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FACTORS OF THE EFFICIENCY OF MANAGING PORTFOLIO PENSION RESERVES OF NON-STATE PENSION FUNDS

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28   2013–2018 .
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The article is devoted to the consideration of approaches and assessment of the efficiency of management of investment portfolios of non-state pension funds. This article is a logical continuation of the previously conducted research on assessing the effectiveness of pension savings management and contains an analysis of the effectiveness of the second component of investment portfolios of non-state pension funds (NPF) — pension reserves. The article examines the factors influencing the efficiency of managing the portfolios of pension reserves of non-state pension funds on the basis of statistical data on 28 NPFs for 2013–2018. The factors chosen were the volumes and growth rates of the funds attracted from pension reserves, the share of pension reserves in the economies of scale of non-state pension funds, the presence of risk strategies (the share of shares and investment units), and the amount of remuneration of management companies.

The aim of the study is to assess the influence of the selected factors on the efficiency of managing the portfolio of pension reserves of NPFs based on the construction of econometric models.

The construction of one-factor and multi-factor econometric models confirms the absence of dependence of the effectiveness of portfolios of pension reserves of APFs, determined by the Sharpe ratio, on the size of attracted pension reserves per one insured person; from the share occupied by NPFs in the non-state pension market, as well as from remuneration to management companies paid by non-state pension funds. The influence of the chosen investment strategy and the growth rate of pension reserves on the efficiency of managing pension reserves of NPFs is revealed.

Keywords: non-state pension funds, pension reserves, portfolio management of pension reserves, efficiency of investment portfolio management.

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2,6   , 1088   .   2788   .,
1,5   —   832   .   1363
8,7 %   6,18   -
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2019   .
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.   Dirk W.G.A. Broeders, Arco van Oord, David R. Rijsbergen
225   -
[15].   -
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218   .
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Maria T.M. Garcia   -
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envelopment analysis (DEA-Malmquist index)   [18].
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68,5 %,
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2013–2018 .,
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$S_i = (R_i - R_m) / \sigma_i$ (1),
S_i —   i-   ; R_i —
i-
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,   i-
[5, . 103]
(R_m)
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1. (Rm) 2013–2018 . *

	2013	2014	2015	2016	2017	2018
- , .	774 572	865 868	945 851	1 044 183	1 140 409	1 226 009
, , .	32 196,8	43 555,6	98 309,2	131 937,6	61 235,1	57 237,4
- , %	4,16	5,03	10,39	12,64	5,37	4,67
6 — 50,03 %						

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7) , - , % ( ). - / -

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	0,044732	1	—	—	—	—	—	—
	-0,22285	0,052501	1	—	—	—	—	—
	0,051004	0,430428	0,001762	1	—	—	—	—
	-0,10046	0,263911	-0,01942	-0,07143	1	—	—	—
	-0,01772	0,226198	-0,03417	0,059273	0,545974	1	—	—
	0,09141	-0,07555	-0,04123	-0,0512	-0,03567	0,054271	1	—
	-0,31438	0,193448	-0,02467	0,105103	0,659536	0,412605	-0,08283	1

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'07.03.2018   49-)   ,   (0,75%
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(   )   2013–2018   . *

			t-	P-
	0,012498	0,367566	0,034003	0,972916
	0,003105	0,00449	0,691486	0,490238
	-0,011	0,003365	-3,26917	0,001314
	1,671625	1,560862	1,070963	0,28576
	0,036114	0,023274	1,551707	0,12266
	0,000269	0,000412	0,652481	0,515004
	0,150425	0,194761	0,772358	0,441014
	-0,04509	0,009244	-4,87784	2,52E-06
R^2= 0,19298 ; Adjusted R^2=0,158537; Std.Error of estimate: 1,364587				
F=5,602489 p=8,3E-06				
— 172				

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($R^2 = 0.193$)   -
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R² 0,193, . . 19,3,5 %

R² ,

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( ) 2013–2018 . *

			t-	P-
	0,568569	0,126154	4,506949	1,22E-05
	-0,03078	0,006813	-4,51727	1,17E-05
	-0,01103	0,003387	-3,25651	0,001363
R²=0,152046; Adjusted R²=0,142011; Std.Error of estimate: 1,377922				
F=15,15158		p=8,86E-07		
— 172				

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	0,011448	1	—	—	—	—	—	—
	-0,61104	0,05136	1	—	—	—	—	—
	0,045617	0,401176	0,148807	1	—	—	—	—
	-0,21779	0,298846	-0,06141	-0,14005	1	—	—	—
	-0,11585	0,260162	-0,05544	-0,10622	0,547464	1	—	—
	0,336042	-0,32752	-0,07343	-0,18311	-0,11824	-0,03851	1	—
	-0,57616	0,187956	0,227149	-0,02509	0,733853	0,53092	-0,24632	1

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R²=0,0668 , , -
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			t-	P-
	0,40398	3,602036	0,112153	0,91182
	0,029912	0,047695	0,627161	0,537649
	-0,21813	0,066194	-3,29533	0,003615
	9,945385	11,29413	0,88058	0,389005
	0,160649	0,238578	0,673358	0,508427
	0,002039	0,004252	0,479592	0,63672
	1,098892	0,662004	1,659948	0,112524
	-0,27573	0,108966	-2,5304	0,019896
R^2=0,667949; Adjusted R^2=0,551731; Std.Error of estimate: 4,791402				
F=5,747394		p=0,000944		
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2018 . *

			t-	P-
	4,213708	1,778795	2,368855	0,026621
	0,855646	0,609839	1,403069	0,173952
	-0,21006	0,064162	-3,27387	0,003333
	-0,27148	0,100227	-2,70862	0,012531
	0,207825	0,215375	0,964944	0,34461
R^2=0,626733; Adjusted R^2=0,561817; Std.Error of estimate: 4,737197				
F=9,654506		p=9,82738E-05		
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F- , , .

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			t-	P-
	6,159414	1,188715	5,181575	2,33E-05
	-0,23307	0,061629	-3,78183	0,000866
	-0,22003	0,063874	-3,44476	0,002027
R^2=0,575065; Adjusted R^2=0,541071; Std.Error of estimate: 4,848042				
F=16,9163		p=2,26E-05		
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