

338 : 004.9

## СУЧАСНІ ПІДХОДИ ДО ВИМІРЮВАННЯ ЯКОСТІ ЖИТТЯ

*The modern approaches to measurement of quality of life are considered. The analysis of the known social and economic indexes characterizing public welfare is carried out.*

[4],

1945

( ) – , .

1991 , ( ) – , [5; 6].

[10; 11; 15]. [5; 6]:

(Human Development Index – HDI),

HDI

$LE_t$ ,  $E_t$ ,  $I_t$ .

$x$   $x_t$

$$x_t = (x - \min(x)) / (\max(x) - \min(x)), \quad (1)$$

$\min(x)$ ,  $\max(x)$  –  $x$

$LE_t$ ,  $E_t$ ,  $I_t$  :

$$LE_t = (LE - \min(LE)) / (\max(LE) - \min(LE)); \quad (2)$$

$$E_t = (\sqrt{MYS_t \cdot EYS_t} - 0) / (\max(\sqrt{MYS_t \cdot EYS_t}) - 0), \quad (3)$$

$MYS_t = MYS / \max(MYS)$  – ,

$EYS_t = EYS / \max(EYS)$  – ;

$$I_t = (\ln(GNIpc) - \ln(\min(GNIpc))) / (\ln(\max(GNIpc)) - \ln(\min(GNIpc))), \quad (4)$$

$GNIpc$  – ( )

HDI [10, 11] :

$$HDI = \sqrt[3]{LE_t \cdot E_t \cdot I_t}. \quad (5)$$

HDI , [10; 11] 1990 .

“ ” - (1934–1998) :,,  
 , 2010 ,, ” [10; 11] HDI,  
 (GII), (MPI). (HDI),  
 [1; 2; 3; 9; 12; 13; 16]:  
 Legatum (The Legatum Prosperity Index), (Happy  
 Planet Index),,, (Better Life Index),  
 1. LPI –  
 142 2006  
 The Legatum Institute.  
 LPI 89 [13],  
 ( ), International Data Corporation,  
 Economist Intelligence Unit

[13; 16]

$$I(x, \beta) = ((w_1 I_1(x_1) + \dots + w_n I_n(x_n)) / (w_1 + \dots + w_n))^{1/\beta}, \quad (6)$$

$x_1, \dots, x_n$  - ;  $\beta$ ;

$w_1, \dots, w_n$  - ;  $I_1, \dots, I_n$  - .

$$n = 8 \quad (6) \quad LPI_T(S) = \left( (1/8)S_{1,T} + \dots + (1/8)S_{8,T} \right) \quad (7)$$

$$S_{i,T}, i = 1, \dots, 8 \quad z-$$

$$INC_{i,T} \quad SWB_{i,T} :$$

$$S_{i,T}(INC_{i,T}, SWB_{i,T}) = \left( (INC_{i,T} - \overline{INC}_{i,T}) / \sigma^{INC_i} + (SWB_{i,T} - \overline{SWB}_{i,T}) / \sigma^{SWB_i} \right) \quad (8)$$

$$\overline{INC}_{i,T}, \sigma^{INC_i} - \quad ; \overline{SWB}_{i,T}, \sigma^{SWB_i}$$

$$INC_{i,T}, SWB_{i,T} :$$

$$INC_{i,T} = \left( \alpha_1 \left( \frac{X_{1,T}^{INC_i} - X_1^{\overline{INC}_{i,T}}}{\sigma_{X_1}^{INC_i}} \right) + \dots + \alpha_N \left( \frac{X_{N,T}^{INC_i} - X_N^{\overline{INC}_{i,T}}}{\sigma_{X_N}^{INC_i}} \right) \right) \quad (9)$$

$$SWB_{i,T} = \left( \beta_1 \left( \frac{X_{1,T}^{SWB_i} - X_1^{\overline{SWB}_{i,T}}}{\sigma_{X_1}^{SWB_i}} \right) + \dots + \beta_K \left( \frac{X_{K,T}^{SWB_i} - X_K^{\overline{SWB}_{i,T}}}{\sigma_{X_K}^{SWB_i}} \right) \right) \quad (10)$$

$X_{i,T}$  -  $i$  -  $T$  ;  
 $N$  -  $i$  -  $K$  -  
 $i$  - 9, 10  $\alpha_i, \beta_i$

2. HPI -  
 2006 New Economics Foundation  
 (NEF).  
 HPI :

$$HPI \approx \text{Experienced Wellbeing} \cdot \text{Life Expectancy} / \text{Ecological Footprint} \quad (11)$$

11 :  
 Experienced Well-being, Life Expectancy  
 Ecological Footprint.  
 World Values Survey.  
 :,, ?”  
 1 000 15 150 .  
 Ladder Of Life ( ),  
 Experienced Well-being .  
 Ladder Of Life [0; 10].  
 Life Expectancy ” ” .  
 [20; 85].  
 Ecological Footprint – (,,  
 ”), , [8];  
 ”  
 Global Footprint Network.  
 HPI ,  
 Ladder Of Life, Life Expectancy, Ecological Footprint  
 :

$$Happy\ Life\ Years = (Ladder\ Of\ Life + \alpha) \cdot Life\ Expectancy / (10 + \alpha), \quad (12)$$

$$Ecological\ Footprint^* = Ecological\ Footprint + \beta, \quad (13)$$

$\alpha \approx 2,93, \beta \approx 5,67 -$   
 12, 13 (11) :

$$HPI = \delta \cdot (Happy\ Life\ Years - \gamma) / Ecological\ Footprint^*, \quad (14)$$

$\delta \approx 7,77$ .  $\delta$  , HPI  
 100 , Ladder Of Life = 10 , Life Expectancy = 85  
 Ecological Footprint = 1. HPI 0,  
 Ladder Of Life = 0 Life Expectancy <= 25 , *Happy Life Years*  
 $\gamma \approx 4,38$ .  
 HPI 151 2006, 2009,  
 2012 [9].

3. „ ( Green GDP, Environmentally-Adjusted Domestic Product, Eco-Domestic Product) –

„ [1] [7], „ : „

$$\text{Зелений ВВП} = \text{ВВП} - \text{ПОК} - \text{ППР} - \text{РООПС} - \text{ДОПС}, \quad (15)$$

– ; – ; – ( ); – ; – 2001–2007 [1]. „ 15 „Inclusive Wealth Report 2012” „

IWI (Inclusive Wealth Index).

( ) : „

IWI

Wealth Report 2012” IWI 1990 2008 „Inclusive 20

4. BLI –

34 , 2011 . BLI 24

[12].

BLI

BLI

[12] 36

[12].

[14; 15], [10], HDI [10], LPI [13], HPI [9] 2011 .

ВВП у розрахунку на одну особу, грн	28 806	–	–
ВВП у розрахунку на одну особу за ПКС, \$	7 233	103	181
ВНП у розрахунку на одну особу за ПКС, \$	6 175	100	187
HDI, безрозмірний, область значень [0,1]	0,729	76	187
LPI, безрозмірний, область значень [0,100]	–	74	110
HPI*, безрозмірний, область значень [0,100]	37,6	100	151

\* 2012 , 3 .

= 102 943, = 107 721,  
 HDI,  
 HDI  
 LPI,  
 HPI

## СПИСОК ВИКОРИСТАНОЇ ЛІТЕРАТУРИ

1. / . . . // . – .
2. „ / „, 2012. – 3. – . 48–54.
3. . – 2011. – 7. – . 70–83.
4. . – Т. VI: . – 2009. – 576 .
5. . – „, 1998. – 51 .
5. : [ . . . ] / . . . , . . . . – . : , 2012. – 261 .

- 
6. [ ] : [ ] . . . . [ ] . – : „ ”, 2004. – 197 .
  7. Handbook of National Accounting: Integrated Environmental and Economic Accounting 2003 // Studies in Methods. – 2003. – 61, Rev.1. (Series F).
  8. [ ] . – : [www.footprintnetwork.org/images/article\\_uploads/NFA\\_Method\\_Paper\\_2011.pdf](http://www.footprintnetwork.org/images/article_uploads/NFA_Method_Paper_2011.pdf)
  9. [ ] . – : [www.happyplanetindex.org/assets/happy-planet-index-report.pdf](http://www.happyplanetindex.org/assets/happy-planet-index-report.pdf)
  10. [ ] . – : [www.hdr.undp.org](http://www.hdr.undp.org)
  11. [ ] . – : [www.hdr.undp.org/en/media/HDR\\_2011\\_EN\\_TechNotes.pdf](http://www.hdr.undp.org/en/media/HDR_2011_EN_TechNotes.pdf)
  12. [ ] . – : [www.oecdbetterlifeindex.org](http://www.oecdbetterlifeindex.org)
  13. [ ] . – : [www.prosperity.com](http://www.prosperity.com)
  14. [ ] . – : [www.ukrstat.gov.ua](http://www.ukrstat.gov.ua)
  15. [ ] . – : [www.vid1.rian.ru/ig/ratings/gdp\\_per\\_capita\\_2012.pdf](http://www.vid1.rian.ru/ig/ratings/gdp_per_capita_2012.pdf)
  16. [ ] . – : [www.webapi.prosperity.com/download/pdf/PI2012\\_MethodologyV4.pdf](http://www.webapi.prosperity.com/download/pdf/PI2012_MethodologyV4.pdf)

28.01.2013 .

---