Cairo University Faculty of Commerce Mathematics and Insurance Department

**Summary Master in Insurance titled:** 

### Evaluating the investment performance of portfolios of investment funds and reserves of social insurance-Application to the National Authority for Social Insurance

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Since the actuarial reserve plus its investment return is the basis used in financial expenses, pensions and compensation paid by the social insurance funds in Egypt for the insured or their beneficiaries, Given the noted scholar of the unequal distribution of the relative investments in funds and reserves of the Social Insurance Fund in Egypt, As well as being a practical investment for many of the most important risks and volatility in the rates of return, which led to the lifting of the degree of seriousness of the portfolios of these funds.

For this, the researcher measured the degree of seriousness of the elements of the investment within the portfolios of Social Insurance Fund in Egypt (each box separately) using standard deviation as a measure of absolute risk and the coefficient of variation of the standard as a measure of relative risk, then the order of these elements according to the degree of seriousness of each of them.

The researcher then measured the degree of risk in investment portfolios using a mathematical model of Markowitz, which is mainly based on the measurement of covariance) between elements investment returns as a measure of the degree of seriousness of the portfolio as a whole, then the order of the governor and according to the degree of risk. The researcher then evaluates the financial performance of the portfolios of Social Insurance Fund in Egypt using a scale Sharp, which was in line and consistent with the degree of seriousness of the investment portfolios of the Social Insurance Fund, so that increases the efficiency of investment performance, the lower degree of risk, and vice versa.

The researcher concluded his research findings and recommendations that work to reduce the degree of risk to a minimum, taking into account an appropriate rate of return and to ensure the money invested.

The main results and recommendations reached by the researcher:

#### First results:

1 - government bonds on a large part of the security, as there is no risk of defaults or risk postponed, value of bonds and their profits are paid regardless of the outcome of the business profit or loss, and can handle the large quantities without affecting the price prevailing in the market, making it suitable to invest huge funds as seed money Governor of banks, insurance companies and social security, but they are exposed to the risks of not cope with the usefulness of

interest prevailing in the market, as well as decrease the risk of purchasing power.

2 - preferred stock is exposed to the same risks to bond, but it is from the point of security comes in the next phase after the bonds directly, and treasury bills field an excellent investment for the funds to be retained to meet the liquidity needs in the future free of the risk and the possibility of easily sold, but the social Security has always liquid resources represented in the periodic subscriptions and investment returns, making it do not need this item.

3 - the danger is that when the investment funds of social insurance in fixed deposits with commercial banks - despite enjoying a high degree of safety, liquidity and cash returns to high - in that direction and increase pumping money into this area of investment may obscure some of the funds for investment in other areas may check back higher than the funds may lose investment opportunities returns regular and large.

4 - incompatible system replacement (long-term lending) with the basic principles for investment in the social insurance system, because the investment in this area of investment may lead to the loss of the amount of the replacement or part thereof in the case of the death of the person replaced pension and that the text of the Social Insurance Law No. 79 of 1979, and the financial risk increases when increases in lending and less when less than lending.

5 - That the insurance fund workers in the government sector higher expected rate of return during the study period, followed by workers' insurance fund business sector and public sector. The insurance fund workers business sector and public sectors less in the degree of risk for the insurance fund of employees in the government sector, and is the National Authority for Social Insurance (funds together) the most efficient in the performance of the investment, followed by the insurance fund of employees in the government sector, then the insurance fund workers in the public sector and private sector.

#### Second: Recommendations:

In what has been reached from the results of the researcher suggests the following recommendations:

1 - must invest part of the insurance funds in deposits and investments denominated in foreign currencies (such as the dollar - Sterling - Euro) the yield resulting from these currencies whether he was returning periodically or capital exceeds the rate of return on the national currency, has jumped the price of these currencies in recent leaps capitalism large, and the diversification of these currencies is happening sort of guarantee, any shortfall in revenues of some kind will increase in revenues offset by another type.

2 - must invest part of the Authority's funds in industrial projects, new lucrative and after studying the extent of society's need for these projects and the potential for continuity of the project in achieving profits and the size of these profits and the rate of return is expected of them, and by studying the project well, or studying other projects of similar of the same type, as that diversification relative (uneven and haphazard) between the different aspects of the investment may not achieve the ideal method for investment.

3 - the issuance of government bonds on behalf of the National Authority for Social Insurance Egyptian linked to the standard prices, the government has to ensure and be marketable in the stock market to be the bonds mature at different periods ranging for example between 10:30 years.

4 - raise the efficiency of operation of existing investments by reducing liquidity to the lowest possible level that does not contradict with the ability to fulfill the obligations in the future, and active participation in the management of the companies that bought the Social Security Agency shares to preserve the invested capital and to obtain the expected income from the investment.

5 - the need to achieve efficiency in dealing with money up the system through an investment policy principles check invest this kind of money and follow the approach that ensures maximum returns on these funds at the lowest level of risk, taking into account the change in the obligations of the system.