

# Impact of Environmental Attitudes on the Judgment of Non-Professional Investors in Saudi Arabia

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## Abstract

This paper aims to study the influence of environmental attitudes on the choice of non-professional investors. It highlights the role of environmental performance assurance on investment judgments. This choice is due to the motivation and importance that investors place on the disclosure of environmental information. The main purpose of the research is focused on the empirical approach justified by the use of a questionnaire addressed to 200 non-professional investors. The results show that attitudes towards the environment do not correlate with the importance that gives this category of investors to the environmental information.. Subsequently, the results prove that the disclosure of an environmental assurance report has a positive impact on investment judgments independently of their appreciation of the environmental information concerning that of financial order.

**Key words:** *Environmental attitude, environmental performance, environmental insurance, non-professional investors, investment judgment.*

## 1. Introduction

Corporate Social Responsibility (CSR) is a concept that has generated much debate. Indeed, efforts to achieve the goals of sustainable development are often perceived as a threat to the beliefs and ideologies of the content of the Social Dominant Paradigm (DSP) that legitimizes the institutions and practices of the market economy (Pirates and Ehrlich, 1974)

The Social Dominant Paradigm (DSP) is characterized by the support of free enterprise and the belief in the possibility of unlimited economic growth. Proponents of the DSP have confidence in the ability of human ingenuity to solve all environmental problems. As a result of the various ecological problems in the world in recent decades, the fundamental values that underpin the corporate social performance (CSP) have given way to a new approach called the New Environment Paradigm (NEP) (Dunlap and van Liere, 1978). Proponents of NEP argue that unlimited growth in an ecological system is impossible. Thus, the DSP and the NEP are two measures of environmental attitudes that can inform us about the degree to which CSR information is taken into account by the various actors of the company, notably investors.

Previous research has recognized that individuals' environmental attitudes may moderate the extent to which they integrate the environment into their investment

decision-making (Dunlap et al, 2000; Shafer, 2006; Alewine, 2010)

Subsequently, the two components of DSP and NEP determine how the attitudes of business actors, including investors, might influence the relative weight of the environment relative to financial performance information. Specifically, previous studies used professional investors as a sample and looked at how they incorporate CSR information into their investment decision-making (Chan and Milne, 1999)

According to Coram (2010), except for Jackson (2008), there is limited research on the reaction of non-professional investors to the disclosure of non-financial information. Currently, investors and other stakeholders are demanding that companies disclose information on CSR performance more voluntarily (Ballou et al., 2006)

Despite the growing availability of CSR performance information, many companies still do not obtain insurance (environmental audit) on this information (Simnett et al., 2014). When CSR reports are assured, investors perceive them as more credible or even more reliable (Hodge et al 2009, Pflugrath et al 2011, Moroney et al 2012)

Researchers in the social sciences recognize that individuals' environmental attitudes may moderate the extent to which they can integrate the environmental aspect into decision-making (Dunlap et al., 2000, Shafer 2006, Alewine 2010).

It is important to examine the influence of these attitudes on investors' judgments, as they can mitigate or accentuate the relationships already established between CSR performance, insurance, and investor judgments.

Referring to previous work, this study examines the attitudes of non-professional investors towards environmental sustainability and their influence on: (1) The relative importance of the environment in relation to financial performance, (2) the interaction of this perceived importance with environmental performance and insurance in decision-making (Brown-Liburd et al 2012, Elliott et al 2014)

Our research aims to modeling the behavioral of the attitude of non-professional investor's face of a dilemma reflecting the conflict between environmental ethics and financial performance. This leads us to study the impact of environmental attitudes on the judgments of non-professional investors when submitting an environmental insurance report.

The interest of this research is to make non-professional investors aware of the importance of the environmental factor when making an investment decision. This is likely to allow managers to integrate the ecological dimension into decision-making approaches. This dimension could generate norms and standards regulated by the new legal texts.

Finally, we are interested to the review of the literature that ends with the development of two theories namely the theory of reasoned action and the theory of attribution. To answer our problematic, we made four hypotheses. Besides, we have proposed a suitable methodology to validate these hypotheses. The discussion and analysis of the results was the subject of the last part. And we achieve with a conclusion.

## 2. Literature Review

It seems reasonable that when non-professional investors agree that the environment is relatively more important than financial performance. Positive environmental performance would have a positive effect on their investment judgments. Concretely, when non-professional investors give less importance to the environment to the financial aspect, information on environmental performance should have little or no effect on their investment decisions (Kim and Statman, 2012)

Several research have resumed studies focusing on the influence of CSR information on investors' judgments assumes the integration of this information into their judgments. Dilla et al. (2012) suggest that the extent, to which an investor views environmental performance information as important, relative to the financial performance information, depends on the attitude of the non-professional investor toward the sustainability of the investment. The environment in general (NEP) and its specific attitudes towards socially responsible investment (SRI)

Moser and Martin (2012) propose two approaches to justify the importance of environmental information in investment judgments. The first approach suggests that the company invest in the social sector by partially admitting the decline in shareholder value. As for the second, more conservative approach, she considers that companies should only engage in socially responsible activities to increase value creation.

Also, Cheah et al. (2011) developed four approaches, two of which converge with that presented by Moser and Martin, (2012). They are relevant for predicting a relationship between investor attitudes and the extent to which they view the environment as important as opposed to financial performance information.

The first point of view is that a company's financial performance is less important than its social and environmental performance. This opinion is based on the idea that some investors give a higher priority to the objectives of promoting social and environmental concerns to the detriment of maximizing shareholder wealth. These

investors may accept an "ethical penalty" that translates into lower returns on investment (McLachlan and Gardner, 2004; Cheah et al., 2011)

For example, the New Environment Paradigm (NEP), which emphasizes ecological sustainability as opposed to economic wealth, melts for such a view. Individuals with strong DSP believes may dismiss data regarding the importance of environmental performance in their investment decisions. The corporate social performance (CSP) and the NEP have shown a negative correlation (Shafer 2006), which is explained by the fact that people with strong NEP beliefs are more likely to share evidence about the importance of environmental performance in their decisions investment. Shafer (2006) evaluates the NEP and the demand for information on environmental performance. Studies of the association between investor attitudes and socially responsible investment behaviors (McLachlan and Gardner, 2004; Williams, 2007; Nilsson, 2008) have used scales of attitudes that directly address specific aspects of CSR.

The first point of view of Cheah et al. (2011) is consistent with previous research that provides evidence of an association between investor attitudes and socially responsible investment behavior. Shafer (2006) finds a positive correlation between NEP (attitude measurement) and support for corporate environmental responsibility. McLachlan and Gardner (2004); Williams (2007); and Nilsson (2008) report that pro-social investor attitudes towards specific corporate social responsibility issues (eg environmental issues, third world exploitation, racism/sexism...) are associated with a greater tendency to hold socially responsible investments.

According to the second point of view Cheah et al. (2011) state that some investors find that socially responsible firms produce higher returns than socially irresponsible ones. These specific attitudes are the subject of an analysis tool using SRI.

Previous studies have pointed to a relationship between an individual's attitude and behavior (Calder and Ross, 1973; Fishbein and Ajzen, 1975). This is based on the theory of reasoned action (Ajzen and Fishbein 1980) which suggests that attitude towards an act is a determinant of behavioral intention. In other words, a more positive attitude toward CSR is likely to be translated into behavioral intent leading to greater use of CSR to make investment decisions. Cherry (1978) introduces the attitude variable into her study of the effects of CSR in decision-making: Attitudes are of great interest in this study because of the possibility of using them to explain or even predict user behavior of social accounting information. Attitudes are often considered as underlying variables that are supposed to influence or guide behavior. Also, our study examines the relationship between environmental attitudes and the decision-making behavior of non-professional investors. Referring to the study by Shafer (2006), we expect in our research a positive association between the attitudes of non-professional investors towards

environmental sustainability and the relative importance of environmental performance.

Also, we expect a similar relationship between the specific attitudes of non-professional investors to SRI and the relative importance of environmental performance. Moreover, it is likely to have a strong association between CIP beliefs and specific attitudes towards SRI.

This suggests to us the following hypothesis:

**H1:** The relative importance of the environment is positively and significantly correlated with the attitude of the New Environmental Paradigm (NEP).

**H2:** the relative importance of the environment is positively and significantly correlated with the socially Responsible Investment (SRI) attitude.

### 2.1. Impact of insurance on investment judgments through environmental performance

Insurance is one of many factors that influence the credibility of managerial disclosures (Mercer, 2004). Several authors (Libby et al., 2004, Coram et al., 2009 and Pflugrath et al., 2011) confirmed that insurance increases the perceived credibility of non-financial information by placing more emphasis on societal information.

Brown-Liburd et al. (2012) find that, in the presence of CSR information assurance, share price revisions are more important when the CSR investment is high compared to other companies in its sector. Indeed, investors, giving importance to environmental performance, could see the environmental insurance report as a symbol of legitimacy (Power, 2003; O'Dwyer et al., 2011) The theoretical framework advocated to develop our hypotheses suggests that people, believing the irrelevance of environmental information, are likely to have less favorable attitudes towards the sustainability of the environment. These people may find that the company's efforts to communicate environmental performance information favor non-shareholders at the expense of shareholders (Kim and Statman, 2012).

For this latter category of investors, positive reports of environmental information can have a negative influence on investment judgments. These investors need to be informed about the possible trade-off between sustainability activities and returns.

However, it seems unlikely that non-professional investors with less favorable attitudes towards sustainability would be familiar with this compromise. As a result, these investors considering this interest-free environmental information will be ready to ignore it (Dilla et al., 2014).

Then, it is a question of attributing the judgment of non-professional investors to the relevance of environmental insurance. Thus, we can decline the theory of attribution to answer our problematic mentioned above.

In which, this theory is concerned with how individuals interpret events and how they relate to their thinking and

behavior. Koonce and Mercer (2005) demonstrated the relevance of this theory in the review of accounting and financial disclosures. To demonstrate the incompatibility of poor disclosures with managers' incentives, Mercer (2004) used this theory. They believe that this information will, therefore, be inherently more credible than good disclosures. This theory advocates an interactive effect between environmental disclosure and insurance. Starting from this, we can advance the following hypotheses:

**H3:** The investment judgments of non-professional investors are positively and significantly related to environmental performance.

**H4:** The investment judgments of non-professional investors are positively and significantly related to the communication of an assurance report relating to environmental performance.

## 3. Methodology

### 3.1. Sample

The data collection involved a sample of two hundred (200) non-professional investors consisting of, fairly, accounting experts and physicians. Our questionnaire was administered via e-mails, the social facebook network, and through direct contact to 480 randomly selected respondents. After tabulation of responses, we selected 42% of the contacted population whose questionnaire response is complete. Also, an exploratory step involved 20 people to pre-test our questionnaire before generalizing it to our entire sample.

To assess the managerial indicators, the respondents consulted the metrics of financial and environmental measures. Firstly, the environmental information certification report was inspired by the reasonable assurance report used in the Brown-Liburd et al. (2012) Secondly, the respondents are trying to rate the significance for each of the six financial and environmental measures. Also, they completed the NEP scale (Dunlap et al., 2000) to assess their overall environmental attitudes towards the environment.

Subsequently, they responded at the socially responsible investment (SRI) scale (Dilla et al., 2012) to assess their attitudes towards socially responsible investment. The results of the respondents show that: (80) Eighty of the participants had declared positive information on environmental performance. And, one hundred and twenty (120) of the participants had declared negative information on the environmental performance.

Finally, the insurance on environmental information is not always deliberately available in the questionnaire. 139 respondents had this information, while 61 respondents did not have this information.

### 3.2. Model and variables description

To test the different hypotheses, we used two models. The first model aims to test the relative importance of the environment in terms of environmental attitudes. The second

model addresses investment judgment concerning environmental performance and environmental performance assurance.

**3.2.1. Model of the relative importance of environmental performance**

$$IMPORT_{i,t} = \beta_1 ATTITUDE_{i,t} + \beta_2 AGE_{i,t} + \beta_3 GENDER_{i,t} + \beta_4 PROF_{i,t} + \epsilon_{i,t}$$

These variables are defined as follows:

**IMPORT:** The relative importance of the environment concerning financial performance information, calculated as the difference between the sum of the responses of the environmental measures and the sum of the financial measures.

**ATTITUDE:** Investor attitudes: (a) towards global environmental sustainability (NEP), calculated as the sum of respondents' responses or (b) in particular towards socially responsible investments (SRI), calculated as the sum of responses from respondents.

**AGE:** The age of the investor.

**GENDER:** Coded 1 for a woman, 0 for a man.

**PROF:** Coded 1 for chartered accountant, 0 for a doctor

$\epsilon_{i,t}$ : error term

**3.2.2. Investment judgment model**

$$IJ_{i,t} = \beta_1 IMPORT_{i,t} + \beta_2 EP_{i,t} + \beta_3 IEP_{i,t} + \epsilon_{i,t}$$

These variables are defined as follows:

**IMPORT:** Defined above (modell1)

The investment judgment (IJ) is measured by:

**OPPORT:** The opportunity dependent variable is a measure of performance (Koonce and Lipe (2010, 2012). It is measured on a five-point scale of highly interesting to not-all-interesting.

**INVEST:** The dependent variable "investment amount" or INVEST is equal to the difference between the investment amount of the groups of respondents who received an insurance report (INVESTI) and the investment amount of the groups of respondents who have not received an insurance report (INVESTII)

**EP:** Environmental performance that is positive or negative.

**IEP:** Insurance of environmental performance whether this missing gold

$\epsilon_{i,t}$ : error term

**4. Results**

We present in this section the results of the descriptive statistics and the multiple regressions results.

**4.1. Descriptive statistics**

**4.1.1. Descriptive statistics of the CIP scale**

We use CIP scale values to measure general attitudes toward environmental sustainability (Dunlap et al., 2000). In our questionnaire, items coded in numbers are consistent with the NEP while those coded by letters disagree with the NEP. The Cronbach Alpha for the NEP scale in our sample is 0.721.

To calculate the CIP composite value, the odd-numbered responses (in digits) of the CIP instrument are coded on a five-point scale ranging from (-2) disagree to (+2) strongly agree. Items numbered in letters are coded in reverse (see questionnaire). The composite score can range from -30 to 30. The CIP value in our sample ranges from -17 to 24, with an average of 5.69, a standard deviation of 7.72, and a median of 6.00.

**Table 1:** Descriptive statistics of the CIP scale

N	Valid	200
	Missing	0
Mean		5.690
Median		6.000
deviation		7.724
Minimum		-17.00
Maximum		24.00

**4.1.2. Descriptive statistics of the SRI scale**

The participants gave their assessment of the importance of each financial and environmental measure on five-point scales, coded over a range from 2 to very important to (-2) for not at all important. We calculated the relative importance of the environment as the sum of the measurements of the importance score of each participant's environmental performance, minus the sum of the importance scores of these financial measures (Dilla et al. 2012). This measure can vary from -24 to 24. In our case, the composite score varies from -12 to 10, with an average of -0.3, a standard deviation of 4.00, and a median of 0.00.

**Tableau 3:** Descriptive statistics of the relative importance

N	Valid	200
	Missing	0
Mean		-0.350
Median		0.000
deviation		4.044
Minimum		-12.00
Maximum		10.00

We note that the average of the relative importance variable is negative (-0.350). This shows that the majority of

respondents consider financial performance more important than environmental performance.

The age of our population ranges from 28 to 63 years with an average age of 42 years. As for gender, women represent 54.5% of our sample; while men represent 45.5%. Table 4 presents the correlations between these variables.

**4.1.4. Descriptive statistics of control variables**

**Table 4: Correlation Statistics**

		REL	IMPORT	NEP	SRI	AGE	PROF	GENDER
IMPORT	Pearson correlation		1	-0.009	-0.027	0.065	0.193**	0.078
	Sig. (bilateral)			0.894	0.708	0.359	0.006	0.275
	N		200	200	200	200	200	200
NEP	Pearson correlation	-0.009		1	0.038	-0.050	-0.022	0.038
	Sig. (bilateral)	0.894			0.591	0.482	0.756	0.598
	N	200	200	200	200	200	200	200
SRI	Pearson correlation	-0.027	0.038		1	-0.019	-0.025	0.149*
	Sig. (bilateral)	0.708	0.591			0.789	0.724	0.035
	N	200	200	200	200	200	200	200
AGE	Pearson correlation	0.065	-0.050	-0.019		1	0.191**	-0.027
	Sig. (bilateral)	0.359	0.482	0.789			0.007	0.705
	N	200	200	200	200	200	200	200
PROF	Pearson correlation	0.193**	-0.022	-0.025	0.191**		1	-0.110
	Sig. (bilateral)	0.006	0.756	0.724	0.007			0.119
	N	200	200	200	200	200	200	200
GENDER	Pearson correlation	0.078	0.038	0.149*	-0.027	-0.110		1
	Sig. (bilateral)	0.275	0.598	0.035	0.705	0.119		
	N	200	200	200	200	200	200	200

\*\* . The correlation is significant at the 0.01 level (bilateral).

\* . \*\*. The correlation is significant at the 0.05 level (bilateral).

The correlation matrix does not show colinearities between the explanatory variables that would prevent certain variables from being retained in the model. Analysis of variance can be done.

**4.1.5. Descriptive statistics for the investment opportunity variable**

Table 5 presents the descriptive statistics for the investment opportunity variable.

**Table 5: Descriptive statistics of investment opportunity**

Relative importance	Environnemental performance	Results	Insurance		
			Present		Present
Less important	Negative	Mean	2,5	2,0769	2,3659
		Standard deviation	0,8892	0,27735	0,76668
		Effective	28	13	41
	Positif	Mean	2,4906	2,6667	2,5405
		Standard deviation	0,84632	0,73030	0,81407
		Effective	53	21	74
	Total	Mean	2,4938	2,4412	2,4783
		Standard deviation	0,85328	0,66017	0,79855
		Effective	81	34	115
More important	Negative	Mean	2,6207	2,5	2,5897
		Standard deviation	0,94165	0,52705	0,84970

	Positif	Effective	29	10	39
		Mean	2,5862	2,7059	2,6304
		Standard deviation	0,82450	0,68599	0,77053
	Total	Effective	29	17	46
		Mean	2,6034	2,6296	2,6118
		Standard deviation	0,87739	0,62929	0,80318
		Effective	58	27	85

For the investment opportunity variable, there is no major difference in average between the two groups of respondents (according to the relative importance of the environment less or more important than the financial performance)

**Table 6:** Descriptive statistics of the investment amount

Relative importance	Environnemental performance	Results	Insurance		
			Present	Absent	Total
Less important	Negative	Mean	475,000	-5730,7692	-1492,6829
		Standard deviation	2380,26220	1378,63738	3597,52625
		Effective	28	13	41
	Positif	Mean	581,1321	-4095,2381	-745,9459
		Standard deviation	1217,98330	2200,10822	2624,60378
		Effective	53	21	74
	Total	Mean	544,4444	-4720,5882	-1012,1739
		Standard deviation	1696,76162	2067,75818	3013,51191
		Effective	81	34	115
More important	Negative	Mean	886,2069	-5100,0000	-648,7179
		Standard deviation	1569,96909	1969,20740	3121,98248
		Effective	29	10	39
	Positif	Mean	1103,4483	-4529,418	-978,2609
		Standard deviation	1915,06858	2394,46359	3446,34512
		Effective	29	17	46
	Total	Mean	994,8276	-4740,7407	-827,0588
		Standard deviation	1739,06835	2224,73149	3286,24073
		Effective	58	27	85

For the variable amount of investment, we note that the average is negative each time the insurance report is absent, this can be explained by the fact that it is sometimes appropriate that the amount of investment without communication of an insurance report is greater than that accompanied by an environmental assurance report. We can conclude then that unprofessional investors become more reluctant, therefore conservative in the presence of an environmental insurance report. In the absence of this type of report, investors only refer to the financial information that becomes a basis for investment decisions.

**4.2. Models Analysis (Multiple Regressions)**

**4.2.1. Environmental Attitude and Relative Importance of Environmental Information**

Hypothesis H1 predicts a positive association between the general attitudes of investors towards environmental sustainability (NEP) and the relative importance they place on the environment concerning financial performance information.

Hypothesis H2 predicts a positive association between specific attitudes towards socially responsible investing (SRI) and the relative importance of the environment with financial performance information.

Table 7 presents the results of regressions used to test hypotheses H1 and H2.

**Table 7:** Regression Results for Hypothesis H1 and H2

	Modèle 1		Modèle 2		Modèle 3	
	Beta <sup>a</sup>	T-statistic	Beta <sup>a</sup>	T-statistic	Beta <sup>a</sup>	T-statistic
NEP	-0.007	-0.105	—	—	-0.06	-0.088
SRI	—	—	-0.037	-0.522	-0.037	-0.517
AGE	0.029	0.419	0.029	0.412	0.029	0.407

GENDER	0.101	1.422	0.106	1.489	0.106	1.487
PROF	0.199	2.759***	0.198	2.774***	1.198	2.766***
R <sup>2</sup>	0.048		0.049		0.025	
F-statistic	2.468		2.537		2.021	
p-value	0.046		0.041		0.077	

\*\*\* Significant at the 1% level

Model 1 uses NEP as an attitude measure to test hypothesis H1 while model 2 uses SRI as an attitude measure to test hypothesis H2. The result of the study of the impact of the NEP on the relative importance of the environment with financial information (model 1) shows that the NEP attitude variable has a non-significant negative coefficient ( $p > 0.1$ ). This leads us to reject H1. The interpretation of this result is likely to inform us about the attitudes of non-professional investors regarding the disclosure of environmental information. Obsessed with the analysis based on numerical elements, the accountants are less sensitive to environmental information.

As for doctors, they are certainly more aware of the phenomena of the environment without considering this information as a key element in their decision to invest. In conclusion, we can say that the two populations are rather in favor of the DSP concept compared to that of the NEP. The DSP promotes the unlimited growth of the economy and therefore the creation of value; while the NEP advocates a return to the environment by calling into question human ability to protect nature against environmental degradation due to technological development. It should be noted, moreover, that the SRI attitude measurement (model 2) has a non-significant negative coefficient ( $p > 0.1$ ). This allows us to reject H2.

These results contradict Dilla et al. (2014) who found a significant positive relationship between CIP attitude measurement and the relative importance of the environment to financial performance.

Also, Dilla et al. (2012) found a significant positive relationship between SRI attitude measurement and the relative importance of the environment to financial performance. The coefficients of the PROF variable are positive and significant at the 1% level in both model 1 ( $p = 0.06$ ) and model 2 ( $p = 0.06$ ), indicating that the profession is positively associated with the importance that non-professional investors place on the environment with financial performance information.

We use a third regression to use both NEP and SRI as attitude measures. The coefficients of the two attitude measures (NEP and SRI) are negative and remain insignificant ( $p \geq 0.1$ ) in this model, suggesting that general attitudes towards environmental sustainability and specific attitudes towards SRI does not explain the relationship between the attitude of this category of investors and the importance they place on the environment in relation to financial performance information.

### 4.3. Impact of environmental performance and insurance on investment judgments

Table 8 presents the results of the analysis of variance with environmental performance, insurance, and the relative importance of environmental information as independent variables, and the variables "investment opportunity" and the "Investment amount" as dependent variables for the total of the sample.

**Table 8:** Regression result for the whole sample

	OPPORT		INVEST	
	F	p-value	F	p-value
PERFORM	0,747	0,389	0,297	0,586
INSUR	0,015	0,903	368,613	0,000
IMPORT_ENV_PERF	1,359	0,245	0,171	0,680
PERFORM X INSUR	0,382	0,683	186,693	0,000
PERFORM X IMPORT_ENV_PERF	1,171	0,312	0,259	0,772
IMPORT_ENV_PERF X INSUR	0,687	0,504	185,279	0,000
PERFORM X IMPORT_ENV_PERF X INSUR	0,788	0,502	125,523	0,000

The interaction of environmental performance with relative importance has no significant impact on the investment judgment materialized by the investment opportunity ( $p > 0.1$ ) and the investment amount ( $p > 0.1$ ). H3 is therefore rejected.

The interaction between the relative importance of environmental performance and environmental information

assurance has a significant positive correlation with the amount of investment ( $P < 0.01$ ). Hypothesis H4 is thus validated for the amount of investment, whereas concerning "the opportunity" we do not find any link. To refine our analysis, we divide our sample into two groups. The first group believes that environmental information is less

important than financial information (the estimate of materiality is less than zero). As for the second group, they consider that the environment is more important. 115 respondents consider that the environment is less important;

while 85 respondents believe that environmental information predominates over financial information.

Table 9 shows the results of the impact of environmental performance on investment judgments for the first group.

**Table 9:** Result of group considering environment more important than financial performance

	OPPORT_INVEST		INVEST	
	F	p-value	F	p-value
PERFORM	0,054	0,818	0,210	0,648
ASSUR	0,019	0,890	167,083	0,000
PERFORM X ASSUR	0,033	0,968	83,438	0,000

Referring to Table 9, we find that the results are insignificant both for the opportunity ( $p > 0.1$ ) and the amount of the investment ( $p > 0.1$ ). This result means that environmental performance has no impact on the investment judgment of non-professional investors.

This result does not corroborate that found by Dilla et al. (2014). The authors demonstrated the existence of a positive

and significant association between environmental performance and investment judgment.

For the second group considering the environmental information is more important than the financial performance, the result shows that it has no impact on the investment judgment (see Table 10).

**Table 10:** result of Group considering environment less important than financial performance

	OPPORT_INVEST		INVEST	
	F	p-value	F	p-value
PERFORM	1,265	0,263	1,629	0,204
INSUR	0,103	0,749	201,970	0,000
PERFORM X INSUR	0,668	0,515	103,803	0,000

These results corroborate those found by Dilla et al. (2014); that is, people who believe that information about environmental performance is relatively unimportant may have less favorable attitudes towards environmental sustainability.

The results in Table 9 indicate that for participants with high values of relative importance, there is a significant positive relationship between insurance and the amount of investment ( $p = 0.000$ ), but it is not significant for the investment opportunity ( $p > 0.1$ )

As shown in Table 10, the insurance variable does not influence the investment opportunity ( $p = 0.749$ ). While its impact on the investment amount is significant ( $p = 0.000$ ) These results confirm previous studies that claim that environmental performance assurance should increase investors' perceptions of the credibility of environmental information by positively impacting investment judgments (Coram et al 2009, Hodge et al., 2009; Plugraht et al. 2011; Moroney et al. 2012; Dilla et al. 2014).

## 5. Discussion

The results show that the involvement of Saudi financial auditors in environmental insurance is very limited or absent . Firstly, we tried to study the impact of environmental concerns on the relative importance of the environment concerning financial performance. Secondly, we tried to study the impact of environmental performance and the assurance of this disclosure on the judgments of non-professional investors. The results show that differences in investors' environmental attitudes do not influence the importance they attach to the environment concerning financial performance information. Also, investors' perception of the relative importance of environmental information concerning financial performance is not compatible with the weighting of environmental performance and the assurance of environmental information.

For participants who consider that environmental performance is less important than the financial one, this performance does not affect the opportunity or the amount of investment. This result remains the same for the stakeholders who adopt the opposite point of view to that of the first. Insurance has a positive influence on the amount of



investment for both groups. This shows that it significantly increases the credibility of environmental information, which is associated with the amount of investment.

Investors, who regard environmental performance information as less important than financial information, seem to witness insurance when assessing the credibility of environmental performance. They take into account these perceptions of credibility in their judgment of the amount of investment.

## 6. Conclusion

Non-professional investors are increasingly interested in non-financial information in general and environmental information in particular. They focused mainly on CSR information that can be perceived as credible and reliable (Eccles et al 2012b).

The study of the nature of the relationship between the attitudes of non-professional investors and the degree of integration of environmental performance and the assurance of this information in their investment judgments allowed us to analyze the behavior of non-professional investors. The results show that the environmental attitudes of this category of investors do not influence the importance they attach to the environment with financial performance information. We found no relationship between the relative importance of environmental performance and the global attitude of investors towards environmental sustainability or CIP beliefs specific attitudes towards socially responsible investment (SRI).

For the entire sample, disclosure of environmental performance does not influence the investment judgment; while the communication of an insurance report only impacts the amount of investment.

For participants who consider that the environmental performance is less important than the financial one (first group), this performance does not affect the opportunity variable or the investment amount. This result does not change for the respondents who take the opposite view to that of the first (second group).

As for insurance, it has a positive influence on the amount of investment for both groups. This means that it significantly increases the credibility of environmental information. Investors, considering environmental performance information as less important than financial information, use assurance when assessing the credibility of environmental performance. They take into account these perceptions of credibility when making their investment decision. According to Coram et al. (2009), we find that the perception of credible information about environmental performance fully modifies the influence of environmental information assurance on judgments of the amount of investment.

Investors in the second group believe that failing disclosure of the assurance report, the company's environmental

performance will be worse even when the stated level of performance is above the sector median. Besides, these investors may perceive insurance as useful because it gives a sense of legitimacy for reported environmental information (Dilla et al., 2014).

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