

Disclosure of information concerning remedies against directors' liability

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Executive summary

Why do some corporations decide to voluntarily disclose information regarding a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance in contrast to others? In order to explain why some corporations disclose more information on this topic than others, first, the literature on liability of directors, remedies against these liabilities and motives for voluntary disclosure is researched. After that, empirical research is performed to determine if listed corporations in The Netherlands significantly differ in disclosing information regarding a granted indemnification clause and a concluded directors' and officers' liability insurance.

1. Presentation of the research problem

Public indignation regarding a number of corporate scandals have lead to an increasing demand of transparency and information disclosure and an emphasis on the importance of decision usefulness of annual reports. According to Foster (1986), the usefulness of financial statements is affected by the content or timing of information disclosures. The most important way for corporations to disclose information is still through regulated financial reports, including the financial statements (Healy and Palepu 2001). Besides information disclosure that is prescribed by regulations, corporations can also disclose information voluntary. Voluntary disclosure is the release of financial and non-financial information in excess of that what is required by regulations.

Improving the decision usefulness of annual reports is a topical subject. The most important criticism is the fact that the information being provided in annual reports is too much based on the past and insufficiently focused on the future (Knoops 2004). More information should be disclosed dealing with opportunities and threats, risks and all sorts of events and circumstances that can be of influence on future developments of the corporation. Disclosing more information about possible risks and whether or not the corporation has taken any precautions to cover those elements of risk could contribute to this. In other words, disclosing information regarding a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance could enhance the decision usefulness of annual reports. Especially interesting to see, is whether corporations listed on the AEX, AMX or AScX significantly differ in disclosing information concerning this subject.

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The research question is formulated as follows:

Why do some corporations, listed on the AEX, AMX or AScX, decide to voluntarily disclose information in their annual report or articles of association concerning a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance in contrast to others?

In the second chapter prior literature is discussed. The chapter will start with an overview of the legal grounds on which a director can be held liable according to Dutch law. The legal grounds for liability of directors will be discussed because an exclusion or limitation of internal liability and indemnification for external liability and a directors' and officers' liability insurance only become relevant after a directors is being held liable for his actions or his failure to act. It is important to know what the scope of coverage is of these different remedies and to what extend a listed corporation in The Netherlands is obligated by Dutch law to disclose information concerning a granted exclusion of liability and indemnification clause and a concluded directors' and officers' liability insurance. This will be discussed in the second part of this chapter. If corporations listed on the AEX, AMX or AScX significantly differ from each other in disclosing information regarding a granted exclusion of liability and indemnification clause and a concluded directors' and officers' liability insurance, a possible explanation might be found in accounting theory. To this end, in the last part of this chapter, some light will be shed on Positive Accounting Theory, research on voluntary disclosure and the Signalling Theory.

The third chapter presents the research design.

In the fourth chapter the empirical results will be elucidated.

Possible explanations for differences in the level of disclosure will be discussed in the fifth chapter using the theoretical framework of the second chapter. At the end of this chapter suggestions for future research will be given.

Some conclusions will be drawn and a short summary will be given in the sixth chapter.

2. Prior literature

2.1. Legal grounds for liability of directors

First an overview will be given of the legal grounds on which a director can be held liable according to Dutch law. Only Civil Code provisions are discussed since these provisions most often lead to settlements or result in directors having to pay damages. Dutch scholarly writers generally make a distinction between internal and external liability of directors.

2.1.1. Internal liability

Internal liability can be seen as liability towards the corporation. The main rule of internal liability can be found in Section 2:9. This provision provides that each managing director has an obligation towards the legal entity to perform properly the duties assigned to him. Managing directors must have a certain amount of freedom to lead the corporation. Entrepreneurship means taking risks every now and then. Not every mistake or incorrect

choice of policy automatically leads to liability (Assink and Olden 2005). When a managing director causes damages to the corporation, these damages can, under certain circumstances, be recovered by the corporation from the director. The Supreme Court has held that a managing director is liable for the damages the corporation has suffered if, depending on all the circumstances, serious negligence (*ernstig verwijt*) is attributable to him.¹⁸ According to Van Schilfgaarde (2006) and Orsel (2005) serious negligence not only covers behavior of which a managing director ‘knew’ it would lead to damages but also behavior of which he ‘should have known’ would cause damages to the corporation. The underlying idea of Section 2:9 is collective responsibility resulting in joint and several liability. However, the director has the possibility of individual exoneration.

Unique for The Netherlands is the right to initiate inquiry proceedings (*enquêteprocedure*)¹⁹ before the Enterprise Chamber (*Ondernemingskamer*) of the Amsterdam Court of Appeals. The Enterprise Chamber will grant a request for an inquiry if there is a good reason to doubt the proper management of the corporation.²⁰ Experts will then be appointed by the court. These experts will produce a report on their findings of the inquiry. Central to this inquiry are the policy and the course of affairs (*beleid en gang van zaken*) in the corporation. If, on the basis of this report, the Enterprise Chamber finds mismanagement (*wanbeleid*), it may set aside corporate resolutions. The Enterprise Chamber can allow the corporation to recover the costs of the inquiry from the managing and supervisory directors. The Supreme Court held that a decision of the Enterprise Chamber finding mismanagement does not imply that a director is personally liable. The Supreme Court added that the stated facts in inquiry proceedings are still uncertain in civil proceedings. Nevertheless, the inquiry proceedings can have great significance in the area of liability of directors.

2.1.2. External liability

External liability is liability towards third parties. The basic tort (*onrechtmatige daad*) provisions are set forth in Sections 6:162 and 6:163. To protect creditors and to prevent abuse of legal entities, three acts were introduced in the 1980’s. The First Abuse Act is not relevant for directors’ liability. The Second Abuse Act provides for personal liability of managing directors for premium, wage tax and value added tax obligations of a legal entity that is in default in its payments thereof, if the non payment is caused by the managing director’s evidently improper management (*kennelijk onbehoorlijk bestuur*). The structure of the Second Abuse Act is similar to that of the Third Abuse Act. Therefore it will not be discussed in more detail since the Third Abuse Act is of greater importance in view of liability of directors. The Third Abuse Act makes it possible for the trustee in bankruptcy to hold directors liable for evident improper management that has led to the bankruptcy. Section 2:138/248 provides that each director is jointly and severally liable to the bankruptcy estate in the amount of any liabilities that cannot be satisfied out of the

¹⁸ HR January 10, 1997, NJ 1997, 360, JOR 1997, 29 (*Staleman/Van de Ven*) and HR April 4, 2003, JOR 2003, 134 (*Skipper Club Charter*).

¹⁹ Section 2:129/239.

²⁰ Section 2:350(1).

liquidation proceeds, if it is evident that the board has performed its duties improperly and plausible that this was an important cause of the bankruptcy.²¹ The Supreme Court ruled that there is evidently improper management if no reasonable managing director would perform his duties in such manner under the same conditions.²² The director can avoid liability if he proves the shortcoming is not attributable to him and he has not breached any duty to take measures to prevent its consequences.²³ Liability cannot be avoided by making an appeal to internal assignment of duties. No director can avoid his responsibilities by saying that he lacks the specific expert knowledge that is required to understand the decision being made in those situations. The Third Abuse Act attaches great importance to the duty to engage in proper bookkeeping and the duty to make the annual accounts public. In the event of a bankruptcy there is an irrefutable presumption that the board has performed these two duties improperly. In addition, there is a refutable presumption that this improper performance was an important cause of the bankruptcy.

If the annual accounts, interim accounts and annual report give a misleading presentation of the situation of corporation, the managing directors are jointly and severally liable to third parties for any resulting damage.²⁴ This liability is only relevant to the extent that these documents have been made public. The misleading presentation must relate to the current financial condition of the corporation. A director can only avoid liability by showing that the misleading presentation is not attributable to him. Section 2:150/260 contains a similar rule for the supervisory directors, with two exceptions. Firstly, this Section does not apply to the interim accounts and the annual report. Secondly, the individual avoidance of liability is treated differently with respect to the annual accounts. To avoid liability a supervisory director only has to show that the misleading presentation is not due to any failure in the exercise of his supervisory duties (De Savornin Lohman 1996). The supervisory director may rely on the information provided to him by the management board and the auditors (Asser-Maeijer 2000).

2.2. Remedies against liability

A director is only liable if an irrevocable judicial judgment is pronounced or if he voluntarily accepts his liability. It is not an established fact that the damages and fines paid and the cost of defending made by a director must come at his own expense, since these costs stem from his actions or failure to act as a director of the corporation (Potjewijd 2003). The legal literature makes a distinction between the internal and external liability of directors. The remedies against liability claims can also be divided in an internal and external cluster.

2.2.1. Exclusion or limitation of internal liability

Directors may stipulate that their contracts include a clause providing for an exclusion or limitation of internal liability. This means directors are excluded for claims of the

²¹ Section 2:149/259 declares Section 2:138/248 of similar application with regard to the supervisory director.

²² HR June 7, 1996, NJ 1996, 695 (*Van Zoolinge*) and HR June 8, 2001, NJ 2001, 454 (*Panmo*).

²³ Section 2:138/248 subsection 3.

²⁴ Section 2:139/249.

corporation by virtue of Section 2:9. An exclusion of liability clause provides for exclusion of liability in advance. In The Netherlands it is possible for a corporation to exclude or limit the internal liability of directors beforehand on the basis of Section 2:9 as long as it does not extend to an act or failure to act that can be characterized as intentional or intentionally reckless (Orsel 2006). Besides this, managing and supervisory directors can also be granted a discharge by the corporation. A discharge is a release of liability after the fact. If a discharge is granted to a director, the corporation can no longer hold him accountable for improper management. If, on the basis of the report, the Enterprise Chamber finds mismanagement, it may nullify the resolution granting a discharge.

2.2.2. Indemnification for external liability

Directors can also stipulate that their contracts include a clause providing for an indemnification for external liability. An indemnification may be granted to directors under Dutch law since an implicit or explicit legal provision prohibiting such a clause is absent (Glasz et al. 1994; De Nijs Bik 1998). In The Netherlands an exclusion of liability and indemnification clause can be incorporated in the articles of association. It is also possible to lay down such a clause in a separate contract. The aim of an indemnification clause is to compensate a director for the loss he suffered due to the disputes he is personally involved in because of the position he fulfils within the corporation (Potjewijd 2003). Firstly, the members of the board of directors can be reimbursed for the amount of damages they are personally due for. Secondly, the members of the board of directors have a right to be reimbursed for reasonable²⁵ costs of defending claims. Lastly, a member of the board of directors has a right to be reimbursed for costs of legal assistance in case no claim against him is submitted but he gets involved in a lawsuit on account of the position he fulfils within the corporation.

2.2.3. Directors' and officers' liability insurance

In granting an indemnification the loss suffered will come at the expense of the corporation. The situation is completely different if the corporation has concluded a directors' and officers' liability insurance to cover this risk. The loss will now come at the expense of the insurer. Central to a directors' and officers' liability insurance is to cover the personal liability of directors. Besides this, such insurance can also be concluded by a corporation to cover the risk it runs after it has granted an exclusion or limitation of internal liability and indemnification for external liability to the directors. This will almost always be included in a directors' and officers' liability insurance (Franssen van de Putte 2004). It is in the best interest of a corporation to enter into a directors' and officers' liability insurance. Firstly, external liability of a director can also lead to liability of the corporation.²⁶ If the insurance enables a director to fulfil his debt, the corporation is also freed (De Nijs Bik, 1998). Secondly, it is also better to insure the risk of internal liability. Usually it concerns a substantial amount of money. If the director is unable to pay the amount of money claimed by the corporation, the capital position of the corporation is being affected (De Nijs Bik, 1998). Lastly, side effects can occur if directors are too afraid

²⁵ Section 6:69 (2) and HR October 16, 1998, NJ 1999, 196.

²⁶ Section 6:170, 171 and 172.

of being held liable (Kroeze, 2005). Fear can lead to directors becoming extremely cautious. The economy of a country can experience serious disadvantages of risk averse behavior by entrepreneurs.

2.2.4. Disclosure

According to Section 2:382(2) and Section 2:383e a corporation must state in the notes to the annual report the amount for which it has granted loans and guarantees to their managing and supervisory directors. Van Schilfgaarde (2006) is of the opinion that this also includes a clause providing for an exclusion of liability and indemnification. The legislator has not ventured an opinion on that point. According to Potjewijd (2003), the existence of an exclusion of liability and indemnification clause means that the director finds himself in a financially dependent situation in proportion to the corporation. In addition, such a clause can lead to a situation in which the corporation lends to a director the reasonable costs of defending claims. If the act or failure to act of a director is qualified as serious negligence in an irrevocable judicial judgment the director will have to pay back all the money lent to him by the corporation. These financial ties of the director with the corporation should be made public in the annual report, but it is highly disputable whether Section 2:382(2) and Section 2:383e obligate a corporation to state in their annual report that an exclusion of liability and indemnification is granted to their directors.

The risk a corporation runs by granting an exclusion or limitation of internal liability and indemnification for external liability can be covered by a directors' and officers' liability insurance. The payment of the premium to the insurer can be seen as a cost for the corporation and must be included in the financial statements. The rules and regulations do not prescribe that a corporation presents these costs separately and as a result they cannot be distinguished from the other costs disclosed in the financial report. In addition, nowhere is stated that a corporation is obligated to disclose information on which insurances have been concluded.

Furthermore, no relevant case law could be found. This leads to the conclusion that a listed corporation in The Netherlands is not required to disclose any information regarding a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance.

2.3. Motives for voluntary disclosure

Proposed introductions of, or amendments to, mandated accounting requirements are always a source of great interest to corporate management. They often spend a lot of time and effort trying to influence accounting regulators. On the other hand corporations also release financial and non-financial information in excess of that what is required by regulations. What could motivate such behavior?

2.3.1. Positive Accounting Theory

There are several theories aimed at predicting and explaining particular accounting-related phenomena. Positive Accounting Theory developed by Watts and Zimmerman and others is one of them. It is based on research that proposed that markets were efficient

and that contractual arrangements were used as a basis for controlling the efforts of self-interested agents. It focuses on how accounting can assist in the functioning of the agency relationship and emphasizes that accounting can be used to reduce the agency costs of a corporation.

Watts and Zimmerman (1990) identified three hypotheses that were frequently used in research that sought to explain and predict accounting practice. The hypotheses identified are the bonus plan hypothesis, the debt/equity hypothesis and the political cost hypothesis. The political cost hypothesis can be used to explain voluntary disclosures. Some corporations have a higher public profile than others and are therefore subject to greater interest by the public, media, government, financial analysts and so on. According to Linsley and Shrivs (2003), these corporations can disclose more additional information to avert this unwanted attention. Watts and Zimmerman (1978) believe that the magnitude of the political costs is highly dependent on corporation size. Healy and Palepu (2001) are more cautious and point out that size is likely to proxy for many other factors. Financial analysts have a significant influence on a corporation. Lang and Lundholm (1993) find that firms with more informative disclosures have larger analyst following, less dispersion in analyst forecasts and less volatility in forecast revisions. Poshakwale and Curtis (2005) find a positive correlation between the level of voluntary disclosure and the number of analysts following, the number of news items and accuracy of analysts' forecasts.

2.3.2. Voluntary disclosure literature

Research on voluntary disclosure focuses on capital market motives for accounting and disclosure decisions. This research supplements the positive accounting literature. Researchers discuss six forces that effect managers' disclosure decisions for capital market reasons: capital market transactions, corporate control contest, stock compensation, litigation, proprietary costs and management talent signaling.

Only two of these forces are useful for this research: capital market transactions and litigation. In the capital market transactions hypothesis great importance is attached to investors' perception of a corporation. Healy and Palepu (2001) conclude that there is a significant relation between investors' perceptions and the managers' decision to issue public debt or equity. Through greater disclosure, corporations attempt to reduce the cost of capital by reducing investor uncertainty. Research supports the idea that there is a negative relation between the level of voluntary disclosure and the cost of equity capital (Barry and Brown 1985, 1986; Diamond and Verrecchia 1991; Botosan 1997; Botosan and Plumlee 2002; Francis et al. 2005).

The cost of litigation also effects managers' disclosure decisions. Corporate managers face the threat of a claim of shareholders or other investors after voluntarily disclosing information. Legal action could be brought against managers for inadequate or untimely disclosures. This could encourage corporations to increase voluntary disclosure. Litigation could also reduce managers' incentives to provide disclosure. The legal system therefore plays an important role in the managers' decision to voluntarily disclose information (Healy and Palepu 2001). Large, wealthy corporations face a greater litigation risk since litigants

seek out corporations that can potentially pay a high amount of damages (Kothari et al. 2009).

The Signalling Theory can also help to explain why corporations choose to voluntarily disclose information. It suggests that some corporations wish to signal the capital market about having stronger risk management capabilities than others (Linsley and Shrivess 2003). High quality corporations, in order to distinct themselves from low quality corporations, will have to voluntarily provide investors with credible information (Çelik et al. 2006).

3. Hypotheses development and research design

3.1. Hypotheses development

Directors are nowadays being held liable by the corporation as well as third parties more often when problems occur within the corporation (Vroom 1999; Potjewijd 2003; Van Olffen 2004; Assink and Olden 2005). There are a number of remedies against such claims. Directors may stipulate that their contracts include a clause providing for an exclusion or limitation of internal liability and indemnification for external liability. Such a clause can be qualified as a risk for the corporation. To cover this risk a corporation can conclude a directors' and officers' liability insurance. The fact that directors nowadays run a greater risk of being held liable and the amount of money claimed by third parties has rapidly increased over the last decade, make it important for shareholders and potential investors to know whether the corporation has granted the managing and supervisory directors an exclusion or limitation of internal liability and indemnification for external liability. To know whether the corporation has concluded a directors' and officers' liability insurance to cover this risk, is possibly even more important for them.

Public indignation regarding a number of corporate scandals have lead to an increasing demand of transparency and information disclosure and an emphasis on the importance of decision usefulness of annual reports. The most important criticism is the fact that the information being provided in annual reports is too much based on the past and insufficiently focused on the future (Knoops 2004). More information should be disclosed dealing with opportunities and threats, risks and all sorts of events and circumstances that can be of influence on future developments of the corporation. Disclosing more information about possible risks and whether or not the corporation has taken any precautions to cover those elements of risk could contribute to this. In other words, disclosing information regarding a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance could enhance the decision usefulness of annual reports. A listed corporation in The Netherlands is not required to disclose any information regarding a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance. Therefore, it is especially interesting to see whether corporations listed on the AEX, AMX or AScX significantly differ in disclosing information concerning this subject. The most important way for corporations to disclose information is still through regulated financial reports (Healy and Palepu 2001). This leads to the following hypotheses:

- Hypothesis 1 (a) Corporations listed on the AEX voluntarily disclose more information regarding a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance in their annual report than corporations listed on the AMX.
- Hypothesis 1 (b) Corporations listed on the AEX voluntarily disclose more information regarding a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance in their annual report than corporations listed on the AScX.
- Hypothesis 1 (c) Corporations listed on the AMX voluntarily disclose more information regarding a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance in their annual report than corporations listed on the AScX.

In The Netherlands, an exclusion of liability and indemnification clause can also be incorporated in the articles of association. Therefore the following hypotheses are formulated:

- Hypothesis 2 (a) Corporations listed on the AEX voluntarily disclose more information regarding a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance in their articles of association than corporations listed on the AMX.
- Hypothesis 2 (b) Corporations listed on the AEX voluntarily disclose more information regarding a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance in their articles of association than corporations listed on the AScX.
- Hypothesis 2 (c) Corporations listed on the AMX voluntarily disclose more information regarding a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance in their articles of association than corporations listed on the AScX.

3.2. Research design

The website of Euronext gives an overview of all national indices and which corporations are listed on these different indices. The corporations listed on the AEX, AMX or AScX in 2006 are shown in Appendix A.

There is no database in existence that contains the detailed information that is needed to conduct this research. *Company.info* was used to download all the annual reports. The articles of association are not included in this database. These were downloaded from the website of the corporation. In The Netherlands, an exclusion of liability and indemnification clause can also be laid down in an employment contract. This possibility will not be examined because a corporation does not provide any information regarding the employment contract of their directors.

An independent *t*-test will be conducted to assess whether corporations listed on the AEX, AMX or AScX significantly differ in voluntarily disclosing information regarding a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance in their annual report or articles of association. The independent *t*-test is applicable since it determines whether two distributions significantly differ from each other and different subjects are assigned to conduct the test (Field 2000). The statistical research will be carried out on SPSS.

3.3. Presuppositions

Three presuppositions are made with regard to the empirical research. Firstly, all corporations listed on the AEX, AMX or AScX have granted their directors an exclusion or limitation of internal liability and indemnification for external liability and concluded a directors' and officers' liability insurance. No conclusions can be drawn without this presupposition. Not disclosing information regarding a directors' and officers' liability insurance in the annual report or articles of association, for example, could otherwise mean that the corporation simply did not conclude a directors' and officers' liability insurance. *Nassau verzekeringen N.V.* and *AIG Europe N.V.*, two major players on the Dutch market for directors' and officers' liability insurances, state that the top five hundred corporations in The Netherlands, including all the listed corporations, have concluded a directors' and officers' liability insurance (Van den Heuvel, 2007).

Secondly, it is presupposed that if in the annual report or articles of association is stated that an exclusion or limitation of internal liability and indemnification for external liability *may* be granted or a directors' and officers' liability insurance *may* be concluded by the corporation, this can be seen as sufficient evidence that an exclusion or limitation of internal liability and indemnification for external liability is granted or a directors' and officers' liability insurance is concluded by the corporation.

Lastly, it is a possibility that the annual report does not mention both the granted exclusion or limitation of internal liability and indemnification for external liability and concluded directors' and officers' liability insurance. Sometimes only one of the two is mentioned. In that case, however, it is presupposed that both are mentioned. Without this presupposition it is very difficult to draw a meaningful comparison and come to an overall conclusion. The same, off course, applies to the articles of association.

3.4. Limitations

The empirical research of this thesis is subject to two limitations. Firstly, the annual report and articles of association are not the only sources of information disclosed by corporations. However, the most important way for corporations to disclose information is, in my opinion, through their annual reports. According to Lang and Lundholm (1993), a positive correlation exists between information being dispersed by annual reports and other types of information. This suggests that corporations coordinate their overall disclosure policy. In addition, Hail (2002) believes that, given their formalized structure, annual reports are more easily comparable among corporations than less formal communication channels.

The second limitation is that a corporation, listed on the AEX, AMX or AScX, can also be listed on an index in another country. This especially applies, in my opinion, to corporations listed on the AEX. As a consequence, different rules and regulations could apply to these corporations. This limitation will be met by investigating which corporations are also listed on the NYSE and how many of them disclose the relevant information. According to their website, the NYSE is the largest equities marketplace in the world. The listed corporations represent approximately \$25 trillion of total global market value per December 31, 2006. All corporations listed on the NYSE are compelled to apply the Sarbanes-Oxley Act. The Sarbanes-Oxley Act was introduced in 2002, but some corporations just had to apply to these new rules per January 2006. It was introduced to improve quality, transparency and reliability of financial reports of public corporations (Jain and Rezaee, 2005).

4. Results

The annual reports and articles of association of the seventy corporations listed on the three indices are scrupulously examined. The results of this examination are shown in Appendix B, C and D. An independent *t*-test is conducted to determine whether the ascertained differences between the three indices are indeed significant. The null hypothesis is tested that there is no difference in voluntarily disclosing between the three indices. The confidence interval is set at 95%. Choosing a higher confidence interval means you can be stricter about your analysis but you run a higher risk of failing to detect a genuine effect (Blalock Jr. 1979; Field 2000).

The two-tailed probability is used if no prediction can be made about the direction of the effect. In this case a prediction can be made about which group will have the highest mean. Dutch law does not compel a listed corporation to disclose any information regarding a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance. The different theories and hypotheses discussed, lead me to believe that a larger corporation will choose to voluntarily disclose more information. In other words, it is probable the level of disclosure will show a declining trend since the corporations listed on the AEX, AMX and AScX represent approximately €536 billion, €40 billion and €20 billion per December 31,

2006.²⁷ Since SPSS only produces the two-tailed significance, the obtained p -value needs to be divided by two to ascertain the one-tailed probability. The results of the t -tests are shown in Appendix E and F. Comparing the results for the level of disclosure concerning a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance in the annual reports makes clear that there is only a significant difference between the means of the AEX and AScX. The one-tailed value of p is 0.018. There is no significant difference between the means of the AEX and AMX. In this case the one-tailed probability is 0.285. The means of the AMX and AScX also do not significantly differ from each other. The one-tailed p -value is 0.068. Comparing the results for the articles of association provides a similar picture. There is only a significant difference between the means of the AEX and AScX. The one-tailed p -value is 0.024. There is no significant difference between the means of the AEX and AMX. The means of the AMX and AScX also do not significantly differ from each other. These t -tests are non-significant because $p = 0.112$ respectively 0.235.

A limitation of this research is that a corporation, listed on the AEX, AMX or AScX, can also be listed on an index in another country. As a consequence, different rules and regulations could apply to these corporations. This limitation is met by investigating which corporations are also listed on the NYSE and how many of them disclose the relevant information. The NYSE is the largest equity market in the world and the rules and regulations that apply to the corporations listed on the NYSE are perceived as one of the most comprehensive in existence today. Nine corporations were listed on the AEX as well as on the NYSE in 2006: ABN AMRO Holding N.V., Aegon N.V., Buhrmann N.V., ING Groep N.V., Reed Elsevier N.V., Royal Dutch Shell plc, Royal KPN N.V., Royal Philips Electronics, and Unilever N.V. None of the corporations listed on the AMX or AScX are also listed on the NYSE. According to Appendix B, only six of the nine corporations disclose the information concerned. This means that the rules and regulations that apply to the corporations listed on the NYSE do not prescribe the disclosure of this type of information.

5. Analysis and suggestions for future research

5.1. Analysis

After an analysis of the different outputs produced by SPSS it can be concluded that corporations listed on the AEX more often disclose information concerning a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance than corporations listed on the AScX. They voluntarily disclose this type of information more often in their annual report as well as in their articles of association. Additional research proves that this outcome is not influenced by the fact that some corporations listed on the AEX are also listed on the NYSE.

²⁷ www.euronext.com (last visited February 20, 2007).

In the second chapter a theoretical framework was presented to explain such differences in the level of disclosure. The political cost hypothesis predicts that some corporations have a higher public profile than others and are therefore subject to greater interest by the public, media, government, financial analysts and so on. According to Linsley and Shrides (2003), these corporations can disclose more additional information to avert unwanted attention. It can be argued that corporations listed on the AEX have a higher public profile than corporations listed on the AScX.

In the capital market transactions hypothesis great importance is attached to investors' perception of a corporation. Prior research predicts that corporations reliant on external financing are more likely to undertake a higher level of disclosure (Francis et al. 2005). Through greater disclosure, corporations attempt to lower their cost of both debt and equity capital by reducing investors uncertainty. This argument may also relate to corporation size (Çelik et al. 2006). Larger corporations make greater use of debt because of tax advantage. It can therefore be argued that corporations listed on the AEX undertake a higher level of disclosure.

The decision to disclose information is also affected by the cost of litigation. This threat of litigation can have two effects. Legal action could be brought against managers for inadequate or untimely disclosures. This could encourage them to increase voluntary disclosure. Litigation could also reduce managers' incentives to provide disclosure. The legal system therefore plays an important role in the decision to voluntarily disclose information. Large, wealthy corporations face a greater litigation risk since litigants seek out corporations that can potentially pay a high amount of damages (Kothari et al. 2009). The litigation hypothesis asserts that the incentive to disclose information is lower for corporations listed on the AEX. On one occasion the spokesperson of a corporation listed on the AEX told me they explicitly choose not to disclose any information on whether or not a directors' and officers' liability insurance has been concluded by the corporation, because they felt this could only attract liability claims.

The Signalling Theory suggests that some corporations wish to signal the capital market about having stronger risk management capabilities than others (Linsley and Shrides 2003). High quality corporations, in order to distinguish themselves from low quality corporations, will have to voluntarily provide investors with credible information (Çelik et al. 2006). In this respect it is interesting to mention that an employee of a corporation listed on the AEX told me they released information in excess of that what is required by regulation for this exact reason. The corporation wants to emphasize that it is more transparent than other corporations. It also wants to enhance the usefulness of its annual report.

The different theories and hypotheses give reason to believe that a large corporation will choose to voluntarily disclose more information. The level of disclosure would then show a declining tendency since the corporations listed on the AEX, AMX and AScX represent approximately €536 billion, €40 billion and €20 billion. The different outputs produced by SPSS only partially support this line of reasoning. Comparing the results for the level of disclosure concerning a granted exclusion or limitation of internal liability and

indemnification for external liability and a concluded directors' and officers' liability insurance in the annual reports makes clear that there is no declining trend. The results for the articles of association do show a declining tendency. It is interesting to note that the corporations listed on the AMX do not significantly differ in their level of disclosure from the corporations listed on the AEX despite the fact that they represent almost the same market value as the corporations listed on the AScX. A conclusive explanation cannot be found in the theories and hypotheses discussed. Apparently there are still more factors that influence the level of disclosure.

5.2. Suggestions for future research

The first two suggestions for future research are related to the two limitations of the empirical research. Firstly, the annual report and articles of association are not the only sources of information disclosed by corporations. One suggestion is to examine more sources of information.

Secondly, a corporation, listed on the AEX, AMX or AScX, can also be listed on an index in another country. Another suggestion is to investigate other influential indices in the world to determine their influence on this research.

Disclosing more information regarding a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance could enhance the decision usefulness of annual reports. The third suggestion is to determine the value users of annual reports attach to the disclosure of this information.

Research results concerning the level of disclosure and the existence of differences between the three indices provide accounting policymakers with useful knowledge for designing disclosure rules. The last suggestion is to research the need to alter the rules and regulation in connection with the results of this master thesis.

6. Summary and conclusions

First an overview is given of the legal grounds on which a director can be held liable according to Dutch law. A distinction can be made between internal and external liability. Internal liability can be seen as liability towards the corporation. External liability is liability towards third parties. A director is only liable if an irrevocable judicial judgment is pronounced or if he voluntarily accepts his liability. Directors may stipulate that their contracts include a clause providing for an exclusion or limitation of internal liability. This means directors are excluded in advance for claims of the corporation. Directors can also stipulate that their contacts include a clause providing for an indemnification for external liability. The aim of an indemnification clause is to compensate a director for the loss he suffered due to the disputes he is personally involved in because of the position he fulfills within the corporation. Central to a directors' and officers' liability insurance is to cover the personal liability of managing and supervisory directors. Besides this, such insurance can also be concluded by a corporation to cover the risk it runs after it has granted an exclusion or limitation of internal liability and indemnification for external liability to the directors. A listed corporation in The Netherlands is not required to disclose any

information regarding a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance.

If corporations listed on the AEX, AMX or AScX significantly differ from each other in disclosing information regarding a granted exclusion of liability and indemnification clause and a concluded directors' and officers' liability insurance, a possible explanation might be found in accounting theory. According to the political cost hypothesis, some corporations have a higher public profile and are therefore subject to greater interest by the public, media, government, financial analysts and so on. To avert this unwanted attention they can disclose more additional information. In the capital market transactions hypothesis great importance is attached to investors' perception of a corporation. Through greater disclosure, corporations attempt to lower their cost of both debt and equity capital by reducing investors uncertainty. The decision to disclose information is also affected by the cost of litigation. According to the Signalling Theory, some corporations wish to signal the capital market about having stronger risk management capabilities than others.

Comparing the results for the level of disclosure concerning a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance in the annual reports makes clear that there is only a significant difference between the means of the AEX and AScX. Comparing the results for the articles of association provides a similar picture.

The different theories and hypotheses give reason to believe that a large corporation will choose to voluntarily disclose more information. The level of disclosure would then show a declining tendency since the corporations listed on the AEX, AMX and AScX represent approximately €536 billion, €40 billion and €20 billion. The different outputs produced by SPSS only partially support this line of reasoning. Comparing the results for the level of disclosure concerning a granted exclusion or limitation of internal liability and indemnification for external liability and a concluded directors' and officers' liability insurance in the annual reports makes clear that there is no declining trend. The results for the articles of association do show a declining tendency. It is interesting to note that the corporations listed on the AMX do not significantly differ in their level of disclosure from the corporations listed on the AEX despite the fact that they represent almost the same market value as the corporations listed on the AScX. A conclusive explanation cannot be found in the theories and hypotheses discussed. Apparently there are still more factors that influence the level of disclosure.

References

Asser, C. 2000. Mr. C. Asser's handleiding tot de beoefening van het Nederlands burgerlijk recht, Asser-serie 2: Vertegenwoordiging en rechtspersoon, deel III: *De naamloze en de besloten vennootschap*, tweede druk bewerkt door mr. J.J.M. Maeijer, W.E.J. Tjeenk Willink. Deventer.

- Assink, B.F. and P.D. Olden. 2005. Over bestuurdersaansprakelijkheid - De reikwijdte van de maatstaf 'ernstige verwijt', vrijtekening en vrijwaring nader bezien. *Ondernemingsrecht* 1: 9-16.
- Barry, C.B. and S.J. Brown. 1985. Differential information and security market equilibrium. *Journal of Financial and Quantitative Analysis* 20: 407-422.
- Barry, C.B. and S.J. Brown. 1986). Limited information as a source of risk, *The Journal of Portfolio Management* 20: 66-72.
- Blalock Jr., H.M. 1979. *Social statistics*. Tokyo: McGraw-Hill.
- Botosan, C.A. 1997. Disclosure level and the cost of equity capital. *The Accounting Review* 97(3): 323-349.
- Botosan, C.A. and M.A. Plumlee. 2002. A re-examination of disclosure level and the expected cost of equity capital. *Journal of Accounting Research* 40: 21-40.
- Çelik, O., A. Ecer and H. Karabacak. 2006. Disclosure of forward looking information: Evidence from listed companies on Istanbul Stock Exchange (ISE). *Investment Management and Financial Innovations*, 3(2): 197-216.
- Diamond, D.W. and R. Verrecchia. 1991. Disclosure, liquidity and the cost of capital. *Journal of Finance* 46: 1325-1359.
- Field, A. 2000. *Discovering statistics using SPSS for Windows: advanced techniques for the beginner*, London: Sage Publications.
- Francis, J.R., I.K. Khurana and R. Pereira. 2005. Disclosure incentives and effects on cost of capital around the world. *The Accounting Review* 80: 1125-1162.
- Franssen van de Putte, A.S. 2004. Vrijwaring en verzekering. In: G. van Solinge and M. Holtzer (red.). *Geschriften vanwege de Vereniging Corporate Litigation 2003-2004*, Serie monografieën vanwege het Van de Heijden Instituut te Nijmegen No. 75, Deventer: Kluwer. 491-503.
- Glasz, J.R., H. Beckman and J.A.M. Bos. 1994. *Bestuur en toezicht*, Deventer: Kluwer.
- Hail, L. 2002. The impact of voluntary corporate disclosures on the ex-ante cost of capital for Swiss-firms. *European Accounting Review* 11: 741-773.
- Healy, P. and K. Palepu. 2001. Information asymmetry, corporate disclosure and the capital markets: a review of the empirical disclosure literature. *Journal of Accounting and Economics* 31: 405-440.

- Heuvel, D. van den. 2007. *Verzekering: een onderbelichte vorm van bescherming bij bestuurdersaansprakelijkheid?* Rotterdam: Erasmus Universiteit Rotterdam.
- Jain, P.K. and Z. Rezaee. 2005. The Sarbanes-Oxley Act of 2002 and security market behavior: early evidence. *Contemporary Accounting Research* 23: 629-654.
- Knoops, C.D. 2004. Het jaarverslag en de overige gegevens. In: M.N. Hoogendoorn, J. Klaassen and F. Krens (red.). *Externe verslaggeving in theorie en praktijk deel 2*. Vierde druk. Den Haag: Reed Business Information. 1196-1239.
- Kothari, S.P., S. Shu and P. Wysocki. 2009. Do managers withhold bad news? *Journal of Accounting Research* 47(1): 241-276.
- Kroeze, M.J. 2005. *Bange bestuurders*. Deventer: Kluwer.
- Lang, R.M. and R.J. Lundholm. 1993. Segment reporting to the capital market in the presence of a competitor. *Journal of Accounting Research* 34: 261-280.
- Linsley, P.M. and P.J. Shrives. 2003. Risk management: Communicating risk management in annual reports. *International Accountant* 20: 28-31.
- Nijs Bik, W.W. de. 1998. De bestuurders gevrijwaard' *TVVS* 2: 33-37.
- Olffen, M. van. 2004. Vrijwaring van bestuurders en commissarissen van een N.V. of B.V. In: G. van Solinge en M. Holtzer (red.), *Geschriften vanwege de Vereniging Corporate Litigation 2003-2004*, Serie monografieën vanwege het Van de Heijden Instituut te Nijmegen No. 75. Deventer: Kluwer. 469-481.
- Orsel, R.A. 2005. De reikwijdte van de interne aansprakelijkheid van bestuurders. *Nederlands Juristenblad* 41: 2134-2138.
- Orsel, R.A. 2006. Aansprakelijkheid van bestuurders en commissarissen; ruimere exoneratie en vrijwaring mogelijk. *Weekblad voor Privaatrecht, Notariaat en Registratie* No. 6650: 34-41.
- Potjewijd, G.H. 2003. Vrijwaring voor bestuurders en commissarissen. *Ondernemingsrecht* 16: 607-613.
- Savornin Lohman, H.A. de. 1996. *Duties and liability of directors and shareholders under Netherlands Law - Piercing the corporate veil*, Kluwer Law International.
- Schilfgaarde, P. van. 2006. *Van de BV en de NV*. Veertiende druk bewerkt door Jaap Winter. Deventer: Kluwer.

Vroom, E.A. 1999. Bieden exoneration- en vrijwaringsclausules bescherming tegen bestuurdersaansprakelijkheid? *Vennootschap & Onderneming* 9: 98-100.

Watts, R.L. and J.L. Zimmerman. 1978. Towards a positive theory of the determinants of accounting standards. *The Accounting Review* 53(1): 112-134.

Watts, R.L. and J.L. Zimmerman. 1990. Positive accounting theory: A ten year perspective. *The Accounting Review* 65(1): 259-285.

Appendix A: Listed corporations in The Netherlands in 2006

AEX	AMX	AScX
ABN AMRO Holding N.V.	Aalberts Industries N.V.	Arcadis N.V.
Aegon N.V.	ASM International N.V.	Ballast Nedam N.V.
Koninklijke Ahold N.V.	Koninklijke BAM Groep N.V.	Beter Bed Holding N.V.
Akzo Nobel N.V.	BinckBank N.V.	Brunel International N.V.
ArcelorMittal N.V.	Koninklijke Boskalis Westminster N.V.	Draka Holding N.V.
ASML Holding N.V.	Corio N.V.	Eurocommercial Properties N.V.
Buhrmann N.V.	Crucell N.V.	Exact Holding N.V.
Koninklijke DSM N.V.	CSM N.V.	Grontmij N.V.
Fortis N.V.	Fugro N.V.	Hunter Douglas N.V.
Hagemeyer N.V.	Heijmans N.V.	Imtech N.V.
Heineken N.V.	LogicaCMG N.V.	Laurus N.V.
ING Groep N.V.	Nutreco Holding N.V.	Macintosh Retail Group N.V.
Koninklijke KPN N.V.	Océ N.V.	OPG Groep N.V.
Koninklijke Numico N.V.	Ordina N.V.	Pharming Group N.V.
Koninklijke Philips N.V.	SNS Reaal N.V.	Sligro Food Group N.V.
Randstad Holding N.V.	Stork N.V.	Smit Internationale N.V.
Reed Elsevier N.V.	Tele Atlas N.V.	Telegraaf Media Groep N.V.
Rodamco Europe N.V.	USG People N.V.	Koninklijke Ten Cate N.V.
Royal Dutch Shell plc	Van der Moolen Holding N.V.	Unit 4 Agresso N.V.
SBM Offshore N.V.	Koninklijke Vopak N.V.	Van Lanschot N.V.
TNT N.V.	Wereldhave N.V.	VastNed Offices/Industrial N.V.
TomTom N.V.	Koninklijke Wessanen N.V.	Vastned Retail N.V.
Unilever N.V.		Wavin N.V.
Vedior N.V.		
Wolters Kluwer N.V.		

Appendix B: AEX

	Exclusion of liability and indemnification clause in the annual report	Directors' and officers' liability insurance in the annual report	Exclusion of liability and indemnification clause in the articles of association	Directors' and officers' liability insurance in the articles of association
ABN AMRO Holding N.V.	No	no	no	no
Aegon N.V.	No	no	article 28A	article 28A.7
Koninklijke Ahold N.V.	No	no	no	no
Akzo Nobel N.V.	No	no	article 38	article 38
ArcelorMittal N.V.	No	no	article 8.8	no
ASML Holding N.V.	p. 13/14, 19/20, 24/25 & 76	p. 76	articles 19.3 & 26.3	article 19.3 & 26.3
Buhrmann N.V.	p. 46 & 47	p. 47	article 30	article 30.6
Koninklijke DSM N.V.	p. 35 & 67	no	article 29A	article 29A.6
Fortis N.V.	No	no	no	no
Hagemeyer N.V.	No	no	article 28	article 28
Heineken N.V.	No	no	article 7.9	article 7.9
ING Groep N.V.	No	no	no	no
Koninklijke KPN N.V.	No	p. 65	article 33	article 33.6
Koninklijke Numico N.V.	No	no	no	no
Koninklijke Philips N.V.	p. 106 & 228	p. 106 & 228	articles 17.4 & 23.2	article 17.5 & 23.3
Randstad Holding N.V.	No	no	article 18	article 18.6
Reed Elsevier N.V.	p. 107	no	no	no
Rodamco Europe N.V.	No	p. 47	article 8.4	article 8.4
Royal Dutch Shell plc	p. 75	no	article 151	article 151
SBM Offshore N.V.	No	no	article 27	article 27
TNT N.V.	No	no	article 33	article 33.6
TomTom N.V.	No	no	no	no
Unilever N.V.	p. 38	p. 38	article 19.9	article 19.9
Vedior N.V.	No	p. 51	article 29A	no
Walters Kluwer N.V.	No	no	article 26	article 26.6

Appendix C: AMX

	Exclusion of liability and indemnification clause in the annual report	Directors' and officers' liability insurance in the annual report	Exclusion of liability and indemnification clause in the articles of association	Directors' and officers' liability insurance in the articles of association
Aalberts Industries N.V.	No	no	no	no
ASM International N.V.	No	no	no	no
Koninklijke BAM Groep N.V.	p. 23	p. 23	article 24.4	no
BinckBank N.V.	No	no	no	no
Koninklijke Boskalis Westminster N.V.	No	no	article 21	article 21
Corio N.V.	No	p. 94	no	no
Cruceil N.V.	p. 121	no	article 28	article 28.7
CSM N.V.	No	p. 51	article 15	article 15
Fugro N.V.	No	no	article 23A	article 23A
Heijmans N.V.	No	no	no	no
LogicaCMG N.V.	p. 41	p. 41	no	no
Nutreco Holding N.V.	No	no	article 20	article 20
Océ N.V.	No	p. 67	article 21	article 21
Ordina N.V.	No	no	no	no
SNS Reaal N.V.	No	no	article 14.4 until 14.10	article 14.9
Stork N.V.	No	no	no	no
Tele Atlas N.V.	No	no	article 15	article 15.5
USG People N.V.	No	no	article 26	no
Van der Moolen Holding N.V.	p. 23	p. 23	article 15 & 23	article 15.4 & 23.2
Koninklijke Vopak N.V.	No	no	article 13.4	article 13.4
Wereldhave N.V.	No	no	no	no
Koninklijke Wessanen N.V.	No	no	no	no

Appendix D: AScX

	Exclusion of liability and indemnification clause in the annual report	Directors' and officers' liability insurance in the annual report	Exclusion of liability and indemnification clause in the articles of association	Directors' and officers' liability insurance in the articles of association
Arcadis N.V.	p. 74	no	article 13	article 13.3
Ballast Nedam N.V.	No	no	no	no
Beter Bed Holding N.V.	No	no	no	no
Brunel International N.V.	No	no	article 10	article 10
Draka Holding N.V.	No	no	no	no
Eurocommercial Properties N.V.	No	no	no	no
Exact Holding N.V.	No	no	no	no
Grontmij N.V.	No	no	article 32	article 32.6
Hunter Douglas N.V.	No	no	no	no
Imtech N.V.	No	no	article 22	article 22
Laurus N.V.	No	no	no	no
Macintosh Retail Group N.V.	No	no	article 30	no
OPG Groep N.V.	No	p. 65	article 13.8	article 13.8
Pharming Group N.V.	No	no	no	no
Sligro Food Group N.V.	No	no	article 32	article 32
Smit Internationale N.V.	No	p. 39	no	no
Telegraaf Media Groep N.V.	No	no	no	no
Koninklijke Ten Cate N.V.	No	no	no	no
Unit 4 Agresso N.V.	No	no	no	no
Van Lanschot N.V.	No	no	article 28B	article 28B.6
VastNed Offices/Industrial N.V.	No	no	no	no
Vastned Retail N.V.	No	no	article 13.6	article 13.6
Wavin N.V.	No	no	article 20	article 20.5

Appendix E: Output independent t-test annual report

AEX - AMX

Group statistics

INDEX	N	Mean	Std. Deviation	Std. Error Mean
SCORE 1.00	25	1.6000	.5000	.1000
SCORE 2.00	22	1.6818	.4767	.1016

Independent t-test

	Levene's Test for Equality of Variances		t-test for Equality of Means				95% Confidence Interval of the Difference		
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Upper	Lower
SCORE	1.286	.263	-.572	45	.570	-.0818	.1430	-.3699	.2063
Equal variances assumed			-.574	44.691	.569	-.0818	.1426	-.3691	.2054
Equal variances not assumed									

AEX - AScX

Group statistics

	INDEX	N	Mean	Std. Deviation	Std. Error Mean
SCORE	1.00	25	1.6000	.5000	.1000
	3.00	23	1.8696	.3444	7.180E-02

Independent t-test

	Levene's Test for Equality of Variances		t-test for Equality of Means				95% Confidence Interval of the Difference		
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Upper	Lower
SCORE	21.208	.000	-2.157	46	.036	-.2696	.1250	-.5212	-.0180
			-2.190	42.734	.034	-.2696	.1231	-.5179	-.0213

AMX - ASCX

Group statistics

	INDEX	N	Mean	Std. Deviation	Std. Error Mean
SCORE	2.00	22	1.6818	.4767	.1016
	3.00	23	1.8696	.3444	7.180E-02

Independent t-test

	Levene's Test for Equality of Variances		t-test for Equality of Means				95% Confidence Interval of the Difference		
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Upper	Lower
SCORE	10.080	.003	-1.520	43	.136	-.1877	.1236	-.4369	6.143E-02
			-1.509	38.126	.140	-.1877	.1244	-.4396	6.415E-02

Appendix F: Output independent t-test articles of association

AEX - AMX

Group statistics

INDEX	N	Mean	Std. Deviation	Std. Error Mean
SCORE 1.00	25	1.2800	.4583	9.165E-02
SCORE 2.00	22	1.4545	.5096	.1087

Independent t-test

	Levene's Test for Equality of Variances		t-test for Equality of Means				95% Confidence Interval of the Difference		
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Upper	Lower
SCORE	4.430	.041	-1.236	45	.223	-.1745	.1412	-.4589	.1098
Equal variances assumed			-1.228	42.630	.226	-.1745	.1421	-.4613	.1122
Equal variances not assumed									

AEX - ASCX

Group statistics

	INDEX	N	Mean	Std. Deviation	Std. Error Mean
SCORE	1.00	25	1.2800	.4583	9.165E-02
	3.00	23	1.5652	.5069	.1057

Independent t-test

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper
SCORE	4.008	.051	-2.048	46	.046	-.2852	.1393	-.5656	-.0048	
			-2.039	44.474	.047	-.2852	.1399	-.5671	-.0034	
	Equal variances assumed									
	Equal variances not assumed									

AMX - ASCX

Group statistics

	INDEX	N	Mean	Std. Deviation	Std. Error Mean
SCORE	2.00	22	1.4545	.5096	.1087
	3.00	23	1.5652	.5069	.1057

Independent t-test

	Levene's Test for Equality of Variances		t-test for Equality of Means								
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference			
	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	
SCORE	.066	.799	-.730	43	.469	-.1107	.1516	-.4163	.1950	-.4164	.1950
			-.730	42.889	.469	-.1107	.1516	-.4164	.1950	-.4164	.1950
	Equal variances assumed										
	Equal variances not assumed										