

## The investigating peculiarities of the dynamics of mean regional costs of the round-woods in regions of Russian Federation

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The dynamics of the mean costs of the round-woods in the Central, North West, Volga, Urals, Siberian and Far Eastern Federal Districts of Russia is considered. The price indices calculated by two methods are used. The first method supposes constancy (invariance) of production structure at the compared temporal periods. The invariability of production structure is the constant proportion among volumes of kinds of realized production, making conditions and other specifications. At the second method the mean cost of the round-woods is calculating by dividing general cost of realized goods on its volume without considering differences in production structure.

In the article the differences among estimations of the mean cost of the round-woods calculated by two methods at the period 2003–2012 years are analyzed. The relative influence of changes of production structure at the mean cost was calculated as:

$$\Delta D_{rel} = 100 \cdot \frac{P(r)_t - P(w)_t}{P(w)_t},$$

where:

$\Delta D_{rel}$  – the index of the relative influence of changes of production structure during used temporal lag (calendar month) at the mean cost, %;

$P(w)_t$  – the mean cost of the round-woods at the temporal period «t» for the real production structure;

$P(r)_t$  – the mean cost of the round-woods at the temporal period «t» for the invariance structure production structure.

The results of calculations using mentioned formula are analyzed by the usual methods of economic analysis and analysis of variance [1, 2].

It is established that in all regions in the considered time the real mean costs of the round-woods were regularly deviated of costs calculated for fixed production structure. According our data the difference in the mean costs of the round-woods for sawing at the fixed and the real production structures for accounting period equal one calendar month fluctuated from -40 to 167% for coniferous species and from -74 to 176% for deciduous species trees. The fact distribution series of influence index of structural change at the mean cost of the round-woods (the distribution of  $\Delta D_{rel}$  parameter) have fundamental features of the normal distribution, but many empirical distribution series have reliable differences in excess and asymmetry indexes.

### References

1. Lubiszyn, N. P. Integrated business analysis / N. P. Lubiszyn. – M. : UNITI-Dana, 2006. – 448 p.
2. Chernova, T. Economic statistics : study guide / T. Chernova. – Taganrog : UNIVERSITY Publishing House, 1999. – 140 c.