

$$N_i - V_i - \sum_{t=1}^T C_{it} = E_i, \quad i = \overline{1, n};$$

$$E_i = N_i - V_i + \sum_{t=1}^T C_{it}, \quad (2)$$

$$Z = \begin{vmatrix} E_1 & -V_1 & \dots & -V_1 \\ -V_2 & E_2 & \dots & -V_2 \\ \dots & \dots & \dots & \dots \\ -V_n & -V_n & \dots & E_n \end{vmatrix}$$

- 1) $p^* = (p_1^*, p_2^*, \dots, p_n^*)$ — ;
- 2) $q^* = (q_1^*, q_2^*, \dots, q_n^*)$ — ;
- 3) v — .

O_1	96200	-32000	-32000	-32000	-32000
O_2	-180	925	-180	-180	-180
O_3	-35000	-35000	88000	-35000	-35000
O_4	-200	-200	-200	1040	-200
O_5	-240	-240	-240	-240	1510

Microsoft Excel,

	(1)	(2)	(3)	(4) « »	(5) « »
N_i	100000	1000	100000	1000	1000
C_i	9400	105	1150	1200	1500
V_i	32000	180	35000	200	240
	96200	925	88000	1040	1510

[1; 2; 3].

Z: $Z = x_1 + x_2 + x_3 + x_4 + x_5 \rightarrow \min.$ (3)

(4) $96200x_1 - 3200x_2 - 3200x_3 - 3200x_4 - 3200x_5 \geq 1$
 $-180x_1 + 925x_2 - 180x_3 - 180x_4 - 180x_5 \geq 1$
 $-35000x_1 - 35000x_2 + 88000x_3 - 35000x_4 - 35000x_5 \geq 1$
 $-200x_1 - 200x_2 - 200x_3 + 1040x_4 - 200x_5 \geq 1$
 $-240x_1 - 240x_2 - 240x_3 - 240x_4 + 1510x_5 \geq 1$
 $x_i \geq 0, i = \overline{1,5}$

(3) Z

Microsoft Excel

$x_1 = 0,127, x_2 = 0,084, x_3 = 0,145, x_4 = 0,083, x_5 = 0,071.$

(5) $\sum_{i=1}^5 x_i = 1/v.$

(6) $v = 1 / \sum_{i=1}^5 x_i.$

$v = \frac{1}{x_1 + x_2 + x_3 + x_4 + x_5} = \frac{1}{0,127 + 0,084 + 0,145 + 0,083 + 0,071} = \frac{1}{0,5099} = 1,961$

(7) $x_i = p_i / v,$

$p_1 = 0,25, p_2 = 0,165,$

$p_3 = 0,285, p_4 = 0,163, p_5 = 0,138.$

$y_1, y_2, y_3, y_4, y_5.$

(8) $F = y_1 + y_2 + y_3 + y_4 + y_5 \rightarrow \max.$

$$\begin{aligned}
&96200y_1 - 180y_2 - 35000y_3 - 200y_4 - 240y_5 \leq 1 \\
&- 32000y_1 + 925y_2 - 35000y_3 - 200y_4 - 240y_5 \leq 1 \\
&- 32000y_1 - 180y_2 + 88000y_3 - 200y_4 - 240y_5 \leq 1 \\
&- 32000y_1 - 180y_2 - 35000y_3 + 1040y_4 - 240y_5 \leq 1 \\
&- 32000y_1 - 180y_2 - 35000y_3 - 200y_4 + 1510y_5 \leq 1 \\
&y_i \geq 0, i = \overline{1,5}
\end{aligned} \tag{9}$$

Microsoft Excel
 y_1, y_2, y_3, y_4, y_5 : $y_1 = 0,0017, y_2 = 0,2008, y_3 = 0,0018, y_4 = 0,1789,$
 $y_5 = 0,1268.$

$$y_i = q_i / v, \tag{7}$$

$$q_i \tag{10}$$

$q_2 = 0,394, q_3 = 0,004, q_4 = 0,031, q_5 = 0,249.$

1) $p = (0,25; 0,165; 0,285;$
 $0,163; 0,138);$
 2) $q = (0,003; 0,394; 0,004; 0,031; 0,249);$
 3) $v^* = 1,961.$

$(v),$
 $v,$
 $S,$
 $: S_{O_1} = 0,25 \times S; S_{O_2} = 0,165 \times S; S_{O_3} = 0,285 \times S; S_{O_4} = 0,163 \times S; S_{O_5} = 0,138 \times S,$ $S_{O_1} —$
 1500000
 $, 247$ 375
 $, 244$ $, 427$
 $\ll \gg$ 207

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1. : 2009 .
2010 . / : [http://aub.org.ua/index.php?option=com_content&task=view & id=155& menu=119&Itemid=113](http://aub.org.ua/index.php?option=com_content&task=view&id=155&menu=119&Itemid=113). —
 2. 2008 . / . —
: http://www.ipoteka.gov.ua/Zvit_DIU_final.pdf. —
 3. . /
. — : <http://www.ssmc.gov.ua/ShowPage.aspx?PageID=12>. —