

Investors' Hard Earned money: Perceptions& Calculative Decisions towards Financial Innovation

(Determining various factors responsible for decision making through SMART-PLS)

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Abstract

Financial innovations are the engine for the growth of any economy. Financial innovations are not new to the Indian Economy; these are having great history and proven success story. Indian Economy has a great potential for every type of financial innovation. However, certain geographical areas are waiting for financial growth and upliftment. At the international level, there is cutthroat competition in the urge to enhance stakeholder's wealth. This competition leads to the emergence of financial innovation. Indian investors these days experienced several exposures because of this growth and expansions. This study is an attempt to know the perceptions of Indian investors towards the innovative financial instrument. Investigator collected primary data with the help of a structured questionnaire, which was based on a five-point Likert scale. A sample of 307 investors collected, based upon 30 variables. These variables were the different statements that depict the factors responsible for investors' buying decisions while investing in innovative instruments. Factor analysis and SMART PLS techniques were used to analyse the data. The effect size for Goodwill, Annual Reports, Expert Advice, External Factor, Information/Recommendations is moderate. At the same time, for Corporate Earning, Future Expectations shows no effect, and for product quality, this effect is week.

Introduction

Investment decisions are quite crucial and need work, which investment and investors manager ordinarily make. There are particular techniques/tools which the learned traders utilize to encourage their own decisions. Certain aspects which influence the individuals' decisions are several elements, i.e. market's features and individual risk profile and bookkeeping information. (Hussein A.H., 2007) discovered that expected corporate earnings, to be rich quickly, stock's liquidity, past operation of the company's stock, government holding would be the major consideration of these investors.

On the other hand, in his study, (Dimitrios I.M. 2007) stated that investors' decisions are more based on the newspaper/media information. In contrast, rational investors more depend upon fundamental and

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technical analysis. Economic growth also depends on the Capital market and its efficiency to channel the savings into productive economic units. The performance of the Capital market depends upon how the investors respond to information available in the capital market. In the Southern part of India, various studies have been conducted to understand the factors responsible for investing in innovative investment. Still, to the best of the researcher's knowledge, they could not find any similar study in Northern India. Indian investors these days experienced several exposures because of this growth and expansions. This study is an attempt to know the perceptions of Indian investors towards the innovative financial instrument. Investigator collected primary data with the help of a structured questionnaire, which was based on a five-point Likert scale. A sample of 307 investors collected, based upon 30 variables. These variables were the different statements that depict the factors responsible for investors' buying decisions while investing in innovative instruments. Factor analysis and SMART PLS techniques were used to analyse the data. The effect size for Goodwill, Annual Reports, Expert Advice, External Factor, Information/Recommendations is moderate. At the same time, for Corporate Earning, Future Expectations f^2 shows no effect, and for product quality, this effect is weak.

Financial innovations are the engine for the growth of any economy. Financial innovations are not new to the Indian economy; these are having great history and proven success story. The Indian economy has a great potential for every type of financial innovation. The world's leading brands in the financial sector are in a line to take advantage of the lucrative Indian Financial Market. Certain geographical areas are waiting for financial growth and upliftment. At the international level, there is cut-throat competition in the urge to enhance stakeholder's wealth. This competition leads to the emergence of financial innovation. This emergence is a natural process: like other innovations in society. It is an ongoing process in which financial engineer develop their products, services as well as processes. Unfortunately, there are certain dark areas also whereby financial innovations went wrong and resulted in a financial crisis. When studied deeply, it came across that it's not the fault of financial innovations. Rather, it is human greed, which turns into a financial crisis. Innovations in the financial sector are the need of the hour; they must face the challenges that will come during economic growth. One of the bedrocks of our financial system is financial innovation, the lifeblood of efficient and responsive capital markets.

Literature Review

A well-structured financial system could be your backbone and required for the much better economic development of a state. The monetary system is responsible for mobilising the economies in monetary funds and money and investing it at the corporate sector. (Walia & Kiran, 2009) It also has a tendency to promote such Savings and investments that bring about rapid economic development in a nation.

The study performed to look at investor's perceptions towards risk-return trade-off for mutual fund services. In this study authors also discussed that volatility in the stock market is the prime reason to avoid it. Investors are ready to take a calculated risk, along with a steady return. (Renuka, 2019) At the same time, this author discovered that investors invest in stocks and derivative due to different objectives, i.e. Risk, Return, Liquidity, and Safety.

Most of the investor invests in innovative products to fulfil their future needs. The last decade shows the many-fold increase in the innovative product in the financial market, due to this fact investing has become a serious business. These innovative products attract investors, and normally investor play with these

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products to generate a higher level of return despite the higher risk. (Pernell, 2020) Although innovative products are very lucrative to investors in his study, these products are very complex and risky. The further author explained that these financial products contribute to financial instability. Rather author also explained how these innovations work to weaken the formal and informal financial markets.

(Bsn & Florida, 2014) framed his doctoral thesis related to investors' perceptions and decided with the help of news and information posted on social media. According to him, " *To test the research hypotheses, I use 807 participants recruited from Amazon.*

Mechanical Turk. As proxies for retail investors, participants take on the role of a member in a hypothetical investment club that had purchased 1000 shares of Lafarge S.A., a company headquartered and traded on the Paris Stock exchange and active on social media. First, participants were randomly assigned to see Lafarge press releases announced on the company's Twitter feed or investor relations web page, followed by a Reuter's article that Lafarge had missed or beat analyst forecasts for the 2012 fiscal year, followed by the press release of the 2012 annual report. Participants then judged the attractiveness of Lafarge as an investment, recommended the number of shares to buy or sell to the club, how long to hold the shares and provided perceptions of management credibility followed by questions related to ELM. Structural equation."

This was a quantitative study and concluded that investors influence the company's coverage on social media. This study was specially framed using Twitter. Investors perceived the company's reputation due to posts on the company's web page, but social media also influence their decision, making process.

(Uddin, 2017) Conducted a Quantitative survey linked to investors' perception towards mutual capital investment with special mention to SIP. The author conducted this questionnaire with 100 participants in the state of Gujarat. This is well worth mentioning here since risk-averse investors avoid investing in equity stock. However, they wish to enjoy the shocks of the stock market normally discovered mutual funds that the best alternative. (Bhatt & Lala, 2014) concluded from their study that most traders invest in the financial market based on their awareness, guidance from a financial adviser and agent. The majority of the traders preferred to purchase a stock index fund instead of a single stock. Retail investors also look at investing in the derivative section beneficial as 49 per cent of those investors are disagree that trades are suitable only for institutional investors. This study also establishes a relationship between demographic features and determining about the capital marketplace.

The writer concluded that there is a significant positive correlation between the age of the respondents and their decision to invest in derivatives.

In contrast, there's inverse Correlation between the annual incomes of the respondents using their choice to invest in derivatives. This study result indicates that investors prefer some variables such as hedging finance, risk management, their understanding regarding financial product, high volatility in the stock market etc., while deciding to invest in the capital market. (Rahman & Bristy, 2018) performed a similar study in Bangladesh. An organized closed-ended poll was prepared to amass advice, and also the exact same has been accumulated using a ease sampling process. Every one of the respondents possess an investment decision in the Dhaka stock-market, however their home is now at Khulna. The survey was equipped using 5 details Likert scale (1= strongly disagree to 5strongly agree) using 2 pieces: market quaries and investment decision dimensions involving 25 factors, signaling investor's understanding of investment decision at the stock exchange.

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Inside this research, the writers reasoned the expects of these bankers essentially induce the funding industry. These anticipations can be both logical illogical. As human being, traders in many cases are guided with their own behavioural thoughts. Particular key sensible traits additionally induce their decisions regarding risk tolerance. No matter that, the moment the test of buyer finish is ran in the lighting of important premises like optional expectancy, information efficacy etc.. It's often noticed the ending value of these anticipation will not of necessity hold and good. (Brenet, 2013) discussed with a brand new concept in their working paper collection. Within this series, they discussed ageing determining/changing different financial innovations. They explored that in the past few years, substantial attention was attracted to macroeconomic consequences of population ageing; consequently, following its 1997 Denver Summit, the BIS (1998) offered a comprehensive review of the impact of aging on financial equilibrium, and Davis (2004) addressed the implications of global aging for fiscal and monetary stability. Recent high tech G20 meetings in the USA and France and also this year's G20 meetings in Sydney again highlight policymakers' concerns at the maximum degree. The issue is simply put: within the previous half-century, many countries have witnessed plummeting fertility rates and mounting life expectancies around the world. Both of these variables are the engine behind unprecedented international ageing. In their paper, they determine the way the market transition can influence financial markets and, in turn, how monetary market invention may help resolve issues flowing from international ageing trends.

(P, Dr Sindhu K., Kumar & Rajitha, 2014) researched the investor perceptions towards mutual funds and discovered mutual fund's investors are very conservative when there is a question of danger. Investors are absolutely rational and aware that the greater the risk, the greater are the yield. They also realize that diversification is the key to decrease the risk. The investor always tries to put money into a blend of schemes. Risk is the major consideration when investing in different schemes.

An extremely Significant study was conducted together with these investors who make their own choice so that they do not require any information. (Hoffmann et al., 2013) for this analysis, authors combine monthly questionnaire data using fitting broker re-cords and reveal how individual investor perceptions shift and drive trading and risk-taking behaviour throughout the 2008-- even 2009 financial catastrophe. As stated by the study census, senses reveal substantial disturbance through the duration of the catastrophe, together with risk tolerance and threat senses being explosive compared to return expectancy. In the bottom weeks with the unexpected emergency, dealers' yield expectations and risk tolerance reduction, whereas the threat senses grow. Nearby the close of the unexpected emergency, return expectations, risk tolerance, and threat senses recuperate.

My Study period is taken as 2008-2017, particularly due to the fiscal crisis of 2008. Some major changes occurred after this crisis. (Allen, 2012) conducted a research to be aware of the welfare effect of financial innovation, especially on investors after 2008-09. The author also assesses the promise made by several academicians regarding financial innovations. Some of those especially Volcker, criticised monetary innovations and stated that these innovations are the significant cause of the crisis. Author within this newspaper documented that monetary innovation certainly looks to have a dark side. But at exactly the exact same time question arises how much did it contribute to the catastrophe? In many nations, it wasn't financial innovation but financial liberalisation, that became the reason behind financial depression.

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For Example, in the Asian crises, monetary innovation is not generally discussed as a determinant. Instead, a more probable culprit in many of these instances is financial liberalisation. A frequent precursor to most of the crises thought was financial liberalisation and significant credit growth.

(Gupta & Mokshmar, 2018) conducted a research in the Indore town of India to ascertain the many aspects influencing the investor's senses. Through this study, the consequence of the investigation contrasts around the five factors. These variables are all speculation, broker protection, security, protection and sophistication and danger. From those factors, two factors are associated with the equity market place, and also the remaining of these three factors are associated with derivatives. The absolute most indispensable purpose of analysis is that the simple fact derivatives have been believed significantly less insecure compared to equity market place together with all the respondents. It truly is understood that derivatives have been believed risky in comparison to this equity market place, however equity is seen as marginally less insecure and less hazardous selection. This study additionally researched which the traders continue to be confused in their comprehension regarding equity and derivatives at the investment market. There's a lack of empirical research in Investors' perceptions with special reference to financial innovation. This is the main cause of the range of this subject.

SMART PLS:

Now to examine the following latent variables, the investigator may utilize the PLS strategy. The Smart PLS strategy (Ringle et al., 2014) includes three-level a) employed for the measurement design (b) the structural units to evaluate instantaneously and also to confirm that the convergence and discriminate validity of this step and c) used for predictions. The reliability of observed variables in the survey has been assessed by employing Cronbach's Alpha reliability technique.

Table 1.1
Reliability Statistics

Cronbach's Alpha	N of Items
.917	30

Table 1.1 shows the reliability coefficient value of this survey was so high with a consequence of 0.917, which can be higher than 0.7. (Joe F. Hair et al., 2012) The researcher used smart PLS software to confirm the way of measuring their measurement model and structural models.

Conceptual Model

The principal component analysis (Factor Analysis) will be that the base of PLS. SMART PLS used for alteration and explanation in constructs complicated in the model (Chin et al., 2003), advocated that PLS is a surgical analytical tool to decrease malfunction. PLS model study comprised in three stages. All the three stages are as under:

- A measurement model is a part of the very first stage.

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- A structural model from the second stage.
- The measurement model measures relations between observed variables (sub-factors) and latent variables (factors). The researcher analyzed from laterally evaluation of validity and trustworthiness of the construct measures while in this version.

Data accumulated Is assessed at two unique stages;

- Conceptual Model, the Partial Least Square Structural Equation Modelling (PLS-SEM) used in evaluating the factors which affect investment decisions.
- A conceptual model designed. PLS-SEM is useful for causal predictive analysis to get reflective factors. (Joe F. Hair et al., 2012).

Even though Primary data gathered for the research is generally dispersed, this approach is nonparametric, so it does not call for any supposition in regards to the normality of data distribution. The PLS-SEM can be a more common multivariate analysis technique utilized to calculate variance-based structural equation models, especially at Social Sciences.

Moreover, PLS-SEM gives a chance to address multifaceted associations and causal relationships that are otherwise hard to uncover. PLS-SEM used the data to assess the path coefficient. The most widely used tool for PLS-SEM nowadays is mostly acceptable for quantitative data analysis. Additionally, PLS-SEM handles a supply from the data using the bootstrapping technique to ascertain the value of their trail coefficient. The principal aim of employing PLS-SEM is far better to understand the factors responsible for the decision-making process whilst investing in innovative/modern instruments. The suggested version is analysed in duplet stages;

- First, the Measurement Model condemn latent variables (measurement models) which define the association involving latent indicators and their distinct variables;
- Secondly, a structural version divides the association between the latent factors. The conceptual model exemplified the relationships between the latent factors and their related different variables.

A Model has been developed by using the PLS-SEM. A total of 30 factors, known as observed variables, selected following the extensive literature survey, talk with expert and peer group. These factors are divided into eight classes. These eight collections are known as exogenous latent constructs. In contrast, the Endogenous latent variable (Investment Choices) contains five detected Factors.

Hypothesis for this model are as under:

H₀₁: External factors do not affect the investment choices of these shareholders.

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H₀₂: Good of the organization doesn't impact the investment choices of their shareholders.

H₀₃: Annual reports and company integrity does not impact the investment choices of their shareholders.

H₀₄: Future Expectations doesn't impact the investment choices of these shareholders.

H₀₅: Info and Tips of experts do not affect the investment choices of these shareholders.

H₀₆: Qualified advice does not affect the investment choices of these shareholders.

H₀₇: Business earning and Publicity doesn't impact the investment choices of their shareholders.

H₀₈: Product Quality does not impact the investment choices of their shareholders.

Data Analysis:

The simulation Job to calculate the Influence of This Detected Factors and also their latent constructs on-investment Conclusion was introduced in SMART-PLS variation 3 (Henseler et al., 2009). SMART PLS-SEM can be employed for theory development in exploratory research.

Major SEM programs comprise;

- Path analysis
- Second-order factor analysis
- Regression models
- Covariance structure models, and
- Correlation structure models.

At precisely the same time, SEM authorises the investigation of their linear relationships allying the latent constructs and discovered factors. It also may create static parameter estimates for the relationships between unobserved factors. The hypothesised structural model was analysed using Smart-PLS variation 3. (Henseler et al., 2009). Moreover, SMART PLS-SEM is presently known and selected within social research studies as a technique that is the finest appropriate way of multivariate analysis (Joseph F. Hair et al., 2019).

Evaluation of Outer Measurement Model

The outer measurement version is directed to figure the reliability (internal consistency, and validity of these observed variables (measured through the questionnaire) together with unobserved factors (Rodríguez-Entrena et al., 2018)[Consistency tests derive from single observed and construct reliability evaluations. To determine validity the convergent and discriminant validity are used.

Construct Reliability and Validity

A sole observed variable reliability depicts the variance of an individual observed relative to an unobserved variable by estimating the standardised outer loadings of the observed variables. Observed variables with an outer loading of 0.7 or more are assumed to be greatly acceptable (Joseph F. Hair et al., 2019). In contrast, the researcher should reject the outer loading with a value less than 0.7. In this study, the discontinuance value trusted for the outer loading was 0.7. From Table 4.23, the outer loadings ranged

between 0.714 and 0.999. Investigators used Cronbach's alpha and Composite Reliability (CR) for internal consistency evaluation in the construct reliability.

But in contrast to Cronbach's alpha, CR has been thought to become a better assessment of internal consistency because it retains the standardised loadings of their variables that are observed (Joe F. Hair et al., 2012). Even though, the study of this Cronbach's alpha and CR value was the same. Table 1.1 implies that the Cronbach's alpha and CR for many constructs were greater than 0.70 except just one value, i.e. to get future expectancy. In such a case, the literature states that check that the value of rho A, which is deemed a much better step compared to Cronbach's Alpha. At exactly the same period, composite reliability can be considered a better appraisal tool to look at the trustworthiness of the build-up. Hence, the rho A and CR presented that the scales were both reliable and given that most of the latent construct values exceeded the minimum threshold level of 0.70. The latent constructs need to require the lowest 50% of the variance from the observed variable from the model. So, this signals that the AVE for several constructs needs to be above 0.5. From Table 1.2, it's seen that each one of the AVE worth were more than 0.5, therefore researchers established convergent validity with this particular version. These results affirmed the convergent validity as well as quality internal consistency of this dimension version.

Table 1.2: Construct reliability and validity

Constructs	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Annual Reports	0.705	0.771	0.800	0.501
Corporate Earnings	0.785	0.701	0.825	0.612
Expert Advice	0.798	0.877	0.814	0.597
External Factors	0.824	0.825	0.884	0.656
Future Expectatons	0.685	0.711	0.824	0.611
Goodwill	0.800	0.809	0.868	0.623
Investment Decisions	0.781	0.805	0.851	0.537
Product Quality	0.727	0.886	0.757	0.549
information/Recommendations	0.748	0.715	0.846	0.733

Table 1.3: Cross Loading

	Annual Reports	Corporate Earnings	Expert Advice	External Factors	Future Expectations	Goodwill	Investment Decisions	Product Quality	information/Recommendations
Abv1	0.719	0.275	0.434	0.322	0.264	0.382	0.419	-0.046	0.236
Abv2	0.778	0.353	0.348	0.332	0.267	0.343	0.34	-0.016	0.349

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Abv3	0.716	0.316	0.202	0.297	0.366	0.253	0.419	0.143	0.263
Abv4	0.716	0.447	0.382	0.376	0.446	0.325	0.386	0.069	0.304
Cev1	0.386	0.83	0.475	0.439	0.386	0.407	0.439	0.305	0.162
Cev2	0.448	0.795	0.418	0.464	0.48	0.465	0.416	0.239	0.258
Cev3	0.297	0.719	0.504	0.436	0.482	0.331	0.32	0.224	0.297
Eav1	0.201	0.424	0.733	0.318	0.337	0.24	0.251	0.161	0.244
Eav2	0.325	0.391	0.779	0.255	0.244	0.299	0.272	0.101	0.501
Eav3	0.492	0.53	0.89	0.436	0.479	0.526	0.585	0.043	0.29
Efv1	0.422	0.5	0.258	0.781	0.425	0.288	0.431	0.204	0.353
Efv2	0.332	0.527	0.406	0.822	0.503	0.466	0.445	0.22	0.238
Efv3	0.347	0.492	0.468	0.863	0.49	0.468	0.432	0.082	0.323
Efv4	0.414	0.311	0.338	0.771	0.365	0.291	0.412	0.068	0.297
Fcv1	0.188	0.333	0.38	0.305	0.318	0.398	0.736	-0.025	0.189
Fcv2	0.438	0.356	0.36	0.313	0.173	0.501	0.754	0.035	0.399
Fcv3	0.467	0.398	0.435	0.458	0.452	0.52	0.842	0.06	0.423
Fcv4	0.499	0.455	0.533	0.555	0.375	0.469	0.79	0.112	0.338
Fcv5	0.385	0.294	0.226	0.256	0.341	0.402	0.716	0.32	0.215
Gev1	0.236	0.39	0.444	0.437	0.253	0.758	0.402	-0.035	0.319
Gev2	0.254	0.35	0.403	0.305	0.277	0.786	0.457	0.033	0.24
Gev3	0.451	0.427	0.431	0.402	0.39	0.825	0.524	0.129	0.304
Gev4	0.457	0.451	0.336	0.349	0.411	0.787	0.568	0.176	0.364
Irv1	0.328	0.11	0.32	0.281	0.245	0.287	0.297	0.075	0.796
Irv2	0.36	0.355	0.382	0.352	0.356	0.374	0.439	0.032	0.913
Mfv1	0.292	0.465	0.356	0.32	0.714	0.298	0.267	0.185	0.283
Mfv2	0.466	0.346	0.269	0.462	0.778	0.324	0.358	0.085	0.309
Mfv3	0.35	0.521	0.497	0.487	0.846	0.383	0.415	0.158	0.262
Pfv1	0.061	0.326	0.103	0.181	0.179	0.104	0.129	0.999	0.064
Pfv2	0.118	0.033	0.004	0.1	0.096	-0.08	-0.006	0.715	0.168

Discriminant Validity:

The next in the SEM is to Ascertain the discriminant validity of This latent constructs. In any build is well defined from other constructs from the path model. Its Cross-loading significance in the directional factor is significantly more than that in virtually any constructs. (Joseph F. Hair et al., 20-19) There are three criteria to Find out the discriminant validity:

- The Fornell and Larcker criterion
- cross-loadings
- Heterotrait – Monotrait Ratio

The Fornell and Larcker criterion and cross-loadings were used to evaluate the discriminant validity (Henseler et al., 2009). The recognized standard is a construct should not show exactly the equal variance as every different construct greater compared to its AVE value (Joseph F. Hair et al., 2019). Table 4.24

shows that the Fornell and Larcker criterion test of this model where the investigator contrasted the squared correlations with the correlations from other latent constructs. Table 1.4 shows that all of the correlations were bigger compared to the squared cause of ordinary variance exerted along the diagonals, satisfying the discriminant validity.

This revealed that the observed factors in most construct designated the specified directional factor affirm that the discriminant validity of this model. By comparison, Table 1.3 demonstrates the cross-loading of all observed variables was greater compared to the inter-correlations of their construct of all the other detected variables in the model. (Joe F. Hair et al., 2012) Thus, these findings indicate that the cross-loading examination standards and supplied adequate identification for its discriminant validity of this dimension version.

Table 1.4: The Fornell and Larcker criterion

	Annual Reports	Corporate Earnings	Expert Advice	External Factors	Future Expectations	Goodwill	Investment Decisions	Product Quality	information/Recommendations
Annual Reports	0.708								
Corporate Earnings	0.488	0.783							
Expert Advice	0.48	0.588	0.772						
External Factors	0.467	0.568	0.455	0.81					
Future Expectatons	0.475	0.566	0.485	0.552	0.781				
Goodwill	0.458	0.516	0.505	0.469	0.432	0.789			
Investment Decisions	0.555	0.506	0.539	0.531	0.453	0.627	0.733		
Product Quality	0.056	0.33	0.105	0.179	0.177	0.109	0.131	0.741	
information/Recommendations	0.401	0.296	0.413	0.373	0.36	0.392	0.441	0.057	0.856

Heterotrait – Monotrait Ratio (HTMT)

HTMT ratio is a tool to assess the discriminant validity; in other words, according to literature, it's the better measure to judge the discriminant validity.(Joseph F. Hair et al., 2019) .

The HTMT ratio of correlations is a new tool to determine the discriminant validity in PLS-SEM. This measure is considered as one of the key building blocks for the model evaluation. According to this criterion, all the values related to HTMT must go below 0.85. Table 1.5 shows the values obtain from this table, and it's clear from this table that all values are below the threshold limit.

Table 1.5: HTMT Ratio

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	Annual Reports	Corporate Earnings	Expert Advice	External Factors	Future Expectations	Goodwill	Investment Decisions
Annual Reports							
Corporate Earnings	0.717						
Expert Advice	0.634	0.835					
External Factors	0.633	0.755	0.561				
Future Expectations	0.695	0.84	0.643	0.718			
Goodwill	0.607	0.685	0.61	0.579	0.563		
Investment Decisions	0.744	0.68	0.621	0.644	0.606	0.78	
Product Quality information/Recommendations	0.22	0.367	0.24	0.282	0.294	0.188	0.262
	0.614	0.418	0.643	0.505	0.53	0.531	0.581

The above findings suggested that the conceptual model was supposed to be acceptable, with confirmation of adequate reliability, convergent validity, discriminant validity, and the research model's verification.

Evaluation of the Inner Structural Model:

From the results given in table 1.2 to 1.5, it's ascertained that the measurement model is valid and reliable. Therefore, make headway is to measure the Inner Structural Model payoff. To do this researcher will observe the model's anticipating relevancy and the accord amid the constructs. For this purpose following measures will be obtained and checked:

- The coefficient of determination (R^2) and Adjusted R^2
- The Path coefficient (β value)
- T-statistic value,
- The Effect size (f^2),
- The Predictive relevance of the model (Q^2), and;
- The Goodness-of-Fit (GOF) index

All of the above are the most interred to assess the inner structural model.

Measuring the Value of R^2

The R^2 , better known as the coefficient of determination, compute the blanket effect size and variance elucidated in the endogenous construct for the structural model. This is a measure of the model's conjecturing incisiveness. In this study, the inner path model is .544 and R Square adjusted is .531 for the quality endogenous latent construct.

Table 1.6: R Square and R Square Adjusted

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	R Square	R Square Adjusted
Investment Decisions	0.544	0.531

This reveals that the eight independent constructs considerably expound 54.4% of the culpable investment variance, meaning that about 54.4% of the change in the decision making was due to eight latent constructs in the model. Therefore, according to Henseler et al. (Henseler et al., 2009) and an R^2 value of 0.75 is premeditated generous, an R^2 value of 0.50 is witnessed as moderate. An R^2 value of 0.26 is examined fragile. In the case of studies related to finance, a value more than 0.5 is considered a good indicator because of the high volatility of the variables under the study. So, the R^2 value in this investigation is sizable.

Estimation of Path Coefficients (β) and T-statistics:

The path coefficients at the PLS-SEM and also the standardised β coefficient in the regression analysis were analogous. Through this β value, researchers examined the significance of this hypothesis. Even the β evidenced the standard version in the dependent assemble for a unit variant in the individual constructs. Researchers calculated the β worth of each path from the hypothesised version; the larger the β worth, the longer the substantial effect on the endogenous latent constructs. But, the β worth needed to be recorded because of its significance level within the T-statistics evaluation. To analyse the significance of the trail coefficient and T-statistics merits, a bootstrapping procedure using 5000 subsamples with no important changes was completed for this study, as exhibited in Table 1.7.

Table 1.7: Path Coefficients and Confidence intervals Bias Corrected

	Standardised Beta	T Statistics	P Values	5.00%	95.00%
Annual Reports -> Investment Decisions	0.208	4.172	000	0.123	0.286
Corporate Earnings -> Investment Decisions	0.019	0.305	0.76	-0.082	0.124
Expert Advise -> Investment Decisions	0.142	2.587	0.01	0.049	0.226
External Factors -> Investment Decisions	0.159	2.591	0.01	0.06	0.257
Future Expectatons -> Investment Decisions	0.002	0.044	0.965	-0.081	0.087
Goodwill -> Investment Decisions	0.331	6.143	000	0.245	0.426
Product Quality -> Investment Decisions	0.027	0.476	0.634	-0.079	0.117
information/Recommendations -> Investment Decisions	0.102	1.992	0.046	0.017	0.186

Table 1.7 will help us to test the various hypotheses which Researchers framed for construct. The first one was H_0 : External Factors does not affect the investment decisions of the investors. For this p-value is

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<.05, which is sufficient to accept the alternative hypothesis that means external factors affect the investors' investment decisions. Value of t statistics also supports the same. The second hypothesis was related to the company's goodwill, which received the highest t value of 6.143, and the p-value also support the same. Furthermore, when observing the direct and positive influence of the Annual reports and business ethics linked factor on investment decisions (H₀₃), the findings from Table 1.7 and Figure 1.1 endorsed that the annual report related factor positively influenced investment decisions ($\beta = 0.208$, T = 4.172, $p < 0.000$), and confirmed H₀₃. The future expectations related factor are not significantly influencing investment decisions was positive ($\beta = 0.002$, T =.044, $p > 0.000$), showing that H₀₄ was not supported. The effect of the information and recommendations related factor on investment decision is significant ($\beta = 0.102$, T = 1.992, $p < 0.05$), therefore supporting H₀₅. Similarly, the findings in Table 1.7 provided empirical support for H₀₆, where the influence of the expert advice related factor on investment decisions is positive. They significantly affected the investment decisions ($\beta = 0.142$, T = 2.587, $p < 0.05$), confirming the hypothesis (H₀₆).

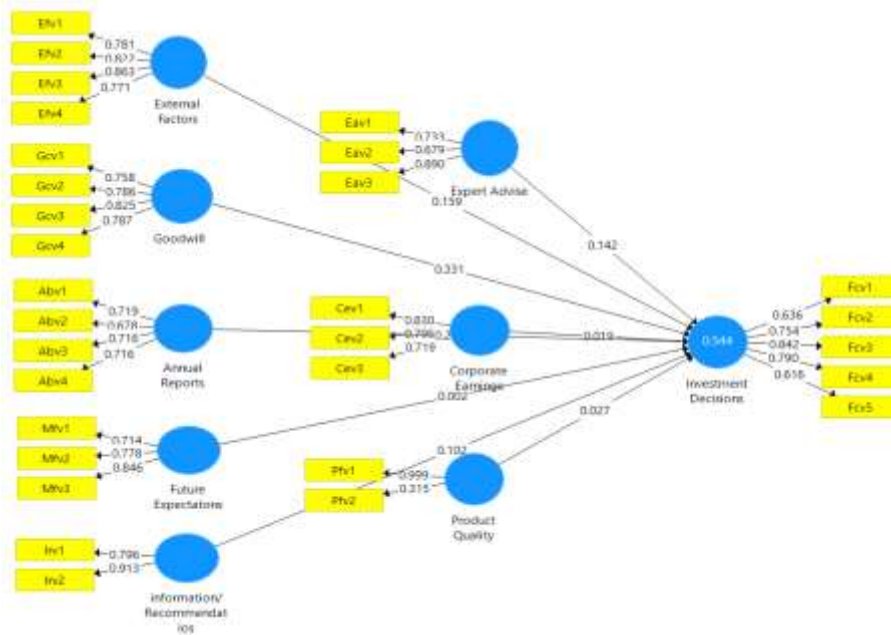


Figure 1.1

The higher the beta coefficient (β), the capable the effect of an exogenous latent construct on the endogenous latent construct. Table 1.7 and Figure 1.1 confirmed that corporate earnings.

Related factor had no effect on investment decisions ($\beta = .09$, T= .305, $p > .05$). So H₀₇ is not supported. Product Quality related factors are also not related to investment decisions. Confidence interval bias-corrected also support the results provided by the t-test as well as by p-value. According to this technique,

there must not be the presence of 0 in both intervals. Table 1.7 depicts that corporate earnings, future expectations, and product quality show 0 in the intervals.

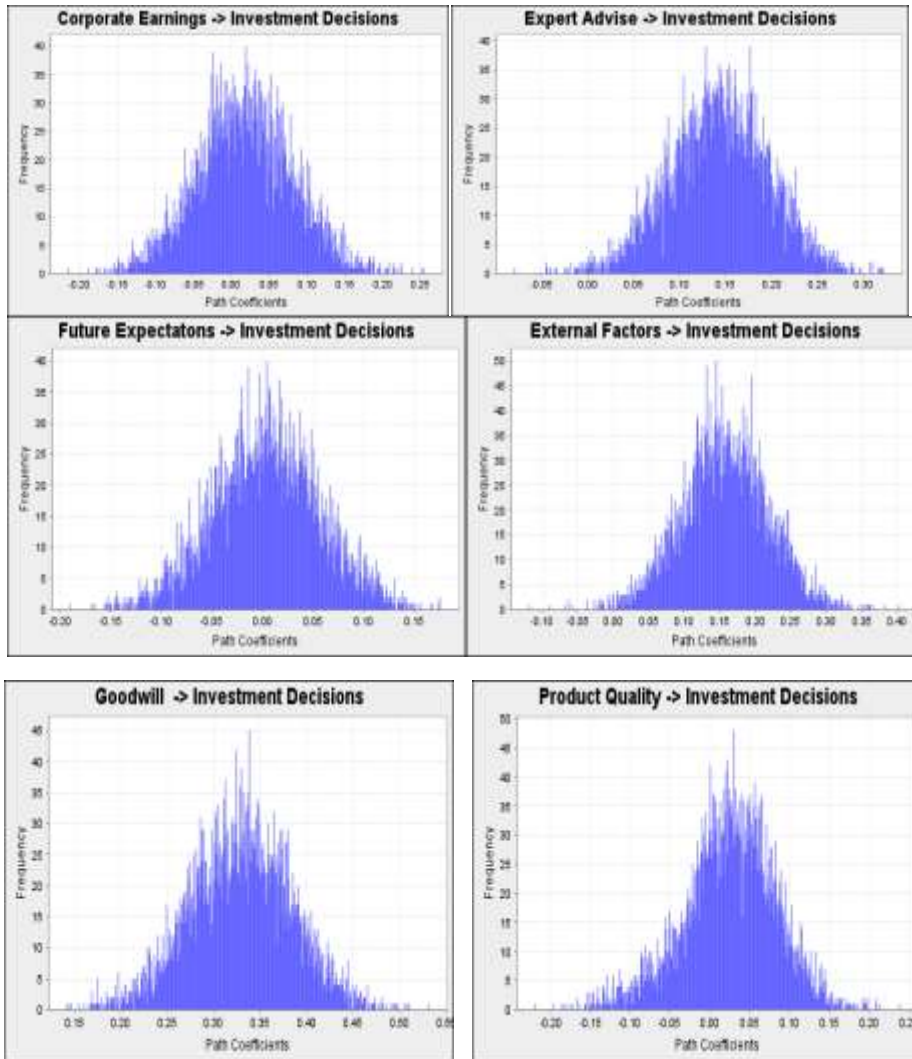


Figure 1.2 Graphical presentation of the path

Table 1.7 confirmed that goodwill of the company is the highest constructs and able to attract the investor. Whereas corporate earnings, product quality and future expectations are the factors, which are not related to investment decisions. These three factors are not significant and shown in red colour.

Measurement of effect Size (f^2)

The f^2 may be the intensity of the effect of the exclusive exogenous latent construct in the adrenal latent construct. As soon as a completely unbiased construct is expunging from the path model, it transforms the coefficient of determination coefficient (r^2). Ergo, it delineates perhaps the ejected latent exogenous construct has connotation leverage on the value of the adrenal endogenous construct.

Table 1.8

Constructs	Investment Decisions	Effect
Annual Reports	0.158	Moderate
Corporate Earnings	0	No effect
Expert Advice	0.154	Moderate
External Factors	0.141	Moderate
Future Expectations	0	No effect
Goodwill	0.176	Moderate
Product Quality	0.001	Week
information/Recommendations	0.146	Moderate

Table 1.8 spectacles the f^2 from the SEM computation. The effect size for Goodwill, Annual Reports, Expert Advice, External Factor, Information/Recommendations is moderate. At the same time, for Corporate Earning, Future Expectations f^2 shows no effect, and for product quality, this effect is week. (Cohen, 2008) An f^2 of .35 considered strong, more than .15 and less than .35 considered moderate one and less than .15 is known to be a week. Calibrating the Effect Size (f^2), the f^2 is the degree of the impingement of each exogenous latent construct on the endogenous latent construct. When an independent construct is expunging from the path model, it changes the coefficient of determination, i.e. R^2 . It delineates whether the expunged latent exogenous construct has convincing leverage on the value of the latent endogenous construct.

Predictive Relevance of the Model (Q2)

Q2 statistics are used to gauge the grade of the PLS path model. Q2 is figured using blindfolding procedures (Henseler & Sarstedt, 2013), and the researcher implemented the researcher cross-validated redundancy. This standard prescribes that the conceptual model can envision the endogenous latent constructs. In the PLS-SEM, the Q2 values measured must be higher than for a strange endogenous latent construct. It demonstrates that the Q2 value for this particular evaluation version is equal to 0.280, that was more than the outset limitation, and premise the path model's predictive relevance is effective at the endogenous.

Goodness-of-Fit Index (GOF)

Goodness-of-Fit (GOF) is employed as an indicator for the Thorough Version Fit to check/verify that the model adequately explains the pragmatic data (Henseler & Sarstedt, 2013).

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These values signify the detailed confirmation of the road Version. A good version fit shows that a model is parsimonious and plausible (Seetharaman et al., 20 17). The GOF is calculated using the geometric mean value of this Normal communality (AVE values) and the average R2 value(s).

$$\text{GOF}=(\text{Average R2}*\text{Average AVE})^{1/2}$$

Table 1.9: Goodness of Fit Index

Constructs	Average Variance Extracted (AVE)	R ²
Annual Reports	0.501	
Corporate Earnings	0.612	
Expert Advice	0.597	
External Factors	0.656	
Future Expectations	0.611	
Goodwill	0.623	
Investment Decisions	0.537	.544
Product Quality	0.549	
information/Recommendations	0.733	
Average value	5.419/9=0.602	

$$\text{GOF}=(\text{Average R2}*\text{Average AVE})^{1/2} \text{ Equation 1}$$

$$\text{GOF}=(0.602*.544)^{1/2}$$

$$\text{GOF}=.572$$

the GOF of the model is reckoned by Equation 1 and the GOF index for this investigation model is 0.572, which shows that pragmatic data fits the model gratifying and has sizable conjecturing power in juxtaposition with diagnostic values.

Conclusion:

Researchers observed in this study that investors consider the company's goodwill as the most important factor for decision-making, followed by the annual report, expert advice and information, and recommendations of experts. Companies must work upon their reputation in the financial market. Annual reports of the companies also matter a lot and affect the decision making progress, whereas corporate earnings and future expectations are not important for the decision making process.

References:

- 1) Allen, F. (2012). Trends Financial Innovation and their Welfare Impact: An Overview. *European Financial Management*, 18(4), 493–514. <https://doi.org/10.1111/j.1468-036X.2012.00658.x>
- 2) Management, 18(4), 493–514. <https://doi.org/10.1111/j.1468-036X.2012.00658.x>
- 3) Bhatt, B. K., & Lala, N. (2014). Ms Apurva A Chauhan Assistant Professor. *Kadokia International Journal of Research in Multidiscipline*, 1(3), 127–137. www.kijrm.com

- 4) Brenet, P. (2013). Financing Innovation. *Innovation Engineering: The Power of Intangible Networks*, 295–313. <https://doi.org/10.1002/9781118615072.ch17>
- 5) Bsn, F. A., & Florida, S. (2014). *Retail Investors' Perceptions of Financial Disclosures on Social Media: An Experimental Investigation Using Twitter*. *Retail Investors' Perceptions of Financial Disclosures on Social Media: An Experimental Investigation Using Twitter*. October.
- 6) Chin, W. W., Marcelin, B. L., & Newsted, P. R. (2003). A partial least squares latent variable modelling approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic-mail emotion/adoption study. *Information Systems Research*, 14(2). <https://doi.org/10.1287/isre.14.2.189.16018>
- 7) Cohen, J. (2008). *Statistical Power Analysis for the Behavioral Sciences* (2008th ed.). Lawrence Erlbaum Associates.
- 8) Dimitrios, I.M., 2007. Investors' behaviour in the Athens Stock Exchange (ASE). *Journal of Accountancy*, 120(6), pp.67-72.
- 9) Gupta, D., & Mokshmar, P. (2018). Factors Affecting the Perception of Investors Towards Equity and Derivatives in Indore City. *International Journal of Research -GRANTHAALAYAH*, 6(2), 274–282. <https://doi.org/10.29121/granthaalayah.v6.i2.2018.1573>
- 10) Hair, Joe F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modelling in marketing research. *Journal of the Academy of Marketing Science*, 40(3), 414–433. <https://doi.org/10.1007/s11747-011-0261-6>
- 11) Hair, Joseph F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- 12) Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modelling in international marketing. *Advances in International Marketing*, 20(2009), 277–319. [https://doi.org/10.1108/S1474-7979\(2009\)0000020014](https://doi.org/10.1108/S1474-7979(2009)0000020014)
- 13) Henseler, J., & Sarstedt, M. (2013). Goodness-of-fit indices for partial least squares path modelling. *Computational Statistics*, 28(2), 565–580. <https://doi.org/10.1007/s00180-012-0317-1>
- 14) Hoffmann, A. O. I., Post, T., & Pennings, J. M. E. (2013). Individual investor perceptions and behaviour during the financial crisis. *Journal of Banking and Finance*, 37(1), 60–74. <https://doi.org/10.1016/j.jbankfin.2012.08.007>
- 15) Hussein, A.H., 2007. Factors influencing individual investor behaviour in the UAE financial markets. *Journal of Business*, 92(2), pp.24- 26.
- 16) P, Dr Sindhu K., Kumar, D. S., & Rajitha. (2014). Influence of Risk Perception of Investors on Investment Decisions. *Journal of Finance and Accounting*, 2(2), 15–25.
- 17) Pernell, K. (2020). Market governance, financial innovation, and financial instability: lessons from banks' adoption of shareholder value management. *Theory and Society*, 49(2), 277–306. <https://doi.org/10.1007/s11186-020-09389-y>
- 18) Rahman, S. M. Z., & Bristy, J. F. (2018). Factors Affecting Investors' Perception towards Investment in Stock Market in Bangladesh: A Study on Investor's of Khulna City. *Khulna University Business Review*, 82(December), 67–82. <https://doi.org/10.35649/kubr.2016.11.12.6>
- 19) Renuka, N. (2019). Investors perception towards investments in derivatives. *International Journal of Innovative Technology and Exploring Engineering*, 8(12), 5421–5428. <https://doi.org/10.35940/ijitee.L379181219>
- 20) Ringle, C. M., Da Silva, D., & Bido, D. D. S. (2014). Modelagem de Equações Estruturais com

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Utilização do Smartpls. *Revista Brasileira de Marketing*, 13(2), 56–73.
<https://doi.org/10.5585/remark.v13i2.2717>

- 21) Rodríguez-Entrena, M., Schuberth, F., & Gelhard, C. (2018). Assessing statistical differences between parameters estimates in Partial Least Squares path modelling. *Quality and Quantity*, 52(1), 57–69. <https://doi.org/10.1007/s11135-016-0400-8>
- 22) Seetharaman, A., Niranjani, I., Patwa, N., & Kejriwal, A. (2017). A Study of the Factors Affecting the Choice of Investment Portfolio by Individual Investors in Singapore. *Accounting and Finance Research*, 6(3), 153. <https://doi.org/10.5430/afr.v6n3p153>
- 23) Uddin, A. (2017). Investor Perception about Systematic Investment Plan (SIP) Plan : An Alternative Investment Strategy. *International Journal of Research in Humanities & Soc. Sciences*, 4, 22–28. http://www.raijmr.com/ijrhs/wp-content/uploads/2017/11/IJRHS_2016_vol04_issue_03_05.pdf
- 24) Walia, N., & Kiran, R. (2009). An Analysis of Investor's Risk Perception towards Mutual Funds Services. *International Journal of Business and Management*, 4(5). <https://doi.org/10.5539/ijbm.v4n5p106>