Package ‘markowitz’

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Type Package

Title Markowitz Criterion

Version 0.1.0

Maintainer Luana Oliveira <luana.azevedo.oliveira.2022@gmail.com>

Description

The Markowitz criterion is a multicriteria decision-making method that stands out in risk and uncertainty analysis in contexts where probabilities are known. This approach represents an evolution of Pascal's criterion by incorporating the dimension of variability. In this framework, the expected value reflects the anticipated return, while the standard deviation serves as a measure of risk. The 'markowitz' package provides a practical and accessible tool for implementing this method, enabling researchers and professionals to perform analyses without complex calculations. Thus, the package facilitates the application of the Markowitz criterion. More details on the method can be found in Octave Jokung-Nguéna (2001, ISBN 2100055372).

URL https://github.com/luana1909/Markowitiz

Imports dplyr, tidyr, magrittr, tidyverse

Language en-US

License GPL-3

Encoding UTF-8

RoxygenNote 7.3.2

Suggests rmarkdown, spelling, testthat (>= 3.0.0)

Config/testthat/edition 3

NeedsCompilation no

Author Luana Oliveira [aut, cre],
Marcos Santos [ctb] (<https://orcid.org/0000-0003-1533-5535>)

Repository CRAN

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Contents

markowitzcalc *Markowitz Criterion*

Description

Implementation of An Markowitz Criterion More information about the method at https://doi.org/10.9771/1516-9022rene.v5i2.6769 More information about the implementation at https://github.com/luana1909/Markowtiz/blob/main/DES

Arguments

criterios	A dataframe with the values of the criteria for each alternative
lambda_selec	A number defining the degree of risk appetite

Value

dataframe with all comparations between alternatives

Examples

```
criterios <- data.frame(criterio = c('a1', 'a2', 'a3'),
                        peso = c(0.25, 0.5, 0.25))
alternativas <- data.frame(alternativas = c('outdoor', 'televisao', 'jornal'),
                           a1 = c(12, 36, -3),
                           a2 = c(-6, 12, 60),
                           a3 = c(24, 48, 30))
result <- markowitzcalc(criterios, alternativas)
```

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