

DETERMINANTS OF PERFORMANCE OF PRIVATELY MANAGED PENSION FUNDS IN INDIA

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***Abstract:** Investing is an art but the process of where to invest is intriguing as well as cumbersome as it has a definite bearing on the returns in the long run. There is abundant historical evidence available that governance practices comprising of Investment Policy, Trustee Composition and Functions, Management Purview, and Investment Strategies do have a bearing on the investment performance. There is evidence that investment performance is important for any privately managed retirement fund, since higher returns reduce the need for extra funding to meet the liabilities and reduce the asset liability gap. Literature on management of pension funds suggests that governance practices and investment strategy are two complimentary issues. Both issues have a direct or an indirect influence on the investment performance outcome in terms of long-term performance of the fund. Good governance is recognized as an important aspect of an efficient private pension management system, enhancing investment performance and security of benefits. This is the first paper which uses pension fund performance data of 225 funds of India over a period of nine years and concludes that a disciplined investment policy leads to a significant impact on the consistency of investment performance. Further, our research shows that trusts which follow a rule bound investment policy yield consistent returns.*

***JEL Codes:** C12, C33, C51, N25, G23*

***Keywords:** Structural Equation Model, Investment Policy, Trustee, Governance, Fiduciary responsibility, Asset allocation, Pension Funds.*

INTRODUCTION

Retirement funds are typically the funds which are accumulated throughout the working life of an individual for a proposed benefit pay out when he superannuates or actually retires. This amount, as a regular source of income, should be able to meet his needs for the rest of his life. Retirement funds, by the very nature of them, relate to sustainability and maintaining standard of living post-retirement for their beneficiaries.

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Our study, using privately managed pension funds data India, tries to unravel how far the present institutions in India are organized to carry their fiduciary responsibilities effectively.

When funds are managed as groups, they have their own protections and perils. The importance of consistent performance, management of the fund, and delivery are the most important elements of any successful structure and so are retirement funds. What it implies for pension funds is that discipline in the structure needs to be inculcated and the sense of fiduciary responsibilities needs to seep in (Ambachtsheer, 2007). Tough challenge here lies for the privately managed funds, as they are under tremendous pressure because of a series of factors such as rising expectations and rapid fall in mortality rate in India. They are constantly compared with their counterparts from developed nations where the markets for these funds are more structured.

Management of pension funds is important to India because India does not have a universal social security system. The occupational pension funds are part of employee benefit funds in India for the organised sector employees since 1881. Since 1922, the occupational pension funds were regulated by the government through the Income Tax Act 1922 and later Income Tax Act 1961 and by the other government agencies¹. Each kind of retirement benefit fund can be managed by the employer (self-managed fund) or can be outsourced to a government agency (for provident fund) and to an insurance company (for managing gratuity and superannuation funds) as in Annexure-1. Gratuity and superannuation funds are allowed to be managed by insurance companies under the aegis of the insurance regulator, namely, Insurance Regulator and Development Authority (IRDA, 2015). Gratuity and provident funds are defined benefit funds whose liability has to be borne by the employers. Superannuation (pension) funds can follow either a defined benefit or a defined contribution scheme based on the choice of the employer.

With the prevailing restrictive regulatory environment and fluctuating interest rates in Indian economy between 2004 and 2014, managing privately managed funds was extremely demanding. Many employers faced losses owing to restricted investment guidelines, losses on investments due to very limited options of churning, rising level of NPAs as some assets turned illiquid, asset liability mismatch emanating from changes in employee composition and poor planning of liability demographics. Apart from these, volatile interest rate and market conditions did not help the funds. Together with these issues, there was a lack of focus on managing retirement funds as it is not a core operational area of an organization. This resulted in the poor performance of privately managed retirement funds. Operational issues related to investment decision making also played a major role in explaining poor performance of retirement benefit funds. The paper examines the performance of privately managed employee benefit funds and relates the performance with the investment operations which

comprise of a disciplined approach towards investments, the regulatory framework and policies governing investments of employee benefit funds. We share best practices from the organizations which have successfully dealt with these issues year after year and methodologies followed by them to deliver good results.

In India, for the workers employed in private sector, the ownership of the funds is with a trust and the benefits provided to the members could be either defined benefit or defined contribution. In the event of a default or shortfall in the fund's earnings to meet the financial obligations, the employer has to meet the shortfall. Similarly, the privately managed provident funds need to match Employees Provident Fund Organisation (EPFO) return for the year (EPFO, 2009). The EPFO is a Government of India undertaking under the Ministry of Labour which manages provident fund of workers of the organised sector. Return on this fund are negotiated by trustees with the Government of India and declared every year. For operational purposes, self-managed pension funds disclose financial performance of their funds voluntary and disclose it once a year for statutory purposes to IT department for tax exemption and for audit purposes. These funds are managed with benign neglect as it is not a part of their core business activity. However, in recent times with changes in investment rules, some self-managed funds by corporates seek to manage them actively through management purview and good governance. Using the financial performance and governance data of self-managed funds in India, this study lays down the factors which determine the performance of a self-managed retirement fund.

In this paper we model relationship between a fund's financial performance, investment policy, trust composition and functions, management purview, and investment strategy. Based on our analytical work and the model, we highlight the key issues in unique investment practices, processes for appointment of trustees, the trust and subcommittee composition, conflicts among stakeholders, separation of execution and control among decision makers, and suggest some strategies which can improve fund performance.

METHODOLOGY

Reviews of various studies have identified the importance of having good governance structures and mechanisms for fund management. This factor translates into consistent performance; it improves fund performance because it improves investment strategies and asset management. The effects of governance on their performance have been tested empirically using data from different countries by Coleman, Esho and Wong (2006) for a cross section of Australian pension funds. Ammann and Zingg (2008) analyze and opine on Swiss pension funds supporting positive relationship between pension fund governance and investment performance. The US Pension funds have been studied in detail by Yang and Mitchell (2005); Useem and Mitchell (2000); Mitchell and Hsin (1997).

The professional qualifications and training (*i.e.* task specific skills) for trustees are of utmost importance. Selection of trustees and allocation of roles and responsibilities to them should be based on education and professional qualifications. This helps in driving the decision making consistency (Clark, Caerlewy-Smith, and Marshall, 2007). Apart from the qualifications of the trustees, the constitution of trust involves a complex but important aspect, which is induction of members from various stakeholder sections directly as trustees or in sub-committees for representing their respective groups. Stewart and Yermo (2008) and Coleman, Esho and Wong (2006) uphold the view that mandatory workers representation in the Australian pension funds results in a better performance.

Few earlier studies have discussed the relationship between governance and the funding status of pension plans (Mitchell and Hsin, 1997; Schneider and Damanpour, 2002; Yang and Mitchell, 2005). Munnell, Aubry, and Quinby (2011) explored the effect of having employees and/or retirees on the Board/Trust on the funding status of pension plans, while Abel (2001) argues that risk aversion, as a strategy, increases with age of the board members. This argument means that systems with a high percentage of trustees, who are retired members of the pension plan would be interested in moving the investments towards the relatively safer assets from the risky assets, while active members as trustees, would opt for riskier portfolios (Amir, Guan and Oswald, 2010; Lucas and Zeldes, 2009; Pennacchi and Rastad, 2011).

Many trusts use absolute return concept for reporting investment performance; this is, however, relative to a risk element which explicitly states the desired thresholds and relative contributions of alpha and beta to overall fund performance. This forms a quantitative decision-making set up reinforcing the importance of trustee skills requirement that support consistent process based decision-making (Clark, Caerlewy-Smith, and Marshall, 2007). Since these trusts are managing investments of various stakeholders, they should become more transparent in reporting, clearer in their objectives and more accountable to the stakeholders. The greater public disclosure of pension fund would act as a trigger and would allow stakeholders to monitor governance and, if required, bring about changes (Mitchell, Piggott, and Kumru, 2008).

From the literature on pension fund performance, it could be concluded that disciplined investment strategy and the role played by trustees in governance, mainly contribute to the performance of funds (Bailey, 1997; Ambachtsheer, 2007; Mitchell and Hsin, 1997). However, a detailed study on the correlations between the parameters, which drive consistent performance in the Indian context, has not been attempted. In this paper, we explain determinants of performance of privately managed pension funds in India using the mediating theory and tests the hypothesis of the mediating theory in the Indian context.

Useem and Mitchell (2000) found that relationship between governance practices and financial performance is indirect via investment strategies or asset allocation

strategies. The Investment Policies, Board purview over investment decisions and the Trustee Compositions form part governance practices of a trust. Their mediating theory hypothesized and found that the relationship between retirement fund governance practices and investment performance was essentially indirect *via* asset allocation decisions (investment strategies). While they use total returns as an outcome of performance, Albrecht and Hingorani (2004) use terminology of risk adjusted return which Nofsinger (1998) defined as abnormal returns for their direct path theory. We use the indirect path to analyze the impact of investment policy, trustee decisions, and functions (governance) on the investment performance outcome in terms of abnormal returns. Based on the above deductions, we use the term Excess Returns (actual returns less the benchmark returns) for measuring investment performance of the funds.

In this paper, the investment outcome measured in terms of investment performance is taken as a function of Investment Policy, Trustee Composition and Functions, Management Purview (collectively could be called as governance practices) and Investment Strategy.

$$FP = f(P, T, M, I)$$

Where FP = Fund Performance = Excess Returns = (Actual Returns – Benchmark Returns). Actual Returns are measured as cumulative aggregate growth rate (CAGR) for the last nine years and Benchmark Returns are measured as CAGR for the last nine years in GSec NSE GOI index, Crisil AAA bond index, Crisil Composite Bond Index and the BSE 100 index for equities.

The calculation of the overall benchmark return for a particular year for a trust was done by allocating similar percent of benchmark asset returns as per the investment. For example, a trust which invested 35% in GSecs in a particular year, 35% of NSE GOI index returns formed the part of the overall benchmark returns for that trust. All the returns reported in this study are mark to market returns, and for the illiquid securities the values were taken from Fixed Income Money Market and Derivatives Association of India (FIMDA) repository which are mark to market return for that security. From the literature review, the key constructs were identified along with the inter-construct relationships.

The study consists of four panel data; the nine years' financial returns being the first panel, the seven years' financial returns being the second panel, the five years' financial returns being the third panel and the three years' financial returns being the fourth panel. In this study, we collected data from 225 trusts. The sampling design uses the stratified random sampling method. The sample covered 10 different sectors comprising of 51 self-managed trusts from public sector units, and 174 self-managed trusts from private corporates with varying employee size and fund sizes

in terms of total assets. These funds are further categorized as large, medium and small.

Data and Descriptive Statistics

Data of pension funds of India. The data was collected by questionnaire and personal interviews. The questionnaire was sent beforehand to the trustees and then met them in person at an appointed time. There were no leading questions asked and the questions in the interview were more attributional. The data collected for this research is the unpublished data. The sectoral distribution of 225 trusts consisted of corporations from ten diverse sectors as shown in Table 1. The size of the corporate and the trust in terms of the number of employees is an important parameter for stratified random sampling. Also that, the size of employees is directly proportional to the size of the pension funds. The study had a diverse spread in this aspect encapsulating large, medium and small enterprises as shown in Table 2.

Table 1

<i>Sector</i>	<i>Count of Trust</i>
BFSI	38
FMCG	16
IT	3
Manufacturing	65
Media	3
Petroleum	27
Port	9
Power	3
Services	58
Telecom	3
<i>Grand Total</i>	225

Source: Authors' calculations.

Table 2

<i>Employee Base</i>	<i>Count of Trust</i>
0 -500	18
501 -1000	53
1001 - 2500	67
2501 - 10000	36
10001 +	51
<i>Grand Total</i>	225

Source: Authors' calculations.

The universe of the privately managed pension funds have different retirement benefits like gratuity, pension, provident fund, superannuation trusts in its ambit;

both, defined benefits and defined contribution funds. The distribution of the same across fund types in the sample is shown in Table 3. The senior management pension is primarily a defined benefit pension fund for the C-suite executives in a corporation, set up by the management to award them with a post retirement lifestyle for their loyalty to the company and to take care of them after retirement. These are very few and exist in large corporations only.

Our sample had a good mix of various sizes of trusts to avoid any bias or have any influence, direct or indirect of the findings because similar practices are followed in same type of trusts. The categorization of the trusts in terms of their fund sizes in the sample is shown in Table 4.

Table 3

<i>Fund Type</i>	<i>Count of Trust</i>
Gratuity	72
Pension	31
PF	82
SA	35
Sr. Mgmt Pension	5
<i>Grand Total</i>	225

Source: Authors' calculations.

Table 4

<i>Fund Type</i>	<i>Count of Trust</i>
0 - 50	73
51 - 100	32
101 - 150	43
151 - 500	14
501 and above	63
<i>Grand Total</i>	225

Source: Authors' calculations.

Our study found that out of 225 trusts, only 128 trusts had investment policy in place which was either documented or was present in principal. Out of 128 trusts which had investment policy, only 85 of them had a written policy document. This implies that only 38% of the sample had a concrete policy document which could be used for reference, irrespective of the managers entrusted to manage the funds. A written investment policy suggests continuity of investment objectives of the fund. Our study revealed that only 122 trusts prepared an investment policy before 2005 in the sample.

Our interviews and answers to our questionnaire revealed that only 69 trusts review their investment policy when there is a change in investment regulation and only 38 trusts review their policy every year. This does not mean that they do not review or alter their investment strategies periodically. When it was further probed as to how

many times these trusts have reviewed their investment policy between 2004 and 2015, it was found, 65 of them changed their policy and 52 of them changed more than five times. It implies that investment policy review was a result of regulatory changes; otherwise funds were content to have a passive management of the funds.

The respondents were also asked about their opinion on the new investment guidelines proposed by the ministry and their opinions. 154 Trusts feel the new pattern of 2009 is a definite opportunity to enhance returns of the trusts even with the existing infrastructure. However, there were some responses highlighting the need to train the trust administrators and the staff on the new guidelines and on effective management styles. Sharing of best practices from other markets was of interest to the respondents. It did highlight that if new guidelines are followed seriously, the risk taking abilities of the investment managers would also increase and a majority of them would move from passive to a more active management style.

Data Analysis and Empirical Findings

The unit of analysis in this study is an individual pension fund trust. Flynn *et al.* (1990) recommend the use of Factor Analysis to establish the construct validity in two ways; first, Exploratory Factor Analysis (EFA), to identify tentative dimensions of a scale and determine which items should be deleted from the scale, and second, Confirmatory Factor Analysis (CFA) which is used to establish construct validity to test hypotheses. Using the panel data we test the existing mediating theory and build the constructs using the Indian pension fund data. We use the exploratory techniques which start with the EFA followed by the CFA and then build a structural model for each of the identified constructs.

Identification of the various latent constructs and its items

From the literature on the conceptual model, we identified five constructs along with their items which can measure the parameters for the construct. These constructs are

- (i) Trust Composition and Functions Construct
- (ii) Investment Policy Construct
- (iii) Investment Strategy Construct
- (iv) Management Purview Construct and
- (v) Investment Performance Construct.

The items for each construct were also measured through the questionnaire responses. Each of the construct had several items to measure the construct attribute in the questionnaire.

Trust Composition and Functions had eight items, namely,

- (i) Presence of Sub Committees (delegation of tasks)

- (ii) Trust management weightage in KPI of officials operating as trustees
- (iii) Number of Trustee meetings every quarter
- (iv) Number of Sub Committee meetings every month
- (v) Number of average man-hours spent monthly by Trustee on Trust activities
- (vi) Is there a minimum mandatory number of Sub Committee meetings to be held guideline?,
- (vii) Number of Trustees
- (viii) Is there a minimum mandatory number of Trustee meetings to be held guideline?.

Investment Policy had fifteen items, namely,

- (i) How frequently the investments are done by your fund
- (ii) Benchmark portfolio guided investment pattern
- (iii) Lot and token size
- (iv) Past track record
- (v) Analyst reports and financial underwriting
- (vi) Investments in Savings bank account for short term
- (vii) Do you have an investment policy
- (viii) Is it documented
- (ix) Asset source (Primary or Secondary Market)
- (x) Transaction cost
- (xi) Preferred way of reinvestment of proceeds
- (xii) Preferred way of rebalancing the portfolio
- (xiii) Keeping cash as a liquidity policy
- (xiv) MTM Policies and
- (xv) ALM.

Investment Strategy had twenty items, namely,

- (i) Sector limits,
- (ii) Stock limits,
- (iii) Trading guidelines,
- (iv) Category of stock-Large Cap/Mid Cap/Small Cap,
- (v) Stock selection criterion by (Forward earnings/PE etc.),

- (vi) Dividend paying record,
- (vii) Ratings,
- (viii) Professional advice,
- (ix) Setting of triggers for stock buy/sell,
- (x) Minimum rating criterion,
- (xi) Limits on sector allocation,
- (xii) Limit on individual institution and group exposure,
- (xiii) Duration management,
- (xiv) Rating downgrades,
- (xv) Policy changes,
- (xvi) Trigger benchmarks,
- (xvii) Returns over a fixed period,
- (xviii) Market outlook,
- (xix) Specified time frame – short or long term, and
- (xx) Coupon rate/yield.

Management Purview had two items; the Management Purview (M) construct is taken as a formative construct because the items M1 and M2 questions are defining the construct “M”.

Where MP1 is measured as Board/Top Management purview over decisions taken in a Trustee meeting and MP2 is measured as Definition of tasks among Trustees.

The data for the construct, namely, Investment Performance was collected and measured by the item which represents Investment Performance dimensions as returns earned by the trust over the last nine years in the conceptual model. Investment Performance is measured as excess returns FP2 (Actual returns earned and reported by the trust less the benchmark returns for the trust) is used in the structural model.

In brief, we had measurement models with various items and assessed them by means of EFA and CFA using SPSS and AMOS 20. In the process we were able to get the robust structural model configurations from each of the individual constructs where

- (i) Trust Composition and Functions has reduced dimensions
- (ii) Investment Policy too has reduced dimensions
- (iii) Investment Strategy got measured by three sub-constructs as Investment Strategy Equity, Investment Strategy Fixed Income, and Investment Strategy Exit Strategy. The fourth construct, Management Purview, was a formative construct and the fifth construct, Investment Performance, had single item.

Formation of Structural Model

Having estimated the final measurement models of the individual constructs, we can build a structural equation model with the various applied inter construct relationships. The structural model is based on the structural theory which is the conceptual representation of the relationships between constructs. The structural model of the study as specified by assigning relationships between the constructs of the study and a set of structural equations is given schematically in Figure 1 (Hair *et al.*, 1998). The structural model specifies the nature and magnitude of the relationships between constructs. The conceptual model discussed earlier was based on theories and literature related to pension funds. On the basis of our research and development of various constructs using the measurement model, we can now draw a schematic diagram (Figure - 1) of a structural equation model of performance of privately managed pension funds in India with all the hypothesized relationships emanating from various constructs.

From these identified constructs and their inter-construct relationships, we tested the hypotheses for the Indirect Path model. The structural model and hypothesized

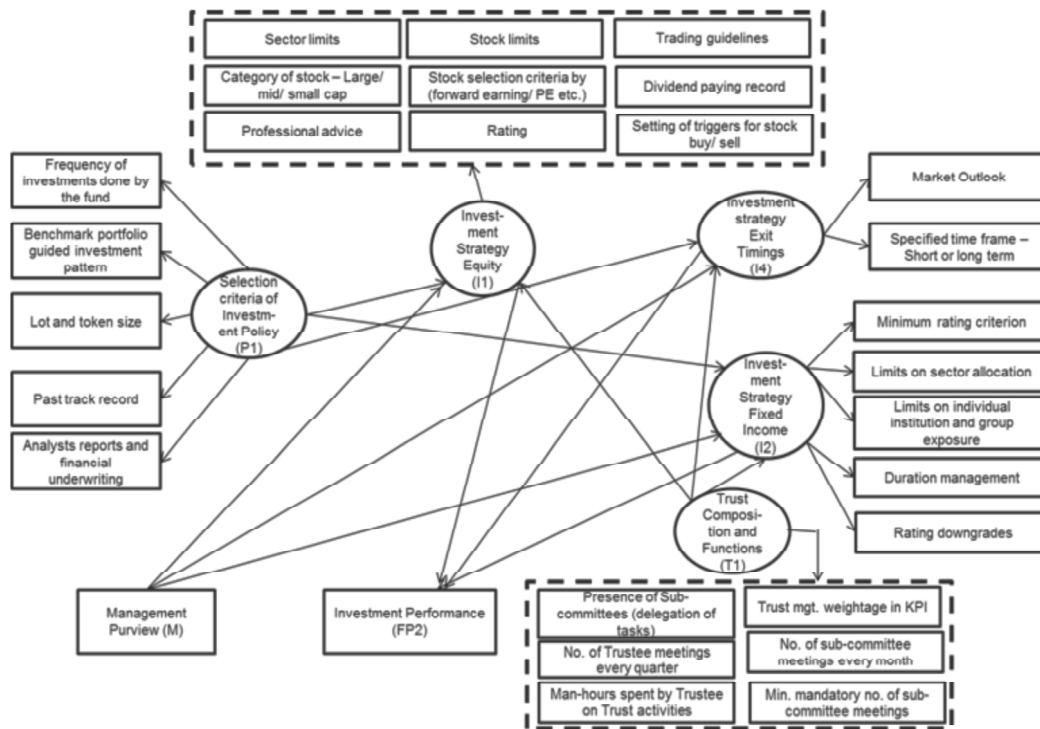


Figure 1: Structural equation model of determinants of performance of privately managed pension funds in India

Source: Authors' illustration.

theoretical relationships between the latent constructs were tested by Structural Equation Modelling (SEM) using AMOS 20. The CFA Structural Model with the aboverelationships among the constructs as per the hypotheses was run for all the four panels of nine years, seven years, five years and three years. The results from the multivariate analysis using structural equation modelling technique AMOS SEM for all the four panels and the data was further evaluated by model fit indices.

The Table 5 summarizes the finding of the hypotheses testing results, for indirect path theory proposed by Useem and Mitchell (2000), besides testing the indirect path theory, we also test inter-construct relationships.

Table 5
Hypotheses testing results summary across various panels (9, 7, 5, 3 years): Indirect Path Theory (IDP)

<i>Hypotheses</i>	<i>Construct Relationships</i>		<i>Result</i>	<i>Result</i>	<i>Result</i>	<i>Result</i>
			<i>Nine years</i>	<i>Seven years</i>	<i>Five years</i>	<i>Three years</i>
HT _a	Trust Composition and Functions	Investment Strategy Equity	S	S	S	S
HT _b	Trust Composition and Functions	Investment Strategy Fixed Income	S	S	S	S
HT _c	Trust Composition and Functions	Investment Strategy Exit Timing	S ^b	NS ^a	S ^b	S ^b
HP _a	Investment Policy	Investment Strategy Equity	S ^b	S ^b	S ^b	S ^b
HP _b	Investment Policy	Investment Strategy Fixed Income	S	S	S	S
HP _c	Investment Policy	Investment Strategy Exit Timing	NS ^a	NS ^a	NS ^a	NS ^a
HM _a	Management Purview	Investment Strategy Equity	NS ^a	NS ^a	NS ^a	NS ^a
HM _b	Management Purview	Investment Strategy Fixed Income	S	S	S	S
HM _c	Management Purview	Investment Strategy Exit Timing	NS ^a	NS ^a	NS ^a	NS ^a
HI _a	Investment Strategy Equity	Investment Performance	S	S	S ^b	NS ^a
HI _b	Investment Strategy Fixed Income	Investment Performance	S	S	S	S
HI _c	Investment Strategy Exit Timing	Investment Performance	S	S	S	S

S - Supported, NS - Not Supported; *** - Significant at 99% CI

a - Not Significant at 99% and 95% and at 90% CI; b - Not Significant at 99% CI but Significant at 95% CI

Source: Authors' calculations.

CONCLUSION

The current model, built using the India pension funds data, supports the Mediating Theory's Indirect Path theory proposed by Useem and Mitchell (2000). Our study shows that the relationship between governance practices and financial performance

is indirect *via* investment strategies or asset allocation strategies. In our study, we have governance practices comprising of Trustee Composition and Functions, Investment Policy, Management Purview affecting Investment Performance indirectly via Investment Strategies. The same has been supported by the hypotheses testing results.

Trust Composition and Functions affects the Investment Strategies negatively on asset classes and exit timing, which is tactical and that is due to the prevalent practices in the unorganized business. These affect the Investment Performance of the pension fund trusts. Investment Policy affects Investment Strategies of the asset classes - equity and fixed income/debt. This affects the Investment Performance and indirect relationships are supported by panel data of nine years. Management Purview affects and has an impact on Investment Strategy of fixed income asset class which further affects the Investment Performance and thus, indirect relationships are supported.

The study provides a solution to the problem of absence of standard guidelines which could ensure consistency in investment performance of privately managed retirement benefit/pension funds in India. It provides an insight into the constituents of an ideal investment policy and few optimal investment strategies with respect to asset classes which can easily be implemented and can impact the investment performance positively. The key items of the constructs, which have participated in the structural equation modelling are important constituents of a trust management structure for privately managed pension funds.

Policy implications of our findings is that the key items for Trust Composition and Functions are the presence of sub committees with clear demarcation of duties and responsibilities with well laid down accountability/responsibility matrices. The sub-committee meeting guidelines should insist on periodic meetings among the trustees and the sub committees. Presence of trust performance evaluation should be one of the KPI of the trustees because it evaluates functioning of the trust and keeps a record of their inputs. Periodicity and frequency of meetings is another important item in the list which ensures collective decision making through a documented process.

The key items for an Investment Policy are the frequency of investments with planned periodicity, declaring thresholds for lot and token size of the instruments or of asset classes while buy and sell, benchmarking of portfolio against standards, defining guided investment patterns, consideration of the past track record of the investment options through analyst reports and standardized financial underwriting. The crucial items for an investment strategy are the asset class strategy and exit strategy decisions. For equity strategy, the important items are the elaborate trading guidelines, stock selection criteria definitions, and clear definition on investments into category of stocks as per market capitalization, the sector and stock limits, other selection criteria like the dividend paying record, forward earning, price earnings ratio (P/E), ratings by certified agencies. Buy and sell triggers are also required to be a part of the

guidelines. Apart from these, seeking professional advice from a pool of professionals with vintage with defined periodicity, is also a necessary part of the investment strategy.

For fixed income Investment Strategy, selection of securities as per pre-defined minimum rating criteria, pre-defined thresholds on sector and individual institution and group exposures are important items. Along with this, the guidelines for duration management need to be elaborated as these overlap in case of tactical calls. Guidelines on ratings of the securities for on boarding and exit, the rating downgrades and the related actions to be taken need to be part of the fixed income strategy. For Investment Strategy exit decisions, clear laid out guidelines on how to decide the time frame of the move, and how to diagnose such a situation along with the possible next few steps need to be incorporated, which would be based on market outlook decisions ratified by professionals.

The findings also highlight few of the generalization of best options available at any given time amidst ever restrictive investment guidelines (regulatory) with timeline pressures. It also envisages the directional importance of seeking professional advice and its adherence in the context of pension fund management. This research provides guidelines to those trusts which do not have documented investment policy as to how they could be better managed. Also that, the trusts could be managed more systematically when investment policies are created for them and are followed.

The study highlights the probable constituents of a best fit of a trust with a trust's multi- functions. This suggests that trustees separate execution and control duties. The key items for defining standards of trust composition and functioning includes the responsibility and accountability matrices through delegation of duties using sub-committee modes. Along with this KPI, weights on trust management of the functionaries while doing their appraisals bring in more sanity to the whole process of pension fund management. Number of meetings attended at all levels, trust and sub-committee, and man-hours spent by functionaries is another important criterion which needs to be mandated in the guidelines, to ensure participation and adherence to processes. Management purview over trust functioning through nominee, periodic updates, and reviews should be included in the guidelines. The guidelines made by the board should also clearly define the tasks of the trustees.

With trust performance in KPI of the trustee coming as an important element in Trust Composition and Functions, the selection of trustees in terms of experience and qualification is critical. The trust must update skills on a regular basis. The research highlights the importance of training and development needs of the trustees and managerial staff. Their profile and work necessitates them to keep abreast with the latest practices, technology and other advancements, including market updates through print or electronic media.

On the basis of our study of the pension funds data on the determinants of performance of privately managed pension funds, policy implications for effective management of pension funds in India are as follows. First, investment policy should be documented and it should be made mandatory along with the investment policy statement. A fund can achieve its long term objective when policy objectives are enforced and realized and the processes are embedded in the document. The written policy document acts as a guide for the trust functionaries. Individual decisions/choices/bias on stock security selection and investment management get restricted in favour of long term decision for the benefit of the trust and its beneficiaries. A written document discourages short term quick fixes without any discussions.

Second, trust performance should be made public and there should be periodic audits of funds. At present, trust performance data is not available in the public domain. Currently, only the fund sizes and the liability numbers (fund size and incremental funding details) are in the public domain, which is generally an actuarial calculation summary. We suggest that the performance of the trust along with portfolio be made available for external assessors and shared with the beneficiaries. The full disclosure would make the entire process more participative. Asset liability match, which is generally done annually by most trusts, could be made quarterly to have an idea of what is the gap between expectation and actual. Investment in appropriate asset classes could be taken accordingly based on this information. Similarly, funding gap needs should be provisioned by the plan sponsor. Lack of periodic audits is something which is detrimental to the trust management, thus affecting the investment outcome. Reviews, performance evaluation and audits should be made an integral part of trust functioning. This would also ensure adherence to guidelines. Participation in the trust functioning as its office-bearer, the functionaries would always remember that they are being monitored and reviewed for their action/inaction periodically.

Third, funds must take the help of professionals to manage funds. Investment Strategy is a discipline in investment in practice and professionalism in the management of funds. Powered by the regulatory provisions pension funds are adopting active funds management practices. They should further provide for provisions for both in-house expertise and professional fund managers mix. Inclusion of more resourceful people in the trust composition would make the otherwise mundane and side-lined trust management job interesting and impact the investment performance.

Fourth, a minimum qualification should be prescribed for trustees. This is necessary if trust performance is one of the KPI's in the appraisals of the trust functionaries. It is time that there is a qualifications criteria blend with experience for these decision makers. The regulator should prescribe minimum qualifications for a trustee. The trust functionaries should be professionally qualified to manage pension funds.

Finally, management oversight should be prescribed in the guidelines, as there is a very fine line between constructive and destructive interference. The plan sponsors should not consider this function as a statutory administrative irritation, rather it should be considered an opportunity to excel and be an exemplar in managing funds. This could be an opportunity to set new trends through active participation while ensuring path breaking ideas being implemented.

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Notes

- 1 An independent pension fund regulator and an insurance regulator came into existence in 2000 and 2003 respectively.

ANNEXURE – 1

Income Tax Rules and Investment Patterns governing retirement benefit funds

Table A-1
Retiral Fund Regulators

<i>Fund Type</i>	<i>IT Rule / Act</i>	<i>If Privately managed then applicable IT Act/ Regulator</i>
Gratuity	Rule 101/ Payment of gratuity act 1972	Can be privately managed under Rule 67
Superannuation	Rule 89 – IT act	Can be privately managed under Rule 67
Provident Fund (PF)	EPF and MP Act 1952 GPF Act 1925 Seamen provident fund act Coal miners provident fund act Ministry of Labour/ Finance	Can be privately managed under Rule 67 but to match the PF rate declared by EPFO every year
National Pension System (NPS) formerly known as New Pension Scheme	PFRDA regulations	Only by professional fund managers under guidelines from PFRDA

Source: Authors' compilation from various Acts and Regulations.

Table A-2
Investment Pattern under IT Rule 67 Funds (1990–2005)

	1990	1991	1992	1993	1994	1995	1996	1997	2003	2005
Special Deposit Scheme	85%	85%	85%	70%	55%	30%	20%			
Gol Securities						25%	25%	25%	25%	25%
State Govt Securities	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Gilt Mutual Funds								As a substitute to SDS / GOI/ State		
PSU/PFI Debt / CBLO				15%	30%	30%	30%	40%	30%	30%
Equity									5% - max	
Discretionary allocation								20%	30%	30%
Private Sector Debt							At the trustee's discretion			
Equity Mutual Funds										
Mandatory pay out (PF)	12%	12%	12%	12%	12%	12%	12%	12%	9.50%	8.50%

Source: Authors' compilation from various Gazette of India.

Table A-3
Investment Pattern (2009)

<i>Investment</i>	<i>Maximum investment</i>
<ul style="list-style-type: none"> • Government securities • Government guaranteed bonds • Gilt MFs 	55%
<ul style="list-style-type: none"> • Debt securities (> = 3 yr maturity) • Term deposit (> = 1 yr) of scheduled commercial banks subject to some conditions • Rupee bonds of IBRD, IFC and ADB 	40%
Money market instruments	5%
<ul style="list-style-type: none"> • Listed shares with derivatives on NSE or BSE • Equity linked schemes of MFs 	15%

Source: Authors' compilation from Gazette of India.

Table A-4
Investment Pattern 2015

<i>Investment categories</i>	<i>Investment pattern (2015)</i>
<ul style="list-style-type: none"> • Government securities • Government guaranteed bonds • Gilt MFs 	Minimum 45% and upto 50%
<ul style="list-style-type: none"> • Debt securities (> = 3 yr maturity) • Basel III Tier – I bonds issued by scheduled commercial banks under RBI Guidelines • Term deposit (> = 1 yr) of scheduled commercial banks subject to some conditions • Rupee bonds of IBRD, IFC and ADB (> = 3 yr maturity) • Units of Debt MF regulated by SEBI 	Minimum 35% and upto 45%

Cont. table A-4

<i>Investment categories</i>	<i>Investment pattern (2015)</i>
Money market instruments	Upto 5%
<ul style="list-style-type: none">• Listed shares with derivatives on NSE or BSE• Equity linked schemes of MFs	Minimum of 5% and upto 15%
<ul style="list-style-type: none">• Exchange traded funds/ index funds	Exchange traded funds, index funds and derivatives are part of the "a minimum 5% and upto 15% limit for equity and equity related instruments
<ul style="list-style-type: none">• Asset backed securities, unit of real estate/infrastructure investment trusts	Upto 5% limit

Source: Authors' compilation from Gazette of India.

