The pension industry in Kenya is a rapidly growing industry with a fund value that is equivalent to 19.1% of the GDP during the year 2004. The world wide change from the defined benefit to the defined contribution in the scheme design of most occupational pension plans has shifted the risk that was borne by the sponsor (employer) to the pensioners who are the employees. The responsibility of managing the schemes investment activities in the security market has been delegated by the board of trustees to the fund managers as required by the regulation governing the operations of pension schemes in Kenya. The pensioner and the board of trustees are therefore interested in the performance of the fund manager so as to ensure prudent investments are done and fund capital is not eroded. Therefore portfolio performance tools are important both for the fund manager and the pensioners. In investigating the portfolio performance tool used and the factors affecting their usage, the researcher used descriptive survey design, and data was collected by use of questionnaires administered by the researcher through drop and pick. A population census of the respondents was undertaken. Findings indicate that a variety of tools, based on CAPM and APT are in use and their usage is influenced by among others, risk profiles of the investor, how the portfolio has been diversified, availability of data and the firm’s policy. To enhance the usefulness of these instruments stakeholders in the industry should recommend which tools are appropriate for consistency and comparability of the fund managers.