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# International Standards of Net Value of Pension Contribution Unit Calculation

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## What is pension contribution unit?

- Pension Contribution Unit is a calculated indicator used to determine the amount of pension funds owned by a fund participant and recorded on his/her individual pension account.
- The change in pension contribution unit value reflects a pension fund investment performance

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## Pension Fund Net Asset Value

- Pension Fund Net Asset Value is calculated as a difference between the pension fund assets value (marked to market value) as of the day of calculation and the total expenses regarding payment of fees to all service providers of the fund.
- **NAV<sub>i</sub> = AV<sub>i</sub> – E<sub>i</sub>**
  - **NAV** – pension fund net asset value
  - **AV** – pension fund assets value
  - **E** – total amount of expenses to pay fees to all service providers of the fund
  - **i** – the day of calculation

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## Fund Assets Value and Liabilities

- Pension fund assets value is calculated based on their market value according to the procedure set by a regulator whose functions are similar to those of the Securities and Stock Market State Commission in Ukraine.
- Liabilities taken into account when the pension fund NAV is calculated are determined in regulations of a Pension Regulator whose functions are similar to those of the State Commission for Regulation of Financial Services Markets in Ukraine.
- Pension benefits liabilities are not taken into account when calculating NAV.

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## Net Value of Pension Contribution Unit

- Net Value of Pension Contribution Unit is calculated by dividing the pension fund NAV by the total number of Pension Contribution Units in the fund as of the day of calculation (before crediting to individual accounts contributions and other transfers made to the fund on the day of calculation)
- **NV PCU<sub>i</sub> = NAV<sub>i</sub>/TN PCU<sub>i</sub>**
  - **NV PCU** – net value of pension contribution unit
  - **NAV** – net asset value of the fund
  - **TN PCU** – total number of pension contribution units in the fund
  - **i** – the day of calculation

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## Frequency of NAV and Net Value of Pension Contribution Unit Calculation

- Pension fund NAV and Net Value of Pension Contribution Unit are calculated **daily**
- Pension Fund Administrator ensures timeliness of calculation
- Custodian verifies NAV and Unit Value calculation

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## International Standard for Calculation of the Number of Pension Contribution Units of a Fund Participant

- The number of Pension Contribution Units of a fund participant shall be determined by dividing the pension contributions received in behalf of such participant by the Net Value of Contribution Unit effective as of the end of the calculation day.
- $N\ PCU_i = N\ PCU_{i-1} + C_i / NV\ PCU_i$ 
  - $N\ PCU_i$  – number of pension contribution units of a fund participant as of the end of calculation day
  - $N\ PCU_{i-1}$  – number of pension contribution units of a fund participant as of the end of previous calculation day
  - $C$  – the amount of pension contribution paid
  - $NV\ PCU_i$  – net value of pension contribution unit as of the end of calculation day
  - $i$  – calculation day

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## How are the Transfers from Another Pension Fund or Bank Taken into Account when Calculating the Number of Pension Contribution Units?

- When calculating the number of pension contribution units **the amounts of pension funds** that were received in behalf of a fund participant **from other pension funds or a bank are treated as pension contributions**

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## Calculation of the Total Number of Pension Contribution Units in a Fund

- The total number of pension contribution units in a fund equals the sum of pension contribution units on the individual pension accounts of all fund participants
- $TN\ PCU_i = N\ PCU_{1i} + N\ PCU_{2i} + N\ PCU_{3i} + N\ PCU_{4i} + N\ PCU_{5i} + \dots + N\ PCU_{ni}$ 
  - **TN PCU** – total number of pension contribution units in a fund
  - **N PCU<sub>1i</sub> + ... N PCU<sub>ni</sub>** - number of pension contribution units on an individual pension account of each fund participant as of the day of calculation
  - **i** – calculation day

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## What is the Procedure for Calculation of the Number of Pension Contribution Units if the Information on Whose Behalf the Contribution was Paid is Unavailable for Several Days?

- In case the information on whose behalf the contribution was paid is unavailable for several days, for calculation of the number of pension contribution units of a fund participant the net value of pension contribution unit as of the end of the day on which this contribution was received is used.

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### **The Change in the Number of Pension Contribution Units in Case of Transfer of the Pension Funds to Another NPF, Bank Deposit Account or Insurance Company**

- When transferring pension funds to another pension fund, to a pension deposit account in a bank or to insurance company the number of pension contribution units decreases

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### **Calculation of the Amount of Funds Owned by Fund Participant (Account Balance)**

- The amount of funds owned by a fund participant is calculated using pension contribution unit
- The account balance is determined by multiplying the number of Pension Contribution Units this individual pension account of a fund participant holds by the Net Value of Pension Contribution Unit of a fund as of the end of calculation day

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## Calculation of the Amount of Funds Owned by Fund Participant (Account Balance)

- $AB_i = N PCU_i \times NV PCU_i$
- $AB_i$  – the amount of pension funds owned by a fund participant
- $N PCU_i$  – the Number of Pension Contribution Units the individual pension account of a fund participant holds
- $NV PCU_i$  – Net Value of Pension Contribution Unit as of the calculation day
- $i$  – calculation day

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## Account Balance

- The total number of Pension Contribution Units in a fund is equal to the sum of Pension Contribution Units held on all accounts of pension fund participants
- Pension fund NAV is equal to the sum of all individual pension account balances of the fund
- Each individual pension account must be current at the end of each business day.

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## Accounting of Pension Funds Intended for Pension Benefits Payment Out of Fund

- There are two accounting options: general (1) or separate accounting (2)
- With general accounting (active fund):
  - There is single NAV and Net Value of Pension Contribution Unit
  - The required amount of pension funds is used to effect pension benefits
  - The Number of Pension Contribution Units of a fund participant and the Total Number of Pension Contribution Units in the fund is decreasing

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## Accounting of Pension Funds Intended for Pension Benefits Payment Out of Fund

- With separate accounting (active and passive funds):
  - Different values of NAV and Net Value of Pension Contribution Unit in active and passive funds
  - Pension funds are invested separately and pension benefits are effected from passive fund
  - With each next benefit effected from passive fund the Number of Pension Contribution Units of a passive fund participant as well as the Total Number of Pension Contribution Units in a passive fund is reduced

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## Accounting of Funds of a Fund Participant Receiving Pension Benefits Whose Contributions Continue

- If a fund participant receives pension benefits and continues to receive contributions in his behalf,
- Based on the participant's choice the following options are possible:
  - All contributions are paid to the active fund, or
  - Part of contributions is paid to active fund and another part to passive fund, or
  - All contributions are paid to passive fund

In case pension contributions are paid to passive fund, their amounts are used for recalculation of pension benefits amounts (with various frequency: monthly, quarterly, semiannually or annually).

If a participant wants his/her benefit may be effected from both funds (active and passive).

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# THANK YOU!

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