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INTERNAL FACTORS OF THE EFFICIENCY OF MANAGING PORTFOLIO PENSION ACCUMULATIONS

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The article discusses approaches to assessing the effectiveness of investing pension savings, examines the internal factors affecting the effectiveness of managing pension savings portfolios of non-state pension funds based on statistics from 35 non-state pension funds for 2013-2017. The internal factors included the volumes and growth rates of attracted pension savings funds, the economies of scale of non-state pension funds (NPFs), the presence of risky strategies, and the size of remuneration of management companies. The selection of internal factors is justified taking into account the limitations associated with the possibility of collecting statistical data from open sources. The aim of the work is to assess the influence of the selected factors on the effectiveness of managing the portfolio of pension savings of non-state pension funds based on the construction of econometric models. The construction of univariate and multivariate econometric models confirms the absence of dependence of the effectiveness of the portfolio of pension accumulations of pension funds, determined by the Sharpe ratio, on the size of the attracted pension savings per insured person; of the share held by non-state pension funds in the pension savings market, as well as of remuneration to management companies paid by non-state pension funds. The influence of the chosen investment strategy and the growth rate of pension savings on the effectiveness of managing pension savings of NPFs is revealed.

Keywords: pension savings market, pension savings, portfolio management of pension savings, portfolio management efficiency.

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« « »	58,99	5,478	71,873	0,141	1,560	5,188	9,353
« « »	53,19	4,610	75,665	0,157	1,853	4,632	6,718
« »	58,99	3,039	73,885	12,648	1,009	3,260	5,875
« - »	49,50	5,015	88,138	0,141	1,448	3,478	5,150
« »	51,53	2,204	103,081	0,169	1,242	1,438	7,500
« « - »	40,67	2,591	108,374	4,220	0,745	7,653	4,333
« »	52,48	1,866	70,910	1,976	1,602	2,837	10,293
« »	51,04	3,878	69,155	0,060	1,388	5,283	9,233
« - »	52,73	1,209	64,593	0,043	1,560	0,210	4,970
« »	49,01	3,147	81,487	0,019	1,811	0,048	2,693
« « - »	47,33	2,551	62,724	0,170	1,463	0,580	9,183
« « »	50,93	1,682	41,941	0,263	1,605	1,460	8,205
-	48,88	2,305	80,077	6,104	1,509	2,820	5,695
« « »	41,81	4,521	50,147	0,708	1,312	9,967	10,423
« »	49,24	4,320	50,833	0,995	1,524	2,173	6,083
« « - »	40,08	4,519	64,286	0,484	1,429	13,080	12,283
« « »	45,08	2,573	38,317	2,258	1,860	13,780	8,473
« « »	59,50	1,832	53,623	0,859	1,503	2,675	9,978
« - « - »	49,95	2,305	84,946	0,056	1,130	9,767	5,950
« « - »	46,93	3,490	152,593	0,460	1,401	0,817	9,130
« « - . . . »	57,89	2,622	65,501	0,285	1,750	9,302	10,118
« « - »	57,13	3,741	48,344	0,115	1,335	4,312	7,398
« - » ( )	42,39	2,171	85,385	0,041	1,451	1,772	9,230
« « - »	63,51	2,081	58,312	0,200	1,341	1,835	1,608
« - »	50,21	3,885	89,302	0,367	1,524	3,692	4,855
« »	28,57	5,404	50,770	5,804	1,411	16,412	9,335

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« « »	41,99	1,457	41,420	0,318	1,459	7,550	9,365
« »	50,28	4,448	148,149	0,010	1,864	2,788	5,525
« - »	56,76	4,071	95,425	8,904	0,875	8,452	7,310
« - »	18,45	3,458	66,901	10,779	1,012	12,870	8,920
« - »	29,97	5,436	67,266	9,583	1,289	14,940	6,930
« « - »	62,74	1,890	203,309	0,313	1,449	5,300	2,570
« - »	59,15	0,728	42,249	0,141	2,465	2,930	7,630
« « - »	57,02	1,496	80,134	0,334	2,053	1,910	6,940
« »	51,65	2,231	94,383	0,327	1,502	0,540	4,850

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* [www.cbr.ru]

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$$S_i = (R_i - R_m) / †_i,$$ (1)

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2. (Rm) *

	2013	2014	2015	2016	2017
- , .	1 008 441	1 132 441	1 719 549	2 129 937	2 374 164
, - , .	69 770	60 214	172 568	231376	105 689
- , %	6,92	5,32	10,04	10,86	4,45
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* [www.cbr.ru]

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	-0,6707^2 (0,2909)	0,1453 (0,1411)	-1,9240^1 (1,0609)	0,1683 (0,1494)	0,1848 (0,3164)
	0,0088^3 (0,0032)	-0,0488 (0,0313)	1,7821^1 (0,9543)	-0,0239 (0,0156)	-0,0195 (0,0402)
R^2	0,0504	0,0172	0,0246	0,0166	0,0017
Adjusted R^2	0,0436	0,0101	0,0175	0,0094	-0,0055
Std.Error of estimate	1,4544	1,4796	1,4741	1,4801	1,4913
F	7,3375	2,4241	3,4875	2,33162	0,2365
F	0,0076	0,1217	0,0639	0,1290	0,6274
	175	175	175	175	175

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^{2} — < 0,05; ^{3} — < 0,01
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( ) 2013–2017 .*

			t-	P-
	-1,87781	1,185939	-1,58339192	0,11568949
	0,007811	0,003418	2,285166653	0,023873675
	-0,02098	0,037026	-0,56657574	0,571950212
	1,203166	1,009014	1,192417208	0,235204995
	-0,00883	0,018583	-0,47519524	0,635421469
	0,006815	0,042212	0,161448876	0,871983044
R = 0,272697; R^2 = 0,074363; Adjusted R^2 = 0,039825; Std.Error of estimate: 1,457328				
F = 2,153049798		p < 0,062978		
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	2,7111 (2,1153)	3,9843^3 (0,2311)	-8,7767^2 (3,3337)	5,7441^3 (1,1352)	6,7042^2 (2,5418)
	0,0045 (0,0249)	-0,46195^1 (0,0249)	8,0136^3 (2,2040)	-0,5043^3 (0,1625)	-0,5009 (0,3318)
R^2	0,00102	0,10795	0,28602	0,22577	0,06459
Adjusted R^2	-0,02925	0,08092	0,26438	0,20231	0,03624
Std.Error of estimate	4,95799	4,68510	4,19150	4,36476	4,79763
F	0,03369	3,99382	13,21984	9,62332	2,27876
F	0,85547	0,05396	0,00093	0,00392	0,14067
	35	35	35	35	35

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	-0,2210	0,4471	-0,2749	1	
	-0,4044	0,0028	0,04933	0,37589	1

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			t-	P-
	-3,35444	5,60498	-0,59847442	0,55416954
	-0,00375	0,022649	-0,165767246	0,869490383
	0,08577	0,252824	0,33924638	0,736868618
	7,277566	2,536443	2,869201029	0,007600337
	-0,32892	0,184485	-1,782920283	0,085071146
	-0,33977	0,32547	-1,043936446	0,305139275
R = 0,65569546; R^2 = 0,42993653; Adjusted R^2 = 0,33164973; Std.Error of estimate: 3,9953				
F = 4,3743		p < 0,00434		
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$R^2=0,42993653$,

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