

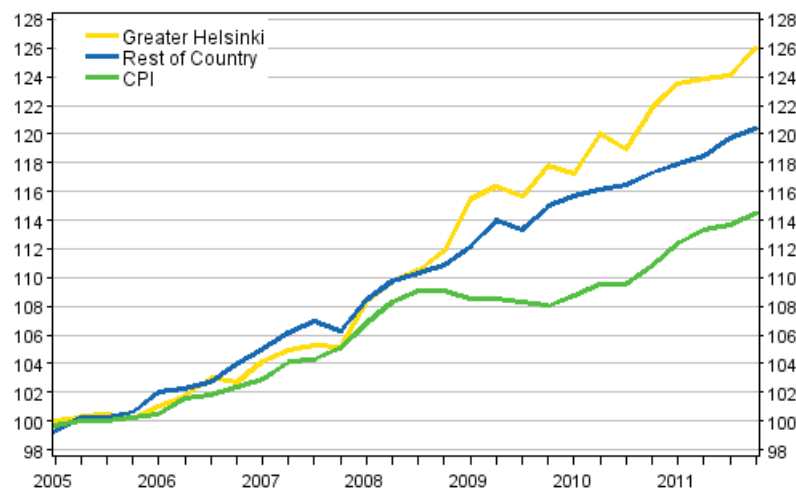
# Rents of dwellings

2011, 4th quarter

## Rents rose by 2.9 per cent in the year

During the last quarter of 2011, the year-on-year increase in rents was 2.9 per cent. The rents of non-subsidised rental dwellings went up by an average of 3.1 per cent in the whole country. In the Greater Helsinki Area the rents of non-subsidised rental dwellings went up by 3.6 per cent and in the rest of Finland by 2.8 per cent. The rents of government subsidised dwellings rose by 2.6 per cent in the whole country. Compared to the previous quarter, the rents of non-subsidised dwellings increased by an average of 1.2 per cent and the rents of government subsidised dwellings by 0.4 per cent.

The development of rents and consumer prices, 2005=100



The data derive from quarterly statistics on rents compiled by Statistics Finland. The rent statistics are based on interview data collected in connection with the Labour Force Survey and on the Population Register Centre's Building and Dwelling Register.

# Contents

## Figures

### Appendix figures

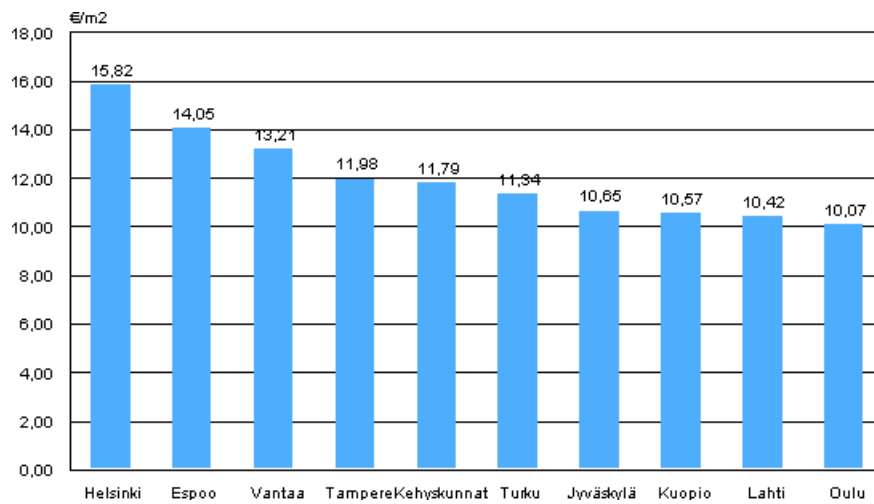
Appendix figure 1. Average rent levels for non-subsidized apartments, 4th quarter 2011.....3

Appendix figure 2. Average rent levels for government subsidized apartments, 4th quarter 2011.....3

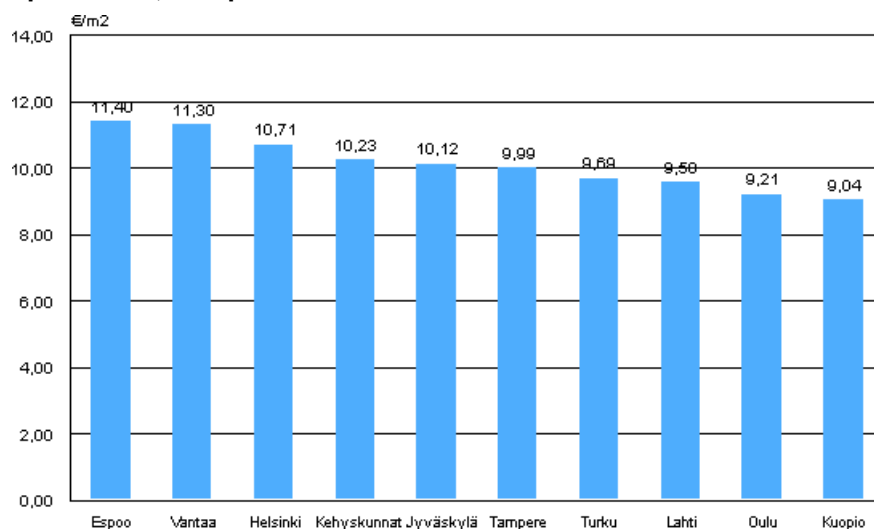
Quality Description: Rents of dwellings.....4

## Appendix figures

**Appendix figure 1. Average rent levels for non-subsidized apartments, 4th quarter 2011**



**Appendix figure 2. Average rent levels for government subsidized apartments, 4th quarter 2011**



# *Quality Description: Rents of dwellings*

## **1. Relevance**

### 1.1. Information content

The quarterly statistics on rents describe quarterly and year-on-year levels and changes of rents for the rental dwelling stock. The statistics are published quarterly approximately five weeks after the end of the examined quarter.

### 1.2. Concepts, classifications and data

#### 1.2.1 The data and the data suppliers

The statistics on rents are compiled from interview data collected in connection with the monthly Labour Force Survey, Statistics Finland's data on the dwelling stock, obtained from the Building and Dwelling Register of the Population Register Centre, and data on migration and population structure. Around 1,500 persons are interviewed monthly. The sample for one survey month consists of five rotation groups which have entered the Labour Force Survey at different points of time. The target population of the survey month changes gradually so that one third of the respondents change monthly. The Population Register Centre's Register of Buildings and Dwellings forms the quarterly framework for rents. The framework is updated annually.

This publication of the quarterly statistics contains information on rents for the whole country, the Greater Helsinki Area, rest of the country, municipalities surrounding the Greater Helsinki Area and other largest municipalities. The Greater Helsinki Area comprises Helsinki, Espoo, Vantaa and Kauniainen. The surrounding municipalities are Hyvinkää, Järvenpää, Kerava, Riihimäki, Kirkkonummi, Nurmijärvi, Sipoo, Tuusula and Vihti.

The interview data for these statistics have been collected, and the quarterly index calculated since the first quarter of 2003.

#### 1.2.2 Concepts

In these statistics the concept of rent includes separately payable water and heating charges, but not compensations paid for the use of amenities such as sauna or laundry room. Telephone and electricity charges are also excluded. The published average rents have been calculated per square metre of dwelling per month (€/m<sup>2</sup>/kk).

The concept of number of rooms excludes kitchen. The room number category of 3h+ refers to dwellings with at least three rooms.

An Arava dwelling refers to a dwelling built with a government housing loan, whose rent is determined on the cost coverage principle. Most Arava dwellings are owned by local government. Non-subsidised dwellings are other than Arava dwellings or interest supported dwellings. Rental dwellings receiving interest support are now also classified under government-subsidised dwellings in these statistics.

A new tenancy refers to a tenancy that has started within less than 12 months from the reference month of a Labour Force Survey interview. For example, in the interview data of December 2009, new tenancies mean those that commenced on or after 1 January 2009.

## **2. Calculation method**

The calculation method used for these quarterly rent statistics is a combination of a traditional method based on classification and a regression analysis (hedonic method).

The data of the rent statistics are classified by area, type of financing, duration of tenancy and number of rooms. The classification is based on the NUTS2 regional division that entered into force in 2003. The data within the NUTS2 areas are classified by region and major town. Division in type of financing is made into non-subsidised and government subsidised tenancies. Non-subsidised tenancies are further

classified into old and new tenancies. The formed categories are finally classified by number of rooms (1h, 2h, 3h+).

The used classification does not necessarily homogenise the data adequately, because dwellings within a category may deviate in respect of their microlocation, floor area, year of completion, etc. The available data contain information about dwelling location at the postal code level, as well as about dwelling age and floor area. With the regression model this information can be used to correct the average price of a given category in the comparison period so that the obtained average price adjusted for quality takes into account internal compositional changes in relevant variables between the base and comparison periods. The used regression model is of the following format:

### Regression model

$$\ln(p_{ij}) = \beta_{0i} + \sum_{k=1}^n \beta_{ki} A_{ijk} + \gamma_{1i} (\text{pinta} - \text{ala}_{ij}) + \gamma_{2i} \sqrt{\text{pinta} - \text{ala}_{ij}} + \gamma_{3i} k \alpha_{ij} + \gamma_{4i} \sqrt{k \alpha_{ij}} + \gamma_{5i} k \text{kaksi}_{ij} + \gamma_{6i} k \text{kolmio}_{ij} + \gamma_{7i} \text{rivitalo}_{ij} + \gamma_{8i} \text{uusi}_{ij} + \varepsilon_{ij}$$

where subindex i refers to the estimation category, j to the observation number and k to the municipality or postal code area within the category.  $\ln(p_{ij})$  is the logarithmic price per square meter for dwelling i in area j. Variables  $A_{ijk}$  are microarea indicators (postal code areas with large towns and municipality indicators with combined areas).  $k$  (duplex) and  $kolmio$  (triplex) are room number indicators and  $rivitalo$  (terraced house) is house type indicator. The variable  $uusi$  (new) indicates new tenancies.

The index of rents is calculated with the following Laspeyres formula:

### Laspeyres

$$\text{indeksi} = \frac{\sum_{i=1}^n q_{0i} * \overline{p}_{1i}}{\sum_{i=1}^n q_{0i} * \overline{p}_{0i}}$$

where

$$\overline{p}_{1i}$$

is the average price standardised for quality for category i in the comparison period,

$$q_{0i}$$

is the category-specific index calculation weight and

$$\overline{p}_{0i}$$

is the average base period price for category i. The average prices are geometric averages.

The weights of the index calculation have been determined using data on dwelling stock and on population structure. The weight is the summed-up floor area of rental dwellings in a category.

### 3. Framework of quarterly statistics on rents

Permanently occupied dwellings (excluding student dwellings, old people's homes and sheltered accommodation) whose tenure status was given as "rental dwelling" were drawn from the Population Register Centre's 2005 Building and Dwelling Register. The total number of such dwellings drawn was 727,027, and they divided into government subsidised (Arava) dwellings and non-subsidised dwellings as shown in the figure below:

#### Framework of quarterly statistics on rents

YHTEENSÄ (All)		727 027	
ARAVAT (Arava)	357 694	VAPAARAH OITTEISET (Non-subsidised)	369 333
-arava-asunnot (government-subsidised)	307 713	- vanhat vapaarahoitteiset (Non-subsidised, old)	255 370
- korkotuetut (interest supported)	49 981	- uudet vapaarahoitteiset (Non-subsidised, new)	113 963

### 4. Timeliness and promptness of the published data

The annual rent statistics are published four times in a year and the published data are final.

### 5. Accessibility and transparency of the data

A latest data release from the statistics and an electronic pdf version of the publication will be published on Statistics Finland's website on the publication date of the quarterly statistics on rents.

### 6. Comparability of the statistics

Besides quarterly, Statistics Finland also publishes statistics on rents annually. The compilation of the quarterly statistics deviates in certain respects from that of the annual statistics. The clearest difference between the two sets of statistics is that in addition to interview data, the annual statistics also utilise data from the Housing Allowance Register, which are not used in the quarterly statistics. Thus, the basis of the data for the annual statistics is considerably broader than the one for the quarterly statistics.

### 7. Coherence and consistency

Apart from the statistics compiled by Statistics Finland, no other regular data are produced on rents of dwellings in Finland. Statistics Finland publishes annual and quarterly statistics on rents.

### Inquiries

Martti Korhonen           09 1734 3451  
Tomi Martikainen        09 1734 3632  
Director in charge:  
Kari Molnar  
Asuminen@stat.fi  
www.stat.fi  
Source: House Rents, Statistics Finland