

Report

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# ABBREVIATIONS

AES	Auto Enrollment System					
AIT	Association of The Insurance and Pension Companies of Turkey					
BIST	Borsa İstanbul A.Ş.					
CBRT	Central Bank of The Republic of Turkey					
СМВ	Capital Markets Board of Turkey					
CPI	Consumer Price Index					
CSD OF TURKEY	Central Securities Depository					
FPAC	Fund Performance Assessment Committee					
FPAS	Fund Performance Assessment System					
GUIDELINES	Pension Mutual Funds Guidelines					
IPS	Individual Pension System					
РМС	Pension Monitoring Center					
TAKASBANK	Istanbul Settlement and Custody Bank Inc.					
T C M A	Turkish Capital Markets Association					
TUIK	Turkish Statistical Institute					



#### INTRODUCTION

This report has been prepared within the framework of responsibilities assigned to the Pension Monitoring Center (PMC) by Articles 10.4 (C/ii) and (D/ii) of the Pension Mutual Funds Guidelines (Guidelines) published by the Capital Markets Board of Turkey (CMB) in compliance with Articles 18 and 20/A of the Law No. 4632.

In the following chapters, the report broadly introduces the Fund Performance Assessment System (FPAS) initiated in 2020 and provides summary results of 2022 FPAS in the final chapter.

## FUND PERFORMANCE ASSESSMENT SYSTEM PROCESS

The procedures and principles pertaining to the rewarding of portfolio management companies managing relatively high-return funds and the sanctioning of portfolio management companies managing relatively low-return funds during the real-time monitoring and assessment of pension mutual funds return performances are regulated by Article 10.4 of the Guidelines of the Capital Markets Board of Turkey.

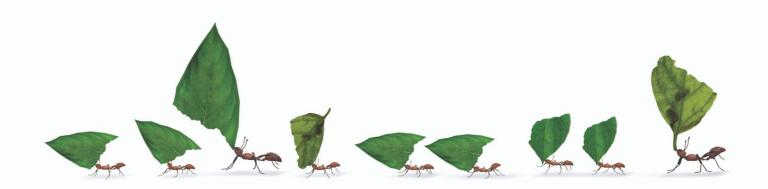
The legislation assigns the operation of the system to Pension Monitoring Center (PMC) and dictates the below-elaborated issues to be settled by the Fund Performance Assessment Committee (FPAC) established within the PMC with participation the of the relevant stakeholders. Directions for the abovementioned Guidelines and the FPAC include:

- 1. Comparing return performances of funds within the same comparison groups assorted by similar risk and title structures and asset allocation strategies, or, for other funds that cannot be included in any comparison groups, comparing return performances by benchmark return;
- 2. PMC determining fund comparison groups, funds excluded from comparison groups and related assessment methodology to present to the FPAC

followed by the announcement of the FPACapproved methodology and fund lists to the public;

- 3. PMC monitoring fund performances in real-time; and, in compliance with the announced methodology, verifying the data and calculation with companies and conducting performance measurement and assessment within the relevant performance period;
- 4. PMC publicly announcing the performance results of the funds that are considered relatively successful or relatively poor within the first 15 business days of the year following the assessment period;
- 5. Imposing rewards or penalties on relevant portfolio management companies based on performance assessment results and the PMC announcing the results to the public.

Within this scope, the report presents the operations conducted by the FPAC and the secretarial work undertaken by the PMC as well as the assessment results of 2022, which are enclosed in the Appendix.



# FUND PERFORMANCE ASSESSMENT COMMITTEE

The Fund Performance Assessment Committee (FPAC) is comprised of seven members (i.e. one from PMC, three from the Association of the Insurance, Reassurance and Pension Companies of Turkey [IAT], and three from the Turkish Capital Markets Association [TCMA]). FPAC decisions are reached by a vote majority and presided over by PMC representative. Information on FPAC members is provided in the below table.

Full Name	Full Name Represe		Affiliated Organization	Position in Organization			
Mustafa AKMAZ	PMC	Chairman	Pension Monitoring Center (EGM)	CEO			
Ahmet KARAMAN	IAT	Member	Garanti Emeklilik ve Hayat A.Ş.	Assistant General Manager			
Burcu UZUNOĞLU	IAT	Member	Allianz Yaşam ve Emeklilik A.Ş. Allianz Hayat ve Emeklilik A.Ş.	Chief Investment Officer/CIO			
Fatih BOZKURT	IAT	Member	Katılım Emeklilik ve Hayat A.Ş.	Director of Fund Management and Fund Services			
Alim TELCİ	TCMA	Member	RE-PIE Portföy Yönetimi A.Ş.	CEO			
Gökçen Yaman AKGÜN	TCMA	Member	Ziraat Portföy Yönetimi A.Ş.	CEO			
Burak SEZERCAN	TCMA	Member	İş Portföy Yönetimi A.Ş.	CEO			

Table 1 – Information on FPAC Members (year of 2022)

#### The duties of the FPAC are summarized below:

- Assessing and approving the comparison groups submitted by the PMC, and determining the minimum number of funds required to form a comparison group
- Defining a new grouping methodology for the funds that cannot be included in the comparison group, or in the event that there is an insufficient number of funds to create a group, or when considering such funds individually without including them in a group;
- Approving the calculation and verification processes submitted by the PMC;
- Processing and resolving the objections of the fund founders in accordance with the decisions of the FPAC.

Decisions taken by the FPAC in the meetings held so far It is presented on our corporate website\*.

\* https://egm.org.tr/fonlar/fon-performans-degerlendirme-sistemi/fpdk-kararlari/



# 2022 COMPARISON GROUPS SELECTION

In compliance with the principles of the Guidelines and the relevant decisions of the FPAC:

- Comparison Groups for 2022 were based on the fund types specified in the article within the Guidelines titled "Fund Types."
- Groups were defined based on the nature of the assets in which they invest, while the fund type is the same.
- No distinction was made between IPS and AES when forming the comparison groups.
- Variable funds were sorted (conservative/cautious, balanced daring/dynamic/growth and aggressive) based on their risk values. Variable funds that do not hold a specific level of risk were assessed independently based on a different methodology
- Groups formed for the funds that are managed on the basis of participation and are the same type
- Comparison groups were designed to consist of a minimum of six funds.

Pursuant to the Guidelines, funds that cannot be sorted into any groups due to their asset allocation strategy or their risk structure, or because their number is below six, were listed under the title "Funds Not Included in Comparison Groups" and the FPAC determined a different methodology for these funds.

In this context, a total of 279 funds were sorted into 20 comparison groups while 93 funds remained excluded.



#### CALCULATION METHOD

Pursuant to relevant decisions of the Guidelines and the FPAC, the lower and upper thresholds for each comparison group were calculated as, respectively, "Arithmetic mean of gross returns from funds in a comparison group – standard deviation of gross returns from funds in the same group" and "Arithmetic mean of gross returns from funds in a comparison group + standard deviation of gross returns from funds in the same group."

Accordingly, the performance of funds whose gross annual rate of return is below the lower threshold are considered "relatively poor" while those above the upper threshold are "relatively successful." As for the funds whose gross rate of return is between the thresholds, their performance was considered "within acceptable limits."



Figure 1 – Figure Depicting the Calculation Method for the Funds in the Comparison Group

Each of the funds that are not included in a comparison group will be assessed by its own benchmark return; lower and upper thresholds will be "benchmark return \* 0.90" and "benchmark return \* 1.10," respectively; and, if the difference between the gross rate of return (%) and benchmark rate of return (%) of the said funds is above 0.75 percent of the absolute value, penalties or rewards will be applicable.

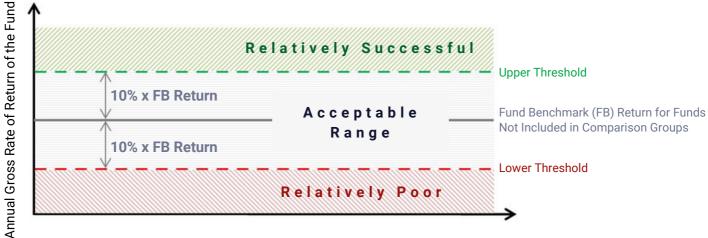


Figure 2 – Figure Depicting the Calculation Method for Funds Not Included in the Comparison Groups

### PERFORMANCE-BASED REWARDS AND PENALTIES

## PMC-CONDUCTED TECHNICAL STUDIES

Pursuant to the Pension Mutual Funds Guidelines, portfolio managers of the funds that are found to have performed "relatively poorly" for at least two years in a three-year performance assessment period will be replaced by the pension company that founded them. Such funds are prohibited from being managed by the same portfolio management company for the two years following the last year in which a poor performance was found.

On the other hand, the founding pension company will pay the portfolio management company an additional fee (success premium) equivalent to 50 percent of the fixed management fee paid to the portfolio manager from the fund management fee collected from the fund within the year in which the funds are found to be "successful" by a yearly performance assessment.

Each year, funds that are found to perform relatively poor and relatively will be announced on the Performance Assessment Results page by the PMC, with details of their yearly net returns, calculated performance results and respective portfolio managers.

PMC established an end-to-end digital platform to fully automate relevant processes of the FPAS, launched in compliance with Article 10.4 of the Guidelines.

To enable the automated gathering of data for calculation from Central Securities Depository (CSD of Turkey), of funds prices and sizes from Takasbank and of index values for fund benchmark from various sources including BIST, the CBRT, TUIK, Bloomberg and Reuters, the PCM established data integration with these organizations and institutions.

Furthermore, the digital Fund Agreement Process was developed and integrated into the aforementioned system to compare the automated calculations by the FPAS with the results obtained by the pension companies and, if necessary, to impose due adjustments on company records.

With a view to maximize accountability and transparency while prioritizing the protection of trade secrets, web pages\* were launched containing all information on the FPAS that might be relevant to stakeholders.

<sup>\*</sup> https://egm.org.tr/fonlar/fon-performans-degerlendirme-sistemi



AGREEMENT
ON THE 2022
PERFORMANCE
ASSESSMENT
RESULTS

Our calculations in compliance with the performance assessment methodology formulated pursuant to the Guidelines and the FPAC decisions, and the agreement on the net return, gross return and fund benchmark return values of funds with companies were conducted on the digital platforms within the first 15 working days of January 2023.

PUBLIC
ANNOUNCEMENT
OF THE 2022
PERFORMANCE
ASSESSMENT
RESULTS

Funds subject to rewards or penalties in compliance with Article 10.4 (B-iii) of the aforementioned Guidelines were announced to the public on January 20, 2023 through the PMC corporate website.

\*https://egm.org.tr/fonlar/fon-performans-degerlendirmesistemi/performans-degerlendirme-sonuclari/

NOTIFICATIONS OF FUNDS SUBJECT TO REWARDS AND PENALTIES TO FOUNDING AND MANAGING COMPANIES

We notified the 14 pension companies and the 22 portfolio management companies of the "relatively successful" or "relatively poor" assessment of the funds they founded or manage via official letters numbered EGM-7030-22- 00002/... /EGM-7030-23-00037, dated January 26, 2023.

OTHER
INFORMATION
RELEVANT TO
STAKEHOLDERS

We maintain the "Funds" heading on the PMC website with a view to provide stakeholders with easy access to all important publicly available information on pension mutual funds and to facilitate the comparisons of fund returns with alternative investment and comparison tools.

#### 2022 FUND PERFORMANCE ASSESSMENT SUMMARY RESULTS

In 2022, all pension mutual funds (a total of 372 funds) were included in the Fund Performance Assessment System. In terms of quantity, 75 percent of funds are "Funds in Comparison Groups" and 25 percent are "Funds Not Included in Comparison Groups." In terms of fund sizes as of late December, 2022, 73 percent of funds are "Funds Included in Comparison Groups" and 27 percent are "Funds Not Included in Comparison Groups." Fund performance results for 2022 are summarized below.

The performances of 279 funds in the 2022 "Funds in Comparison Groups," which had a net asset value of 310.617 billion Turkish lira as of year end, were assessed. In terms of quantity, 16 percent of these funds were deemed relatively successful, 73 percent within acceptable limits, and 11 percent were relatively poor. In terms of fund size, 12 percent were deemed relatively successful, 79 percent within acceptable limits and 9 percent relatively poor. (Figure 3 and 4)

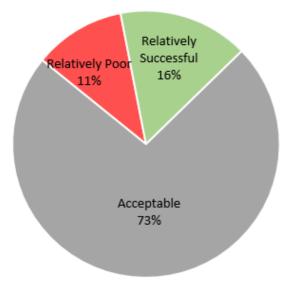


Figure 3 Distribution of Fund Performances
in the Comparison Groups by the Number of Funds

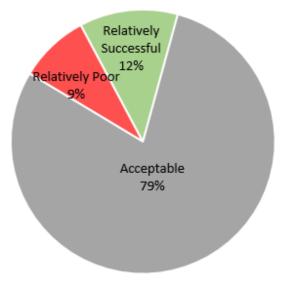


Figure 4 Distribution of Fund Performances
in the Comparison Groups by Net Asset Values



The performances of 84 funds in the 2022 "Funds Not Included in Comparison Groups," which had a net asset value of 114.3 billion Turkish lira as of year end, were assessed.

In terms of quantity, 43 percent of these funds were deemed relatively successful, 48 percent within acceptable limits, and 9 percent were relatively poor. In terms of fund size, 29 percent were deemed relatively successful, 62 percent were considered within acceptable limits, and 9 percent were relatively poor. (Figures 5 and 6)

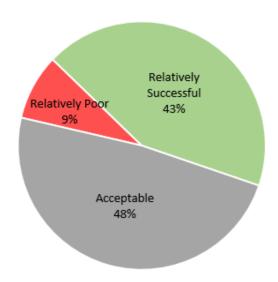


Figure 5 Distribution of Fund Performances Not Included in the Comparison Groups by the Number of Funds

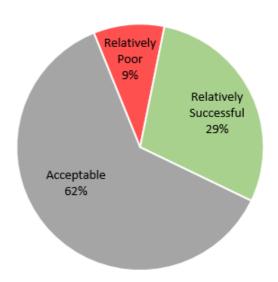


Figure 6 Distribution of Fund Performances Not Included in the Comparison Groups by Net Asset Value

A comprehensive assessment of all funds (372 funds) included in the 2022 performance assessment system, which had a net asset value of 424.90 billion Turkish lira, was also conducted.

In terms of quantity, 23 percent of all funds were deemed relatively successful, 67 percent within acceptable limits, and 10 percent was found to be relatively poor (Figure 7). In terms of fund size, 16 percent of all funds were deemed relatively successful, 75 percent within acceptable limits and 9 percent was found to be relatively poor (Figure 8).

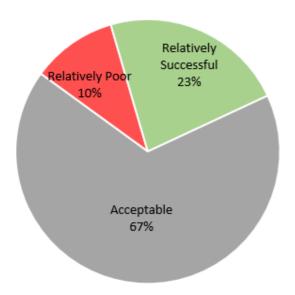


Figure 7 Distribution of Fund Performances of All
Funds Included in the Performance
Assessment by the Number of Funds

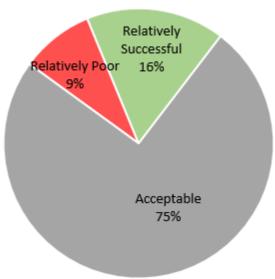


Figure 8 Distribution of Fund Performances of All
Funds Included in the Performance
Assessment by Net Asset Value

The 2022 fund performances of the 15 founding pension companies are demonstrated in the chart below. Figure 9 demonstrates performances by the number of funds and Figure 10 shows performances by net asset value.

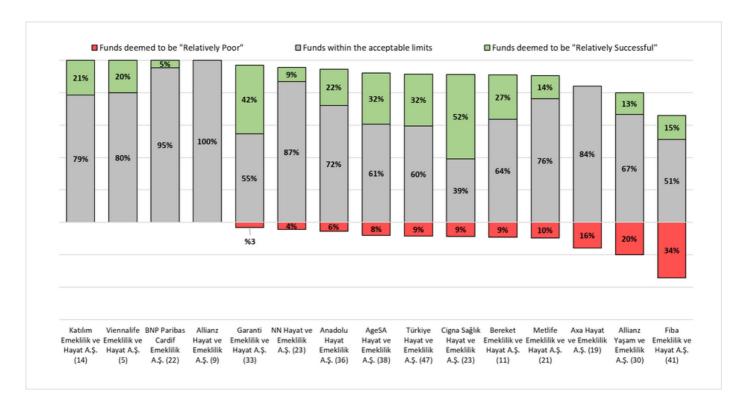


Figure 9 - Performance Results by the Number of Funds\*

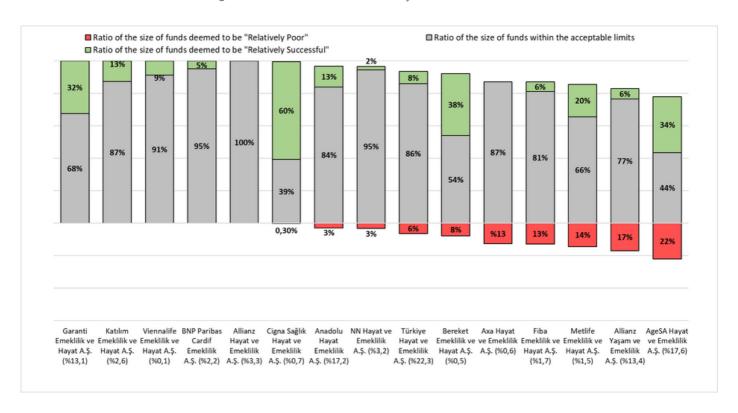


Figure 10 - Performance Results by Fund Size\*

Calculations were made on the basis of 6 digits after the comma, and the table representations were made by rounding to the hundredths.

<sup>\*</sup> In the charts above, the total number of funds subject to performance evaluation of the funds established by the pension company are shown in Figure-9, and their ratios within the total fund size subject to performance evaluation are shown in brackets under the company name in Figure-10.

The 2022 fund performances of the 25 portfolio management companies are demonstrated in the chart below. Figure 11 demonstrates performances by the number of funds and Figure 12 shows performances by net asset value.

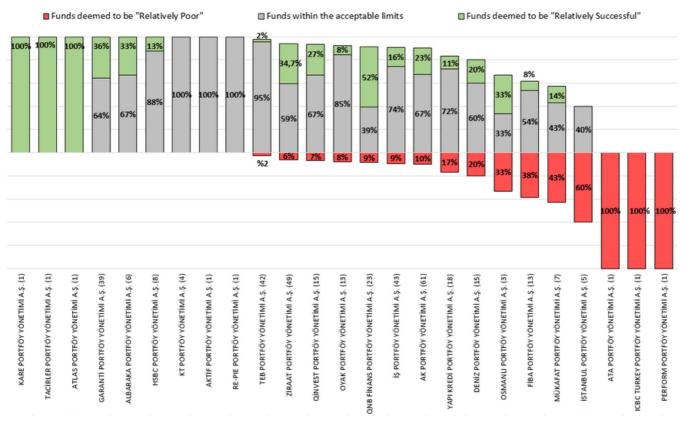


Figure 11 - Performance Results by the Number of Funds\*\*

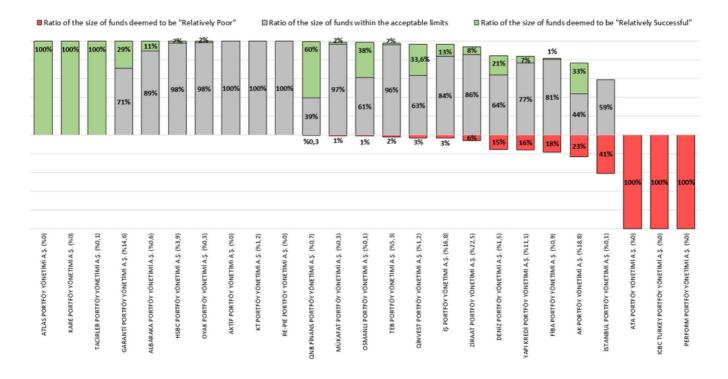


Figure 12 - Performance Results by Fund Size\*\*

<sup>\*\*</sup> In the charts above, the total number of funds subject to performance evaluation of the funds managed by the portfolio management company is shown in Figure-11, and their ratio within the total fund size subject to performance evaluation in Figure-12 in parentheses adjacent to the company name.

Calculations were made on the basis of 6 digits after the comma, and the table representations were made by rounding to the hundredths.

# RETURN PERFORMANCE OF THE PRIVATE PENSION INDUSTRY COMPARED TO ALTERNATIVE INVESTMENT TOOLS

The PMC OVERALL INDEX\* representing the weighted average of net returns of all pension mutual funds increased by 65.1 percent in the year end of 2022 compared to the previous year. In other words, the private pension industry achieved a higher return performance than deposit by obtaining an average of 65.1 percent net nominal return in the year 2022. (Figure 13).

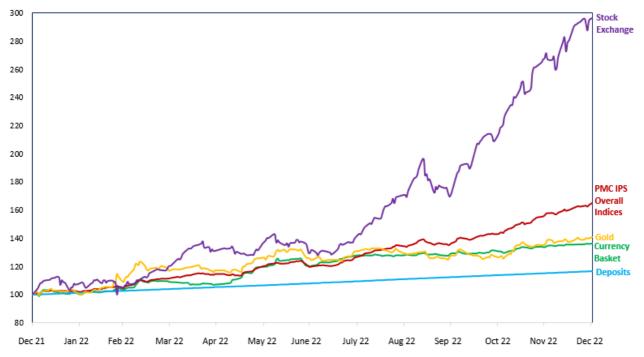


Figure 13 - Comparison of the PMC OVERALL Index and Alternative Investment Tools in 2022

\*The PMC OVERALL INDEX is calculated by weighting the daily net nominal returns on all pension mutual funds active in the system (voluntary IPS, auto-enrollment and State Contribution funds) with their net asset values. You can find detailed information about the index at https://emeklilik.egm.org.tr/egm-endeksleri.



# COMPARISON OF PENSION COMPANIES' RETURN PERFORMANCES

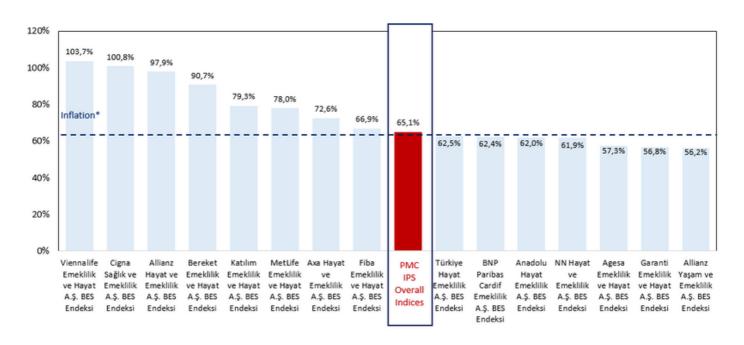


Figure 14 - Comparison of Funds in the PMC Indices by Pension Companies

The net return performances of pension companies affirm that 8 companies achieve returns above the inflation rate (Figure 14).

The values in Figure-14 are calculated by weighting the daily net nominal returns of the funds included in the index and the daily net assets of the funds.

\* In 2022, the CPI fluctuated by 64.3 percent.



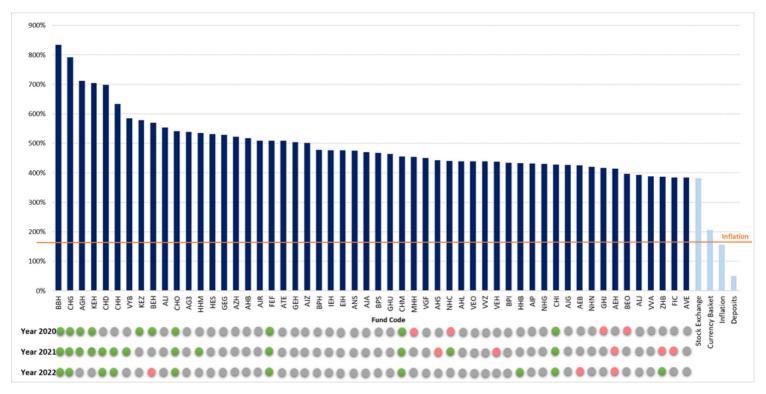
#### 3 YEARS PANAROMA OF FPAS

Resault of FPAS		Number of Funds	Change Ratio of Net Assest Value (Yearly)			Rate of Return for 3 Yearly (Nominal)		Alternative Investment Tools 3 Yearly Value Changes / Nominal Returns							
Year 2020	Year 2021	Year 2022	Included in FPAS 3 Years*	Year 2020 / Year 2019	Year 2021 / Year 2020	Year 2022 / Year 2021	Average Return of Funds	Return of the Highest Fund	Return of the Lowest Fund	PMC IPS Overall Indices	Gold	Currency Basket	Stock Exchange	Deposits	Inflation
	0		23	18%	47%	119%	279,9%	834,6%	59,5%						
			1	37%	37%	133%	182,4%	182,4%	182,4%						
			8	67%	47%	139%	283,4%	712,7%	57,8%						
			1	1%	-19%	64%	98,2%	98,2%	98,2%						
			0	0%	0%	0%	0%	0%	0%						
			3	-10%	190%	70%	110,5%	114,9%	102,6%						
			11	42%	30%	39%	123,4%	221,2%	60,5%						
			3	27%	26%	242%	299,8%	569,6%	71,3%						
			14	14%	26%	82%	208,8%	578,9%	55,2%						
			2	-4%	21%	-3%	61,3%	66,7%	55,9%						
			2	82%	52%	206%	57,0%	57,1%	56,9%						
			4	1245%	112%	141%	275,3%	441,0%	69,7%						
			0	0%	0%	0%	0%	0%	0%						
			1	30%	119%	277%	145,6%	145,6%	145,6%	178,3%	274,9%	206,6%	381,5%	50,8%	156,2%
			10	24%	22%	128%	139,4%	308,4%	55,0%						
			4	-2%	20%	51%	124,6%	207,9%	70,2%						
			0	0%	0%	0%	0%	0%	0%						
			13	29%	35%	76%	241,7%	453,6%	75,0%						
			6	12%	32%	322%	289,3%	699,0%	59,7%						
			8	43%	41%	25%	173,9%	262,0%	78,3%						
			16	64%	172%	68%	229,0%	585,2%	55,8%						
			1	51%	53%	184%	387,4%	387,4%	387,4%						
			4	37%	38%	257%	146,1%	414,3%	11,9%						
			20	70%	71%	73%	191,1%	443,1%	54,5%						
			27	49%	73%	50%	203,3%	433,1%	56,0%						
			17	21%	76%	54%	151,0%	425,3%	54,4%						
			157	25%	49%	84%	232,4%	554,4%	55,0%						
			356	33%	61%	76%	172%	341%	75%			•			

- There are 400 funds in 2020, 360 funds in 2021, 372 funds in 2022, and 356 funds included to FPAS in three years.
- Funds whose performance was evaluated as "Relative Adequate" in the relevant FPDS period.
- Funds whose performance was assessed as "Relatively Poor" in the relevant FPDS period.
- : Funds whose performance was evaluated as "Within Acceptable Limits" in the relevant FPDS period.

Fund Performance Assessment System (FPAS) success situations are included in Appendix-2.

#### YEARS PANAROMA OF FPAS



Şekil 15 - Funds with Three-Year Net Nominal Returns Over All Three-Year Value Changes / Nominal Returns of Selected Alternative Investment / Loading Instruments

• : Funds whose performance was evaluated as "Relative Adequate" in the relevant FPDS period.

: Funds whose performance was assessed as "Relatively Poor" in the relevant FPDS period.

. Funds whose performance was evaluated as "Within Acceptable Limits" in the relevant FPDS period.

PMC IPS Overall Indices : It is the index that includes all voluntary IPS, Automatic Enrollment and State Contribution funds. Stock Exchange **Currency Basket** 

**Deposits** 

Gold

: BIST 100 Index

: It is the basket (50% EURO + 50% USD) created over the daily EURO and USD selling rates announced by the CBRT.

: BIST KYD 1-Month Indicator Deposit Index : BIST KYD Gold Price Index Weighted Average

Inflation : Consumer price index





# ADDITIONAL MEASURES TO ENSURE HEALTHY SYSTEM OPERATIONS

To ensure that the performance monitoring and assessment mechanism defined in the Guidelines is operated correctly; competition is established; potential irregularities, omissions and abuses are prevented; and risks are managed most appropriately by the FPAC, a leading decision was made proposing that:

- The members representing the TCMA, pursuant to the items (b) and (c) of paragraph 2 of Article 74 of the Capital Market Law; and the members representing the IAT, pursuant to the items (ç) and (d) of paragraph 9 of Article 24 of the Insurance Business Law;
- The member representing the PMC, pursuant to the PMC's mission to ensure the safe and efficient operation of the system and to protect the rights and interests of participants as set forth in Article 20/A of Law No. 4632,

are to advise the FPAC regarding additional measures, and the PMC is to take initiative within this scope with the relevant Association and supervisory and regulatory authorities.

The decision also stipulates that: as the performance of pension mutual funds is calculated automatically using the data transferred over the integration between the PMC and CSD of Turkey, İstanbul Settlement and Custody Bank Inc. (Takasbank) and Borsa Istanbul A.Ş. (BIST); to ensure that calculations are accurate,

- Founders of funds and portfolio management companies should take the necessary measures to ensure that the data that founders report to MKK, TAKASBANK and BIST is accurate, coherent, and updated;
- and that all data required by the PMC to monitor fund performance (including principally the "net expense rate" and the index data used for fund benchmark/threshold, which will be provided in accordance with Annex 3 of the Guidelines) is parametrically reported to the PDP or submitted by pension companies to the PMC.

#### This report

was drafted by the PMC Business Intelligence and Corporate Reporting U-nit based on data from the digital platform Fund Performance Assessment System, audited by the Internal Control and Risk Management and Internal Audit unit, and approved by the General Directorate.

#### Contact us at

https://www.egm.org.tr/contact-us/contact-us/

for further inquiries or suggestions concerning the report.



