
330.341.1

: , 2016, 2 (90), . 133–153

• • , • • , • •

« » , -

2005–2007 . 2008–2013 .

« » , -

• • , • • , -

(K_t / L_t)

$$\frac{P_t}{K_t} = \frac{P_t}{L_t} / \frac{K_t}{L_t}$$

K_t^r , t

$$K_t^r = P_t / \frac{P_0}{L_0} \times \frac{K_0}{L_0} = K_0 \times \frac{P_t}{P_0}, t = 1, \dots, T. \tag{1}$$

(K_t^r)

K_t^r

$$[1; T] - I_i^{1:T} - \dots, 0 - \dots;$$

$$I_{RF}^{1:T} - \dots i [1; T];$$

$$PR_i^t - \dots i [1; T]; t($$

$$PR_{RF}^t - \dots t($$

$$(PR_i^T - PR_i^0) \dots i [1; T] I_i^{1:T}.$$

$$(\bar{I}_i) \dots [1; T] :$$

$$\bar{I}_i = I_i^{1:T} \frac{1}{(PR_i^T - PR_i^0)} \frac{PR_{RF}^0}{PR_i^0}. \quad (2)$$

$i(E_i)$

$$E_i = \frac{\bar{I}_{RF}}{\bar{I}_i}. \quad (3)$$

(2)

,

-

-

-

-

.

-

-

-

-

:

,

-

.

-

,

,

-

-

-

-

,

1990-

,

[2;

4].

2005 .

1990 .

9%.

2005 .,

1990 .

,

,

-

.

2009 . ,

2013 . 2008 .

2008–2013 . : 2005–2007 .

, , -

, -

, -

, [5, 6]. -

. (3)

.14. -

, , -

- -

, -

()- 60%. -

- , -

, , -

, . -

4 , -

2005 . -

(- 100)*

| 2005–2007 . | | | 2008–2013 . | | |
|-------------|-----|----|-------------|-----|----|
| | - | | | - | |
| . | 1++ | 1 | . | 1++ | 1 |
| . | 1++ | 2 | | 1++ | 2 |
| . | 1++ | 3 | . | 1++ | 3 |
| . - | 1++ | 4 | . - | 1++ | 4 |
| | 1++ | 5 | . | 1++ | 5 |
| | 1++ | 6 | | 1++ | 6 |
| | 1++ | 7 | | 1++ | 7 |
| . | 1+ | 8 | . | 1++ | 8 |
| | 1+ | 9 | | 1++ | 9 |
| | 1+ | 10 | | 1++ | 10 |
| | 1+ | 11 | . | 1++ | 11 |
| . | 1+ | 12 | . | 1++ | 12 |
| . | 1+ | 13 | | 1+ | 13 |
| . | 1+ | 14 | . | 1+ | 14 |
| . | 1+ | 15 | . | 1+ | 15 |
| | 1 | 16 | . | 1 | 16 |
| . | 1 | 17 | ** | 1 | 17 |
| | 1 | 18 | . | 1 | 18 |
| . | 1 | 19 | | 0 | 19 |
| . | 1 | 20 | . | 0 | 20 |

| 2005–2007 . | | | 2008–2013 . | | |
|-------------|---|----|-------------|---|----|
| | - | | | - | |
| | 0 | 21 | . | 0 | 21 |
| . | 0 | 22 | () | 0 | 22 |
| . | 0 | 23 | - - | 0 | 23 |
| . | 0 | 24 | . | 0 | 24 |
| . | 0 | 25 | . | 0 | 25 |
| . | 0 | 26 | . | 0 | 26 |
| . | 0 | 27 | . | 0 | 27 |
| . | 0 | 28 | . | 0 | 28 |
| . | 0 | 29 | . | 0 | 29 |
| . | 0 | 30 | . | 0 | 30 |
| . | 0 | 31 | . | 0 | 31 |
| . | 0 | 32 | . | 0 | 32 |
| . | 0 | 33 | . | | |

* : (1++) - 50 . . .
 ; (1+) - 30-50 . . . -
 ; (1) - 10-30 . . . ; -
 (0) - - 10 . . .
 ** 2005–2007 . . .
 « » 14,8 2004 . . .
 10,2 2007 . . . 2007 . . . ,

[9] -

2000–2012 . 27 5. -

« - , »,- -

2005–2007 . 2008–2013 .. .1 -

.3 - , -

2004 .

2007 .

2005–2007 .

6 .. - 32 .. - 16 ..

2004 . 61% 2007 . 54%

5 , [9] 25

| | 2005–2007 | | | 2008–2013 | | |
|--|-----------|--------|-------------|-----------|--------|-------------|
| | , 2004 | , 2007 | , 2005–2007 | , 2007 | , 2013 | , 2008–2013 |
| | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 |
| | 0,95 | 1,00 | 0,75 | – | – | – |
| | 1,58 | 1,48 | 1,04 | – | – | – |
| | 1,08 | 1,08 | 0,82 | – | – | – |
| | 1,21 | 1,15 | 0,80 | – | – | – |
| | 1,05 | 1,04 | 0,83 | – | – | – |
| | 0,95 | 0,92 | 0,58 | – | – | – |
| | 1,37 | 1,35 | 1,35 | – | – | – |
| | 0,95 | 1,03 | 1,18 | – | – | – |
| | 1,09 | 1,20 | 1,02 | 1,20 | 1,32 | 0,92 |
| | 1,06 | 1,17 | 1,33 | 1,17 | 1,45 | 1,38 |
| | 2,14 | 2,55 | 6,54 | 2,55 | 2,59 | 3,98 |
| | – | – | – | 1,48 | 1,57 | 1,82 |
| | – | – | – | 0,78 | 0,84 | 0,58 |
| | – | – | – | 1,08 | 1,07 | 0,70 |
| | – | – | – | 1,26 | 1,38 | 1,70 |
| | – | – | – | 1,71 | 1,79 | 2,64 |
| | – | – | – | 0,71 | 0,78 | 0,64 |

| | 2005–2007 | | | 2008–2013 | | |
|--|-----------|--------|-------------|-----------|--------|-------------|
| | , 2004 | , 2007 | , 2005–2007 | , 2007 | , 2013 | , 2008–2013 |
| | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 |
| | 1,03 | 0,97 | 0,98 | – | – | – |
| | 1,81 | 1,49 | 1,23 | – | – | – |
| | 0,99 | 1,00 | 0,97 | – | – | – |
| | 0,82 | 0,76 | 0,61 | 0,76 | 0,67 | 0,65 |
| | 0,87 | 0,87 | 0,84 | 0,87 | 0,84 | 1,02 |
| | 0,63 | 0,62 | 0,57 | 0,62 | 0,62 | 0,58 |
| | 0,54 | 0,61 | 0,81 | 0,61 | 0,63 | 0,90 |
| | 0,59 | 0,62 | 0,71 | 0,62 | 0,55 | 0,68 |
| | 0,64 | 0,66 | 0,56 | 0,66 | 0,61 | 0,63 |
| | 1,63 | 1,51 | 1,81 | 1,51 | 1,30 | 1,25 |
| | 0,62 | 0,67 | 0,63 | 0,66 | 0,74 | 1,04 |
| | 0,74 | 0,77 | 0,71 | 0,77 | 0,92 | 1,21 |
| | 1,53 | 1,37 | 0,87 | 1,37 | 1,12 | 1,03 |
| | 0,63 | 0,60 | 0,56 | 0,60 | 0,60 | 0,60 |
| | 0,91 | 0,86 | 0,72 | 0,86 | 0,83 | 0,59 |
| | 1,14 | 1,06 | 1,10 | 1,06 | 0,99 | 1,54 |
| | 0,67 | 0,69 | 0,61 | 0,69 | 0,66 | 0,75 |
| | – | – | – | 1,26 | 1,19 | 1,05 |
| | – | – | – | 0,79 | 0,80 | 0,79 |
| | – | – | – | 1,13 | 0,98 | 0,81 |
| | – | – | – | 1,26 | 1,19 | 1,05 |

, 81% . 59 -
 62% , 71% -
 2008-2013 . 2004-2007 . (, -
 2008 .) -
 . -
 66% , 2007 . 74% 2013 . -
 . -
 92% 2013 . 77% 2007 . -
 21% -
 (. [7]). - ,
 . ,
 2004 . -
 . -
 2005-2007 . .
 , 2007 . -
 50 . , « » . -
 , , -
 , . -
 .
 109% 2004 .
 120% 2007 .
 .

2013 . 2007 . ,

« »

2008–2013 .

2005–2007 .

(15-02-00198)

1. // . – 2007. – . 77, 1. – . 33–42.

2. // . – 2009. – 4. – . 145–152.

3. ()//

. – 2015. – 2. – . 86–102.

4. // : . – 2005. – 1. – . 32–55.

-
5. ? // . – 2009. – 2 (45). – . 31–36.
 6. . . . – . – . : , 2000.
 7. // : . – 2015. – 2 (86). – . 224–240.
 8. : - , 2015. – 116 .
 9. / . . . , – , 2014. – 346 .

(,) –
 ,
 (630092, , . . . , 20,
 -mail: boris.lavrovski@gmail.com).

(,) –
 (630092, -
 , . . . , 20, -mail: luzinrs@gmail.com).
 (,) –
 ,
 « » (630102, , . . . , 26/1, -mail:
 murzov@bk.ru).

DOI: 10.15372/REG20160208

Region: Economics & Sociology, 2016, No. 2 (90), p. 133–153

B.L. Lavrovsky, R.S. Luzin, I.A. Murzov

INNOVATION FACTOR IN THE DEVELOPMENT OF RUSSIAN REGIONS

The article suggests an approach to measuring and evaluating the factor of innovation on macro- and regional levels without common innovation indi-

cators. Innovation activity is seen as a force that can slow down or even overcome the objective increasing in per-unit investment when shifting to a higher technological level of production. We assess the influence of the innovative factor solely in connection with the ratio between investment efforts and the resulting indicators of economic dynamics, growth in labor productivity. Using a particular method of evaluation, we give the assessments of innovation intensity in investment relating to the Russian regions in 2005–2007 and 2008–2013. The article demonstrates significant differences between the line-up of leading regions in some publications. It turns out that the important characteristics of economic development for leading regions identified with the proposed method are much more preferable than those of «innovative» leaders determined with traditional rank-rating approaches. Concerning the Siberian regions, we notice a major polarization of innovation intensity indicators. In fact, no region has moderate innovation indicators.

Keywords: region, innovation activity, investment, economic dynamics, workforce productivity

*The publication is prepared within the framework of the project
No. 15-02-00198 supported by funding from the Russian Foundation
for Humanities*

References

1. *Valtukh, K.K.* (2007). Tekhnologicheskoe obnovenie ekonomiki i kapitalovlozheniya [Technological renovation of economy and capital investment]. Vestnik Rossiyskoy akademii nauk [Herald of the Russian Academy of Sciences], Vol. 77, No. 1, 33–42.
2. *Lavrovsky, B.* (2009). K voprosu o prirode sovremennogo krizisa [On the nature of current crisis]. Voprosy ekonomiki [Problems of Economics], 4, 145–152.
3. *Lavrovsky, B.L., I.A. Murzov & R.S. Luzin.* (2015). Innovatsii kak faktor evropeyskoy ekonomicheskoy dinamiki (empiricheskii analiz) [Innovation as a factor of European economic dynamics (empirical analysis)]. Prostranstvennaya ekonomika [Spatial Economics], 2, 86–102.

4. *Lavrovsky, B.L., Ye.A. Postnikova & Ye.Yu. Gubareva.* (2005). Svoystva sovremennogo transfertnogo mekhanizma [The current transfer mechanism]. Region: ekonomika i sotsiologiya [Region: Economics and Sociology], 1, 32–55.

5. *Lavrovsky, B.L. & Ye.A. Shiltsin.* (2009). Rossiyskie regiony: sblizhenie ili rassloenie? [Russian regions: leveling or stratification?]. Ekonomika i matematicheskie metody [Economics and Mathematical Methods], 2 (45), 31–36.

6. *Mikheyeva, N.N.* (2000). Differentsiatsiya sotsialno-ekonomicheskogo polozheniya regionov Rossii i problemy regionalnoy politiki [Differentiation of social and economic situation of the Russian regions of and problems of regional policy]. Moscow, RPEI [Scientific reports EERC].

7. *Okruzhko, O.A.* (2015). Fenomen investitsionnoy privlekatelnosti Kaluzhskoy oblasti [The investment attractiveness phenomenon in Kaluga Oblast]. Region: ekonomika i sotsiologiya [Region: Economics and Sociology], 2 (86), 224–240.

8. *Suslov, V.I.* (Ed.). (2015). Rossiya v zerkale mezhdunarodnykh reytingov [Russia in the Mirror of International Rankings]. Novosibirsk, IEOPP SO RAN [Institute of Economics and Industrial Engineering SB RAS], 116.

9. *Suslov, V.I. & N.A. Kravchenko* (Eds.). (2014). Formirovanie innovatsionnoy ekonomiki: kontseptualnye osnovy, metody, modeli [Formation of Innovation Economy: Conceptual Grounds, Methods and Models]. Novosibirsk, 346.

Information about the authors

Lavrovsky, Boris Leonidovich (Novosibirsk, Russia) – Doctor of Sciences (Economics), Professor at Novosibirsk State Technical University (20, Karl Marx av., Novosibirsk, 630092, Russia, -mail: boris.lavrovski@gmail.com).

Luzin, Rodion Sergeyeovich (Novosibirsk, Russia) – post-graduate student at Novosibirsk State Technical University (20, Karl Marx av., Novosibirsk, 630092, Russia, -mail: luzinrs@gmail.com).

Murzov, Igor Anatolyevich (Novosibirsk, Russia) – Candidate of Sciences (Economics), economic advisor at SibGarantMed LLC (26/1, Boris Bogatkov st., Novosibirsk, 630102, Russia, -mail: murzov@bk.ru).

19.02.2016 .

©, 2016