

LIQUIDITY OF VEHICLES VALUE. METHODS OF A QUANTITATIVE ESTIMATION

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The list of business situations for an estimation of vehicles liquid value is wide enough. It begins from valuation for needs of administrative decisions and proceeds up to an estimation of the mortgage for a security for commercials credit.

The valuation of transport as mortgage meets specifically most often in appraising practice and demands special attention by virtue of the opposite interests meeting of bank and the proprietor. In this connection the substantiation and a choice of the method of market value estimation gets the special importance.

The analysis of national and international standards of valuation practice has allowed revealing most often used methods. In these theses are results of their application conditions analysis for various transport objects of a valuation.

The first group: «Normative and expert» methods. The discount for liquidity is defined by a method of an expert estimation within the limits of the established «norms» (specifications). The maintenance of the first group methods is reflected with the following table 1.

Table 1: Examples of discounts for the «Normative and expert» method

№	Character of liquidity discount	Ways of a quantitative estimation	Discount i, %
1	Discount for necessity sales ("promptness")	The discount is defined in the form of a difference between market value of the enterprise - of analog at its sale in the open competitive market and enterprise-analog cost at sale at the auctions at alienation on court or at liquidation of the debtor	from 5 till 50
2	Discount for seasonal prevalence of sale	It is defined by comparison of a price level for an valuation and other periods of year, demand aloud is used for objects at which depends on a sale season	from 5 till 20
3	Discount for absence of guarantee certificates	Pays off at liquidation of the debtor and its property	from 10 till 20

The second group: "Settlement" methods (methods of a probability estimation) are realized with two calculation technics: 1) the discount for liquidity is defined on the basis of revealing likelihood law of depreciation at decrease in term of an exposition under conditions set by the customer; 2) the discount for liquidity is defined on the basis of direct comparison to analogues market value or by statistical modeling (that also assumes use as basic sizes of market value of analogues and their technical - operational parameters, operational properties).

The maintenance of the first technics is reflected with the following formula (Galsyuks methods, Kozyrev model).

$$V_{liquidity} = \frac{V_{market} * k_{demand}^{elast}}{(1 + R)^{\Delta t}} \quad (1)$$

where $V_{\text{liquidity}}$ – liquidating value;

V_{market} – market value;

$k_{\text{demand}}^{\text{elast}}$ – elasticity, the correction factor considering influence of elasticity of demand for a market and liquidating project value of an estimation;

R – the annual rate of discount (expressed as decimal fraction) or medium market profitability of an investment in similar objects for base period T (it is usual 1 year);

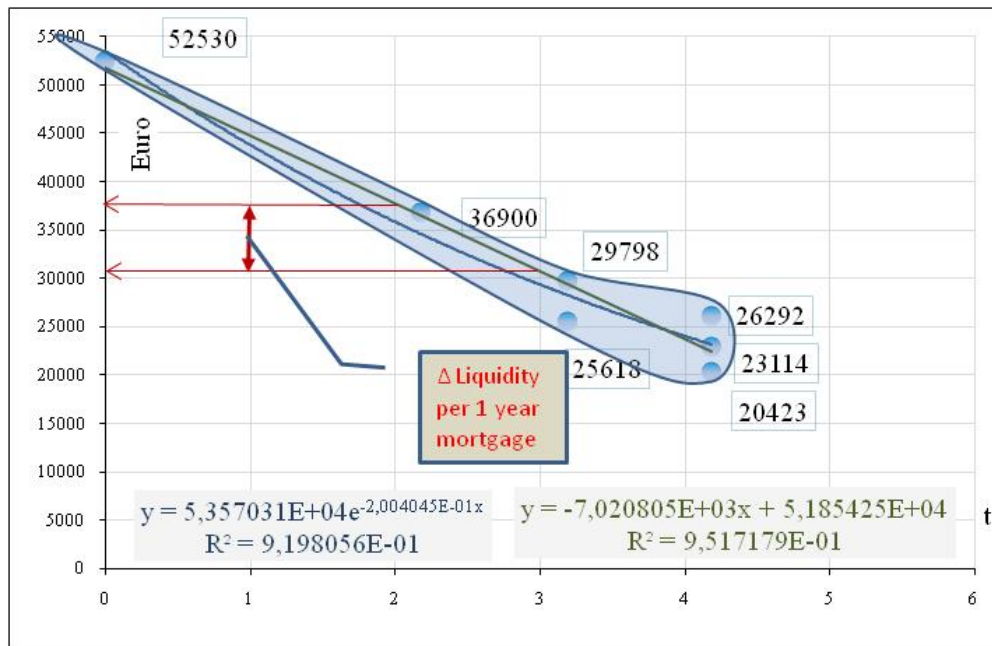
$\Delta t = (t_e - t) / T$ – the object reference in time;

t_e – the period of a normal (usual) exposition of object of a valuation in the market;

t – the period of forcedly "accelerated" exposition, set or established legislatively;

T – time period with which connect average market profitability R .

The maintenance of the second technics is reflected with the following picture.



Picture 1: Change of market value of analogs in time and calculation of value liquidity on the basis of comparison with analog

The third group of methods. Empirical (skilled, experimental) methods. Value of liquidating (is defined under the conditions of promptness set by the customer, but not below defined by the legislation) by the direct introduction (on the instructions of the proprietor) in contact to potential buyers, i.e. participations of the appraiser in the organization of the conclusion of the transaction 1) or by realization of a method of direct field researches; 2) or by the organization of open auction.

Criteria and estimations of methods efficiency are in the table 2.

Table 2: Criteria and estimations of methods efficiency

Criteria of an estimation of efficiency of methods	«Normative and expert» methods	"Settlement" methods	Empirical (skilled, experimental) methods
Reliability of an estimation (definiteness, probability of realization of results of an estimation in practice)	Low (+ 1)	Average (+ 2)	High (+ 3)
Transparency of procedure of an estimation (general availability of the used information and simplicity of perception the customer and control, check by representatives)	Low (+ 1)	Average (+ 2)	High (+ 3)

Labour input of works of the qualified expert (direct time expenses of the appraiser at realization of a method, i.e. оборачиваемость its human capital)	Low (- 1)	Average (- 2)	High (- 3)
Expenses for procedure of an estimation (direct material inputs of the executor of an estimation at realization of a method)	Low (- 1)	Average (- 2)	Hight (- 3)