

**.THE CENTRAL BANK OF THE REPUBLIC OF ARMENIA**  
**BOARD RESOLUTION**

March 6, 2012

No 62-N

**ON APPROVAL OF REGULATION 10/17 ON “CALCULATION METHODOLOGY OF  
PENSION FUND PERFORMANCE AND THE CRITERIA ON PRESENTATION  
THEREOF”**

This Regulation includes the amendments and supplements and all other changes endorsed under the following Resolutions of the Board of the Central Bank: 15.07.15 N 164

In order to ensure a common criterion for investors for pension funds assessment and comparison, as well as to ensure an effective pension fund supervision by RA CBA, based on the Law of Republic of Armenia “On funded pensions” articles 25(6), guided by the Law of Republic of Armenia on “The Central bank” article 20(e), the Law of Republic of Armenia on “Legal acts” article 16 and article 70(1), the Board of the Central bank of the Republic of Armenia decides:

1. To approve Regulation 10/17 on “Calculation methodology of pension fund performance and the criteria on presentation thereof” pursuant to appendix (attached).
2. This resolution shall enter into force on the tenth day upon its official promulgation.

**Chairman of the Central bank of the Republic of Armenia**

**A. Javadyan**

## Appendix

Central Bank of the Republic of Armenia Board Resolution 62-N

Adopted March 6, 2012

### REGULATION 10/17

## CALCULATION METHODOLOGY OF PENSION FUND PERFORMANCE AND THE CRITERIA ON PRESENTATION THEREOF

### PART 1. GENERAL TERMS

#### CHAPTER 1. SCOPE

1. This Regulation sets methodology of calculation of voluntary and mandatory pension funds (hereinafter: fund) performance and criteria on presentation thereof.
2. Provisions of Chapter 3 of this Regulation shall not apply to newly established funds during one year after inception of the fund.

#### CHAPTER 2. MAIN CONCEPTS USED IN THIS REGULATION

3. The main concepts used in this Regulation have the following meaning:
  - 1) “**fund performance**”- change in net asset value per unit expressed in percentage terms;
  - 2) “**return on fund assets per unit of risk**”- an indicator, which shows relation between fund return on assets in the previous periods and the risks ensuing thereof.

4. Other concepts used in this regulation have the meanings as defined in the Republic of Armenia law “On Fully Funded Pension Funds” and/or the Republic of Armenia law “On Investment Funds”.

### **CHAPTER3. CRITERIA ON PRESENTATION OF FUND PERFORMANCE**

5. Fund manager shall present information on performance of the funds managed by it in the form of indicators established under paragraph 6 of this Regulation.
6. Fund manager shall calculate the following indicators on each fund managed by it as of each working day (hereinafter: day of calculation):
  - 1) Fund performance as of the day of calculation, in accordance with formula provided under paragraph 7 of this Regulation;
  - 2) Fund performance for the period from the beginning of given year till the day of calculation, in accordance with formula provided under paragraph 7 of this Regulation;
  - 3) Fund performance for twelve-month period before the day of calculation, in accordance with formula provided under paragraph 7 of this Regulation and return on fund assets per unit of risk for twelve-month period before the day of calculation, in accordance with formula provided under paragraph 9 of this Regulation;
  - 4) Fund average performance for five-year period before the day of calculation, in accordance with formula provided under paragraph 8 of this Regulation;
  - 5) Fund average performance for the whole period of fund business (since inception), in accordance with formula provided under paragraph 8 of this Regulation.

### **CHAPTER 4. FUND PERFORMANCE**

7. Fund performance defined under clauses 1, 2 and 3 of paragraph 6 of this Regulation shall be calculated through the following formula:

$$P = \left[ \frac{U_1}{U_0} - 1 \right] * 100\%, \text{ where:}$$

“*P*” is fund performance for the calculated period;

“*U<sub>0</sub>*” is net asset value per unit calculated for the first working day before the first working day of the period of calculation;

“*U<sub>i</sub>*” is net asset value per unit calculated for the last working day of the period of calculation.

8. Fund performance defined under paragraph 6, clauses 4 and 5 of this Regulation, shall be calculated through the following formula:

$$P = \left[ \left( \frac{U_i}{U_0} \right)^{\frac{1}{k}} - 1 \right] * 100\% , \text{ where:}$$

“*P*” is fund performance for the calculated period;

“*U<sub>0</sub>*” is net asset value per unit calculated for the first working day before the first working day of the period of calculation;

“*U<sub>i</sub>*” is net asset value per unit calculated for the last working day of the period of calculation;

“*k*” is period of calculation expressed in absolute terms.

## CHAPTER 5. RETURN ON FUND ASSETS PER UNIT OF RISK

9. Return on fund assets per unit of risk defined under paragraph 6, clause 3 of this Regulation, shall be calculated through the following formula:

$$r = \frac{P - r_f}{\sigma} , \text{ where:}$$

“*r*” is return on fund assets per unit of risk for the period of calculation;

“*P*” is fund performance for the calculated period expressed in absolute terms;

“*r<sub>f</sub>*” is average return of the Republic of Armenia Treasury bills in circulation as of the last day of the previous month of the calculation period, expressed in absolute terms, which is published by financial agency authorized by the Republic of Armenia government. In cases when financial agency authorized by the Republic

of Armenia government does not publish the abovementioned indicator,  $r_f$  shall be calculated based on the return of the Republic of Armenia Treasury bills in circulation before maturity, as calculated by the yield curve published by the Republic of Armenia Central Bank;

“ $\sigma$ ” is standard deviation of fund performance for the last five years of fund’s business (for the whole period of business if the fund operates for less than five years), which shall be calculated through the following formula:

$$\sigma = \sqrt{\frac{1}{N-1} \sum_{i=1}^N (P_i - \mu)^2}, \text{ where:}$$

“ $\mu$ ” is mean of fund performances for the last five years of fund’s business (for the whole period of business if the fund operates for less than five years), which shall be calculated through the following formula:

$$\mu = \frac{1}{N} \sum_{i=1}^N P_i, \text{ where:}$$

“ $P_i$ ” is the fund performance established under paragraph 6, clause 1 of this Regulation, and calculated in accordance with paragraph 7 of this Regulation, expressed in absolute terms for  $i$ -th period;

“ $N$ ” is number of calculations of fund performances for the last five years of fund’s business (for the whole period of business if the fund operates for less than five years), calculated in accordance with paragraph 7 of this Regulation.