



Long-Range Planning of Asset Allocation in Pension Funds: An Application of Scenario Planning

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Introduction

Public pension funds in Iran will encounter serious crises in recent years. These crises could be due to elder population, accumulation of government debts, increasing the number of pensioners in comparison with the current employees, inefficient management of investments, and scarce of good investment policies. One of the solutions to tackle such this problem is scientific and right asset allocations of pension funds. According to the strategic nature of these decisions, in this research, scenario planning was employed to identify the possible scenarios of pension funds which is encountering with. In order to Identify the paramount importance, relevant uncertainties and scenarios, a combination of Fuzzy Delphi Method, Wilson Matrix, and Morphological analysis were used. Findings depicted five scenarios of oil Inflation, currency inflation, non-oil inflation, and resistant economy are the most probable scenarios and pension funds will have to allocate their assets according to the characteristics of these scenarios. This research, proposes a new strand towards a better asset allocation and strategic planning for pension funds which should be followed by policy makers and decision makers.

Research Methodology

This research is in the category of survey research and the methods of data collection are interviews and questionnaires. In this study, so as to allocate the assets of the Social Security Pension Fund in the long run, scenario planning was used. The six phases of scenario development include the following steps:

- Defining a critical issue or decision
- Identify participants
- Identify driving forces
- Determining the critical factors of uncertainty
- Development of possible scenarios
- Policy development

Research Findings and Conclusion

In the first stage, all the factors and variables affecting the way of investing the Social Security Pension Fund were prepared through STEEP framework, study of research literature and research team consensus. Then, 60 investment experts were asked to participate in this research. These specialists work in investment companies and pension funds. 44 people agreed to participate in the study. Experts were asked to rate the uncertainty of each of the identified factors based on two criteria: probability and severity of impact. According to the defined stop threshold, since the difference between the probability points and the intensity of the effect of all factors in the second round is less than 1, the fuzzy Delphi method is stopped in the second round.

In the next step, all factors were positioned on the Wilson matrix using diffuse scores. Based on the output, the factors of economic sanctions, inflation and oil prices have been identified as the three vital factors of uncertainty in the investment of pension funds.

Possible scenarios for allocating pension fund assets (Source: Research Findings)

Scenario number	Decision	Economic sanction	Inflation rate	Oil price
1	acceptable	desired	Undesirable	Undesirable
2	acceptable	Undesirable	Undesirable	Undesirable
3	acceptable	desired	Undesirable	desired
4	acceptable	Undesirable	Undesirable	desired
5	acceptable	Undesirable	desired	desired
6	unacceptable	desired	desired	desired
7	unacceptable	Undesirable	desired	Undesirable
8	unacceptable	desired	desired	Undesirable

Key words

Pension Fund, Social Security, Scenario Planning, Wilson Matrix, Morphological Analysis

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