

Imputed Rent of Owner-occupied Dwellings – Compilation Challenges

In most countries in the Eastern Europe, Caucasus, and Central Asia (EECCA) and South East Europe (SEE) region, 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.

In the absence of a sufficiently large rental market, the European system of accounts (ESA 2010) suggests using an alternative methodology - the user cost approach¹. 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

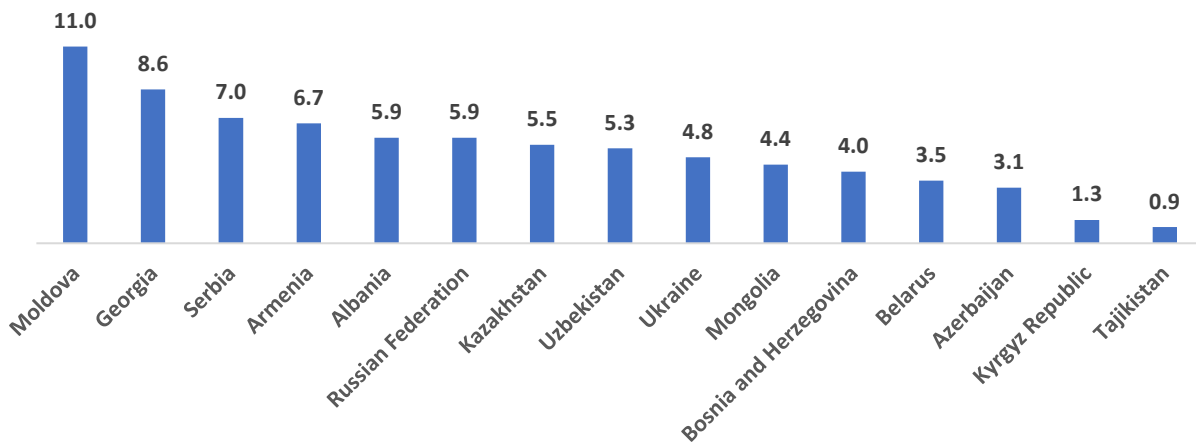
Expert estimates are often used in the compilation of these components due to the lack of relevant data sources.

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. Figure 1 shows the share of imputed rent in the GDP of selected EECCA and SEE countries. Overall, in most EECCA and SEE countries, imputed rental of owner-occupied dwellings accounts for a significant share of GDP, which also has a significant impact on real GDP growth.

¹ See ESA 2010, para 3.79

Figure 1. The share of imputed rent in GDP, percent



Source: UNECE survey; Data for Albania corresponds to 2011; Armenia -2018; Other countries -2019

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 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 actually rented apartments in these countries is much lower than in advanced Western European economies. Maybe this is because the EECCA and SEE countries offer more opportunities to the residents to run high-profit businesses than in the Western European countries? This is unlikely to be true. Perhaps, the EECCA and SEE countries impose stricter regulations in the form of taxes related to real estate rental? In fact, tax policies are more lenient in the EECCA and SEE countries and often a large portion of real estate rentals are informal. It seems that the only and fairly simple explanation lies in the fact that in the EECCA and SEE countries there is a low demand for real estate rental, 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.

The risk of overestimation is very high. The user cost method requires data on stock value of dwellings². 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 simply copied in the compilation practice of many EECCA and SEE countries, which leads to an overestimation of this component.

EECCA and SEE 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.

In some EECCA and SEE countries, the government officials acknowledge that living in certain rural areas is a "losing business", and therefore, encourage living in these areas through subsidies. Subsidies are provided not only for the actual rental of real estate but also for imputed rent. Let us discuss the following common cases:

- 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 motive for issuing additional social benefit is that the person lives in an undeveloped highland village. This extra amount could be considered as subsidies on production, and the economic activity is imputed rental of owner-occupied dwellings.

² See ICP Guidelines for the User Cost Method, 2010

- 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.

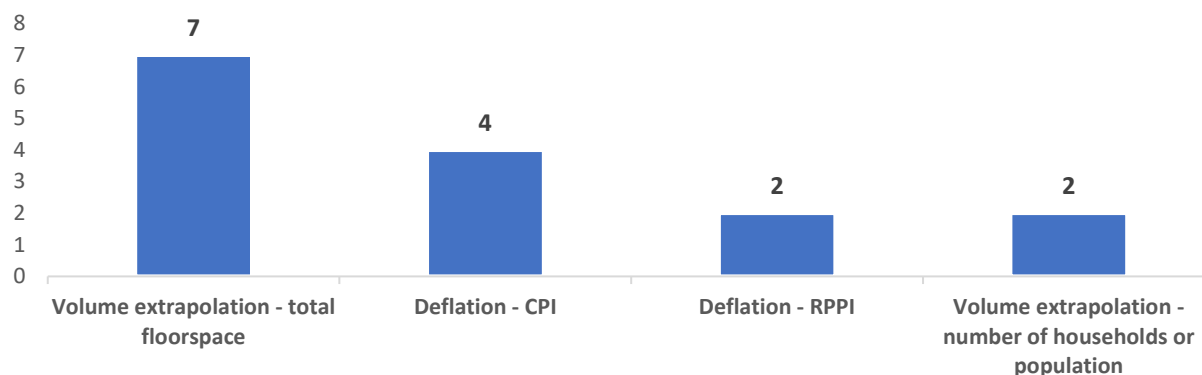
Recommended actions to improve the compilation in current prices:

- If detailed data sources are available, then the imputation should be made at the detailed level by applying the rent equivalent 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.
- 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 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 commonly used in the EECCA and SEE region. Figure 2 shows that 7 out of 15 countries in the region use total floorspace as a volume indicator.

Figure 2. Number of EECCA and SEE countries by the method of constant-price compilation



Source: UNECE survey

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 methodology³ 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.

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.

³ See Handbook on prices and volume measures in national accounts, 2016, Pages 110-111