Using mathematical programming on investment in the Economic Valuation and Investment in decision

Research Motive

Research result

Theoretical Background

The critical points and Future plan
The development process of modern financial management

1950’s
According to Markowitz variation of the rate of return, it showed me that there is a thing to be a good measure of the risk of the portfolio.

1960’s
CRSP database that stock material has been piled in the University of Chicago has been constructed which the empirical analysis was Fama within the existing research results.

1970’s
Black and Scholes is derived by developing an option pricing model.
The development process of modern financial management

1980’s
Jensen and many scholars proceed study to treat with on behalf of the problems caused by conflicts of interest between the stakeholders of the company.

1990’s
the basic home is assumed in the traditional financial management varies, human psychological factors.
Put a relevant subtitle in this line

Company Name - Presentation

Linear Programming

which can be represented linearly

programming mean that programming

under the plan activities using

several methods

one primary function to the

maximum or minimum in

the background

can been studied after

the mathematics is

started

© IEOM Society International
Research Result

<Cash flow Table>

<table>
<thead>
<tr>
<th>변수 유형</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>현금흐름</td>
<td>0</td>
<td>-$1,000</td>
<td>-$1,200</td>
<td>-$2,000</td>
<td>-$2,500</td>
<td>-$3,000</td>
</tr>
<tr>
<td>(각 기간별)</td>
<td>1</td>
<td>-$2,000</td>
<td>-$2,400</td>
<td>-$2,100</td>
<td>-$1,300</td>
<td>$900</td>
</tr>
<tr>
<td>2</td>
<td>$2,000</td>
<td>$2,500</td>
<td>$3,000</td>
<td>$2,000</td>
<td>$1,400</td>
<td>-$700</td>
</tr>
<tr>
<td>3</td>
<td>$2,900</td>
<td>$3,567</td>
<td>$2,621</td>
<td>$2,000</td>
<td>$1,600</td>
<td>$0</td>
</tr>
<tr>
<td>4</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$2,000</td>
<td>$211</td>
<td>$0</td>
</tr>
<tr>
<td>5</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$2,296</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

\[ \hat{a}_{ij} \]

예산 (\(M_R\))

<table>
<thead>
<tr>
<th>n = 0</th>
<th>n = 1</th>
<th>n = 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>$3,000</td>
<td>$5,000</td>
<td>$4,800</td>
</tr>
</tbody>
</table>

d여율

<table>
<thead>
<tr>
<th>n = 0→1</th>
<th>n = 1→2</th>
<th>n = 2→3</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>20%</td>
<td>20%</td>
</tr>
</tbody>
</table>

d출률

<table>
<thead>
<tr>
<th>n = 0→1</th>
<th>n = 1→2</th>
<th>n = 2→3</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>20%</td>
<td>20%</td>
</tr>
</tbody>
</table>
The critical points

Dual Problem

Research has not been reached to dual problem

Research Quality

Result

DEVELOPMENT

MANAGMENT

MAKEITTING

BUSINESS

- we cannot implement to modeling the investment proposal with Gauss-Jordan method
- we cannot implement to modeling the investment proposal with simplex method
Thank you

Jinwoo Lee and Myeonghun Ji