

Development land markets and development gain – stylized facts from a Nordic country

FIG Working Week 18.6. 2008 Stockholm
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Purpose

- This is a presentation of a research project that has just started
- The idea of the study is presented
- stylized facts of reseach data are presented

1. **Concept of development land**
2. The players in development land markets
3. Why we need to know more about the value of development land
4. Lot prices follow apartment prices
5. Development land prices follow lot prices
6. A mass database of development land transactions
7. Land markets in local finance
8. The research agenda

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Concept of development land

Finnish context:

No planning permission is needed

Local government has a planning monopoly

Existence of a master plan specially indicates
development land

However, any land with locational advantages is
development land

(In Finnish discussion a term "raw land" is used)

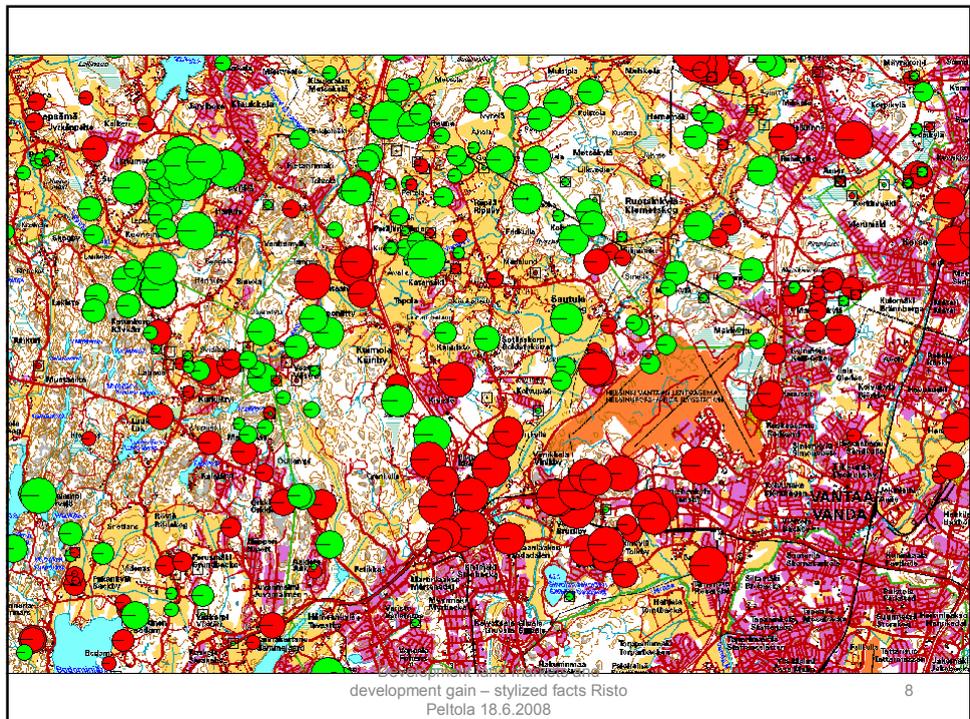
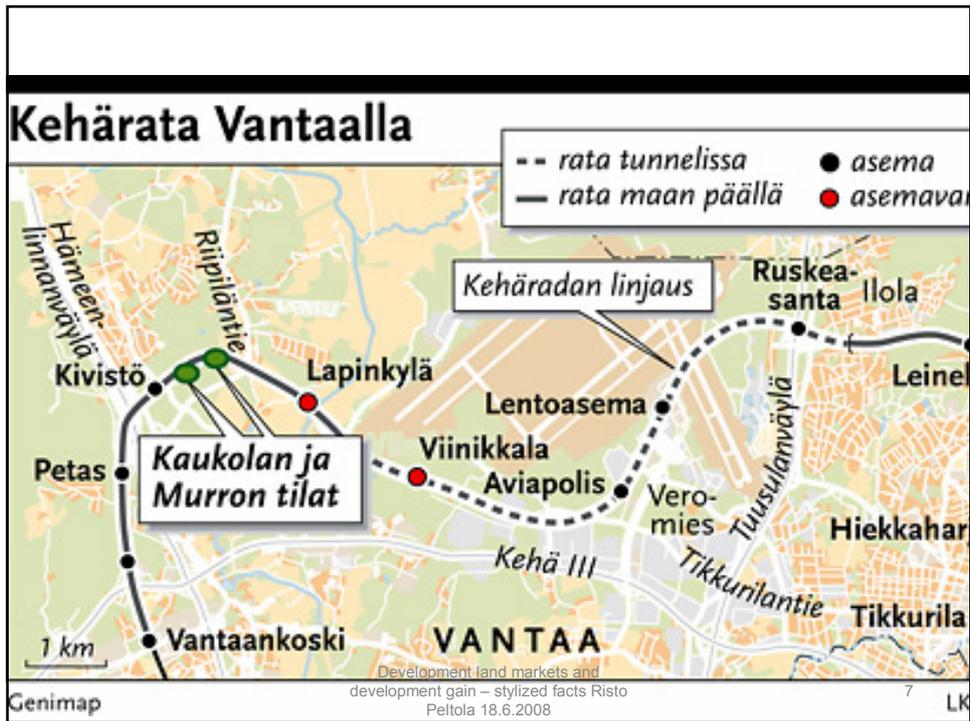
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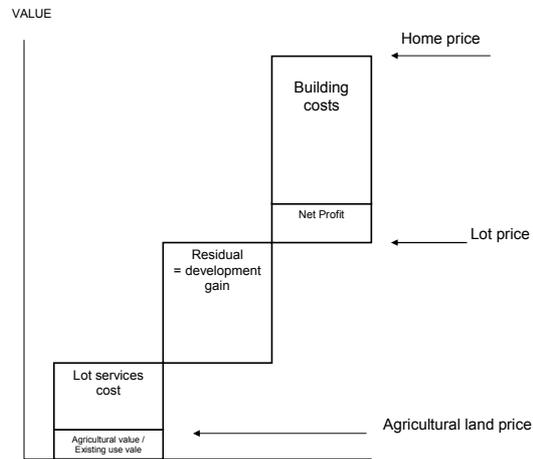


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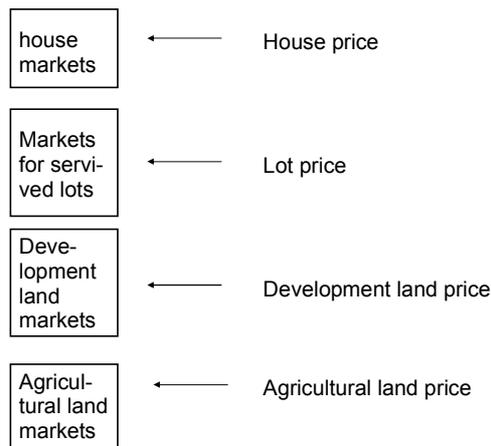
Development gain as a residual



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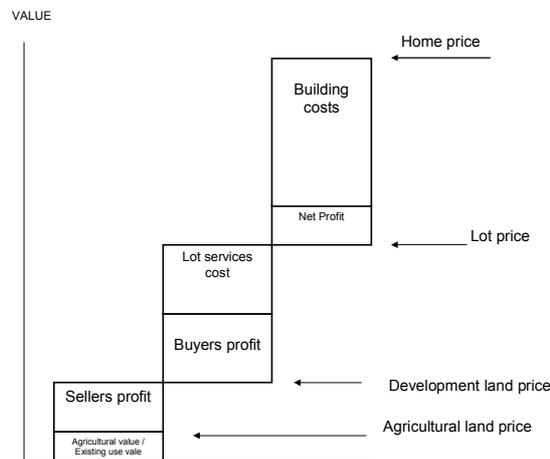
Housing land market supply chain (Finnish context)



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Sharing of the development profit in a development land market



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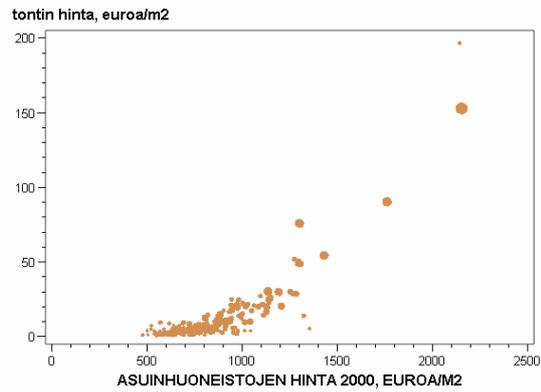
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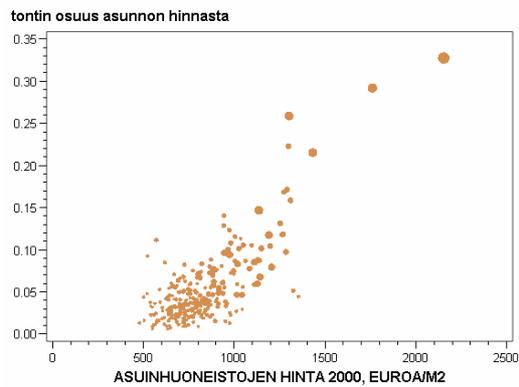
Lot prices follow apartment prices: mean prices in Finnish communities



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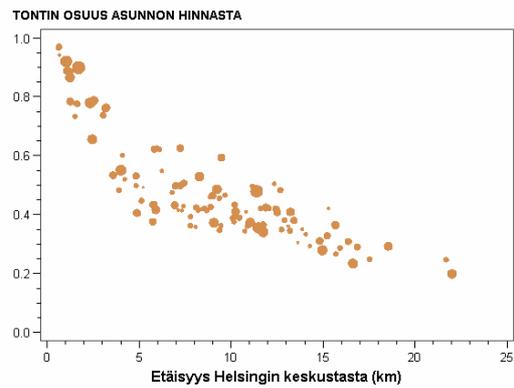
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The lot share of house prices in Finland (The circles indicate communities, circle size relates to city size)



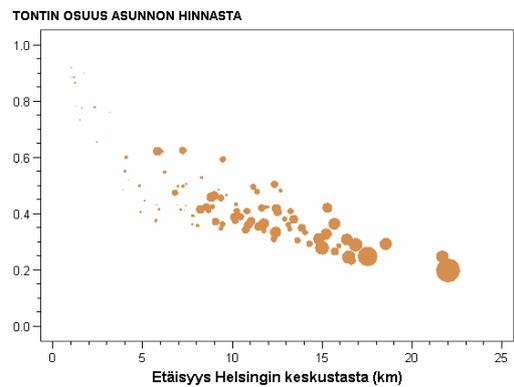
The lot share of apartment prices in Helsinki MA as a function CBD distance

(Zip codes)



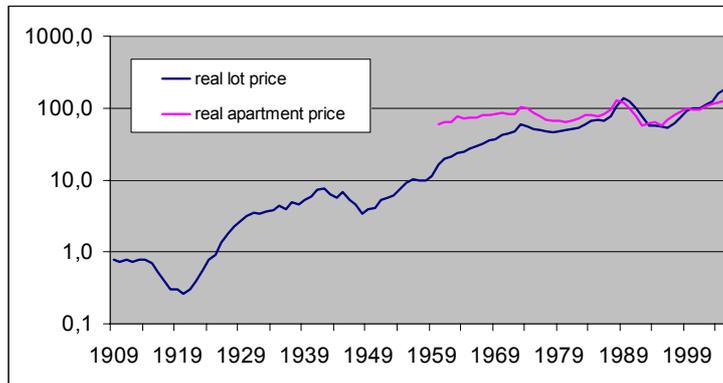
The lot share of apartment prices in Helsinki MA as a function CBD distance

(Zip codes, circle size relates to number of land sales)



Lot prices follow apartment prices: over time, mean prices in Finnish communities (log scale)

source: Leväinen 1991, Skurnik 1980, Statistics Finland, own calculations

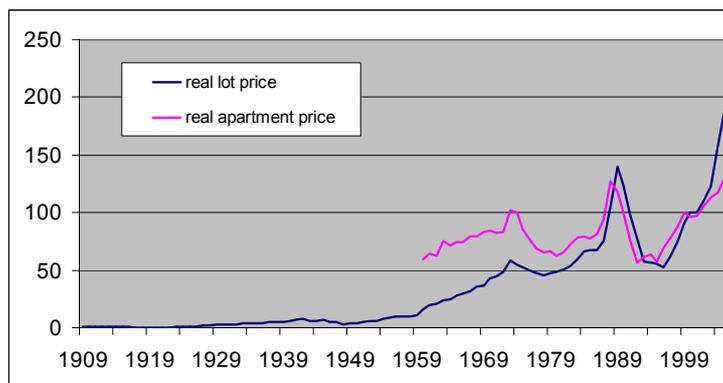


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Lot prices follow apartment prices: mean prices in Finnish communities (1960-2006)

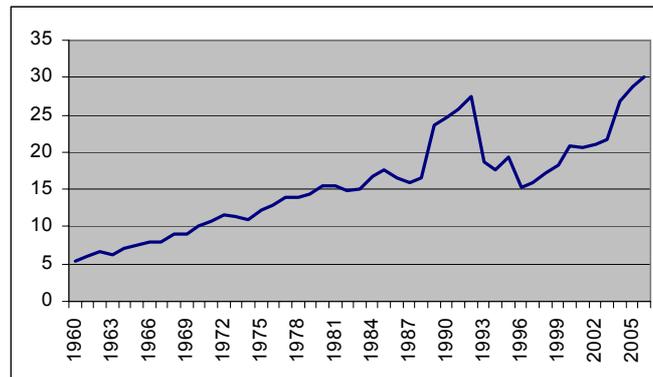
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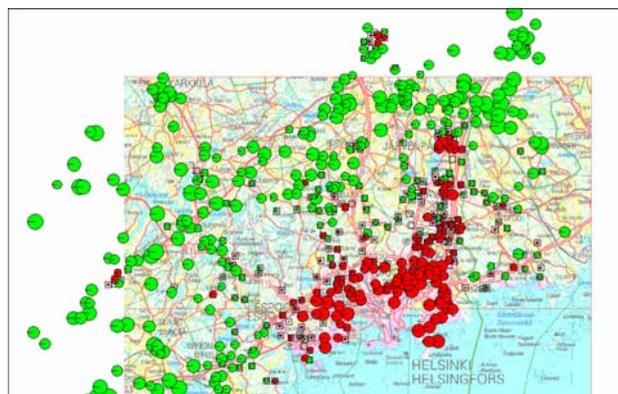
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The lot share of apartment prices in Helsinki Metropolitan area, 1960-2005



The lot share of house prices in Helsinki Region (red circles = lot share more than 27 %)



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8. **Land markets in local finance**

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Development land markets (Finnish context)

- Traditionally local governments have been dominant players in the development land markets, very often the only buyers
- Historically, there are important exceptions to this rule:
 - building companies buying land in Helsinki MA in phases of rapid urbanization and weak local government, such as in the beginning on 1900-century and in 1960-ies
 - More recently, a legislation was introduced to increase development on privately owned land, with a development charge to be paid

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Local governments are the main players in the development land markets

- Historical reasons, legislation
- Local government finances and builds the infrastructure
- Development land market has been a mechanism for local governments to finance the infrastructure

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Why we need to know more about the value of development land

- Valuation
- Local finance
- Supply of housing lots and affordable housing

Local finance

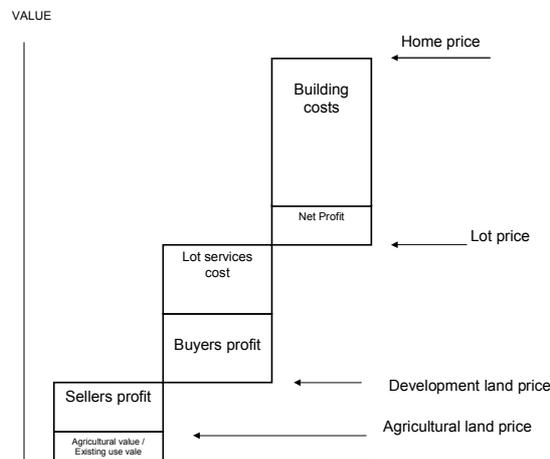
Development land market has been a mechanism for local governments to finance the infrastructure (if the community is the dominant player as a buyer)

If privately owned land is developed, a development charge has to be paid.

The development charge depends on

1. Development costs
2. Increase on the value of land

Sharing of the development profit in a development land market



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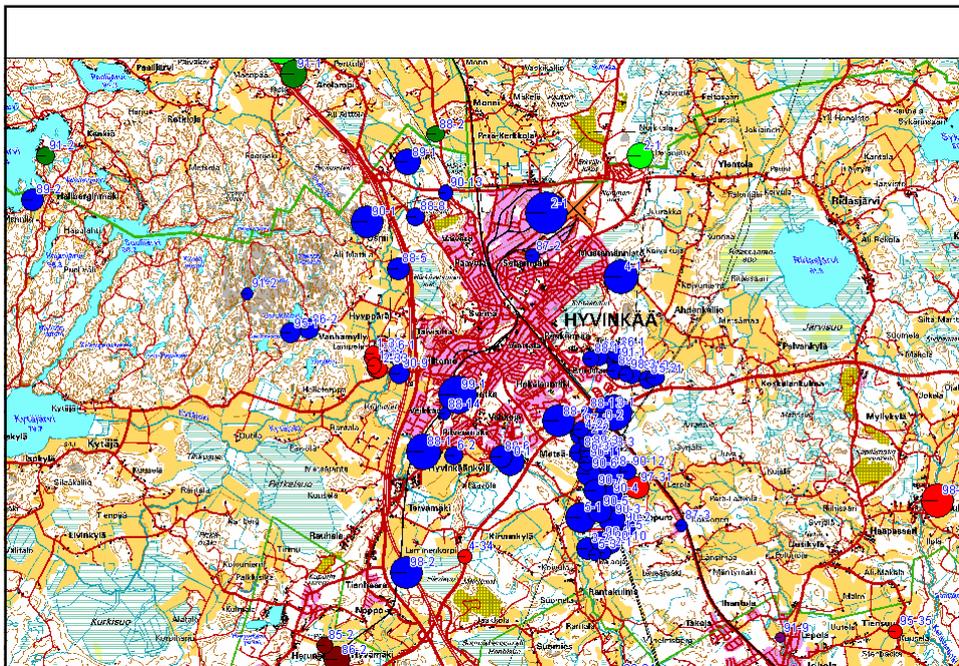
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The volume of land bought by Finnish local governments in 1985-2007

10533 sales
128262 ha
(0,4 % of land area)

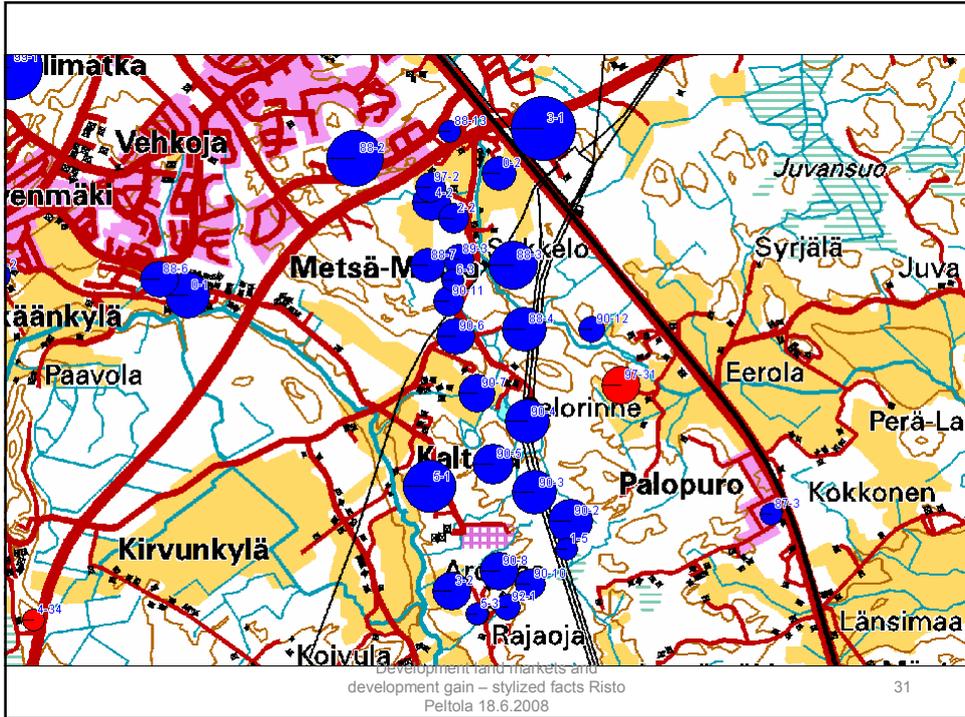
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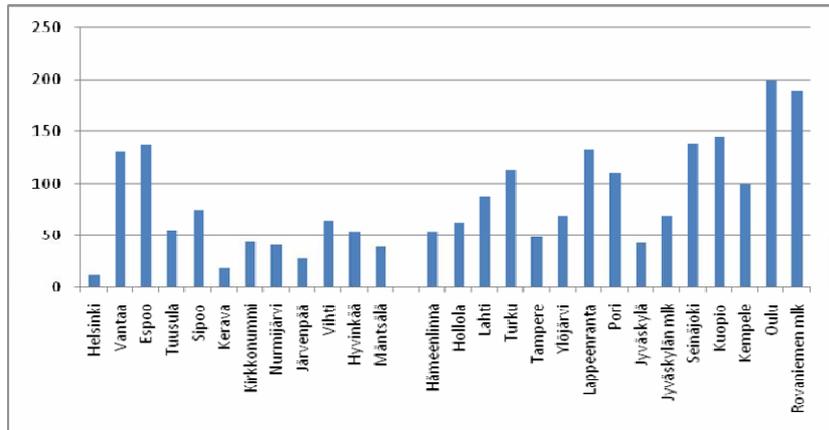


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number of sales of development land, 27 communities, years 1985-2007



Oulu region:

Far north, cold climate, dark winters, poor amenities

Fastest growing region in relative terms

Population 200.000

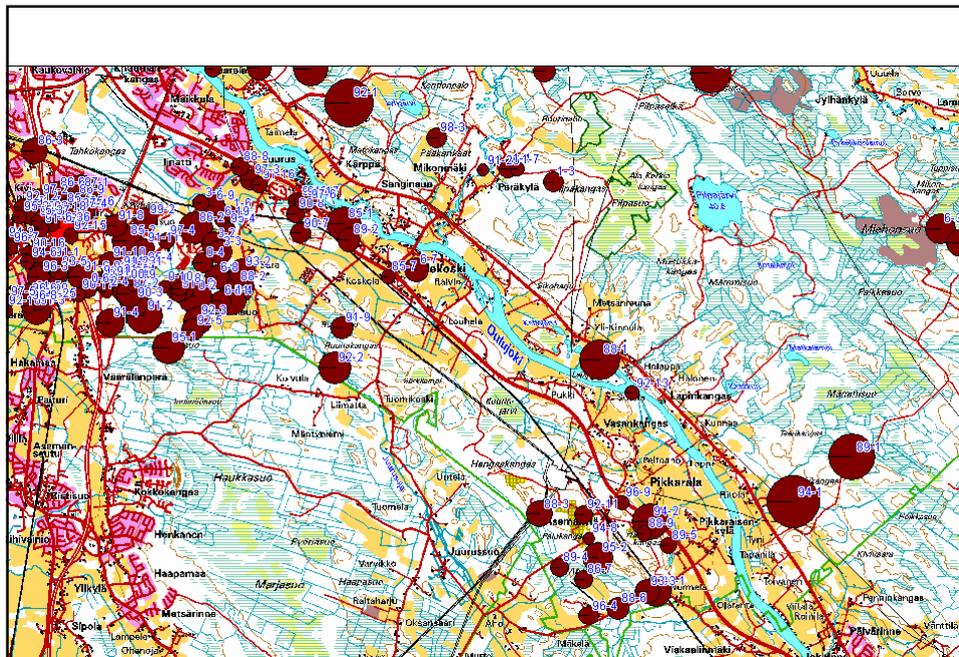
Annual growth 4 %

Active land policy

Cheap housing

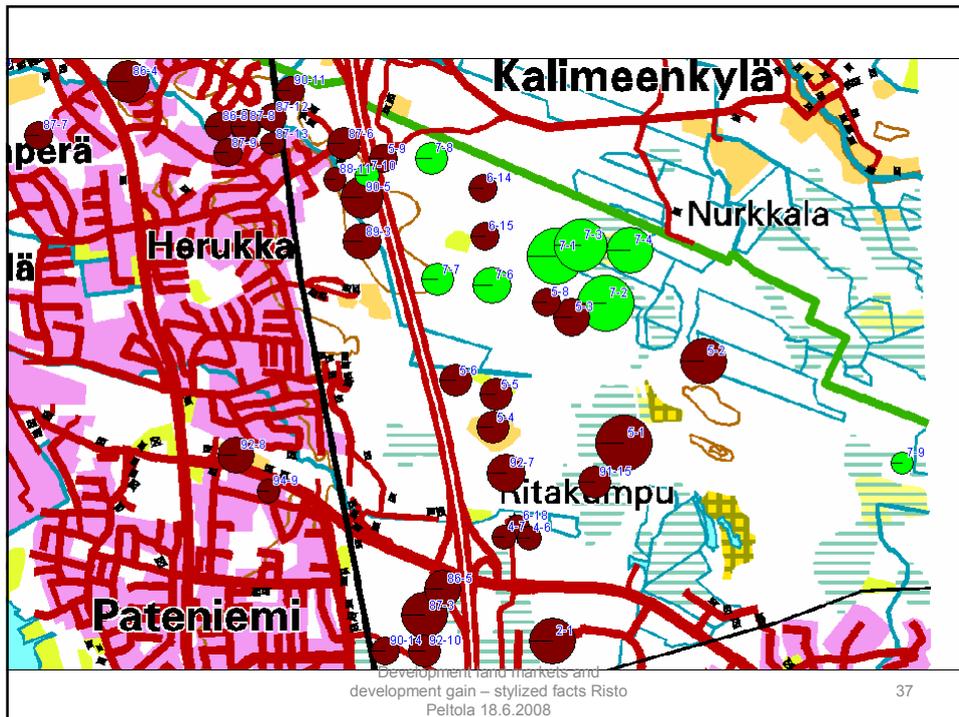
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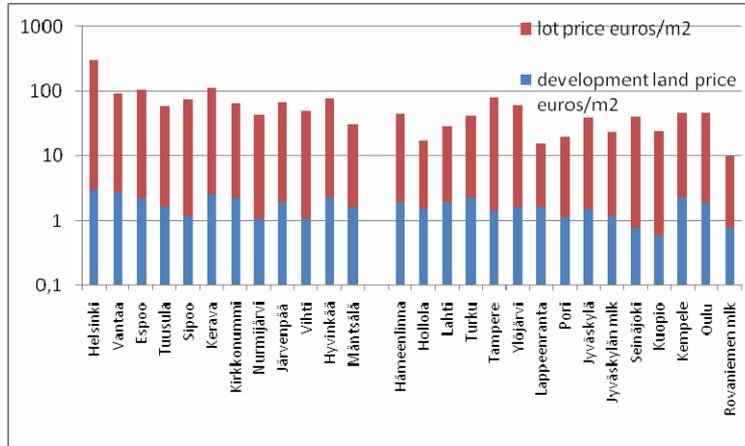
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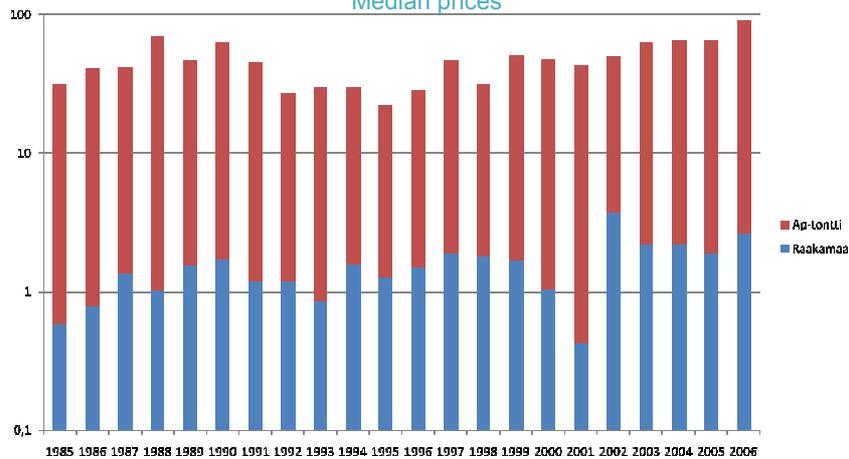
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Development land prices follow lot prices:
across space;
mean prices in 27 Finnish communities



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Development land prices follow lot prices:
over time;
in outer ring of Helsinki MA.
Lot price is estimated in development land sale location and time.
Median prices

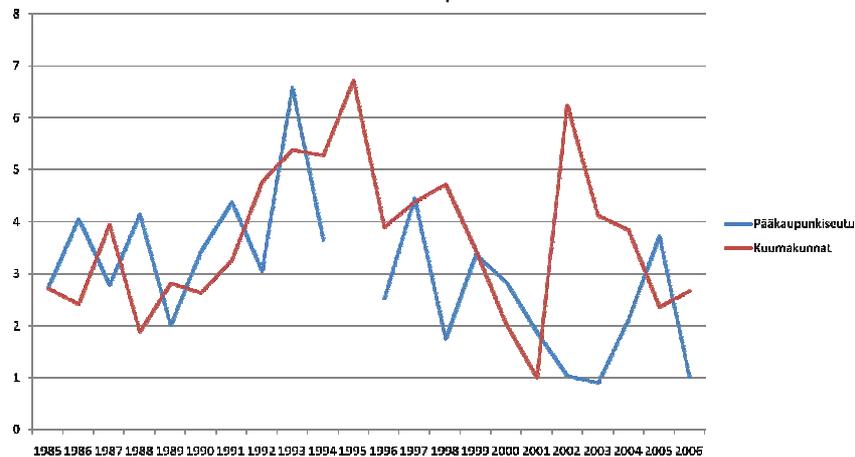


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The Price ratio between undeveloped land and lot prices in Helsinki MA.

Lot price is estimated in development land sale location and time.

Median prices



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The price ratio between development land and housing lots in Helsinki MA.

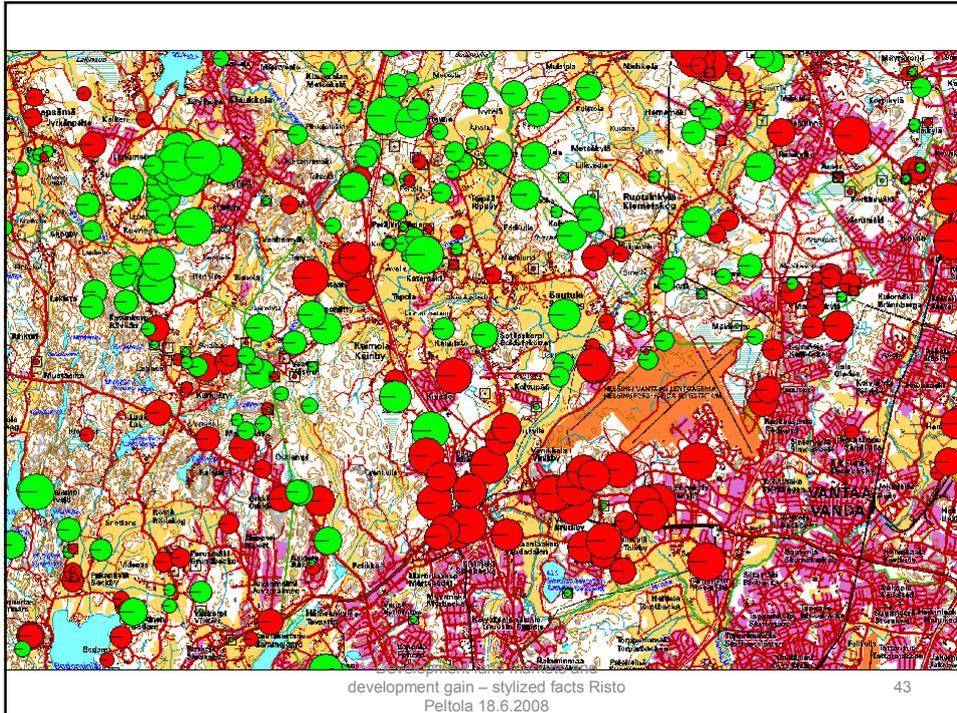
Lot price is estimated in development land sale location and time.

Median prices

Large red = 30 % or more

No circle = 5 %

Large green = 1 % or less

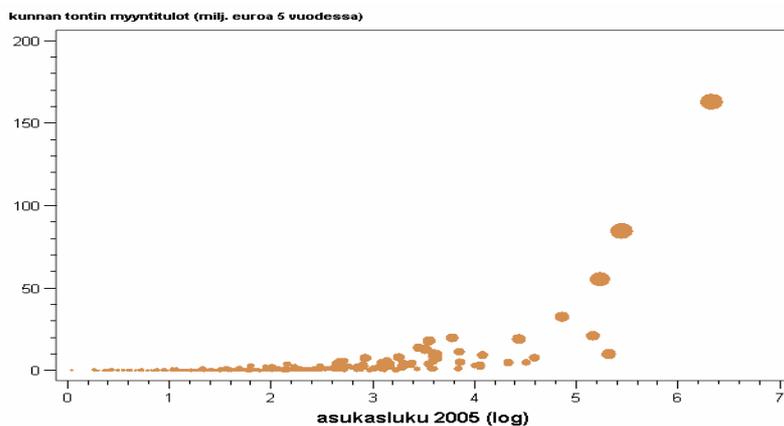


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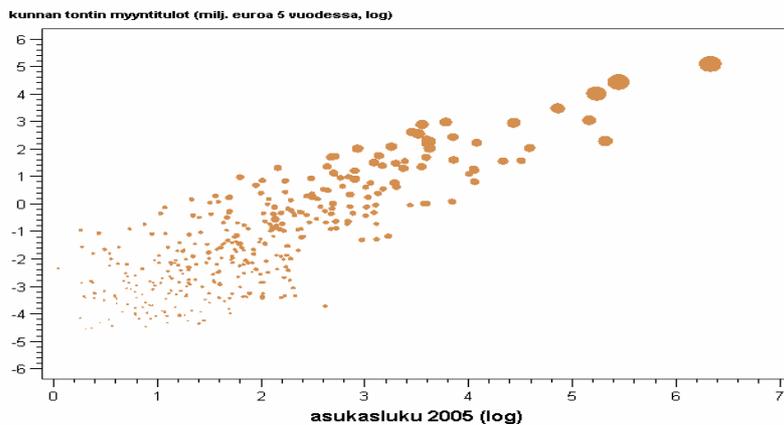
Local government revenue on lot sales, mill. euros



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Local government revenue on lot sales, mill. Euros (log)

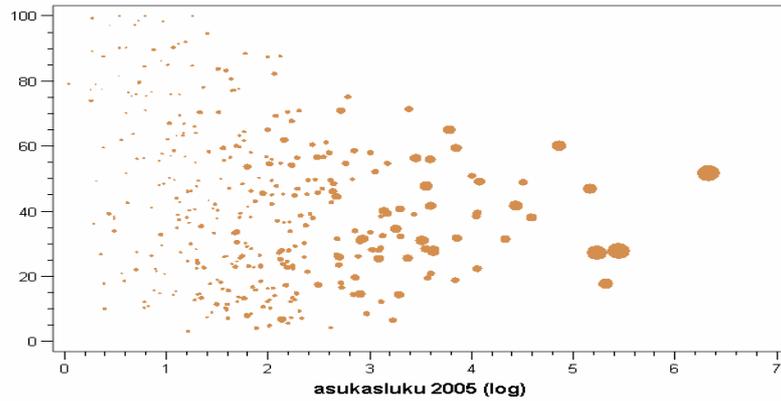


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Local government share of all lot sale revenue

kunnan osuus myyntituloista

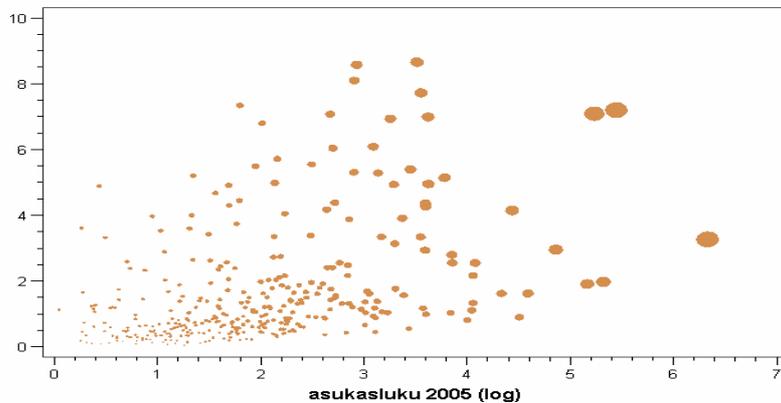


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The share of lot sale revenue of all local government revenues

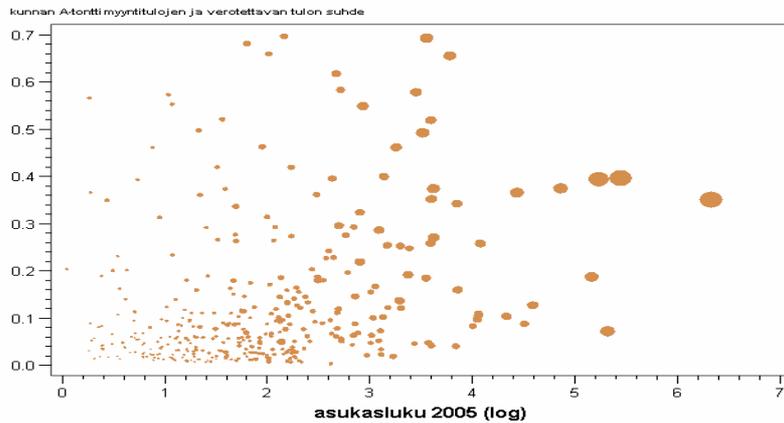
A-tonttimyymntitulojen suhde kunnan verotuloihin



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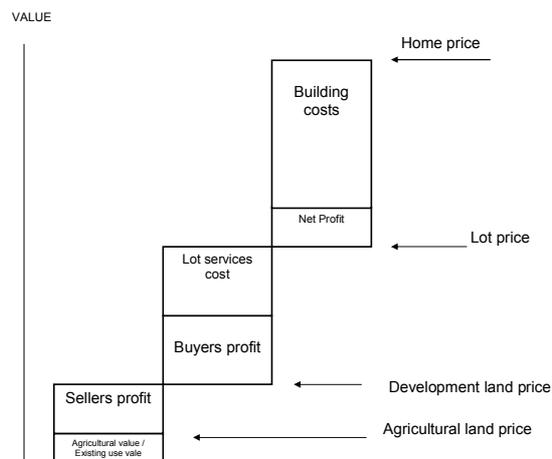
The ratio of lot sale revenue and taxable income



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The research agenda



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The research agenda

- The components of house prices should be
 - defined
 - measured
 - modelled
- Especially development costs need standard definitions for measurement purposes

The research agenda

1. What is the size of development gain in sales of development land?
2. What is the distribution of development gain between buyer and seller of development land?
3. Which factors affect to the size and distribution of the development gain?
4. What are the implications, when private land is developed and a development charge has to be calculated?