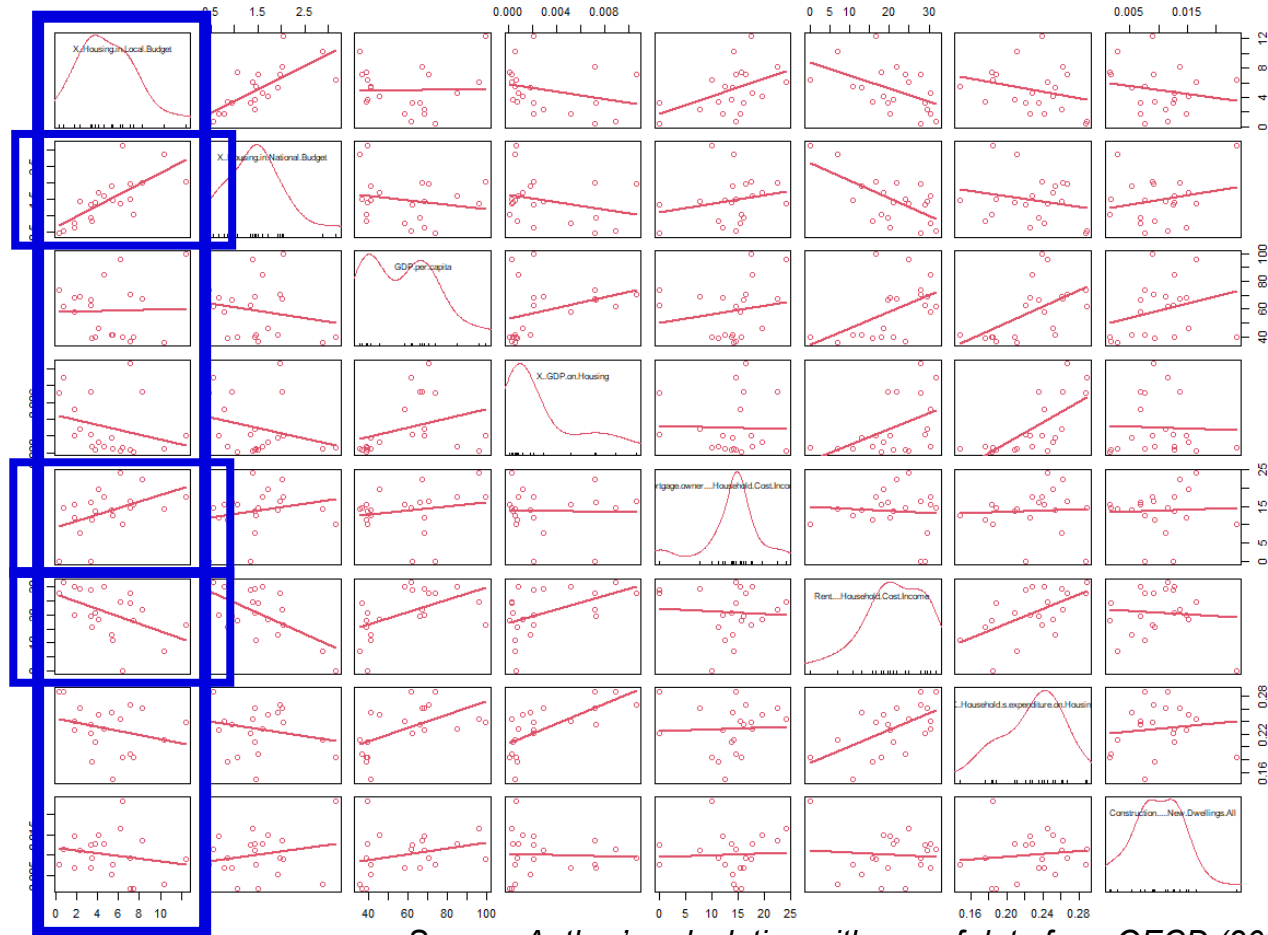**Local Budget Housing**

National Budget Housing

GDP per capita

%GDP on Housing

Mortgage owner's spending on Housing

Renter's spending on Housing

%Household's expendit. on Housing

%New Dwellings constr.

Source: Author's calculation with use of data from OECD (2020a,b)

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Linear Regression

H0: The variation of Municipal Housing is sufficiently explained by the total variation of selected variables explaining Housing sector

% Housing in Local Budget = const

       + ß1 % Housing in National Budget

       + ß2 % GDP on Housing Allowances

       + ß3 GDP per capita

       + ß4 %Household Cost/Income (Mortgage owner)

       + ß5 %Household Cost/Income (Rent)

       + ß6 % Household's expenditure on Housing

       + ß7 Construction - % New Dwellings/All dwellings in year

Source: Author's calculation with use of data from OECD (2020a,b)

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Source: Author's calculation with use of data from OECD (2020a,b)

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Output N. 1

The level of priority that the national government gives to Housing is strongly reflected on city level.

One possible explanation may be, that Housing policies are set by law and municipal governments use only limited power to act on their own in this field (Hulchanski, 2006; Feather 2018; OECD, 2019).

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Output N. 2

Well-being of a country (GDP) does have a positive, but only very limited link with municipal will to spend on Housing.

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Output N. 3 – relevatory

There is a hint of positive relationship between municipal spending on Housing and cost/income ratio on Housing of people who have a mortgage.

The more more money goes to housing, the higher expenditure on private housing there is

a) **Does it mean, that <u>the more a city spends on housing development areas, the more high-quality (expensive) apartments</u> people buy?** This assumption would be supported if construction rate was positively and significantly linked with municipal spending on Housing. The exact opposite, however, has proved to be true.

Output N. 3 – relevatory

There is a hint of positive relationship between municipal spending on Housing and cost/income ratio on Housing of people who have a mortgage.

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b) Does it mean that the <u>city invests in public housing</u>, which causes presence of less private dwellings and consequently more difficult and expensive possibility to buy an apartment? This assumption is supported by the fact, that also total expenditure of households on housing is negatively and significantly linked with municipal spending on housing. In such a place then there might be more public dwellings, which are generally less costly for their renters.

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Output N. 3 – relevatory

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c) Does it mean, that <u>**cities, which spend more on Housing, are inhabited by rather poorer people, and those who can afford a mortgage pay relatively more for it in a proportion to their income than rich people in rich cities?**</u> This construct would be supported by a negative relationship with Households' expenditure.

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Output N. 3 – relevatory

There is a hint of positive relationship between municipal spending on Housing and cost/income ratio on Housing of people who have a mortgage.

The more more money goes to housing, the higher expenditure on private housing there is

To answer the questions, it is important to understand what exactly are the financial instruments, which are used by the cities and what target group are these aimed for.

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4) Summary – What to remember and What to do next

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What to remember

There appear to be links between Municipal spending on Housing and

POSITIVE - Housing in National Budget

POSITIVE - GDP per capita

POSITIVE - %Household Cost/Income of Mortgage owner

NEGATIVE - %Household Cost/Income of a Renter

NEGATIVE - Household's expenditure on Housing

NEGATIVE - Construction - % New Dwellings/All dwellings in year

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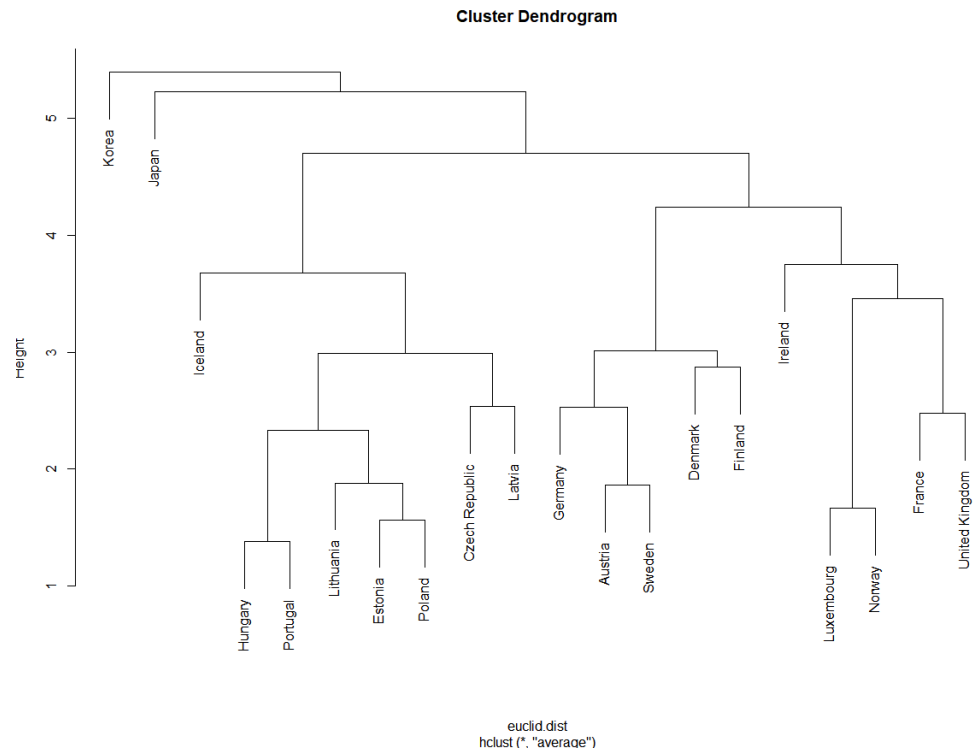
THESE NEED TO BE FURTHER PROVED

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What to consider and do next

MULTIPLE PHENOMENA NOT TAKEN INTO CONSIDERATION

Ex. SYSTEM DIFFERENCES IN COUNTRIES

- Only appear when conducting case studies

Cluster Dendrogram

What to consider and do next

MULTIPLE PHENOMENA NOT TAKEN INTO CONSIDERATION

Ex. IMPACT OF SPECULATION ON HOUSING MARKET

- Let's find data on this and investigate!

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What to consider and do next

TOO LITTLE DATABASE

let's extend it!

- Data for multiple years available – time-series analysis to improve this paper's relevance in process

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Literature

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Thank you!
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