Imputed Rental of Owner-occupied Dwellings in EECCA and SEE countries

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## Background

In most countries in Eastern Europe, Caucasus, and Central Asia (EECCA) and South East Europe (SEE) regions, more than 80 percent of the population lives in their own homes

This creates difficulties in imputing the rent of owner-occupied dwellings at current prices

Unlike some Western European countries where more than half of the dwellings are actually rented, it is not possible in EECCA countries to estimate the imputed rent using the actual rent equivalent values because there are areas, especially rural type settlements, where no dwellings have been sold or rented in the accounting period

#### **Estimation Methods**

In the absence of a sufficiently large rental market, the European system of accounts (ESA 2010) suggests using an alternative methodology - the user cost approach. Under this method, the gross value added of dwelling services is measured as the sum of the following components:

- Consumption of fixed capital
- Other taxes less subsidies on production
- Net operating surplus

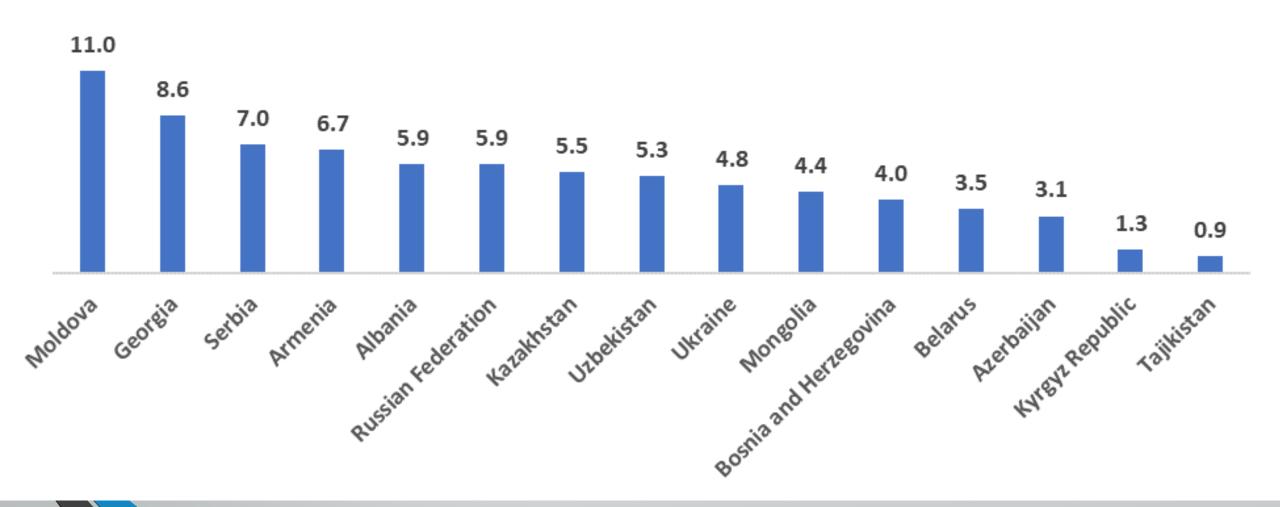
#### **Estimation Methods**

The recent UNECE survey showed that 11 out of 15 EECCA and SEE countries have implemented the user cost method. The other four countries (Moldova, Mongolia, Kazakhstan, and Turkey) use the rent equivalence method.

Although most EECCA and SEE countries apply the user cost method, their final results are significantly different.

Overall, in most EECCA and SEE countries, imputed rent accounts for a significant share of GDP, which also has a significant impact on real GDP growth.

#### The share of imputed rent in GDP, percent



#### Questions for Discussion

A significant share of imputed rent indicates that dwelling services are potentially profitable economic activity in these countries that may generate additional income to households or other institutional units

However, this potential is not realized in practice

Given that renting of real estate is considered as a low-risk business with a moderate but stable income, and most of households in EECCA and SEE countries suffer from unemployment and low incomes, it is even more bizarre why the share of rented apartments in these countries is much lower than in advanced Western European economies.

#### Questions for Discussion

- Is it because the EECCA and SEE countries offer more opportunities to the residents to run high-profit businesses than in the Western European countries?
- Perhaps, the EECCA and SEE countries impose stricter regulations in the form of taxes related to real estate rental?
- Maybe there is a low demand for real estate rental in the EECCA and SEE countries, and it leads to low supply? If this is true, then we have to admit that imputed rental is not a profitable business in the EECCA and SEE countries and is overestimated in their national accounts.

#### Measurement Challenges

The user cost method requires data on stock value of dwellings

In many cases, direct data sources are not available and expert estimates are used

The compilation of net operating surplus and consumption of fixed capital is based on the estimated stock value of dwellings, which are also based on expert estimates and represent fixed ratios. For example, in Western European countries, the annual rate of return is estimated at 2.5 percent of the stock value of dwellings

This ratio is copied in the compilation practice of many EECCA and SEE countries, which leads to an overestimation of this component.

## Measurement Challenges

EECCA countries differ from Western European countries in the level of rural development

While in Western European countries there is little difference in the development of urban and rural type settlements, in some EECCA and SEE countries this difference is more dramatic

Some villages are often cut off from the outside world, more than 10 miles to the nearest market, no hospital, no school etc.

In addition, the lack of roads and other infrastructure hinders the development of tourism in these areas. Considering this, it is not surprising that in many rural settlements no dwelling is sold or rented during the reporting period

Against this background, the real rate of return for certain rural areas can be 0 or even negative instead of 2.5 percent.

## Measurement Challenges – First Example

In some EECCA countries, the government encourages living in these areas through subsidies. Subsidies are provided not only for the actual rental of real estate but also for imputed rent

When providing social assistance, the government considers the geographical location of the household

For example, if the household is located more than 800 meters above sea level, it receives additional assistance from the budget

If a person has moved somewhere below 800 meters above sea level, this additional social assistance will be canceled

In this case, the only reason for issuing additional social benefit is that the person lives in an undeveloped highland village. This extra amount could be considered as subsidies on imputed rental

## Measurement Challenges –Second Example

The government funded educational project is aiming to ensure access to education for the rural population

Under this project, teachers move to rural areas for long-term residency and employment, and their expenses are reimbursed by the government

In this case, the real estate is rented at subsidized prices

When using the rent equivalent method, applying the same price to other dwellings in this area will overestimate the imputed rent.

#### Recommended Actions

If detailed data sources are available, then the imputation should be made at the detailed level by applying the rent equivalence method

In villages where none of the dwellings have been sold or rented during the reporting period, the gross value added of the imputed rental should be considered equal to zero

Rent equivalent at market prices should not be affected by subsidized prices

#### Recommended Actions

If detailed data sources are not available, then the user cost method should be applied

Net operating surplus should be compiled at a more detailed level by applying evidence-based rates of real return

Subsidies on imputed rental should be included in national accounts.

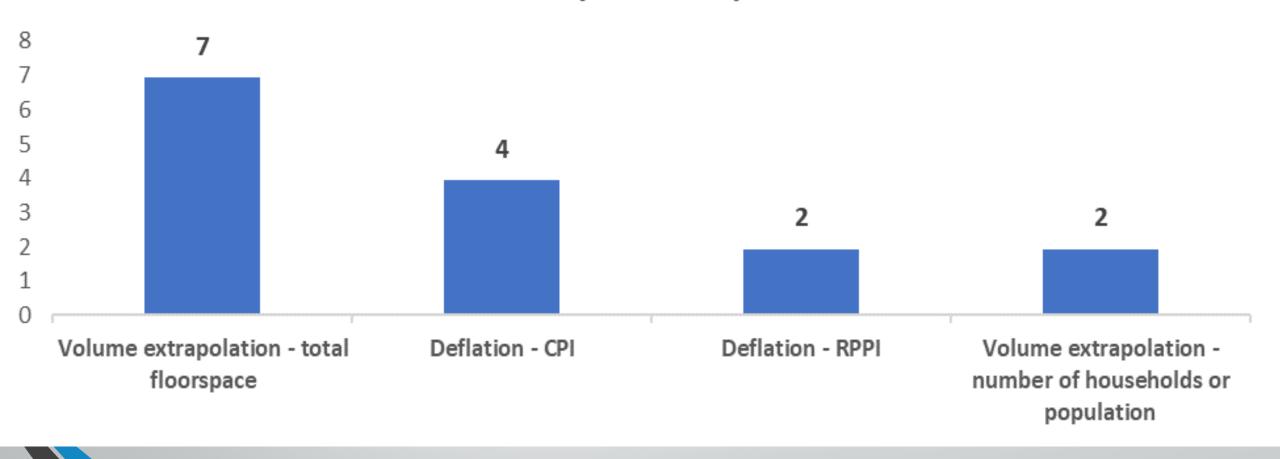
## Compilation at constant prices

An increase in imputed rent at constant prices should be in line with an increase in total floorspace and improvement of other living conditions

In some EECCA and SEE countries where information on total floorspace is available, real growth is calculated as a volume extrapolation by applying total floorspace as a volume indicator

Although this method does not take full account of changes in quality, it is the most frequently used in the EECCA and SEE regions.

# Number of EECCA and SEE countries by the method of constant-price compilation



#### Compilation at constant prices

Some countries apply volume extrapolation by number of households or population

This mainly happens when data on total floorspace are not available

Obviously, this method is even worse and should only be used when there is no alternative

The Eurostat methodology prefers the use of consumer price index (CPI) when the stratification method is not used for current prices

In this case, the reliability of constant-price estimates depends on the quality of the price index

## Compilation at constant prices

It could be better using the residential property price index (RPPI), but at this stage it is not compiled in many countries

Countries that compile RPPIs do not use them in their national accounts mainly because these indices are not representative

Several international projects are currently underway to implement the RPPI and improve its quality

It would be great if the implementation of RPPI takes full account of all users including national accountants.

## Thank you for your attention!