MASTERTHESIS MAARTEN KRISTIAN BUL

THE SIZE AND COMPOSITION OF THE BOARD OF DIRECTORS AND ITS EFFECT ON FINANCIAL PERFORMANCE FOR CULTURAL INSTITUTIONS.

JULY 2010

Abstract

At present, there has been little research to the influence of the board of directors on organizational performance in the cultural industries. This thesis analyses the composition, functions and possible effects of the board, with a final goal of finding a correlation between human capital from for-profit environments and financial performance in cultural institutions. After testing four hypothesis on 17 Dutch museums, over 5 years, it was found directors from for-profit environments might give higher incomes from funding. However, directors from non-profit cultural environments positively influence incomes from commercial activities significantly.

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1. INTRODUCTION

The creative and cultural industries are becoming increasingly prominent as a major contributor to economic growth (Jones et. al., 2005). On top of that they are considered to be a key source of competitive advantage in the globalized economy (Florida, 2002). There is however a conflicting relationship between art/creativity and business/management, which makes it hard to integrate the two. Eikhof & Haunschild (2007) found that despite of this need there very little organizational routines, based on economic logic, implemented in cultural organizations. This thesis will try to find more grounds upon which more economic logic can be implemented.

This topic is especially relevant to the Dutch cultural industry. To stimulate cultural institutions to become more business-oriented dependent and to create a more innovative and entrepreneurial cultural environment, the Dutch government recently deployed a new policy with which a minimum of 25% own income is required. This means, 25% of all income should come from a source other than the government. This makes the financial performance of the cultural institutions of increased importance.

This development combined with the theoretical need for more insight on integrating business with culture is the motivation of this thesis. I will research whether it is beneficial for cultural institutions to attract business people to help them cope with this new, more financial oriented, environment. Based on theory I will argue selecting board members from for-profit environments can give access to an increased financial legitimacy through experience and knowledge. I will also argue more board members will give access to a larger pool of resources and are therefore beneficiary to the financial performance of the cultural institution.

In this thesis I will first analyze how define the cultural industries and the importance of more research in this field. Then I'll do the same shortly for governance in non-profit organizations, because many of the cultural institution are non-profit. After this I'll analyze how the board of directors are composed and what its exact roles and responsibilities are. Fourthly I'll illustrate how the orientation of the board can influence the execution of these roles and responsibilities, after which an elaborate literature review on the possible performance influencers follows.

Based on the literature research in these first five chapters I'll argue board members from the for-profit sector and the size of boards positively influence the financial performance of cultural institutions. In the seventh chapter I'll try to prove this by testing three hypotheses. Hereafter I'll will revise these results and discuss their implications for different fields of research. Finally I will sum up my findings in the conclusion.

2. THE CULTURAL INDUSTRIES

Research in the field of creative and cultural industries is of great importance, because the issues faced in these industries are of increasing relevance to those in other industries (Lampel et. al., 2000). This relevance is thanks to many differences between these industries and others. It provides a unique setting in which resources and managerial processes can be analyzed (Caves, 2000). Unfortunately not most of the research is focused on issues concerning the public policy of the elite performing arts. There has been little attention to the management of creative or cultural organizations (Caves, 2003).

Although there are many similarities, it is important to make a difference between the terms "creative industries" and "cultural industries" when dealing with industry, theory and policy analysis (Cunningham, 2001). Creative industries can be defined as "goods and services that we broadly associate with cultural, artistic, or simply entertainment value" (Caves, 2000). However cultural industries can be defined quite similar, the products in the cultural industries are distinct form those from creative industries in two ways: the products comprise symbolic ideas and the market knows various types of market failure. The various market failures are result of the way arts are consumed. Firstly, benefits of consuming art are valuable to those who experience it directly and to those who are not present. Secondly, closely related, a large share of the people who fund the arts, through government policies, is not consuming it (Galloway & Dunlop, 2007). As we'll explore later, the absent of a functioning market might be a reason why business people could increase the financial performance of the cultural institutions.

As might be logical in a 'non-market', many of these institutions are non-profit. Although money is not the prime reason for their existence, cultural institutions are, like any other non-profit organization, dependent on financial legitimacy. Their income results mostly from ticket sales, foundational or corporate sponsorships, private donations and governmental subsidies. So the income should increasingly come from the 'customers' or funders. Additionally, directors from a for-profit environment might also be able to create a more financially stable organization through good governance.

3. GOVERNANCE IN NON-PROFIT ORGANIZATIONS

Fueled by various scandals governance by the board of directors has, over the last few decades, been a central topic in a lot of academic research. Logically, these scholars were mainly focused on the relation between board composition and performance of for-profit, publicly traded companies. However, it is well known that organizational governance in the non-profit sector is of great importance too (Van Hoomissen, 1994). This is because our knowledge of the activity and behavior of the board of directors is especially low in this sector (Steane and Christie, 2001, Parker, 2003). Therefore the knowledge on governance needed for this thesis partly originates from for-profit sector research. Because of the lack of research in this field, this thesis will contribute to the general knowledge whether correlations are found or not.

4. INFLUENCERS ON THE SIZE, STRUCTURE AND COMPOSITION OF THE BOARD

When considering the performance of board of directors by it's shape, it is useful when looking at the influencers on this shape. Three factors are determent to the shape of the board: the people who are on it (composition), the kind of chairman (structure) and the size. The characteristics of the people who are on the board are worked out later. For the structure of the board there are roughly two options: either the CEO is the chairman, or somebody else is.

As open social systems organizations are inevitably linked to the conditions of the environment they operate in. Therefore the directors should represent, lead and relate to these stakeholder groups, while enlisting directors who can orchestrate a portfolio of new and existing stakeholder groups in order to obtain the resources needed to support the non-profit organization (Parker, 2007).

For cultural organizations stakeholders more diverse compared to other non-profit or for-profit organizations (Oster, 1995). They can be grouped under the organization, funders, customers, society and suppliers (Voss, Cable & Voss, 2000). As a result, aspects like high public/professional profile, communication skills and network relationships of board members seem to be ranked higher than in the for-profit sector (Parker, 2007).

In the next paragraph the influencers on composition and structure of the board are illustrated the distinctive characteristics of the directors. After the influence of the internal and external environment on the size of the board will be discussed. A short conclusion will end this paragraph.

4.1 Characteristics of board members

The main difference among the directors on the board in any kind of organization is the insider-outsider division. The balance between insiders and outsiders determines the independence of the board from the organization. A larger share of outsiders causes a more independent board (Weisbach, 1998).

Inside directors come from within the organization and serve largely by providing information about the organization and its direct environment (Fama & Jensen, 1983). Outside directors are focused mainly on providing resources from the environment. Based upon the kind of resources a director can provide Hillman, Cannella & Paetzold (2000) identify three kind of outside directors: business experts, support specialists and community influentials.

Business experts contribute with knowledge and expertise on the type of organization and the environment it operates in. They support on strategic decision-making and internal operations. Support specialists bring linkages and expertise in specific areas that support the main strategy. These can be public relations, law, insurance or capital. Community influential's posses' knowledge or influence on non-business organizations like political groups, institutions or social organizations.

4.2 Influences on the composition from the external environment

Zald (1967) states the ecological characteristics and social demographics of a community affect the organizations located in that area. Not only the demands may vary because of the demographic area, but also the supply of 'desirable' board members. Zald (1967) found demographic characteristics of the area had their effect on the socioeconomic status of the board. At the same time a larger concentration of other organizations in the area was correlated with larger organizations, who in their turn where more attractive to board members. In short the composition of the board seem to be related to the demographical environment in which the organization operates.

Pfeffer (1973) found the composition of the board is also related to the organizational environment. The regulations, stakeholders and resource dependency are in this case influencers of the kind of board members in the board. Increased dependency on the government leads for non-profit organizations to a focus on administrational tasks and therefore to directors who have knowledge of the business (business experts).

Another aspect of the board, which is influenced by the external environment, is the number of interlocks. An interlock is a connection between two organizations through board members. There are two kinds of interlock: direct interlocks and indirect interlocks. The interlock is direct when a director sits on the board of the other organization. An indirect interlock occurs when two board members of two different organizations sit together on a third party board.

Overall interlocks are formed to enable cooperation and increase access to resources. Boyd (1990) found an uncertain external environment led to an

increase in interlocks. This is because of the need for certainty, which is closely related to access to resources. The type of resource needed is on its turn influential to the type of interlock. Research by Stearns & Mizruchi (1993) found the types of interlocks with financial institutions are associated to the organizational borrowing strategies. In this perspective an organizations' dependency on the environment is an important influencer on the type and number of interlocks, and therefore the selection of board members. In other words, they function as support experts.

The environmental influence a board composition was further illustrated by Hillman (2000) who found organizations respond to significant changes in this environment by changing the composition of the board.

4.3 Influences on the composition from the internal environment

On top of the external environment, the internal environment of the organization was found to be of influence on board composition as well. It was found the size of the budget was directly correlated to the amount of directors from financial organizations (Hillman, 2000).

Other internal forces, when configuring the board, are the preferences of the CEO and the serving board members. Since both should be heard, Hermalin and Weisbach (1998) modeled the composition and structure of the board as a result from a bargaining game between the CEO and the serving board members. Generally they expect to see stronger CEO's with weaker dependent boards and weaker CEO's with stronger independent boards. When the board is structured in a way where the CEO is chairperson of the board his influence on the composition of the board will resultant be larger.

However, in case of the non-profit boards there is an extra board responsibility that complicates matters. For non-profit organization the board members are also expected to contribute resources. Therefore a CEO will favor high-giving individuals, insider or outsider, and take a possibly higher involvement of the board for granted (O'Regan & Oster, 2005). In short the role and the preferences of the CEO have an important role in the composition of the board.

4.4 Influences on the size of the board

As the kinds of directors seem influenced by the internal and external environments, so is the size of the board. Large organizations tend to have larger boards (Pfeffer, 1972). As for the external environment, Pfeffer (1973) found the size of the board was correlated its function and to the need for environmental linkages. The board was found to be larger when the total budget and the proportion private donations rise. It is argued this is because of the increased dependency on private donations and therewith the increased focus on access to resources. Likewise, non-profit boards are expected to be larger, because of the broader set of tasks and larger resource needs (Oster, 1995).

4.5 Conclusion

In case of the cultural organizations in the Dutch environment it therefore can be expected the boards will attract more support specialists and grow in size. Whether this will result in a better financial performance depends on the function the board has and how the board executes this function.

5. THE FUNCTION OF THE BOARD IN NON-PROFIT ORGANIZATIONS

In for-profit organizations the board of directors functions as a representative of the shareholders. Because non-profit organizations have no shareholders it is harder to establish what the exact purpose of the board is. According to Oster (1995) the non-profit board should promote the organization's mission and it therefore has the responsibility to multiple stakeholders like the public taxpayer, the clients, the donors and the staff. Because cultural organizations have more different kind of stakeholders compared to for-profit or other non-profit organizations this is an interesting research field in which no prior research has been done on board composition and performance.

In this paragraph the function of a non-profit board will be analyzed. This gives a set of variables on which different board members can contribute to support the organization. Later we will link these to different outcomes in performance.

5.1 Duty of loyalty

The board of directors is an organizational organ serving as buffer group between the public and professional staff (Price, 1963). As stated above its function in case of non-profit organizations is to promote the organization's mission. To do so all board members individually have two main duties when overseeing the conduct of an organization: the duty of loyalty and the duty of care (Wiehl, 2004). The duty of loyalty covers confidentiality, corporate opportunity and conflicts of interest. The most important directive is the fact a director may not (ab)use the position of board member to gain personal advantage. Unless, of course, this somehow works to the benefit of the organization primarily.

5.2 Duty of care

The second duty – the duty of care – addresses the need for directors to be working in line with the organization's purpose, finances and activities. There are three circumstances in which this duty of care is applicable for non-profit organizations. According to the well-accepted view of the three W's the board

members of non-profit organizations should bring Work, Wisdom and Wealth to the organization (O'Regan & Oster, 2005).

This view is based on the resource-based view (RBV), a dominant theory in strategic management (Barney et. al., 2001). It originates from the resource dependence theory (Aldrich & Pfeffer, 1976), which proposes the survival of an organization is subjected to its ability to get access and control over environmental resources. These resources can be categorized into the three W's: Work, Wisdom and Wealth.

5.2.1. Work

Within the non-profit sector the Work-function is somewhat different from the decision-making-function generally described in the for-profit sector literature. In case of the former the function includes more operational tasks. An other difference is the fact the options a board member can choose from are measured by profitability primarily. Other dimensions like strategic fit, term, added organizational pressure and the level of investment are all subjected to this main objective. With non-profit organizations it is key to decide for the option that is closest to the mission of the organization. This might very well be the least profitable option. Moreover, since the options are not weighted on financial and therefore measurable characteristics primarily, they tend to be more subjected to subjectivity. It can therefore be argued the quality of work by non-profit board members is based on expertise and knowledge compared to work in the forprofit.

5.2.2. Wisdom

The Wisdom-function of the board covers the assessment, evaluation and alignment of organizational and management performance in line with the mission and strategy of the organization. O'Regan & Oster (2005) claim resources in Wisdom have three purposes. First it covers the monitoring role of the board plus a more active responsibility of advising the senior management. Secondly, ethical and legal issues to which the organization is subjected are a field covered by this function of the board (Miller, 2002). Lastly, the board is also trusted to hold and manage the assets available in a way that is beneficiary to the stakeholders (Chait, Ryan & Taylor, 2005). These expectations are usually illustrated by applicable law systems within the country. However, the non-profit boards differ from for-profit boards on the fact a market for corporate control is absent. This may allow both the management and the board of directors with considerable autonomy, since no (potential) shareholders are monitoring the directors.

In this scope, the most important argument for the monitoring role of the Wisdom function can be found. Fama (1980) describes the theory of principal-agent relationships in which the board represents the community (the principal) as their agents. The board in it's turn is the principal of the senior management

of the organization, thereby the agent. This theory is better known as agent theory. In this theory it is assumed the goals of agents and principals are not fully aligned. Every different role brings different preferences for different courses of action based upon time-horizons, risk exposure and effort involved (Walsh & Seward, 1990). When there is no control by a principal it is expected the agent will, when divergences in goals occur, act in their self-interest.

For non-profit organizations the wisdom role is in essence similar too the wisdom role of for-profit organizations. The only differences are a wider variety of stakeholders represent and the absence of a market for corporate control. This could limit the pressure and control on a boards' performance, which therefore might not be optimal.

5.2.3. Wealth

According to the resource based view (RBV) theory an organization is always subjected to dependency on and uncertainties from the external environment. This dependency and uncertainty is subjected to the level of dependence of the company and the type of environment. This was illustrated by the correlation between higher percentages of attorneys in a board when there were more regulations applicable to the organization (Pfeffer, 1972).

Apart from the directors *as* resource, the resource dependency model illustrates how directors can connect the organization with the external environment in order to reduce the uncertainty (Hillman et. al, 2000). The board is in this case a linkage between the organization and the external environment. The board functions now as a tool for the organization to get more control over uncertainties in this environment.

The uncertainty reduced if directors are able to reduce the transaction costs coming from interdependencies with the external environment (Williamson, 1984). Besides interlocks an example could be a director who has knowledge of regulations and governmental processes, thereby reducing uncertainty (support specialist). The director can reduce the transaction costs of dealing with these regulations and processes, by knowing what people to contact and how to work as efficiently as possible.

The board may not only reduce uncertainty by knowledge, but also through access to scarce information and resources (Pfeffer & Salancik, 1978). Zald (1969) supports this theory by finding a relation between resource acquisition and board interlocks with financial institutions. In this case one of these memberships was with a financial institution, allowing the organization of which the person was a board member too, to get easier access to financial resources.

In short the wealth-function board of directors allows an organization to deal with dependency on and uncertainty from the external environment by reducing transaction costs and increase access to resources (Daily & Dalton, 1994).

6. THE EFFECTS OF THE BOARD-ORIENTATION

Depending on the specific board members' characteristics and the needs of the organization, a director's completion of his role might differ. As Johnson (1996) finds, directors might perform both the wealth-function as the wisdom-function, while they are theoretically distinct. However, they are interdependent, while a board member with lower resource contributions (Wealth) might compensate with more operational duties (Work). In other cases a board member with high resource contribution might focus more on monitoring (Wisdom) to ensure those resources are well spent. In other words, a directors orientation influences the contribution made to the organization.

Baysinger & Butler (1985) further elaborates by suggesting the differences in fulfilling the role of director are probably most visible when looking at their individual occupational attributes and experience. It was found these characteristics had influence on the kind of decisions and strategies implemented by the board (Hambrick & Mason, 1984), which on their turn could thereby be predicted (Westphal & Zajac, 1997).

Pfeffer (1973) found a correlation between the overall orientation of the board and the environmental context. So apart from interpersonal differences between board members, the orientation of the boards in general is affected by the environment. The level of affection is in its turn linked to the extend resources are coming from this environment (Levine & White, 1961)

On top of that, the CEO also influences the overall orientation of the board. O'Regan & Oster (2005) found that CEO's in nonprofit organizations often use their power in order to get boards to focus more on fundraising instead on monitoring activity.

7. THE INFLUENCE OF THE BOARD ON FINANCIAL PERFORMANCE

There is much literature and research on the board of directors in relation with the performance of an organization. The diversity of influencers and the ways to measure performance are rich, but the orientation to non-profit boards is limited. To stay in line with the goal of this paper the focus of this analysis lies on finding possible influencers on financial performance for cultural institutions.

7.1 Board composition: Insiders vs outsiders

Based largely on agent theory, a large representation of outside directors on boards is expected to have a positive correlation with a better performance. According to this theory the division of control and ownership leads to self-interest actions by managers. These actions could benefit themselves, but be harmful for an optimal result for the firm. The boards function as mechanism to

secure the interests of the owners, which is high financial performance (Fama & Jensen, 1983). The monitoring role is in this case one of the primary duties (Fleischer et.al., 1988). Because outside directors are expected to be independent from the organization's management, they should provide superior performance when monitoring the management (Dalton et. al., 1998). This might be a reason why Zald (1967) found non-profit organizations with a larger representation of business leaders in their boards where perceived to be more effective.

Alternatively, a large representation of inside directors is expected to have a positive correlation with a better performance, based on stewardship theory. This theory argues managers are always working to realize high levels of profit and shareholder's return. Inside directors are, in this case, better capable to evaluate the work of top managers because of their knowledge of the organization and its direct environment (Boyd, 1994). Additionally outside directors might be less reliable to evaluate the performances of non-profit organizations because of a lack in experience or distraction by external responsibilities (Westphal & Zajac, 1998).

For both the views there are a lot of researches with supportive findings. However, there is also a large stream of literature not finding any correlation. Callen & Falk (1993) illustrated non-profit organizations are not more efficient when the boards have a larger proportion of outsiders. Based on many of these researches Dalton et.al. (1998) conducted a meta-analytic review of board performance in relation to board composition and structure. They used 159 usable samples out of 5 empirical studies and found no correlation between financial performance and either board composition or structure.

However, research done by Hillman & Dalziel (2001) gives a more detailed view. They found board dependence was negatively influencing the monitoring role and positively influencing the provision of resources. It seems the balance between the two roles are different among different organizations. This might cause the mixed results in research. This is justified for it will zoom in on the kind of outside director and test the relation to a very specific form of performance.

7.2 Board composition: Personal characteristics

When looking at the level of the individual director research showed a director might influence performance positively if he's resource-rich (Boyd, 1990), has specific knowhow (Mizruchi & Stearns, 1994) or has critical capital in order to obtain certain resources (Hillman & Dalziel, 2003). A board members' capital can be either human (Work & Wisdom) or social capital (Wealth). Human capital can be described as a person's skills, reputation, knowledge, experience and expertise (Coleman, 1988). According to Miller & Shamsie (1996) knowledge-based resources can result in higher financial performance in a more uncertain cultural environment. Social capital can be expressed as the resources that are

potentially available through the network of relationships of a person (Nahapiet & Goshal, 1998). Together they form the board capital (Hillman & Dalziel, 2001).

Board capital was proven to be a positive influence on performance based upon the benefits of Pfeffer and Salancik (1978). First, an organization gets advice and counsel leading to a better performance (Westphal, 1999). This is partly provided through the human capital of directors (Gales & Kesner, 1994). Advice and counsel are also influenced by social capital. For instance, through directors' ties with strategically related organizations (Carpenter & Westphal, 2001).

Second, the legitimacy and reputation of the organization are positively influenced by social capital of board members (Daily & Schwenk, 1996) and can lead to a better performance at an IPO (Certo, Daily & Dalton, 2001).

Third, through social capital a board member can increase the communication channels available to an organization. This gives can give access to valuable information and reduce transaction costs caused by uncertainties. Interlocks are an example of such a communication channel and can increase performance (Hillman, Zardkoohi & Bierman, 1999).

7.3 Board structure

Both agency and stewardship theory are also applicable to the position of chairperson. The chairman of the board can be an outside director or the CEO (inside director). In this case too there is a large stream of literature in favor of the split control between the operational managers and the board. This preference of a separate board structure is based upon agency theory. Rochester (2003) found boards led by the CEO where primarily passive. It is suggested this way the CEO limits the monitoring function, allowing managers more freedom to operate. Domination like this could result in decisions based on self-interest, again leading to suboptimal organizational performance (Rechner & Dalton, 1991).

Alternatively stewardship theory on its turn advocates the joint structure gives the organization a unified leadership. Therefore there would be no differences between internal or external perception of control. The organizational outcomes and processes are the responsibility of one person. On its turn unified leadership will give an optimal result (Donaldson & Davis, 1991).

For both the composition as the structure theory, there are a lot of researches with supportive findings. However, there is also a large stream of literature not finding any correlation. Based on many of these researches Dalton et.al. (1998) conducted a meta-analytic review of board performance in relation to board composition and structure. Based on 159 usable samples they found no correlation between financial performance and either board composition or structure.

7.4 Board interlocks

Apart from personal characteristics board members can also increase access to resources by interlocks. The main benefit is a channel to exchange the resource information. In addition the cooperation could increase access to external resources apart from information. The organization in control of these particular resources gains additional advantages by having a way to influence on the decision-making apparatus and to control the use of exchanged resources. Benefits for the 'receiving' party are an increased access to resources and reduction in transaction costs (Stearns & Mizruchi, 1993). These findings suggest interlocks may increase organizational performance.

7.5 Board performance

The acquirement of resources, and therefore performance, can be positively affected by board capital. This can be done through securing resources on more profitable terms or influence on financial capital, political bodies or important stakeholder groups (Hillman & Dalziel, 2001). To do so, organizations secure commitment and involvement of their stakeholders, by having them represented on their boards (Hillman et.al., 2001).

The performance of the board itself might as well be correlated to organizational performance. Research by Miller, Weiss & MacLeod (1988) suggests the certain board practices may have a positive influence on effective governance. This is illustrated by Cornforth and Edwards (1998) who found strategically important items can be undervalued against routine reports and other agenda items when their agenda's are unstructured and unprioritized. Holland (2002) shows by implementing structurized and prioritized agenda's, experimenting with meeting structures and focused briefing papers for decisions result in higher board performance. This suggests the organizational abilities of the chairperson can have an influence on the performance of the board and therewith the company.

7.6 Board Size

Next to the composition, structure and performance of the board, corporate literature also focuses on the relation between board size and performance. Yermack (1996) finds large board sizes have a significant negative effect on organizational value. A reason might be increased risks for free-riders, and therewith a declining effectiveness of the board in general. In this line it is also argued smaller board have a better cohesiveness (Jensen, 1993), are less vulnerable to manipulation (Mintzberg, 1983), and are better able to initiate actions (Goodstein et.al., 1994).

A preference for larger board sizes is largely build on the resource based view. The number of board members may increase the ability to make links to needed resources in the environment (Goodstein et.al., 1994). Therefore a larger board will be needed when the need for resources from the environment is bigger (Pfeffer & Salancik, 1978). Provan (1980) findings support this view by

illustrating the positive relation between board size and the level of critical resources gained from the environment an increased chance for board interlocks and increased access to knowledge and advice could be two other arguments for large boards (Dalton et.al., 1999).

Boyd (1990) argues the board must be small enough to work in an efficient manner, but large enough to obtain the resources needed. But, Dalton et.al. (1999) showed by meta-analysis of 131 samples a positive correlation between board size and organizational performance. Because of the larger variety in stakeholders it can be argued a larger board size is leading to a better performance for cultural organizations too.

8. THE HYPOTHESIZED EFFECTS OF THE BOARDCOMPOSITION AND SIZE ON THE FINANCIAL PERFORMANCE IN CULTURAL INDUSTRIES

8.1 Hypotheses 1-3: The composition of the board

Based on theory on board composition it is safe to say the changing environment in the Dutch cultural industry will cause a change the composition of the boards of directors. It is however not sure whether this will make the organizations perform better financially. To argue in favor of a better performance I'll analyze the relevant distinctive characteristics of the cultural industries and use these to formulated four hypotheses.

The cultural industries are a different kind of industry from the regular for- or non-profit industries. As Potts, Cunningham & Hartley (2008) observe, they have many similarities to the service economy and are an outgrowth of a 'non-market'. This non-market was characterized by public goods and private imagination, but is increasingly product from and representation of the whole society.

First of all, value is not solely determined by offer and demand.

Wijnberg and Gemser (2000) discuss three selection systems influencing the valuation of products in different industries. They distinguish market, peer and expert selection. In market selection the consumers select the producers. When a system of peer selection is in place the selected and selectors are in the same group. In the third case, expert selection, the group determining value is not part of the consumers or producers. In the postimpressionistic cultural industry the latter has been dominant.

In the cultural industries museums and theatres are institutions functioning as important experts. By producing certain cultural products (plays, exhibitions etc) they try to distinguish new trends between different styles and periods. As a result they value art in terms of innovativeness. As an expert your competitive advantage is therefore the ability to select the newest styles and most innovative

artists the first (Wijnberg, 2004). This makes it important for the museums to identify stylistic innovations. These innovations are on the elements of a product that can be changed, without influencing the technical features of this product. To value these changes a selector has to have knowledge on the product category and it's history (Wijnberg, 2004).

However, the ordinary consumers do not share the same standards of evaluation as the experts. There seems to be a weak relationship between expert judgment and popular appeal (Holbrook, 1999). It seems the evaluation (or taste) of the consumers weakens the correlation between the two (Holbrook & Addis, 2007a). When producing a film it seems there are two paths, creating artistic excellence or commercial appeal. Theoretically it seems it's possible to have both (or neither), but the two distinctive routes seem harmful to each other (Holbrook & Addis, 2007b). In other words, based upon what somebody values the most it can be decided to use the resources in order to gain artistic status or commercial success.

The way on which the values of people in the organization affect the situation of a cultural institution in its environment is even more diverse. There are more parties judging the organization than just the general public and the experts. Voss, Cable & Voss (2000) illustrated there are four different stakeholders with different values, or selection criteria, to the cultural institution. It was found the organizational values affected the relation with the corresponding stakeholder. The relation was influenced positively when the values appeared, through behavior, to be similar to each other. Figure 1 gives a schematic visualization of the relational activities and partners influenced by the organizational values.

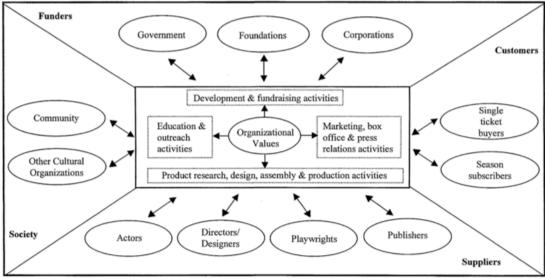


Figure 1

It was proven the financial values to "increase the theatre's financial stability" and "expand our base of financial support" received a greater proportion of their revenues from corporate and foundation funders. At the same time they were also more likely to produce plays in the public domain Voss, Cable & Voss (2000).

The selection systems in a for-profit environment are market based. The products will therefore be commercially oriented, not artistic, and the most important stakeholders are those who are the source of money. Based on the differences in environment a director with a for-profit background can be expected to value financial performance stronger. On top of that such a person has the experience, knowledge and orientation to implement resources aimed at such stakeholders.

Such characteristics make a director with a background in a for-profit environment a support specialist, by bringing expertise in finance and commercial products and linkages to the corporations. In this line the contributions to a cultural institution can be:

- 1. Enhancing the financial stability
- 2. Generating more revenues from customers
- 3. Increasing support from corporations

8.1.1. Hypothesis 1: Financial stability

Pfeffer (1972) found a correlation between board members from financial institutions and a more positive debt/equity ratio. Board members from forprofit organizations could give the same effect to the cultural industries because of two arguments. First, the value and orientation for financial stability in cultural institutions of these directors are, as illustrated above, expected to be stronger. Adding such human capital to the board can enhance the boards' orientation on monitoring the financial stability of the organization. As Radbourne (2003) illustrates, good governance ensures strategic development and organizational effectiveness. For non-profit cultural board the capacity of managing finances is part of this governance. Second, the cultural institution has more knowledge and expertise available to increase financial stability. As Holcomb (2009) illustrated the productivity of resources is affected by the human capital of the ones who use them to create value. Therefore both arguments are based on the wisdom role of the directors.

Although no relation was found between outsiders en performance by Dalton et. al. (1994), Holcomb (2009) illustrated there is a clear gab between an artistic or commercial orientation, which is important for the wisdom available. In the research of Dalton et. al. (1994) no such gap between differences in human capital was identified. Based on large differences in orientation and wisdom between the for-profit and non-profit environments, we therefore can hypothise the following:

Hypothesis 1A:

"Directors from the for-profit environment increase the financial stability of cultural institutions thanks to their knowledge, expertise and orientation on financial performance when monitoring the organization"

When combining the theories on board orientation with the ones on the structure of the board, one could hypothesize a director from a for-profit environment as chairman gives higher financial stability. This is based on two arguments. First, the value and orientation for financial stability in cultural institutions of these chairmen are, as illustrated above, expected to be stronger. This leads to a greater orientation of the board on such topics. Secondly the human capital of this chairman could help the board of director become more effective in implementing a more financial oriented monitoring role. Therefore we can hypothise the following:

Hypothesis 1B:

"Chairmen from a for-profit environment increase the financial stability of cultural institutions thanks to their orientation on financial stability when monitoring the organization and their human capital to make the board more effective in doing so"

8.1.2. Hypothesis 2: Revenues from commercial activities

Throsby (1994) showed many basic economic models, for example crosselasticity and supply/demand management, are applicable to the cultural industries. In line with the arguments above we could argument the human capital of directors, or chairmen, from for-profit environments enable the cultural institutions to generate higher revenues from customers.

However, as Holbrook (2009) illustrated such marketing activities are coupled with a commercial path instead of an artistic one. This on its turn undermines the expert status of cultural institutions like museums and theatres. Eikhof & Haunschild (2007) argue managing and marketing artistic practices following economic logics are a danger to resources needed for creative production. In line with these findings Voss & Voss (2000) found strategic orientation on customers is not desirable in case of a non-profit environment, based on artistic innovations, with customers who may not be able to articulate their preferences, and lead customers who are looking for product expertise. Because the cultural institutions are first and foremost dependant on their expert status, which is dependant on the artistic level of their product, we can hypothise the following:

Hypothesis 2A:

"Directors from the for-profit environment do not increase the revenues from commercial activities for cultural institutions, because their customer orientation is conflicting with the expert status of the organization."

Hypothesis 2B:

"Chairmen from the for-profit environment do not increase the revenues from commercial activities for cultural institutions, because their customer orientation is conflicting with the expert status of the organization."

8.1.3. Hypothesis 3: Support from non-governmental funders

Aside from the arguments of human capital and orientation on financial performance the main argument for an increased support from corporations is based on a second difference between the cultural and the for-profit industries. It appears social networks play a larger role in the cultural industries compared to the for-profit industries (Potts, 2008). The quality and the reach of an institution's network are therefore of greater influence to its performance. This might be a reason why Alexander (1996) found the orientation of the stakeholders is determinant for the kind of exhibitions shown in museums. Where products of for-profit organization are largely determined by the internal selection systems, the products in the cultural industries are not solely aimed at contribution to the expert status of cultural institutions. So even though when the monetary value of a cultural product is quite clear (e.g. the value of 'old culture') and therefore less subjective to the opinions or choices of others, the value of the product can vary per stakeholder.

TABLE 1
Summary of the Orientation of Stakeholders in Museum Exhibitions

| | Interest | | | | | | | |
|---------------------------|------------------------|---------------------------|--------------------------|--|--|--|--|--|
| Stakeholder | Popular Exhibitions | Accessible Exhibitions | Scholarly Exhibitions | Other Concerns | | | | |
| Individual philanthropist | No | No | Yes | Own collection | | | | |
| Corporate funder | Yes | Yes | No | | | | | |
| Government funder | Yes | Yes | Yes | Nontraditional audiences, living artists | | | | |
| Foundation funder | No | No | Yes(?) | | | | | |
| Museum curator | No | No | Yes | | | | | |

Differences between environments influence the social capital people poses. In this case the social capital of the board members from non-profit environments can result in a higher reputation for the cultural institution. They can make sure the orientation of a stakeholder from the for-profit industries is translated to the product (exhibition) of that institution. This is important, because the orientation of corporations are completely opposite from the orientation of the curator himself (table 1). In this role the directors limits the uncertainty for

corporate sponsors. Therefore it becomes more attractive to become a sponsor in the first place.

The reduction of uncertainty by the social capital of directors from the for-profit industries works both ways. As stated before, the directors can provide access to valuable resources and lower the costs of transaction. Interlocks are a great example of such strategic ties by social capital. The number of outside directors is an indicator of the level of integration an organization has in interorganizational networks (Mizruchi, 1994).

The connection between networks and resource dependency is well established (Mizruchi, 1994). Some positions in such networks are more beneficiary than others (Kogut, 2000). For cultural institutions these positions have traditionally, based on their selection system, been on positions between other experts where knowledge was most valuable. When there is a need for other resources than knowledge the organization has to position itself in other networks. As an important supplier of financial resources to cultural institutions, the for-profit industries are such networks. By having a board member on the board with social capital in these networks the position of the cultural can improve and result into increased access to resources.

The social capital of directors from the for-profit sector can give access to important resources for the cultural institutions since corporations and foundations of wealthy individuals from the for-profit industries are important funders. Although no relation was found between outsiders en performance by Dalton et. al. (1994), this theory illustrates an increased importance of their social capital under the Wealth function, since important sources of funding lie outside of the non-profit environment . Therefore we can hypothise the following:

Hypothesis 3A:

"Directors from the for-profit environments give cultural institutions increase access to non-subsidy funding thanks to their social capital from these environments"

Likewise, and for the same arguments as provided for Hypotheses 3A and 2B we can hypothise:

Hypothesis 3B:

"Chairmen from the for-profit environments give cultural institutions increase access to non-subsidy funding thanks to their social capital from these environments"

8.2 Hypothesis 4: The size of the board

As illustrated by Dalton (1999) there is a positive correlation between board size and the financial performance of an organization. Because cultural institutions have more diversity in their group of stakeholders and board are a representation of these stakeholders, it can be argued larger boards are needed to give host all of these representatives. In other words, there are more directors available to focus on the three different functions the board has. A larger board can be expected to have an increased possibility on directors who *can* and *are* actively monitoring the financial performance of cultural institutions (Wisdom). Therefore it can be argued there also is a possible correlation between board size and performance in the cultural industries.

Hypothesis 4A:

"Board size is positively correlated to financial stability of cultural institutions, because there is a larger possibility for directors who can and are fulfilling this financial monitoring role."

In addition, it can also be argued a larger board hosts more social capital. In line with the argumentation above the reach of the social networks and reputation might therefore increase. This is in line with Oster (1995) who found non-profit boards are expected to be larger because of a broader set of tasks and larger resource needs (Wealth).

Hypothesis 4B:

"Board size is positively correlated to increase funding by corporations to cultural institutions, because there is a larger possibility for directors who posses the relevant social capital."

9. METHODOLOGY

9.1 Sample

The core data set for this study is based on 17 museums that receive subsidies from the national government. For one these museums are subjected to the new Dutch legislations, but also they are of a size and national allure they are able to attract resources from their environment. On top of that they are the ones that play a gatekeeping role in the visual arts sector which small museums do not (Crane, 1987).

There are actually 29 museums who receive government subsidies, but some of the museums were reluctant to provide the information (Huis Doorn and Nederlands Scheepvaartsmuseum Amsterdam) or geographically to far away to visit in this time frame. Although I collected 192 annual reports I limited the quantitative data set to years I had at least 20 different annual reports from. This left me with the years 2004 until 2008. Unfortunately not all data (financial and directors) could be retrieved for all selected museums. Full data sets were obtained for 17 museums (see appendix A). This allowed me to test the hypothesis on 90 appearances of the connections.

Since all financial successes must be placed in perspective of the museums themselves I decided to use ratios in order to test financial performance. This way the influence of (financial) size of the museums is minimalized.

9.2 Coding

As recommended by Prof. Mr. Dr. Wijnberg I developed a coding scheme that tapped various backgrounds of the individual directors. Not only I reviewed the environment a director was coming from (for-profit or non-profit), but also the content of his position (cultural or non-cultural). This way his human capital from for-profit environments was separated from his relevant human capital of the cultural environments of museums. As a result directors could fall into one of four categories (see Appendix B):

- 1. Non-profit with cultural content
- 2. Non-profit with non-cultural content
- 3. For-profit with cultural content
- 4. For-profit with non-cultural content

The form in which the organization was registered with the Chamber of Commerce could determine whether an environment is non-profit or for-profit. Determing whether the content was cultural or not was done by testing its environment to the definition of Galloway & Dunlop (2007) or, where possible, by job title (e.g. Minister of Education, *Culture* and Science). These backgrounds can be found in Appendix C. When no information was found about the background of a director, the museum was removed from the sample.

Apart from relative share of the four different types of directors I also tested the correlations by the share and dominance of directors from a for-profit environment. This is done to test the connection on a more general level.

9.3 Ratios

Financial ratios are an established tool for businesses and nonprofits. While there are dozens of ratios that can be calculated, most nonprofits can use a handful of them to learn more about their financial condition. Financial ratios are useful if they are:

- Calculated using reliable, accurate financial reports in this case annual reports
- Calculated consistently from period to period in this case over 5 years
- Used in comparison to benchmarks or goals in this case to XX other museums
- Interpreted in the context of both internal and external factors in this case to 'non-profit directors' and to other sources of money.

In H_{1A} and H_{2B} the presence of director with a for-profit background is tested in relation to 'financial stability'. There are two financial ratios for non-profit organizations which can be used to test this financial stability, without taking into account the results of acquiring resources (non-profit assistant fund, 2008): the debt ratio and the current ratio.

| Debt ratio Total liabilities = Debt ratio Total unrestricted net assets | How much the organization is relying on funding from others, such as loans, payables, and obligated funds. Indication of how much of a cushion there is. |
|--|--|
| Current ratio Current assets = Current ratio Current liabilities | An indication of the organization's ability to pay obligations in a timely way (within 12 months). A useful indicator of cash flow in the near future. |

For H_{2A} and H_{2B} the background of for-profit directors is believed not to (positively) influence the income from commercial activities. Again there are two ratios recommended to test this with. For this purpose they for this purpose both are based on commercial incomes only.

| Commercial income as a percentage of total income | Organizations with commercial income have more autonomy and flexibility |
|--|---|
| Total commercial income = Earned income ratio (commercial) | |

Self-sufficiency ratio (commercial)

<u>Total commercial income</u> = Self-sufficiency Total expense ratio (commercial) The proportion of operating expenses that are covered by commercial income.

The background of the directors is focused on another source of income, non-subsidy funding, in H_3 . As I argued I believe the directors have a positive effect on the level of this income. To measure this I used the same ratios as used for H_{2a} and H_{2B} , with non-subsidy funding as an alternative source of money.

Non-subsidy funding as a percentage of total income

<u>Total non-subsidy funding</u> = Earned income Total income ratio (non-subsidy) Organizations with nonn-subsidy funding have more autonomy and flexibility

Self-sufficiency ratio (non-subsidy)

<u>Total non-subsidy funding</u> = Self-sufficiency Total expense ratio (non-subsidy) The proportion of operating expenses that are covered by non-subsidy funding.

Finally H_{4A} and H_{4B} are each tested by two ratio. The influence of the size of the board on the financial stability (H_{4A}) can be tested with the same ratios as H_1 . To test the influence of size of the board on the I used the same financial ratios used to test H_3 . All financial data can be found in Appendix D.

9.4 Analysis

To analyze the linkages between the various directors and the ratios I used the R method to find correlations. With this method, the random selection of large samples of participants also suggests the findings can be generalized with some degree of confidence (Addams, 2000).

The R method refers to the use of the Pearson's product-moment correlation, r, to the examination of trait or test relationships. A typical R method study might investigate the relationship between two variables such as divorce (x) and depression (y). By doing so generalizations are geared towards showing the more extensive tendencies and potentialities that occur with people across various situations (Brown, 1980).

The ability to reflect individual differences in significance is important to get results that can be generalized. Since I wanted to generalize my findings over all

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cultural institution this is the reason why I used this method. Applying the R method was possible, because my data consists of one data matrix containing scores from objective tests such as intelligence or mathematical tests (Burt, 1937).

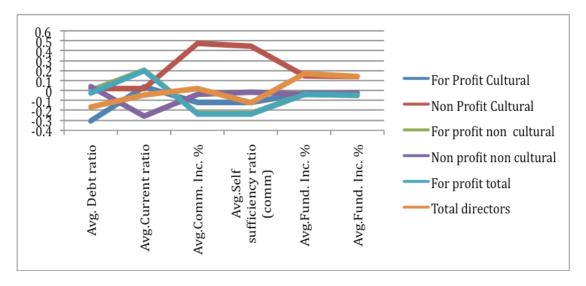
When testing the kind of chairman and the dominance of for-profit directors I used the Analysis of Variance (ANOVA) method. This is because I had to test the variables in relation to three different groups. Because ANOVA uses an F test (opposed to a Z or t test) to compare multiple means, it is possible to determine whether three or more sample means are significantly different from each other (Stoline, 1981).

Furthermore it is important the data is well established on validity and operational definitions. To increase the validity I tried to use a large as possible sample size while keeping the selected entities as relevant as possible. On top of that I tried to find significances that were average over all the years, so single successes are of limited influence. To limit the influence of other variables as much as possible, I tried to formulate the hypothesis as clear as possible and I tested them to multiple ratios.

Since my sample is rather small it is relatively hard to proof a correlation is significant. Because I didn't want to miss any possible correlations because of this I also compared the means of the ratios with the kind of chairman and the dominance of non-profit or for-profit directors over the years. When there seems to be a structural difference between groups, this might be a good foundation for further research.

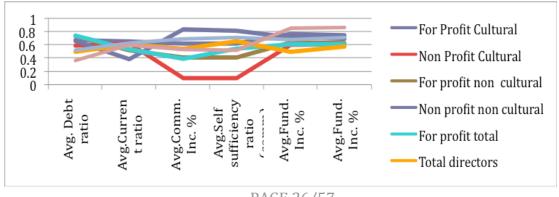
10. RESULTS

The strength of a connection is illustrated by the correlation. The correlation can be between -1 (variable has a full negative influence) to +1 (variable has a full positive influence). When the correlation is 0 there is no influence from the variable. As can be seen in graph 1, almost all variables lie between -0.3 and +0.2. So these are very weak correlations. The only strong correlation seems to be the influence of Non-Profit Cultural directors on the Average Commercial Incomes (%) and Average Sufficiency Ratio (Comm).



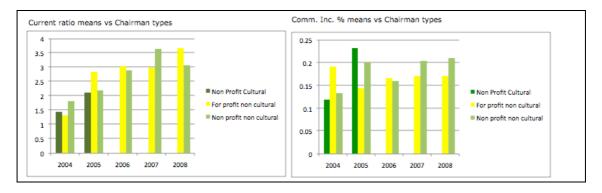
Graph 1

The measurement of the significance is the chance a correlation is not found. Usually a P level of 0.05 and lower indicates a significant correlation. However, since my sample is rather small we use the marginal significance level of P<0.1. As can seen in graph 2 the influence of the share Non-Profit Cultural directors on the Average Commercial Incomes (%) and Average Sufficiency Ratio (Comm) are the only ones with an (almost) significant correlation with P-values of 0.0984 and 0.1118 respectively (see Appendix E). So although a significant correlation is likely further research should be done.



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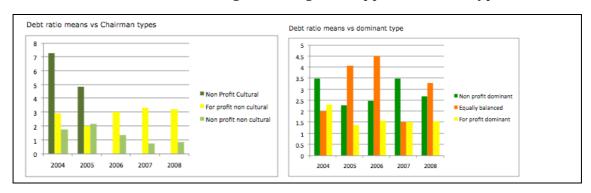
This does support H_{2A} , arguing directors from a for-profit environment will not result in higher commercial incomes for museums. Even better, we found directors from a non-profit cultural environment are likely to increase commercial incomes. H_{2B} however, seems to have no correlation when analyzing the means of the ratios per Chairman type (graph 3 and 4).



Graph 3 and 4

Although no significance was found, we find some interesting results for the other hypotheses when we look at the comparison of means of the other connections.

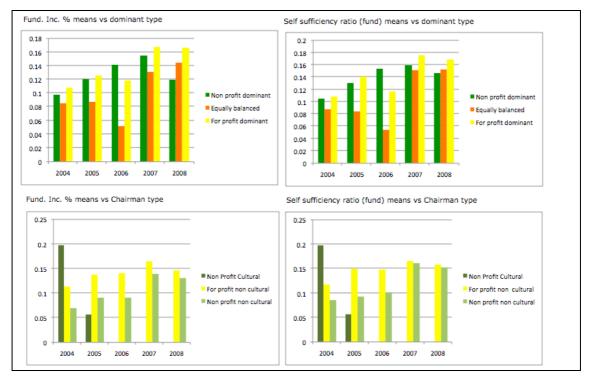
When this is done for H_{1A} and H_{1B} we notice two possible correlations for the Debt Ratio that seem to contradict each other. When we don't consider Non Profit Cultural chairman (graph 6), for there are only two years with such chairmen, we notice For Profit Non Cultural chairmen have higher Debt Ratio Means compared to Non Profit Non Cultural chairmen. This is contrary to H_{1B} . On the other hand, when we look at the Debt Ratio Means compared to the dominance of For-profit or Non-profit directors, we see the debt ratio is structurally lower, therefore supporting H_{1A} . Unfortunately the current ratio we used to test H_{1A} and H_{2A} show no structural differences between the types of directors and chairmen, limiting the strength of support for these hypotheses.



Graph 5 and 6 $\,$

When we use the same method to analyze H3A and H3B we notice For Profit chairmen are structurally more successful in generating incomes from funding

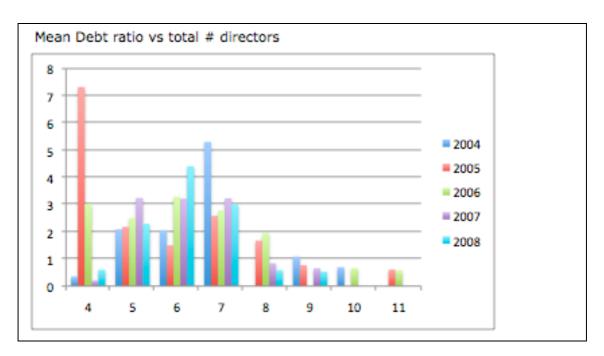
(see graph 7 and 8). Also a dominance by For Profit Directors results, mostly, in higher funding (see graph 9 and 10). Also note in most cases an equally balanced board appears to be less effective compared to both For Profit or Non Profit dominance. These results support each other and give enough reason to do further research in this field.



Graph 7, 8, 9 and 10

Interesting enough there was no significant correlation found between size and any financial performance (H_{4A} and H_{4B}). This is unexpected since the theoretical background, based on meta-studies, did find a significant correlation. When looking at the means of the Total Number Directors over the years there too seems little correlation (see Appendix F). When leaving out boards with 4 directors, it does seem there is a relation between the Mean Debt Ratio and the Total Number Directors, as can be seen in graph 11.

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Graph 11

11. CONCLUSION

Only H_{2A} was strongly supported, since no correlation between For-Profit directors and commercial income was found. Even better for H_{2A} a marginal significant correlation was found between Non-Profit Cultural directors and commercial income. As already indicated by Eikhof & Haunschild (2007) and Voss & Voss (2000), for-profit influences on the product of the cultural institutions don't result in higher financial performance. By the outcome of this thesis we can assume directors with a non-profit cultural have a positive

| Hypothesis | Independent variable | Dependent variable | Correlation |
|---------------|----------------------|--------------------|-------------|
| | A: Directors | Debt | +- |
| oility | | Curr. | - |
| Stak | B: Chairman | Debt | +- |
| H1: Stability | | Curr. | - |
| | A: Directors | Inc. | ++ |
| me | | S.S. | + |
| H2: Income | B: Chairman | Inc. | - |
| H2: | | S.S. | - |
| | A: Directors | Inc. | +- |
| H3: Funding | | S.S. | +- |
| Func | B: Chairman | Inc. | +- |
| Н3: | | S.S. | +- |
| | A: Health | Debt | +- |
| | | Curr. | - |
| H4: Size | B Funding | Inc. | - |
| H4: | | S.S. | - |

influence on the commercial incomes of cultural institutions. This might very well be thanks to the added cultural knowledge and therewith an increased expert status of the institution.

As expected For-Profit chairman didn't increase commercial income either, therewith supporting H_{2B} . However, there was no correlation found between Non-Profit Cultural chairmen and commercial income, as might be expected based on the outcome from H_{2A} . One reason might be the relative small number of cases with such a chairman, biasing the sample.

Both H_{3A} and H_{3B} are supported, although not significantly, meaning more research should be done with larger samples. This is an important outcome for (Dutch) cultural institutions, because a way to increase income funding from non-governmental subsidies might be by having a chairman or dominance of directors with a For-Profit background in the board.

There seems little support for H_{1A} and H_{1B} , although an interesting contradiction was found in small correlations of the debt ratio. Apparently For-Profit Chairmen have structurally a higher debt ratio compared to Non-profit Chairmen. At the same time a dominance of For-Profit Directors seemingly

leads to a lower debt ratio. One explanation might lie in differences in orientation. Where directors might be more focused on their monitoring role, a chairman might be more focused on future growth of the institutions and therefore allows a higher debt ratio in order to fund this growth. Another explanation may be a For-Profit Chairman adds more to a better reputation or provides a higher quality interlock to the institution compared to a For-profit director. However, this might explain the higher debt ratio for H_{2B} , but doesn't

explain the lower debt ratio for H_{2A} . More research on the differences between the influences and orientations of chairmen and directors is clearly needed.

Most noticeable is the lack of correlation between the size of the board and the financial performance of cultural institutions (H_{4A} and H_{4B}). Only in the debt ratio some correlation could be found. This might be because of increased monitoring capabilities by the board, but this is unsure. Since there was no correlation in increased funding incomes, while H_{3A} and H_{3B} indicate such correlation by For-Profit Directors and Chairmen, we might be able to conclude the efficiency of the cultural boards are not optimal. This might explain why a solidly proven correlation in between board size and financial performance (Dalton, 1999) is not found in this research. It might also explain why For-Profit Directors only show correlation with financial performance when they are dominant over Non-Profit Directors. Further research to the efficiency of the cultural boards is needed to investigate this 'absent' correlation.

In short:

| H1A: NOT SUPPORTED , but interesting for further research |
|--|
|--|

H1B: **NOT SUPPORTED**, but interesting for further research

H2A: **SUPPORTED**, even found significant correlation showing Non-Profit cultural directors are of positive influence to commercial income.

H2B: **SUPPORTED**, although more research is needed to proof significance.

H3A: **SUPPORTED**, although more research is needed to proof significance.

H3B: **SUPPORTED**, although more research is needed to proof significance.

H4A: **NOT SUPPORTED**, but interesting for further research

H4B: **NOT SUPPORTED**, but interesting for further research

12. IMPLICATIONS

The results of this thesis can be seen through the lens of the two main different functions of the board: Wisdom and Wealth. Apparently the Wisdom supporting the expert status of the cultural institutions is valuable (H_{2A} and H_{2B}). However, the Wisdom of creating financially healthy organizations seems not to be correlated with For-Profit directors (H_{1A} and H_{1B}). But, these directors do give a correlation with the Wealth function (H_{3A} And H_{3B}). Therefore the background of the directors may be affecting the functions they perform.

Hillman & Dalziel (2003) found a similar effect with dependent and independent board members. They found dependency influenced the monitoring (wisdom) function negatively and the RBV (wealth) function positively. Research in this field can contribute to the interplay between agent theory and the RBV, "which has been most important in the literature on corporate restructuring, where the two approaches are both substitutes and complements" (Lockett & Thompson, 2001).

If further research proves For-Profit backgrounds give stronger performance on the Wealth function and Non-Profit backgrounds stronger performance on the Wisdom function, cultural boards could increase efficiency by allocating responsibilities accordingly. Based on the lack of support for the effectivity of a larger board (H_{4A} and H_{4B}) research on the efficiency of cultural boards seems important. Especially since research to the relation between the RBV, strategic human resource management and sustainable competitive advantages (SCA) is still limited (Barney et. al., 2001).

For Dutch institutions this research means they can attract a dominance of For-Profit or Non-Profit directors and chairmen to respectively generate more income from funding or commercial activity. There are also strong indications it can be beneficiary to make the board more effective by adjusting the different functions and responsibilities of board members to their background.

APPENDIX A - DATA SAMPLE

Museums receiving a subsidy from the Subsidieplan 2009-2012

| | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 |
|----------------------------------|----------|--------|-------|----|----|----|-----|----------|---------|---------|---------|---------|----|
| Afrika Museum | 97 | 90 | 99 | 00 | 01 | 02 | 03 | 04 x | 05 Х | 06 Х | 07 X | vo X | 09 |
| Geld- en Bankmuseum | | | | | | | | X | X | X | X | X | |
| Haags Historisch Museum/Museu | m de Ge | vangen | moort | | | | | ^ | | X | X | X | |
| Hollandse Schouwburg | m ac ac | vangen | рооге | х | х | х | х | x | х | X | Х | X | |
| Huis Doorn | | | | Α | Α | Α | A | A | Α | Α | Α | A | |
| Joods Historisch Museum | | | х | х | x | x | x | x | Х | х | х | x | |
| Keramiekmuseum Princessehof | | | , A | A | A | A | , a | + | + | + | X | X | х |
| Kröller-Müller Museum | | | | х | х | х | х | + | + | + | + | + | A |
| Letterkundig Museum | | | | - | - | - | - | <u> </u> | | | | | |
| Mauritshuis | | | | х | х | х | х | x | х | х | х | х | |
| Muiderslot | | | | X | X | X | X | x | X | X | X | X | |
| Museum Boerhaave | | | | Λ | Α | Α | Λ | x | X | X | X | X | |
| Museum Catharijneconvent | | | х | х | х | х | х | X | X | X | X | X | |
| Museum Merrmanno-Westreenia | nıım | | | Λ | Λ | Α | | ^ | | | | X | |
| Museum Slot Loevestein | iuiii | | | | | | | x | х | х | х | X | |
| Museum van Oudheden | | | | х | х | х | х | x | X | X | X | X | |
| Museum Volkenkunde | | | | Λ | Λ | Λ | Λ | x | X | X | X | X | |
| Naturalis | | | | 77 | | | | X | | | X | X | |
| Nederlands Filmmuseum | | | Х | X | X | X | X | A | X | X | | | |
| Nederlands Fotomuseum | | | | | | | | - | | | | | |
| Nederlands Openluchtmuseum | | | х | х | х | х | X | x | X | | X X | - X | v |
| Nederlands Scheepvaartmuseum | A matand | am | X | X | X | X | X | X | X | Х | X | | X |
| Paleis het Loo | | aiii | | | | | | | | | | X | |
| | X | | | | | X | X | | X | | | | |
| Persmuseum | . D | | X | Х | X | X | Х | X | Х | X | X | Х | |
| Rijksbureau voor Kunsthistorisch | e Docum | | | | | | | | | | | | |
| Rijksmuseum Amsterdam | | X | X | X | X | X | X | X | X | X | X | X | |
| Rijksmuseum Twente | | | X | X | X | X | X | Х | X | X | X | X | |
| Teylers Museum | | | | | | | | Х | X | X | X | X | Х |
| Van Gogh Museum | | | | | | | Х | Х | X | Х | X | X | |
| Zuiderzeemuseum | | | | - | - | - | - | - | - | X | X | X | |

- Full data available
- Incomplete financial data
- + Incomplete director data

APPENDIX B - DIRECTORS

| Description | Туре |
|-------------------------|------|
| For Profit Cultural | 1 |
| Non Profit Cultural | 2 |
| For profit non cultural | 3 |
| Non profit non cultural | 4 |

| 1 A. Brugmans | | Director | Museum | Type | Chairman |
|--|----|-------------------------------------|----------------------------|------|----------|
| A J.J.M. van Hooff | 1 | A. Brugmans | Mauritshuis | 3 | * |
| A AJJM. van Hooff | 2 | A. van Es | Van Gogh Museum | 4 | |
| 6 C.F.C. graaf zu Castell Rijksmuseum Twenthe 3 6 C.F.C. graaf zu Castell Rijksmuseum Twenthe 3 7 D.H. Kat Joods Historisch Museum 3 8 Dhr. Ar. Arthur Arnold Museum van Oudheden 2 9 Dhr. H.J. Hielkema Museum Volkenkunde 2 10 Dhr. H.J. Hielkema Museum Volkenkunde 4 11 Dhr. J. B.H. Hardholt Persmuseum 2 13 Dhr. Krant Hollandse Schouwburg 3 14 Dhr. M.W. Meijer Museum Volkenkunde 2 15 Dhr. Mr. M.B. van der Lande Rijksmuseum Amsterdam 3 16 Dhr. Dr. G.F. P. Van Oostrom Rijksmuseum Amsterdam 4 16 Dhr. Dr. G.F. P. Van Eijck van Heslinga Naturalis 4 17 Dr. E. S. van Eijck van Heslinga Naturalis 4 18 Dr. A.H.E.M. Wellink Macrishuis 4 19 Dr. A.H.E.M. Wellink Mauritshuis 4 10 Dr. B. Le Haar | 3 | A.J.J.M. van Hooff | Naturalis | 3 | |
| 6 C.F.C. graaf zu Castell Rijksmuseum Twenthe 3 6 C.F.C. graaf zu Castell Rijksmuseum Twenthe 3 7 D.H. Kat Joods Historisch Museum 3 8 Dhr. Ar. Arthur Arnold Museum van Oudheden 2 9 Dhr. H.J. Hielkema Museum Volkenkunde 2 10 Dhr. H.J. Hielkema Museum Volkenkunde 4 11 Dhr. J. B.H. Hardholt Persmuseum 2 13 Dhr. Krant Hollandse Schouwburg 3 14 Dhr. M.W. Meijer Museum Volkenkunde 2 15 Dhr. Mr. M.B. van der Lande Rijksmuseum Amsterdam 3 16 Dhr. Dr. G.F. P. Van Oostrom Rijksmuseum Amsterdam 4 16 Dhr. Dr. G.F. P. Van Eijck van Heslinga Naturalis 4 17 Dr. E. S. van Eijck van Heslinga Naturalis 4 18 Dr. A.H.E.M. Wellink Macrishuis 4 19 Dr. A.H.E.M. Wellink Mauritshuis 4 10 Dr. B. Le Haar | 4 | Ageeth Scherphuis | Persmuseum | 4 | |
| 6 C.F.C graaf zu Castell Rijksmuseum Twenthe 3 7 D.H. Kat Joods Historisch Museum 3 8 Dhr. Arthur Arnold Museum van Oudheden 3 9 Dhr. H.J. Hielkema Rijksmuseum Amsterdam 2 10 Dhr. H.J. Hielkema Museum van Oudheden 2 11 Dhr. J.A.W.J. Leerdam Museum Volkenkunde 4 12 Dhr. J.A.W.J. Leerdam Museum Volkenkunde 4 13 Dhr. Krant Hollandse Schouwburg 3 14 Dhr. M.W. Meijer Museum Volkenkunde 2 15 Dhr. Mr. M.L. van der Lande Rijksmuseum Amsterdam 3 16 Dhr. prof. dr. F.P. van Oostrom Rijksmuseum Amsterdam 4 17 Dr. E.S. van Eijck van Heslinga Naturalis 4 18 Dr. A.H.E. M. Wellink Naturalis 4 20 Dr. B. E. Haar Geld - en Bankmuseum 4 21 Dr. C.B.S. Cheenii Museum Catharijneconvent 4 22 Dr. E. Van Delden | 5 | | Persmuseum | 3 | |
| D.H. Kat | 6 | S | Rijksmuseum Twenthe | 3 | |
| 9 Dhr. H.J. Hielkema Museum van Oudheden 2 10 Dhr. H.J. Hielkema Museum val Oudheden 2 11 Dhr. J.A.W.J. Leerdam Museum Volkenkunde 4 12 Dhr. J.B.H. Hardholt Persmuseum 2 13 Dhr. W.M. Meijer Hollandse Schouwburg 3 14 Dhr. M.W. Meijer Museum Volkenkunde 2 15 Dhr. Mr. M.L.B. van der Lande Rijksmuseum Amsterdam 3 16 Dhr. Dr. Gr. F.P. van Oostrom Rijksmuseum Amsterdam 4 17 Dr E.S. van Eijck van Heslinga Naturalis 4 18 Dr. A.H.E.M. Wellink Nederlands Openluchtmuseum 4 20 Dr. B. Ler Haar Geld- en Bankmuseum 4 21 Dr. Ch.E.S. Choenni Museum Catharijneconvent 4 22 Dr. E. Van Delden Rijksmuseum Amsterdam 2 * 23 Dr. F.A. Petter Museum Slot Loevestein 4 * 24 Dr. H.H.F. Wijffels Rijksmuseum Amsterdam 2 * <td>7</td> <td></td> <td>Joods Historisch Museum</td> <td>3</td> <td></td> | 7 | | Joods Historisch Museum | 3 | |
| 10Dhr. H.J. HielkemaMuseum van Oudheden211Dhr. J.A.W.J. LeerdamMuseum Volkenkunde42Dhr. B.H. HardholtPersmuseum213Dhr. KrantHollandse Schouwburg314Dhr. M.W. MeijerMuseum Volkenkunde215Dhr. Mr. M.L.B. van der LandeRijksmuseum Amsterdam316Dhr. prof. dr. F.P. van OostromRijksmuseum Amsterdam417Dr. E.S. van Eijck van HeslingaNaturalis418Dr. A.H.E.M. WellinkNederlands Openluchtmuseum4*19Dr. A.H.E.M. WellinkMauritshuis4*20Dr. B. ter HaarGeld-en Bankmuseum4*21Dr. Ch.E.S. ChoenniMuseum Solt Loevestein4*22Dr. E. Van DeldenRijksmuseum Twenthe3*23Dr. F.A. PetterMuseum Solt Loevestein4*24Dr. H.H.F. WijffelsRijksmuseum Amsterdam2*25Dr. L.P.J. (Lucas) NoldusNaturalis3*26Dr. R.E.O. EkkartMuseum Volkenkunde2*27Dr. Th. H.J. ClemensMuseum Catharijneconvent428Drs. S.C.J. de VriesNaturalis330Drs. B.FransenRijksmuseum Twenthe331Drs. B.FransenMuseum Slot Loevestein332Drs. B.J. KoekoekMuseum Slot Loevestein333Drs. J. M.G. Baron van SlingelandtMuseum | 8 | Dhr. Arthur Arnold | Museum van Oudheden | 3 | |
| Dhr. H.J. Hielkema | 9 | Dhr. dr. P.L.C. Huvenne | Rijksmuseum Amsterdam | 2 | |
| Dhr. J.A.W.J. Leerdam | 10 | Dhr. H.J. Hielkema | Museum van Oudheden | 2 | |
| Dhr. J.B.H. Hardholt | 11 | Dhr. J.A.W.J. Leerdam | Museum Volkenkunde | 4 | |
| Dhr. M.W. Meijer Museum Volkenkunde 2 15 Dhr. Mr. M.L.B. van der Lande Rijksmuseum Amsterdam 3 16 Dhr. prof. dr. F.P. van Oostrom Rijksmuseum Amsterdam 4 17 Dr. E.S. van Eijck van Heslinga Naturalis 4 18 Dr. A.H.E.M. Wellink Nederlands Openluchtmuseum 4 19 Dr. A.H.E.M. Wellink Mauritshuis 4 20 Dr. B. ter Haar Geld- en Bankmuseum 4 21 Dr. Ch.E.S. Choenni Museum Catharijneconvent 4 22 Dr. E. Van Delden Rijksmuseum Twenthe 3 23 Dr. F.A. Petter Museum Slot Loevestein 4 24 Dr. H.H.F. Wijffels Rijksmuseum Museum Colkarijneconvent 4 25 Dr. L. P.J.J. (Lucas) Noldus Naturalis 3 26 Dr. R.E.O. Ekkart Museum Volkenkunde 2 27 Dr. Th. H.J. Clemens Museum Wolkenkunde 2 28 Dr. S. C.J. de Vries Naturalis 3 29 Drs. A. Van Harten Museum Slot Loevestein 4 20 Drs. B. Fransen Rijksmuseum Twenthe 3 31 Drs. B.J. Koekoek Museum Slot Loevestein 3 32 Drs. P.J. Westeeg Nederlands Openluchtmuseum 4 33 Drs. F.A. Versteeg Nederlands Openluchtmuseum 4 34 Drs. F.A. Versteeg Nederlands Openluchtmuseum 4 35 Drs. H. Benninga Naturalis 3 36 Drs. H. Benninga Naturalis 3 37 Drs. H.A. Doek Nederlands Openluchtmuseum 4 38 Drs. ir. C. Maas Geld- en Bankmuseum 3 39 Drs. J. Polak Joods Historisch Museum 4 30 Drs. J. Polak Nederlands Openluchtmuseum 4 30 Drs. J. Polak Nederlands Openluchtmuseum 4 31 Drs. J. | 12 | | Persmuseum | 2 | |
| 14Dhr. Mr. M.L.B. van der LandeRijksmuseum Amsterdam315Dhr. Mr. M.L.B. van dor LandeRijksmuseum Amsterdam416Dhr. prof. dr. F.P. van OostromRijksmuseum Amsterdam417Dr E.S. van Eijck van HeslingaNaturalis418Dr. A.H.E.M. WellinkNederlands Openluchtmuseum419Dr. A.H.E.M. WellinkMauritshuis420Dr. B. ter HaarGeld- en Bankmuseum421Dr. Ch.E.S. ChoenniMuseum Catharijneconvent422Dr. E. Van DeldenRijksmuseum Twenthe323Dr. F.A. PetterMuseum Slot Loevestein424Dr. H.H.F. WijffelsRijksmuseum Amsterdam2*25Dr. L.P.J.J. (Lucas) NoldusNaturalis326Dr. R.E.O. EkkartMuseum Volkenkunde227Dr. Th. H.J. ClemensMuseum Wolkenkunde228Drs. S.C.J. de VriesNaturalis33Drs. B.FransenMuseum Slot Loevestein430Drs. B.FransenRijksmuseum Twenthe331Drs. B.J. KoekoekMuseum Boerhaave332Drs. D.J.M.G. Baron van SlingelandtMuseum Boerhaave333Drs. F.A. VersteegNederlands Openluchtmuseum434Drs. F. B. ErkensMuseum Slot Loevestein335Drs. H. BenningaNaturalis336Drs. H. BenningaNaturalis337Drs. H. Benninga <td< td=""><td>13</td><td>Dhr. Krant</td><td>Hollandse Schouwburg</td><td>3</td><td></td></td<> | 13 | Dhr. Krant | Hollandse Schouwburg | 3 | |
| 15Dhr. Mr. M.L.B. van der LandeRijksmuseum Amsterdam316Dhr. prof. dr. F.P. van OostromRijksmuseum Amsterdam417Dr. E.S. van Eijck van HeslingaNaturalis418Dr. A.H.E.M. WellinkNederlands Openluchtmuseum419Dr. A.H.E.M. WellinkMauritshuis420Dr. B. ter HaarGeld- en Bankmuseum421Dr. Ch.E.S. ChoenniMuseum Catharijneconvent422Dr. E. Van DeldenRijksmuseum Twenthe323Dr. F.A. PetterMuseum Solt Loevestein424Dr. H.H.F. WijffelsRijksmuseum Amsterdam2*25Dr. L.P.J.J. (Lucas) NoldusNaturalis326Dr. R.E.O. EkkartMuseum Volkenkunde2*27Dr. Th. H.J. ClemensMuseum Wolkenkunde2*28Drs. S.C.J. de VriesNaturalis3*30Drs. B. FransenRijksmuseum Twenthe3*31Drs. B. FransenRijksmuseum Twenthe3*32Drs. D.J.M.G. Baron van SlingelandtMuseum Boerhaave3*33Drs. F.A. VersteegNederlands Openluchtmuseum4*34Drs. F.M. ErkensMuseum Solt Loevestein3*35Drs. H. BenningaNaturalis3*36Drs. H. BenningaNaturalis3*37Drs. H. BenningaNaturalis3*38Drs. J. Polak <t< td=""><td>14</td><td>Dhr. M.W. Meijer</td><td></td><td>2</td><td></td></t<> | 14 | Dhr. M.W. Meijer | | 2 | |
| Dr. E.S. van Eijck van Heslinga Dr. A.H.E.M. Wellink Mauritshuis 4 20 Dr. B. ter Haar Geld- en Bankmuseum 4 21 Dr. Ch.E.S. Choenni Museum Catharijneconvent 4 Dr. F. A. Petter Museum Slot Loevestein 4 Dr. H.H.F. Wijffels Rijksmuseum Amsterdam 2 Dr. E.J. J. (Lucas) Noldus Naturalis 3 Dr. F.A. Petter Dr. L.P.J.J. (Lucas) Noldus Naturalis 3 Dr. F.B.O. Ekkart Museum Volkenkunde 2 Dr. Th. H.J. Clemens Museum Catharijneconvent 4 Dr. S.J. J. de Vries Naturalis 3 Dr. S. J. J. Sekoeke Naturalis 3 Drs. B. Fransen Rijksmuseum Twenthe 3 Drs. B. Fransen Rijksmuseum Twenthe 3 Drs. B. Fransen Rijksmuseum Twenthe 3 Drs. F. A. Versteeg Nederlands Openluchtmuseum 4 Drs. J. F. Wersteeg Nederlands Openluchtmuseum 4 Drs. J. Heemskerk Geld- en Bankmuseum 3 Drs. H. Heemskerk Geld- en Bankmuseum 4 Drs. J. Polak Drs. J. J. Polak Drs. J. J. Polak Drs. J. J. Polak Drs. J. J. Fran Duijne Museum Catharijneconvent 4 Prs. J. J. Van Duijne Museum Slot Loevestein 3 Tors. J. J. Van Duijne Museum Slot Loevestein 3 Drs. J. J. Van Duijne Museum Catharijneconvent 4 Prs. J. J. Van Duijne Museum Catharijneconvent 4 Prs. J. J. Polak Drs. J. J. Polak Drs. J. J. Polak Drs. J. J. Polak Drs. J. J. Van Duijne Museum Wolkenkunde 4 Drs. J. J. Van Duijne Museum Volkenkunde A Drs. J. J. Van Duijne Museum Volkenkunde A Drs. J. J. Van Duijne Museum Volkenkunde A Drs. J. J. J. L. K. de Koekkoek Museum Slot Loevestein A Drs. P. J. S. Koon A Drs. J. J. S. Choon A Drs. J. J. S | 15 | Dhr. Mr. M.L.B. van der Lande | Rijksmuseum Amsterdam | 3 | |
| 17Dr E.S. van Eijck van HeslingaNaturalis418Dr. A.H.E.M. WellinkNederlands Openluchtmuseum419Dr. A.H.E.M. WellinkMauritshuis420Dr. B. ter HaarGeld- en Bankmuseum421Dr. Ch.E.S. ChoenniMuseum Catharijneconvent422Dr. E. Van DeldenRijksmuseum Twenthe323Dr. F.A. PetterMuseum Slot Loevestein424Dr. H.H.F. WijffelsRijksmuseum Amsterdam2*25Dr. L.P.J.J. (Lucas) NoldusNaturalis326Dr. E.E.O. EkkartMuseum Volkenkunde227Dr. T.h. H.J. ClemensMuseum Catharijneconvent428Drs S.C.J. de VriesNaturalis329Drs. A. Van HartenMuseum Slot Loevestein430Drs. B.FransenRijksmuseum Twenthe331Drs. B.J. KoekoekMuseum Slot Loevestein332Drs. D.J.M.G. Baron van SlingelandtMuseum Boerhaave333Drs. F.A. VersteegNederlands Openluchtmuseum434Drs. F.M. ErkensMuseum Slot Loevestein335Drs. H. BenningaNaturalis336Drs. H. HeemskerkGeld- en Bankmuseum437Drs. H. A. DoekNederlands Openluchtmuseum438Drs. J. Van DuijneMuseum Slot Loevestein440Drs. J. J. PolakJoods Historisch Museum440Drs. J.B. J. BremerR | 16 | Dhr. prof. dr. F.P. van Oostrom | Rijksmuseum Amsterdam | 4 | |
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| 22Dr. E. Van DeldenRijksmuseum Twenthe323Dr. F.A. PetterMuseum Slot Loevestein424Dr. H.H.F. WijffelsRijksmuseum Amsterdam2*25Dr. L.P.J.J. (Lucas) NoldusNaturalis326Dr. R.E.O. EkkartMuseum Volkenkunde227Dr. Th. H.J. ClemensMuseum Catharijneconvent428Drs S.C.J. de VriesNaturalis329Drs. A. Van HartenMuseum Slot Loevestein430Drs. B.FransenRijksmuseum Twenthe331Drs. B.J. KoekoekMuseum Slot Loevestein332Drs. D.J.M.G. Baron van SlingelandtMuseum Boerhaave333Drs. F.A. VersteegNederlands Openluchtmuseum434Drs. F.M. ErkensMuseum Slot Loevestein335Drs. H. BenningaNaturalis336Drs. H. BenningaNaturalis337Drs. H. A. DoekNederlands Openluchtmuseum438Drs. ir. C. MaasGeld- en Bankmuseum339Drs. J. PolakJoods Historisch Museum440Drs. J. WertheimHollandse Schouwburg341Drs. J.B.J. BremerRijksmuseum Twenthe142Drs. J.F. Van DuijneMuseum Catharijneconvent444Drs. J.F. Van DuijneMuseum Catharijneconvent445Drs. J.P. De JongNederlands Openluchtmuseum346Drs. K.J. StormTeylers Museum | 21 | | | 4 | |
| Dr. F.A. Petter Dr. H.H.F. Wijffels Rijksmuseum Amsterdam Dr. L.P.J.J. (Lucas) Noldus Naturalis Dr. R.E.O. Ekkart Museum Volkenkunde Dr. Th. H.J. Clemens Museum Catharijneconvent Museum Slot Loevestein Museum Slot Loevestein Museum Slot Loevestein Museum Slot Loevestein Rijksmuseum Twenthe Drs. B.Fransen Rijksmuseum Wuseum Slot Loevestein Museum Slot Loevestein | 22 | Dr. E. Van Delden | • | 3 | |
| Dr. L.P.J.J. (Lucas) Noldus Naturalis Dr. R.E.O. Ekkart Museum Volkenkunde Dr. R.E.O. Ekkart Museum Catharijneconvent Museum Slot Loevestein | 23 | Dr. F.A. Petter | , | 4 | |
| Dr. L.P.J.J. (Lucas) Noldus Dr. R.E.O. Ekkart Museum Volkenkunde Dr. Th. H.J. Clemens Museum Catharijneconvent Museum Slot Loevestein Museum Boerhaave Museum Boerhaave Museum Boerhaave Museum Slot Loevestein | 24 | Dr. H.H.F. Wijffels | Rijksmuseum Amsterdam | 2 | * |
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| Drs S.C.J. de Vries Drs. A. Van Harten Museum Slot Loevestein Rijksmuseum Twenthe Rijksmuseum Slot Loevestein Ruseum Slot Loevestein | 26 | * * * * | Museum Volkenkunde | 2 | |
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| 48 Drs. P.J. Schoon Rijksmuseum Twenthe 2 | 46 | Drs. K.J. Storm | Teylers Museum | 3 | |
| , | 47 | Drs. L.K. de Koekkoek | Museum Slot Loevestein | 4 | |
| 49 Drs. P.M. Noordervliet-Bol Rijksmuseum Amsterdam 1 | 48 | Drs. P.J. Schoon | Rijksmuseum Twenthe | 2 | |
| | 49 | Drs. P.M. Noordervliet-Bol | Rijksmuseum Amsterdam | 1 | |

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| 50 51 | Drs. P.M.M. Tromp Drs. Ph. Van Tijn | Rijksmuseum Twenthe Joods Historisch Museum | 3 4 | |
| 52 | Drs. R.M. Weisz | Joods Historisch Museum | 3 | |
| 53 | Drs. W. Bloemberg | Geld- en Bankmuseum | 2 | |
| 54 | Drs. W.M.J. Pijbes | Rijksmuseum Amsterdam | 2 | |
| 55 | Drs. W.Th.M.Frijhoff | Museum Catharijneconvent | 4 | |
| 56 | Drs.ir. P.J.A.T. Loyson | Geld- en Bankmuseum | 3 | |
| 57 | E. Kist | Van Gogh Museum | 3 | * |
| 58 | F. Wiinen | Afrika museum | 4 | |
| 59 | Frank van Vree | Persmuseum | 2 | |
| 60 | G. Van den Heuvel | Afrika museum | 4 | |
| 61 | Geert-Jan Laan, voorzitter | Persmuseum | 3 | * |
| 62 | H. Van Loon | Afrika museum | 4 | |
| 63 | H.F. Dijkstal | Naturalis | 4 | * |
| 64 | H.M. Holterman | Rijksmuseum Twenthe | 3 | * |
| 65 | Hans Westerhof | Persmuseum | 4 | |
| 66 | Harriet Schrier | Persmuseum | 3 | |
| 67 | Ing. K. Damen | Museum Slot Loevestein | 3 | |
| 68 | Ir. G.N. Kok | Museum Slot Loevestein | 4 | * |
| 69 | Ir. H.M. Darmanata | Naturalis | 3 | |
| 70 | J. Krant | Joods Historisch Museum | 3 | * |
| 71 | J.M.M. van der Ven | Van Gogh Museum | 3 | |
| 72 | James Cuno | Van Gogh Museum | 2 | |
| 73 | Jan Willem Gast | Persmuseum | 4 | |
| 74 | Jhr. Drs. D. Laman Trip | Nederlands Openluchtmuseum | 3 | |
| 75 | Jhr.mr. J.P.E. Teding van Berkhout | Geld- en Bankmuseum | 3 | |
| 76 | Joan Hemels | Persmuseum | 4 | |
| 77 | Johan Olde Kalter | Persmuseum | 3 | |
| 78 | K. Lee-Reid | Van Gogh Museum | 2 | |
| 79 | Kees van der Wild | Persmuseum | 3 | |
| 80 | Mevrouw Drs. J.R. Beets-Hehewerth | Teylers Museum | 3 | |
| 81 | Mevrouw drs. M.A. Scheltema | Rijksmuseum Amsterdam | 3 | |
| 82 | Mevrouw drs. S. Wolff | Museum van Oudheden | 4 | |
| 83 | Mevrouw S. van Heemskerck Pillis - Duvekot | Museum van Oudheden | 4 | |
| 84 | Mevrouw. Drs. M.E. Ruys-van Haaften | Mauritshuis | 4 | |
| 85 | Mr M.C. Udink | Naturalis | 3 | |
| 86 | Mr. A. Ruys | Rijksmuseum Amsterdam | 3 | * |
| 87 | Mr. A.R. van Heemstra | Museum van Oudheden | 3 | * |
| 88 | Mr. A.S. Fransen van de Putte | Rijksmuseum Amsterdam | 4 | |
| 89 | Mr. A.W. Kist | Museum Volkenkunde | 4 | |
| 90 | Mr. B.I.M. Hudig | Museum Catharijneconvent | 4 | |
| 91 | Mr. C.G.A van Wijk | Teylers Museum | 3 | |
| 92 | Mr. E. Ten Cate | Rijksmuseum Twenthe | 3 | * |
| 93 | Mr. G.H.N.L. Van Woerkom | Nederlands Openluchtmuseum | 4 | |
| 94 | Mr. J. Van Zwol | Rijksmuseum Twenthe | 3 | |
| 95 | Mr. J.J. Van Es | Teylers Museum | 3 | |
| 96 | Mr. J.L. de Wijkerslooth | Museum Volkenkunde | 4 | |
| 97 | Mr. J.M. Boll | Teylers Museum | 4 | * |
| 98 | Mr. J.M.N. Leighton | Mauritshuis | 2 | |
| 99 | Mr. L.R. Van der Weij | Afrika museum | 4 | * |
| 100 | Mr. M.J. Cohen | Hollandse Schouwburg | 4 | * |
| 101 | Mr. R.G. Degenaar | Museum Slot Loevestein | 3 | * |
| 102 | Mr. S.G.M. Asser-Ribbert | Joods Historisch Museum | 3 | |
| 103 | Mr.R.J. Hoekstra | Mauritshuis | 4 | |
| 104 | Mrs. C.L.E. Van Tets-van Tienhoven | Mauritshuis | 2 | |
| 105 | Mrs. Gonçalves-Ho Kang You | Mauritshuis | 3 | |
| 106 | Mw. A. Doesburg | Museum Volkenkunde | 4 | |
| 107 | Mw. C. Lemmens | Museum Boerhaave | 3 | |
| 108 | Mw. Drs. J.P. Rijsdijk | Geld- en Bankmuseum | 4 | |
| 109 | Mw. Drs. M. van Rossen | Museum Volkenkunde | 4 | * |
| 110 | Mw. drs. M.W.M. Vos-van Gortel | Naturalis | 4 | * |
| 111 | Mw. drs. S. Bruines | Museum Catharijneconvent | 4 | |
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MASTERTHESIS MAARTEN KRISTIAN BUL

| 112 | Mw. Drs. S.C. Shkolnik-Oosterwouder mme | Nederlands Openluchtmuseum | 4 | |
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| 113 | Mw. M. Kilic-Karaaslan | Museum Volkenkunde | 3 | |
| 114 | Mw. mr. A. Deveci-Kesmer | Rijksmuseum Amsterdam | 4 | |
| 115 | Mw. mr. F.G. van Diepen-Oost | Naturalis | 4 | |
| 116 | Mw. mr. J.J.M.S. Leyten-De wijkerslooth de Weerdesteyn | Mauritshuis | 4 | |
| 117 | Mw. mr. M.E.C. Pernot | Museum Catharijneconvent | 4 | |
| 118 | Mw. mr. Y.N. Rosina | Geld- en Bankmuseum | 3 | |
| 119 | Mw. N.Y. Albayrak-Temur | Nederlands Openluchtmuseum | 4 | |
| 120 | Mw. P.W. Kruseman | Nederlands Openluchtmuseum | 2 | |
| 121 | Mw. Prof. Dr. E.A. Van Zoonen | Nederlands Openluchtmuseum | 4 | |
| 122 | O.M. Starmans RA | Afrika museum | 3 | |
| 123 | P. Schnabel | Van Gogh Museum | 2 | |
| 124 | P. Winsemius | Van Gogh Museum | 3 | * |
| 125 | Ph. van Tijn | Museum Boerhaave | 3 | |
| 126 | prof dr R.S. Reneman | Museum Boerhaave | 4 | |
| 127 | Prof. Chr. J. White | Mauritshuis | 2 | |
| 128 | Prof. Dr . H.J.M. Venbrux | Afrika museum | 4 | |
| 129 | Prof. Dr R.H. Dijkgraaf | Teylers Museum | 4 | |
| 130 | Prof. Dr. H.S.A. Heymans | Joods Historisch Museum | 4 | |
| 131 | Prof. Dr. Ir. J.H.C. Reiber | Museum Boerhaave | 4 | |
| 132 | Prof. Dr. J.W. Winter | Mauritshuis | 4 | |
| 133 | Prof. Dr. S.L. De Blaauw | Museum Catharijneconvent | 2 | |
| 134 | Prof. Drs. F.W. Saris | Teylers Museum | 4 | |
| 135 | Prof. drs. W. Otterspeer | Museum van Oudheden | 2 | |
| 136 | Prof. Ir. W. Dik | Museum Boerhaave | 3 | * |
| 137 | Prof. mr. I.P. Asscher-Vonk | Rijksmuseum Amsterdam | 3 | |
| 138 | Prof. mr. P.F. van der Heijden, | Museum Volkenkunde | 4 | |
| 139 | Prof.dr. J.M.W.G. Lucassen | Geld- en Bankmuseum | 4 | |
| 140 | Prof.dr. L.E.M. Vet | Naturalis | 4 | |
| 141 | Prof.dr. M.Barnard | Museum Catharijneconvent | 4 | |
| 142 | Rik Vos | Persmuseum | 4 | |
| 143 | Servaas Smulders | Persmuseum | 3 | |
| 144 | Trude Maas | Van Gogh Museum | 4 | |
| 145 | W. Kok | Rijksmuseum Amsterdam | 4 | |
| 146 | Willy Pieterse | Persmuseum | 4 | |
| 147 | Wim Vroom | Persmuseum | 4 | |
| | | | | |

APPENDIX C - DIRECTOR BACKGROUNDS

Background

- 1 Former Chairman of Unilever
- 2 Chairman GGZ Nederland
- 3 Director Burgers' Zoo
- 4 Nederlands journalist en programmamaker bij de AVRO
- 5 Independent journalist, Director NVJ
- 6 An insururer "http://www.rtvoost.nl/nieuws/?nid=106471"
- 7 Healthcare entrepreneur
- 8 CEO Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden
- 9 CEO Koninklijk Museum van Schone Kunsten Antwerpen
- 10 VSB Fonds
- 11 Politician Tweede Kamer der Staten-Generaal PvdA fractie
- 12 CEO Nederlands Persmuseum
- 13 Director Kempen & Co
- 14 TiMe Amsterdam
- 15 Partner Baker & McKenzie
- 16 Universiteitshoogleraar Universiteit Utrecht en President Koninklijke Nederlandse Akademie van Wetenschappen
- 17 Algemeen directeur Bestuursbureau Universiteit Leiden
- 18 President of De Nederlandsche Bank
- 19 President of De Nederlandsche Bank
- 20 Politician: Thesaurier-generaal & CEO financiële markten, ministerie van financiën
- 21 Ministry of Interior and Kingdom Affairs Integration Policy
- 22 Partner antiquiteitenhandel at Osnabrück
- 23 Mayor Woudrichem
- 24 Chairman Socio-Economical advisory board
- 25 General secretary and Treasurer Managing Director Noldus Information Technology B.V.
- 26 directeur Rijksbureau voor Kunsthistorische documentatie
- 27 Katholieke Theologische Universiteit Utrecht
- 28 Amsterdam University Press
- 29 Medical doctor & researcher
- 30 CEO Agfra Holding B.V.
- 31 NVTB Nederlands Verbond Toelevering Bouw
- 32 Vice Chairman of the Supervisory Board KAS bank
- 33 CEO AWVN
- 34 Former CEO Woning Bedrijf Rotterdam
- 35 Former CEO Jaarbeurs Utrecht
- 36 Chairman Rabobank Nederland
- 37 Politician: Eerste Kamer
- 38 Senior Advisor Cerberus Global Investment Advisors
- $39 \quad Economist \hbox{-} transportation$
- 40 Chairman De Nederlandse Orde van Makelaars
- 41 Writer cultural topics
- 42 TenneT BV
- 43 TenneT BV
- 44 President & CEO, Port of Amsterdam
- 45 Zelfstandig adviespraktijk voor strategie, overleg, organisatie en samenwerking 'Achter de duinen
- 46 Since 1978 with Ago, now Aegon
- 47 Advisor Ministy OCW & SZW: projectsubsidies Belvedere
- 48 CEO Dordrechts Museum
- 49 Writer
- 50 Koninklijke Grolsch NV
- 51 President of the Algemene Rekenkamer
- 52 CEO DBN Groep
- 53 Director Cultuur Erfgoed, Ministerie OCW
- 54 CEO Kunsthal Rotterdam
- 55 Professor History religious culture, university history, mentality history
- 56 CEO Onderlinge Levensverzekering-maatschappij 's-Gravenhage u.A.
- 57 Former Chairman Raad van Bestuur ING groep
- 58 Professor Psycholinguïstiek Universiteit Utrecht

- 59 Historian and Professor of Journalism & Culture at the University of Amsterdam
- 60 Lecturer art at an HBO-school and an autority on African art and etnographics
- 61 Chief editor at Vandaag & Morgen
- 62 Pastor at 'de congregatie van de Heilige Geest'
- 63 Politician: vice-premier and minister of foreign affairs and member of the Tweede Kamer.
- 64 Royal Numico N.V.
- 65 Independent Museums and Institutions Professional
- 66 Secretary general at Dutch Publishers Association
- 67 President en CEO Damen Shipyards Group
- 68 Waterschap Rivierenland
- 69 Consultant IBM
- 70 Chairman Kempen & Co
- 71 CEO Samas-Groep NV
- 72 President and Eloise W. Martin Director of The Art Insitute of Chicago
- 73 World Association of Newspapers (WAN)
- 74 Former Chairman ING Nederland
- 75 Former vice-chairman Hudig-Langeveldt Groep
- 76 Professor of Communication Science at Universiteit van Amsterdam
- 77 Reporter and Chief editor De Telegraaf
- 78 Former CEO Cleveland Museum of art
- 79 Vice-Chief editor De Telegraaf
- 80 Chairman Woning-winkel Zuid
- 81 CFO Shell Nederland
- 82 Former chairman executive committee African Parks Foundation
- 83 Politician: Tweede Kamer der Staten-Generaal (1982-1998)
- 84 Secretary SOS Children's Villages
- 85 Chairman of the Supervisory Board of NV Koninklijke Delftsch Aardewerkfabriek since 2003
- 86 Chairman Heineken N.V
- 87 Former director Unilever
- 88 Lawyer Van Doorne
- 89 Director Autoriteit Financiële Markten
- 90 Leids Universiteits Fonds
- 91 CEO Gottmer Uitgeversgroep
- 92 CEO bank Ten Cate & Cie NV
- 93 CEO ANWB
- 94 Banking sector: "Weer is gekozen voor iemand uit het bankwezen" Annual report Rijksmuseum
- 95 Laywer Houthoff Buruma NV
- 96 Professor: law, Universiteit Leiden
- 97 Politician: lid Raad van State
- 98 CEO National Galleries of Scotland
- 99 President of court Arnhem
- 100 Mayor Amsterdam
- 101 Lawyer with DHC Advocaten
- 102 SAR Legal Advice
- 103 Politician: lid Raad van State, secretaris-generaal, informateur
- 104 Vereniging Rembrandt
- 105 Lawyer
- 106 Statengriffier van de Provincie Flevoland
- 107 Psychology with Spel Hardewijk
- 108 Manager with Nederlandsche bank N.V
- 109 Former Mayor Alkmaar
- 110 Former Mayor Utrecht
- 111 Local government and tourist office Amsterdam
- 112 CEO School Gelders Mozaiek
- 113 Organization consultant Twynstra Gudde Adviseurs en Managers
- 114 Laywer & CEO Rhythm of Reason Arnhem
- 115 Former 'gedeputeerde' Provinciale Staten Noord-Holland
- 116 Politician: Eerste Kamer, Raad van State
- 117 Director Vereniging eigen Huis
- 118 Laywer & Partner Rosina Eising Advocaten
- 119 Director HR & Organization Centraal Orgaan opvang asielzoekers
- 120 CEO amsterdams historisch museum & Chairman amsterdamse hogeschool voor de kunsten

- 121 University LLoughborrough, UK
- 122 G. Van Den Bergh Nijmwegen Beheer BV
- 123 CEO Sociaal en Cultureel Planbureau & professor university Universiteit Utrecht
- 124 McKinsey & Company
- 125 Director Corporate Communicatie Connexxion
- 126 President Koninklijke Nederlandse Akademie van Wetenschappen
- 127 Former Director of the Ashmolean Museum and an expert on Dutch art
- 128 Professor: Radboud University Nijmegen: Antropologie van de religie, dood, religiositeit, ritueel
- 129 University Professor of Mathematical Physics at the University of Amsterdam and president KNAW
- 130 AMC: Child doctor
- 131 Leids Universitair Medisch Centrum
- 132 Lecturer UvA
- 133 Professor KNAW: Department of Art History
- 134 Professor Leidse university: Wiskunde & Natuurwetenschappen
- 135 Hoogleraar Universiteitsgeschiedenis, Universiteit Leiden
- 136 KPN Royal Dutch Telecom
- 137 Professor social law Radboud Universiteit Nijmegen
- 138 Rector Magnificus en Voorzitter College van Bestuur Universiteit Leiden
- 139 Reseacher international institute Social History
- 140 CEO Netherlands Institute Ecology NIOO-KNAW and professor Wageningen Universiteit
- 141 Professor of Liturgical Studies at the Protestantse Theologische Universiteit (Utrecht)
- 142 CEO nederlandse museum vereniging
- 143 Communication specialist
- 144 Politicain: Eerste Kamer
- 145 Minister van Staat
- 146 Archivaris
- 147 Head section ESCI at Defence Materiel Organisation

APPENDIX D - FINANCIAL RATIOS

| | 2004 | 2005 | 2006 | 2004 | 2008 |
|-------------------------------|---------|---------|---------|---------|---------|
| Afrika Museum | | | | | |
| Debt ratio | 0.18 | 1.08 | 4.63 | 6.74 | 6.36 |
| Current ratio | 5.77 | 3.59 | 4.3 | 5.9 | 4.29 |
| Comm. Inc. % | 21.72% | 15.15% | 18.92% | 25.89% | 22.33% |
| Self sufficiency ratio (comm) | 26.21% | 12.02% | 15.57% | 25.42% | 22.40% |
| Fund. Inc. % | 0.31% | 0.38% | 11.66% | 2.27% | 0.80% |
| Self sufficiency ratio (fund) | 0.37% | 0.30% | 9.60% | 2.22% | 0.81% |
| | | | | | |
| Geld- en Bankmuseum | | | | | |
| Debt ratio | 0.81 | 1.71 | 1.93 | 3.22 | 2.9 |
| Current ratio | 2.32 | 1.45 | 1.42 | 1.04 | 1.1 |
| Comm. Inc. % | 0.84% | 1.37% | 0.38% | 7.92% | 7.94% |
| Self sufficiency ratio (comm) | 0.85% | 1.16% | 0.43% | 8.02% | 7.96% |
| Fund. Inc. % | 0.00% | 1.65% | 2.14% | 8.22% | 8.29% |
| Self sufficiency ratio (fund) | 0.00% | 1.39% | 2.43% | 8.32% | 8.31% |
| Hollandse Schouwburg | | | | | |
| Debt ratio | 0.36 | 7.32 | 3.02 | 0.83 | 0.61 |
| Current ratio | 5.06 | 1.3 | 1.77 | 3.3 | 3.11 |
| Comm. Inc. % | 0.68% | 0.09% | 0.59% | 0.51% | 0.51% |
| Self sufficiency ratio (comm) | 0.65% | 0.08% | 0.63% | 0.66% | 0.57% |
| Fund. Inc. % | 0.00% | 12.29% | 3.75% | 16.14% | 21.51% |
| Self sufficiency ratio (fund) | 0.00% | 11.33% | 3.96% | 20.71% | 24.25% |
| Joods Historisch Museum | | | | | |
| Debt ratio | 7.6 | 2.28 | 5.31 | 6.17 | 6.46 |
| Current ratio | 2.86 | 2.73 | 1.72 | 1.89 | 1.58 |
| Comm. Inc. % | 7.27% | 11.70% | 9.23% | 11.72% | 9.26% |
| Self sufficiency ratio (comm) | 7.20% | 12.10% | 9.11% | 11.13% | 9.11% |
| Fund. Inc. % | 27.65% | 27.39% | 34.20% | 38.20% | 40.54% |
| Self sufficiency ratio (fund) | 27.37% | 28.35% | 33.75% | 36.25% | 39.91% |
| sen sunicioney ratio (rana) | 27.3770 | 20.5570 | 33.7370 | 30.2370 | 33.7170 |
| Mauritshuis | | | | | |
| Debt ratio | 2.2 | 1.5 | 0.42 | 0.47 | 0.22 |
| Current ratio | 1.96 | 1.94 | 4.43 | 4.36 | 7.59 |
| Comm. Inc. % | 25.70% | 10.88% | 29.27% | 15.40% | 22.97% |
| Self sufficiency ratio (comm) | 27.56% | 11.11% | 37.80% | 14.53% | 30.99% |
| Fund. Inc. % | 31.41% | 49.50% | 35.30% | 62.12% | 34.86% |
| Self sufficiency ratio (fund) | 33.67% | 50.54% | 45.60% | 58.60% | 47.03% |
| Museum Boerhaave | | | | | |
| Debt ratio | 0.85 | 0.73 | 1.04 | 0.52 | 0.5 |
| Current ratio | 2.09 | 3.59 | 4.3 | 5.9 | 4.29 |
| Comm. Inc. % | 3.58% | 3.21% | 3.27% | 3.62% | 4.06% |
| Self sufficiency ratio (comm) | 3.75% | 3.58% | 3.19% | 4.64% | 4.27% |
| Fund. Inc. % | 12.80% | 10.13% | 7.38% | 18.75% | 9.42% |
| Self sufficiency ratio (fund) | 13.42% | 11.30% | 7.20% | 24.03% | 9.91% |

| Museum Catharijneconvent | | | | | |
|-------------------------------|--------------|--------|--------|--------|--------|
| Debt ratio | 6.32 | 1.63 | 5.4 | 4.4 | 3.97 |
| Current ratio | 0.94 | 0.8 | 0.59 | 0.33 | 0.29 |
| Comm. Inc. % | 6.25% | 6.99% | 9.47% | 13.83% | 14.07% |
| Self sufficiency ratio (comm) | 5.12% | 8.41% | 9.38% | 13.90% | 14.34% |
| Fund. Inc. % | 0.98% | 10.16% | 11.74% | 6.71% | 7.15% |
| Self sufficiency ratio (fund) | 0.80% | 12.22% | 11.63% | 6.74% | 7.29% |
| W 01 . V | | | | | |
| Museum Slot Loevestein | F 14 | 2.00 | 1 55 | 0.70 | 0.53 |
| Debt ratio | 5.14 2.22 | 3.08 | 1.55 | 0.79 | 0.52 |
| Current ratio | | 3.54 | 4.25 | 6.42 | 6.65 |
| Comm. Inc. % | 40.05% | 20.47% | 21.64% | 37.54% | 41.79% |
| Self sufficiency ratio (comm) | 40.47% | 26.55% | 27.54% | 48.68% | 61.83% |
| Fund. Inc. % | 13.29% | 16.01% | 17.25% | 25.08% | 20.44% |
| Self sufficiency ratio (fund) | 13.43% | 20.77% | 21.95% | 32.52% | 30.23% |
| Museum van Oudheden | | | | | |
| Debt ratio | 5.63 | 8.47 | 7.24 | 6.98 | 6.64 |
| Current ratio | 0.57 | 1.69 | 1.96 | 3.35 | 3.19 |
| Comm. Inc. % | 12.33% | 10.55% | 11.64% | 9.58% | 9.30% |
| Self sufficiency ratio (comm) | 12.05% | 13.20% | 12.83% | 10.80% | 9.50% |
| Fund. Inc. % | 0.78% | 1.14% | 0.66% | 1.47% | 1.62% |
| Self sufficiency ratio (fund) | 0.76% | 1.42% | 0.72% | 1.66% | 1.65% |
| Museum Volkenkunde | | | | | |
| Debt ratio | 4.5 | 1.72 | 1.95 | 1.61 | 1.55 |
| Current ratio | 0.73 | 1.91 | 2.1 | 2.24 | 2.23 |
| Comm. Inc. % | 5.09% | 7.29% | 7.27% | 10.76% | 3.80% |
| Self sufficiency ratio (comm) | 5.30% | 7.84% | 7.41% | 10.79% | 3.84% |
| Fund. Inc. % | 7.54% | 11.14% | 3.97% | 5.59% | 9.01% |
| Self sufficiency ratio (fund) | 7.85% | 11.98% | 4.06% | 5.60% | 9.12% |
| Naturalis | | | | | |
| Debt ratio | 3.52 | 0.81 | 0.84 | 0.49 | 1.04 |
| Current ratio | 0.77 | 1.5 | 1.65 | 3.12 | 1.73 |
| Comm. Inc. % | 12.01% | 12.44% | 12.89% | 13.29% | 12.71% |
| Self sufficiency ratio (comm) | 14.18% | 13.66% | 12.71% | 14.40% | 13.93% |
| Fund. Inc. % | 1.83% | 5.02% | 3.49% | 5.28% | 9.34% |
| Self sufficiency ratio (fund) | 2.15% | 5.51% | 3.44% | 5.72% | 10.24% |
| Nederlands Openluchtmuseum | , | | | | |
| Debt ratio | 1.09 | 0.77 | 0.66 | 0.66 | 0.96 |
| Current ratio | 3.34 | 4.28 | 4.83 | 5 | 2.96 |
| Comm. Inc. % | 30.60% | 31.76% | 31.06% | 33.98% | 34.36% |
| Self sufficiency ratio (comm) | 36.98% | 33.91% | 32.77% | 33.82% | 33.65% |
| Fund. Inc. % | 17.26% | 15.95% | 23.96% | 14.92% | 6.82% |
| Self sufficiency ratio (fund) | 20.86% | 17.03% | 25.27% | 14.84% | 6.67% |
| (········) | _0.0070 | | _3,,0 | , 0 | 3.0.70 |
| Persmuseum | | | | | |
| Debt ratio | 0.7 | 0.61 | 0.58 | 0.84 | 0.54 |
| | | | | | |

| Current ratio | 2.29 | 3.26 | 4.19 | 1.73 | 8.08 |
|-------------------------------|--------|--------|--------|--------|--------|
| Comm. Inc. % | 5.41% | 5.81% | 5.93% | 10.15% | 7.62% |
| Self sufficiency ratio (comm) | 5.30% | 5.74% | 5.55% | 10.04% | 7.00% |
| Fund. Inc. % | 10.47% | 10.90% | 9.27% | 7.73% | 9.23% |
| Self sufficiency ratio (fund) | 10.26% | 10.77% | 8.67% | 7.64% | 8.48% |
| | | | | | |
| | | | | | |
| Teylers Museum | | | | | |
| Debt ratio | 1.58 | 0.19 | 0.16 | 0.25 | 0.29 |
| Current ratio | 2.47 | 2 | 2.83 | 1.86 | 1.75 |
| Comm. Inc. % | 27.25% | 48.89% | 22.95% | 26.88% | 33.52% |
| Self sufficiency ratio (comm) | 27.62% | 51.58% | 22.71% | 27.64% | 32.93% |
| Fund. Inc. % | 2.11% | 0.49% | 2.14% | 16.39% | 11.29% |
| Self sufficiency ratio (fund) | 2.14% | 0.51% | 2.12% | 16.86% | 11.10% |
| Rijksmuseum Amsterdam | | | | | |
| Debt ratio | 7.27 | 4.84 | 5.99 | 6.24 | 72.57 |
| Current ratio | 1.44 | 2.12 | 2.43 | 2.4 | 36.39 |
| Comm. Inc. % | 11.96% | 23.25% | 28.52% | 23.85% | 23.92% |
| Self sufficiency ratio (comm) | 11.86% | 23.16% | 28.57% | 23.39% | 23.20% |
| Fund. Inc. % | 19.85% | 5.68% | 6.74% | 5.87% | 13.59% |
| Self sufficiency ratio (fund) | 19.69% | 5.66% | 6.75% | 5.75% | 13.18% |
| | | | | | |
| Rijksmuseum Twente | | | | | |
| Debt ratio | -0.78 | 0.6 | 0.6 | 0.82 | 0.54 |
| Current ratio | 2.48 | 4.92 | 4.26 | 2.67 | 3.62 |
| Comm. Inc. % | 5.69% | 6.09% | 7.80% | 6.52% | 6.79% |
| Self sufficiency ratio (comm) | 5.73% | 6.38% | 7.93% | 6.64% | 7.63% |
| Fund. Inc. % | 0.82% | 9.08% | 11.71% | 14.66% | 19.87% |
| Self sufficiency ratio (fund) | 0.83% | 9.51% | 11.91% | 14.93% | 22.30% |
| Van Gogh Museum | | | | | |
| Debt ratio | 0.36 | 0.43 | 0.4 | 0.53 | 1.22 |
| Current ratio | 2.54 | 3.79 | 3.95 | 3.27 | 3.44 |
| Comm. Inc. % | 62.67% | 67.68% | 57.77% | 60.96% | 61.20% |
| Self sufficiency ratio (comm) | 66.80% | 83.99% | 56.44% | 65.94% | 59.52% |
| Fund. Inc. % | 17.13% | | 24.61% | 14.87% | 15.53% |
| | | 14.91% | | | |
| Self sufficiency ratio (fund) | 18.26% | 18.50% | 24.04% | 16.09% | 15.10% |

APPENDIX E - RESULTS

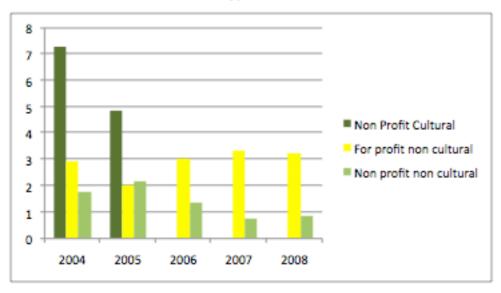
| | | Debt rati | 0 | | | | |
|-------------------------|-------------------------------|-----------|--------|--------|--------|--------|---------|
| | | 04 | 05 | 06 | 07 | 08 | Avg. |
| For Profit Cultural | Pearson | -0.31 | -0.78 | -0.19 | -0.146 | -0.102 | -0.3056 |
| | Significance | 0.353 | 0.766 | 0.944 | 0.576 | 0.696 | 0.667 |
| Non Profit Cultural | Pearson | -0.258 | -0.154 | -0.175 | -0.115 | 0.8 | 0.0196 |
| | Significance | 0.443 | 0.555 | 0.503 | 0.661 | 0.76 | 0.5844 |
| For profit non cultural | Pearson | -0.247 | 0.138 | 0.056 | -0.011 | 0.064 | 0 |
| | Significance | 0.464 | 0.597 | 0.83 | 0.968 | 0.807 | 0.7332 |
| Non profit non cultural | Pearson | 0.477 | -0.36 | 0.049 | 0.119 | -0.086 | 0.0398 |
| | Significance | 0.138 | 0.891 | 0.853 | 0.649 | 0.742 | 0.6546 |
| For profit total | Pearson | -0.278 | 0.116 | 0.047 | -0.04 | 0.034 | -0.0242 |
| | Significance | 0.408 | 0.658 | 0.857 | 0.88 | 0.898 | 0.7402 |
| Total directors | Pearson | 0.081 | -0.325 | -0.333 | -0.17 | -0.083 | -0.166 |
| | Significance | 0.813 | 0.204 | 0.192 | 0.515 | 0.752 | 0.4952 |
| Chairman | Significance | 0.896 | 0 | 0.748 | 0.695 | 0.26 | 0.5198 |
| | Mean: For profit non cultural | 2.946 | 2.012 | 3.048 | 3.357 | 3.245 | 2.9216 |
| | Mean: Non profit non cultural | 1.737 | 2.163 | 1.361 | 0.772 | 0.828 | 1.3722 |
| | Mean: Non Profit Cultural | 7.269 | 4.845 | - | - | - | - |
| Dominance | Significance | 0.76 | 0 | 0.351 | 0.356 | 0.354 | 0.3642 |
| | Non profit dominant | 3.5 | 2.277 | 2.475 | 3.485 | 2.679 | 2.8832 |
| | Equally balanced | 2.013 | 4.068 | 4.502 | 1.526 | 3.29 | 3.0798 |
| | For profit dominant | 2.316 | 1.377 | 1.589 | 1.516 | 1.559 | 1.6714 |
| | • | | | | | | |
| | | | | | | | |
| | | Current i | atio | | | | |
| | | 04 | 05 | 06 | 07 | 08 | Avg. |
| For Profit Cultural | Pearson | -0.092 | 0.32 | 0.095 | -0.08 | -0.056 | 0.0374 |
| | Significance | 0.724 | 0.211 | 0.717 | 0.76 | 0.83 | 0.6484 |
| Non Profit Cultural | Pearson | -0.143 | -0.1 | 0.138 | 0.111 | 0.155 | 0.0322 |
| | Significance | 0.585 | 0.702 | 0.597 | 0.672 | 0.553 | 0.6218 |
| For profit non cultural | Pearson | 0.416 | 0.388 | 0.118 | 0.025 | 0.073 | 0.204 |
| | Significance | 0.097 | 0.124 | 0.652 | 0.924 | 0.781 | 0.5156 |
| Non profit non cultural | Pearson | -0.329 | -0.488 | -0.237 | -0.079 | -0.154 | -0.2574 |
| | Significance | 0.198 | 0.047 | 0.359 | 0.762 | 0.555 | 0.3842 |
| For profit total | Pearson | 0.37 | 0.437 | 0.131 | 0.006 | 0.054 | 0.1996 |
| | Significance | 0.143 | 0.08 | 0.616 | 0.981 | 0.838 | 0.5316 |
| Total directors | Pearson | -0.21 | 0.059 | 0.126 | -0.239 | 0.065 | -0.0398 |
| | Significance | 0.419 | 0.821 | 0.63 | 0.356 | 0.804 | 0.606 |
| Chairman | Significance | 0.925 | 0.7 | 0.696 | 0.573 | 0.196 | 0.618 |
| | Mean: For profit non cultural | 1.318 | 2.846 | 3.049 | 2.987 | 3.679 | 2.7758 |
| | Mean: Non profit non cultural | 1.829 | 2.197 | 2.906 | 0.3658 | 3.073 | 2.07416 |
| | Mean: Non Profit Cultural | 1.439 | 2.123 | - | - | - | - |
| Dominance | Significance | 0.909 | 0.558 | 0.555 | 0.523 | 0.403 | 0.5896 |
| | Non profit dominant | 2.132 | 2.483 | 3.201 | 3.749 | 3.831 | 3.0792 |
| | Equally balanced | 2.578 | 1.398 | 2.1 | 2.539 | 2.403 | 2.2036 |
| | For profit dominant | 2.475 | 3.357 | 2.952 | 2.864 | 3.51 | 3.0316 |
| | | | | | | | |
| | | Comm. Ir | ıc. % | | | | |
| | | 04 | 05 | 06 | 07 | 08 | Avg. |
| For Profit Cultural | Pearson | -0.177 | -0.056 | 0.046 | -0.202 | -0.187 | -0.1152 |
| | | | | | | | |

| | Significance | 0.496 | 0.831 | 0.861 | 0.438 | 0.473 | 0.6198 |
|-------------------------|-------------------------------|---------------------|--------------|--------|--------|--------|---------|
| Non Profit Cultural | Pearson | 0.309 | 0.345 | 0.652 | 0.438 | 0.473 | 0.4736 |
| Non Front Cultural | Significance | 0.228 | 0.175 | 0.005 | 0.021 | 0.076 | 0.0984 |
| For profit non cultural | Pearson | -0.089 | -0.116 | -0.342 | -0.308 | -0.296 | -0.2302 |
| Tor prone non cultural | Significance | 0.735 | 0.658 | 0.179 | 0.228 | 0.249 | 0.4098 |
| Non profit non cultural | Pearson | -0.048 | -0.095 | -0.033 | -0.05 | 0.049 | -0.0354 |
| Non pront non cultural | Significance | 0.854 | 0.717 | 0.899 | 0.85 | 0.85 | 0.834 |
| For profit total | Pearson | -0.119 | -0.122 | -0.303 | -0.32 | -0.319 | -0.2366 |
| To prometown | Significance | 0.65 | 0.64 | 0.237 | 0.21 | 0.211 | 0.3896 |
| Total directors | Pearson | -0.072 | 0.469 | -0.089 | -0.116 | -0.097 | 0.019 |
| | Significance | 0.784 | -0.188 | 0.735 | 0.658 | 0.71 | 0.5398 |
| Chairman | Significance | 0.967 | 0.278 | 0.585 | 0.614 | 0.958 | 0.6804 |
| | Mean: For profit non cultural | 0.191 | 0.145 | 0.166 | 0.172 | 0.172 | 0.6804 |
| | Mean: Non profit non cultural | 0.133 | 0.201 | 0.161 | 0.205 | 0.211 | 0.6804 |
| | Mean: Non Profit Cultural | 0.12 | 0.233 | - | - | - | - |
| Dominance | Significance | 0.839 | 0.262 | 0.713 | 0.57 | 0.259 | 0.5286 |
| | Non profit dominant | 0.143 | 0.181 | 0.193 | 0.214 | 0.262 | 0.5286 |
| | Equally balanced | 0.242 | 0.063 | 0.146 | 0.231 | 0.108 | 0.5286 |
| | For profit dominant | 0.109 | 0.181 | 0.112 | 0.12 | 0.123 | 0.5286 |
| | | | | | | | |
| | | | | | | | |
| | | Comm. In | ıc. % | | | | |
| | | 04 | 05 | 06 | 07 | 08 | Avg. |
| For Profit Cultural | Pearson | -0.177 | -0.056 | 0.046 | -0.202 | -0.187 | -0.1152 |
| | Significance | 0.496 | 0.831 | 0.861 | 0.438 | 0.473 | 0.6198 |
| Non Profit Cultural | Pearson | 0.309 | 0.345 | 0.652 | 0.621 | 0.441 | 0.4736 |
| | Significance | 0.228 | 0.175 | 0.005 | 0.008 | 0.076 | 0.0984 |
| For profit non cultural | Pearson | -0.089 | -0.116 | -0.342 | -0.308 | -0.296 | -0.2302 |
| | Significance | 0.735 | 0.658 | 0.179 | 0.228 | 0.249 | 0.4098 |
| Non profit non cultural | Pearson | -0.048 | -0.095 | -0.033 | -0.05 | 0.049 | -0.0354 |
| | Significance | 0.854 | 0.717 | 0.899 | 0.85 | 0.85 | 0.834 |
| For profit total | Pearson | -0.119 | -0.122 | -0.303 | -0.32 | -0.319 | -0.2366 |
| | Significance | 0.65 | 0.64 | 0.237 | 0.21 | 0.211 | 0.3896 |
| Total directors | Pearson | -0.072 | 0.469 | -0.089 | -0.116 | -0.097 | 0.019 |
| | Significance | 0.784 | -0.188 | 0.735 | 0.658 | 0.71 | 0.5398 |
| Chairman | Significance | 0.967 | 0.278 | 0.585 | 0.614 | 0.958 | 0.6804 |
| | Mean: For profit non cultural | 0.191 | 0.145 | 0.166 | 0.172 | 0.172 | 0.1692 |
| | Mean: Non profit non cultural | 0.133 | 0.201 | 0.161 | 0.205 | 0.211 | 0.1822 |
| | Mean: Non Profit Cultural | 0.12 | 0.233 | - | - | - | - |
| Dominance | Significance | 0.839 | 0.262 | 0.713 | 0.57 | 0.259 | 0.5286 |
| | Non profit dominant | 0.143 | 0.181 | 0.193 | 0.214 | 0.262 | 0.1986 |
| | Equally balanced | 0.242 | 0.063 | 0.146 | 0.231 | 0.108 | 0.158 |
| | For profit dominant | 0.109 | 0.181 | 0.112 | 0.12 | 0.123 | 0.129 |
| | | | | | | | |
| | | Self suffice (comm) | ciency ratio |) | | | |
| | | 04 | 05 | 06 | 07 | 08 | Avg. |
| For Profit Cultural | Pearson | -0.187 | -0.077 | 0.029 | -0.195 | -0.175 | -0.121 |
| | Significance | 0.471 | 0.769 | 0.913 | 0.454 | 0.502 | 0.6218 |
| Non Profit Cultural | Pearson | 0.312 | 0.362 | 0.636 | 0.568 | 0.356 | 0.4468 |
| | Significance | 0.222 | 0.153 | 0.006 | 0.017 | 0.161 | 0.1118 |
| For profit non cultural | Pearson | -0.098 | -0.099 | -0.367 | -0.28 | -0.295 | -0.2278 |
| | DAGE | 4 4 / - | | | | | |

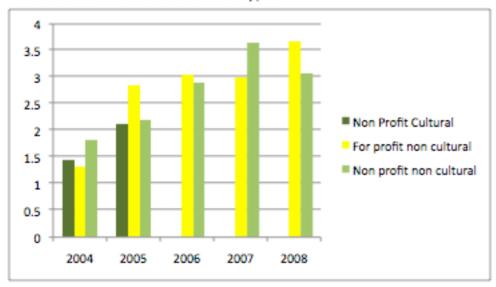
| | Significance | 0.707 | 0.706 | 0.148 | 0.276 | 0.25 | 0.4174 |
|-------------------------|-------------------------------|-----------|-------------|--------|--------|--------|----------|
| Non profit non cultural | Pearson | -0.038 | -0.123 | 0.008 | -0.045 | 0.101 | -0.0194 |
| | Significance | 0.885 | 0.637 | 0.975 | 0.863 | 0.701 | 0.8122 |
| For profit total | Pearson | -0.13 | -0.11 | -0.33 | -0.293 | -0.316 | -0.2358 |
| | Significance | 0.619 | 0.673 | 0.96 | 0.254 | 0.216 | 0.5444 |
| Total directors | Pearson | -0.054 | -0.199 | -0.073 | -0.172 | -0.103 | -0.1202 |
| | Significance | 0.838 | 0.443 | 0.781 | 0.51 | 0.695 | 0.6534 |
| Chairman | Significance | 0.951 | 0.438 | 0.639 | 0.711 | 0.815 | 0.7108 |
| | Mean: For profit non cultural | 0.204 | 0.168 | 0.17 | 0.177 | 0.178 | 0.1794 |
| | Mean: Non profit non cultural | 0.152 | 0.214 | 0.173 | 0.227 | 0.245 | 0.2022 |
| | Mean: Non Profit Cultural | 0.119 | 0.232 | - | - | - | - |
| Dominance | Significance | 0.875 | 0.377 | 0.616 | 0.555 | 0.188 | 0.5222 |
| | Non profit dominant | 0.157 | 0.201 | 0.206 | 0.227 | 0.295 | 0.2172 |
| | Equally balanced | 0.255 | 0.069 | 0.146 | 0.249 | 0.106 | 0.165 |
| | For profit dominant | 0.111 | 0.2 | 0.111 | 0.124 | 0.125 | 0.1342 |
| | | Fund. Inc | . 0/ | | | | |
| | | 04 | 70 | 06 | 07 | 08 | Avg. |
| For Profit Cultural | Pearson | -0.002 | -0.137 | -0.107 | -0.015 | 0.14 | -0.0242 |
| Tor Tront Cultural | Significance | 0.994 | 0.6 | 0.684 | 0.954 | 0.593 | 0.765 |
| Non Profit Cultural | Pearson | 0.167 | 0.082 | 0.305 | 0.754 | 0.076 | 0.765 |
| Non Front Cultural | Significance | 0.107 | 0.755 | 0.303 | 0.703 | 0.076 | 0.140 |
| For profit non cultural | Pearson | -0.161 | -0.042 | -0.204 | -0.015 | 0.771 | -0.0382 |
| roi pront non cultural | Significance | 0.537 | 0.872 | 0.432 | 0.965 | 0.231 | 0.6356 |
| Non profit non cultural | Pearson | 0.07 | 0.072 | 0.432 | -0.047 | -0.306 | -0.0372 |
| Non pront non cultural | Significance | 0.789 | 0.029 | 0.794 | 0.858 | 0.233 | 0.7174 |
| For profit total | Pearson | -0.151 | -0.069 | -0.213 | -0.016 | 0.233 | -0.0402 |
| roi profit total | Significance | 0.563 | 0.793 | 0.413 | 0.95 | 0.246 | 0.6112 |
| Total directors | Pearson | 0.216 | 0.209 | 0.202 | 0.08 | 0.337 | 0.1698 |
| Total un cetors | Significance | 0.406 | 0.421 | 0.436 | 0.76 | 0.586 | 0.5218 |
| Chairman | Significance | 0.469 | 0.634 | 0.46 | 0.872 | 0.952 | 0.6774 |
| Ghan man | Mean: For profit non cultural | 0.113 | 0.138 | 0.141 | 0.164 | 0.146 | 0.1404 |
| | Mean: Non profit non cultural | 0.07 | 0.130 | 0.091 | 0.139 | 0.140 | 0.1404 |
| | Mean: Non Profit Cultural | 0.198 | 0.057 | - | 0.137 | 0.131 | - 0.1042 |
| Dominance | Significance | 0.130 | 0.866 | 0.597 | 0.992 | 0.849 | 0.8492 |
| Dominance | Non profit dominant | 0.0975 | 0.121 | 0.141 | 0.155 | 0.043 | 0.1269 |
| | Equally balanced | 0.0975 | 0.121 | 0.052 | 0.133 | 0.12 | 0.1209 |
| | For profit dominant | 0.108 | 0.126 | 0.032 | 0.168 | 0.143 | 0.1372 |
| | | | | | | | |
| | | | ciency rati | | | | |
| | | 04 | 05 | 06 | 07 | 80 | Avg. |
| For Profit Cultural | Pearson | -0.02 | -0.152 | -0.112 | -0.025 | 0.132 | -0.0354 |
| | Significance | 0.939 | 0.56 | 0.668 | 0.923 | 0.613 | 0.7406 |
| Non Profit Cultural | Pearson | 0.171 | 0.09 | 0.306 | 0.046 | 0.093 | 0.1412 |
| | Significance | 0.511 | 0.732 | 0.232 | 0.86 | 0.722 | 0.6114 |
| For profit non cultural | Pearson | -0.18 | -0.041 | -0.227 | 0.043 | 0.172 | -0.0466 |
| | Significance | 0.49 | 0.877 | 0.382 | 0.871 | 0.509 | 0.6258 |
| Non profit non cultural | Pearson | 0.091 | 0.025 | 0.094 | -0.067 | -0.258 | -0.023 |
| | Significance | 0.727 | 0.924 | 0.721 | 0.797 | 0.317 | 0.6972 |
| For profit total | Pearson | -0.172 | -0.071 | -0.235 | 0.033 | 0.192 | -0.0506 |

| | Significance | 0.509 | 0.788 | 0.364 | 0.899 | 0.461 | 0.6042 |
|-----------------|-------------------------------|-------|-------|-------|--------|-------|--------|
| Total directors | Pearson | 0.222 | 0.198 | 0.186 | -0.011 | 0.127 | 0.1444 |
| | Significance | 0.391 | 0.447 | 0.475 | 0.967 | 0.626 | 0.5812 |
| Chairman | Significance | 0.57 | 0.58 | 0.56 | 0.953 | 0.845 | 0.7016 |
| | Mean: For profit non cultural | 0.118 | 0.15 | 0.148 | 0.166 | 0.158 | 0.148 |
| | Mean: Non profit non cultural | 0.085 | 0.093 | 0.101 | 0.161 | 0.153 | 0.1186 |
| | Mean: Non Profit Cultural | 0.197 | 0.057 | - | - | - | - |
| Dominance | Significance | 0.894 | 0.871 | 0.577 | 0.999 | 0.97 | 0.8622 |
| | Non profit dominant | 0.105 | 0.13 | 0.154 | 0.159 | 0.147 | 0.139 |
| | Equally balanced | 0.088 | 0.084 | 0.054 | 0.151 | 0.152 | 0.1058 |
| | For profit dominant | 0.109 | 0.141 | 0.117 | 0.176 | 0.169 | 0.1424 |

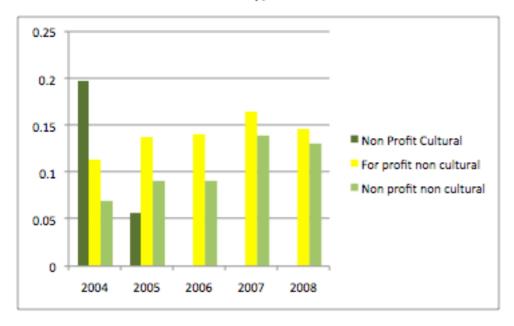
Debt ratio means vs Chairman types



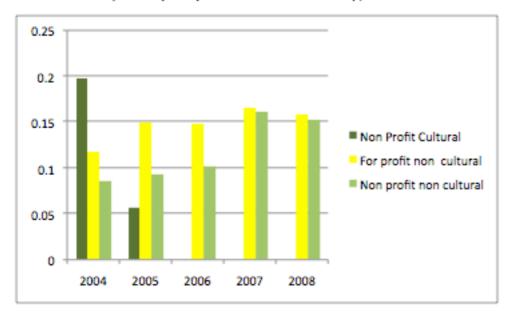
Current ratio means vs Chairman types



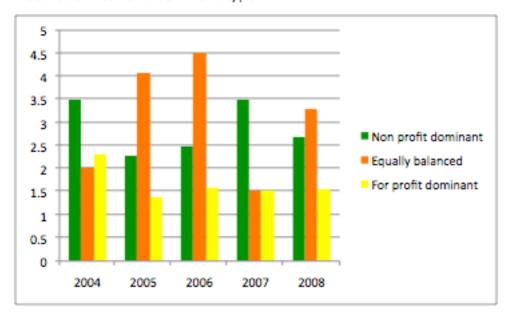
Fund. Inc. % means vs Chairman type



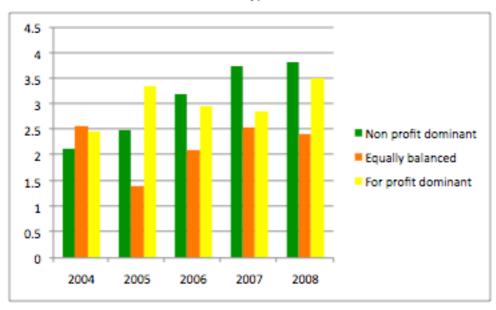
Self sufficiency ratio (fund) means vs Chairman type



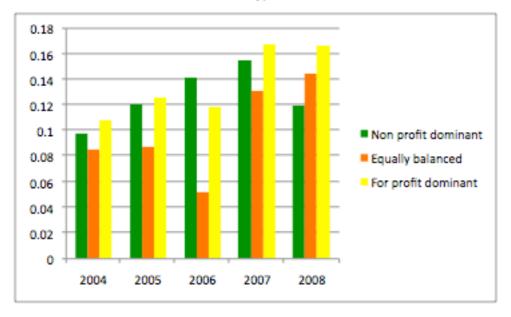
Debt ratio means vs dominant type



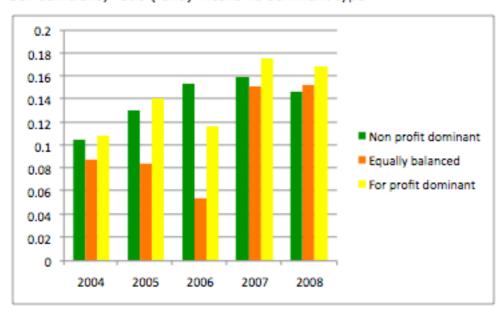
Current ratio means vs dominant type



Fund. Inc. % means vs dominant type



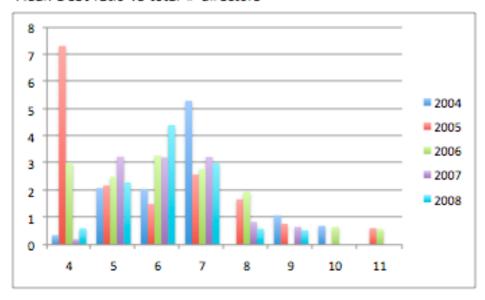
Self sufficiency ratio (fund) means vs dominant type



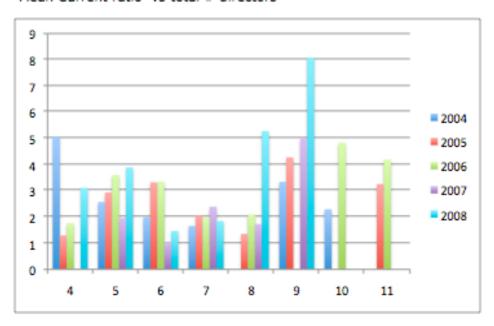
APPENDIX F - MEAN RATIOS BY NUMBER OF DIRECTORS

| Mean De | ebt ratio vs total # o | lirectors | | | |
|--|---|---|---|---|--|
| | 2004 | 2005 | 2006 | 2007 | 2008 |
| 4 | 0.35668 | 7.322 | 3.017 | 0.209 | 0.606 |
| 5 | 2.089 | 2.182 | 2.503 | 3.242 | 2.295 |
| 6 | 2.059 | 1.501 | 3.291 | 3.216 | 4.41 |
| 7 | 5.303 | 2.583 | 2.779 | 3.23 | 3.015 |
| 8 | | 1.673 | 1.945 | 0.845 | 0.591 |
| 9 | 1.085 | 0.773 | | 0.655 | 0.536 |
| 10 | 0.697 | | 0.658 | | |
| 11 | | 0.6114 | 0.582 | | |
| Mean Cu | ırrent ratio vs tota | l # directors | | | |
| | 2004 | 2005 | 2006 | 2007 | 2008 |
| 4 | 5.0631 | 1.295 | 1.771 | 0.021 | 3.113 |
| 5 | 2.572 | 2.933 | 3.599 | 1.954 | 3.89 |
| 6 | 2.002 | 3.32 | 3.346 | 1.044 | 1.464 |
| 7 | 1.657 | 2.061 | 1.961 | 2.391 | 1.846 |
| 8 | | 1.354 | 2.098 | 1.728 | 5.275 |
| 9 | 3.338 | 4.276 | | 4.996 | 8.08 |
| 10 | 2.293 | | 4.835 | | |
| 11 | | 3.258 | 4.189 | | |
| | | | | | |
| | | | | | |
| Mean Fu | ınd. Inc. % vs total | | | | |
| | 2004 | 2005 | 2006 | 2007 | 2008 |
| 4 | 2004 | 2005 0.123 | 0.037 | 0.009 | 0.216 |
| 4 5 | 2004 0 0.095 | 2005 0.123 0.054 | 0.037 0.106 | 0.009 0.094 | 0.216 0.113 |
| 4 5 6 | 2004 0 0.095 0.083 | 2005 0.123 0.054 0.1 | 0.037 0.106 0.092 | 0.009 0.094 0.082 | 0.216 0.113 0.097 |
| 4 5 | 2004 0 0.095 | 2005 0.123 0.054 0.1 0.211 | 0.037 0.106 | 0.009 0.094 | 0.216 0.113 |
| 4 5 6 | 2004 0 0.095 0.083 | 2005 0.123 0.054 0.1 0.211 0.106 | 0.037 0.106 0.092 | 0.009 0.094 0.082 0.206 0.077 | 0.216 0.113 0.097 |
| 4 5 6 7 | 2004 0 0.095 0.083 0.112 | 2005 0.123 0.054 0.1 0.211 | 0.037 0.106 0.092 0.174 0.04 | 0.009 0.094 0.082 0.206 | 0.216 0.113 0.097 0.196 |
| 4 5 6 7 8 9 | 2004 0 0.095 0.083 0.112 | 2005 0.123 0.054 0.1 0.211 0.106 | 0.037 0.106 0.092 0.174 0.04 | 0.009 0.094 0.082 0.206 0.077 | 0.216 0.113 0.097 0.196 0.208 |
| 4 5 6 7 8 9 | 2004 0 0.095 0.083 0.112 | 2005 0.123 0.054 0.1 0.211 0.106 | 0.037 0.106 0.092 0.174 0.04 | 0.009 0.094 0.082 0.206 0.077 | 0.216 0.113 0.097 0.196 0.208 |
| 4 5 6 7 8 9 10 | 2004 0 0.095 0.083 0.112 | 2005 0.123 0.054 0.1 0.211 0.106 0.16 | 0.037 0.106 0.092 0.174 0.04 0.24 | 0.009 0.094 0.082 0.206 0.077 | 0.216 0.113 0.097 0.196 0.208 |
| 4 5 6 7 8 9 10 | 2004 0 0.095 0.083 0.112 0.173 0.105 | 2005 0.123 0.054 0.1 0.211 0.106 0.16 | 0.037 0.106 0.092 0.174 0.04 0.24 | 0.009 0.094 0.082 0.206 0.077 | 0.216 0.113 0.097 0.196 0.208 |
| 4 5 6 7 8 9 10 | 2004 0 0.095 0.083 0.112 0.173 0.105 | 2005 0.123 0.054 0.1 0.211 0.106 0.16 0.109 (fund) vs total # 6 | 0.037 0.106 0.092 0.174 0.04 0.24 0.093 | 0.009 0.094 0.082 0.206 0.077 0.149 | 0.216 0.113 0.097 0.196 0.208 0.092 |
| 4 5 6 7 8 9 10 11 | 2004 0 0.095 0.083 0.112 0.173 0.105 | 2005 0.123 0.054 0.1 0.211 0.106 0.16 0.109 (fund) vs total # 6 2005 | 0.037 0.106 0.092 0.174 0.04 0.24 0.093 directors 2006 | 0.009 0.094 0.082 0.206 0.077 0.149 | 0.216 0.113 0.097 0.196 0.208 0.092 |
| 4 5 6 7 8 9 10 11 Mean Se | 2004 0 0.095 0.083 0.112 0.173 0.105 | 2005 0.123 0.054 0.1 0.211 0.106 0.16 0.109 (fund) vs total # 6 2005 0.113 | 0.037 0.106 0.092 0.174 0.04 0.24 0.093 directors 2006 0.04 | 0.009 0.094 0.082 0.206 0.077 0.149 | 0.216 0.113 0.097 0.196 0.208 0.092 |
| 4 5 6 7 8 9 10 11 Mean Se | 2004 0 0.095 0.083 0.112 0.173 0.105 elf sufficiency ratio 2004 0 0.101 | 2005 0.123 0.054 0.1 0.211 0.106 0.16 0.109 (fund) vs total # 6 2005 0.113 0.064 | 0.037 0.106 0.092 0.174 0.04 0.24 0.093 directors 2006 0.04 0.109 | 0.009 0.094 0.082 0.206 0.077 0.149 2007 0.033 0.121 | 0.216 0.113 0.097 0.196 0.208 0.092 2008 0.243 0.13 |
| 4 5 6 7 8 9 10 11 Mean Se | 2004 0 0.095 0.083 0.112 0.173 0.105 elf sufficiency ratio 2004 0 0.101 0.087 | 2005 0.123 0.054 0.1 0.211 0.106 0.16 0.109 (fund) vs total # 6 2005 0.113 0.064 0.119 | 0.037 0.106 0.092 0.174 0.04 0.24 0.093 directors 2006 0.04 0.109 0.093 | 0.009 0.094 0.082 0.206 0.077 0.149 2007 0.033 0.121 0.083 | 0.216 0.113 0.097 0.196 0.208 0.092 2008 0.243 0.13 0.096 |
| 4 5 6 7 8 9 10 11 Mean Se 4 5 6 7 | 2004 0 0.095 0.083 0.112 0.173 0.105 elf sufficiency ratio 2004 0 0.101 0.087 | 2005 0.123 0.054 0.1 0.211 0.106 0.16 0.109 (fund) vs total # 6 2005 0.113 0.064 0.119 0.215 | 0.037 0.106 0.092 0.174 0.04 0.24 0.093 directors 2006 0.04 0.109 0.093 0.194 | 0.009 0.094 0.082 0.206 0.077 0.149 2007 0.033 0.121 0.083 0.198 | 0.216 0.113 0.097 0.196 0.208 0.092 2008 0.243 0.13 0.096 0.198 |
| 4 5 6 7 8 9 10 11 Mean Se 4 5 6 7 8 | 2004 0 0.095 0.083 0.112 0.173 0.105 elf sufficiency ratio 2004 0 0.101 0.087 0.111 | 2005 0.123 0.054 0.1 0.211 0.106 0.16 0.109 (fund) vs total # 6 2005 0.113 0.064 0.119 0.215 0.121 | 0.037 0.106 0.092 0.174 0.04 0.24 0.093 directors 2006 0.04 0.109 0.093 0.194 | 0.009 0.094 0.082 0.206 0.077 0.149 2007 0.033 0.121 0.083 0.198 0.076 | 0.216 0.113 0.097 0.196 0.208 0.092 2008 0.243 0.13 0.096 0.198 0.269 |

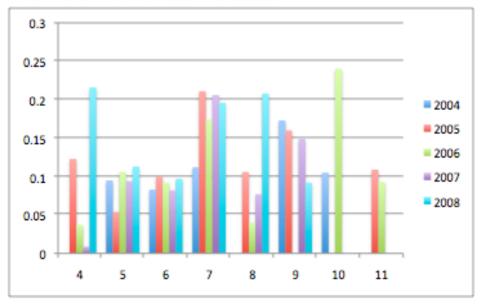
Mean Debt ratio vs total # directors



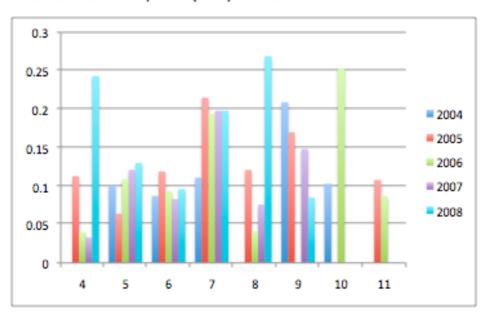
Mean Current ratio vs total # directors



Mean Fund. Inc. % vs total # directors



Mean Self sufficiency ratio (fund) vs total # directors



APPENDIX G - REFERENCES

- Addams, H. (2000) Q-Methodology. In H. Addams & J. Proops (eds.), *Social discourse and environmental policy: An application of O methodology.* Cheltenham: Edward Elgar.
- Aldrich, H.E., Pfeffer, J. (1976). 'Environments of organizations.' *Annual review of Sociology, vol. 2, 79-105.*
- Alexander, Victoria D. 1996. Pictures at an exhibition: Conflicting pressures in museums and the display of art. American Journal of Sociology 101:797–839.
- Barney J., Wright M, Ketchen DJ. 2001. The resource-based view of the firm: ten years after 1991. Journal of Management 27(6): 625 641.
- Baysinger, B.D., Butler, H.N. (1985). 'Corporate Governance and the Board of Directors: Performance Effects of Changes in Board Composition.' *Journal of Law, Economics and Organization, Vol. 1, No. 1.*
- Boyd, B. (1990) 'Corporate Linkages and Organizational Environment: A Test of the Resource Dependence Model.' *Strategic Management Journal, Vol. 11, 419-430.*
- Brown, S.R. (1980). *Political Subjectivity: Applications of Q-Methodology in Political Science.* New Haven: Yale University Press.
- Burt, C. (1937). Correlations between persons. British Journal of Psychology, 28, 59-96.
- Callen, J.F., Falk, H. (1993). 'Agency and Efficiency in Nonprofit Organizations: The Case of "Specific Health Focus" Charities.' *The accounting review Vol. 68, No. 1 (1993), p. 48-65.*
- Caves R.E. 2000. Creative Industries: Contracts between Art and Commerce. Harvard University Press: Boston (MA).
- Caves, R.E. (2003). Contracts between art and commerce. *The Journal of Economic perspectives, 17(2), 73-83.*
- Certo, S.T., Covin, J.G., Daily, C.M., Dalton, D.R. (2001). 'Wealth and the Effects of Founder Management Among IPO-Stage New Ventures.' *Strategic management journal Vol. 22, No. 6-7 (2001), p. 641-658.*
- Chait, R., Ryan, W.P., Taylor, B.E. (2005). 'Governance as leadership: reframing the work of nonprofit boards'. *BoardSource*
- Coleman, J.S. (1988). 'Social Capital in the Creation of Human Capital.' *American journal of sociology Vol. 94 (jan. 1988), p. 95.*
- Cornforth, C., Edwards, C. (1998). 'Good governance: developing effective board-management relations in public and voluntary organisations'. *London: Chartered Institute of Management Accountants*, 1998.
- Crane, D. (1987). 'The Transformation of the Avant-Garde: The New York Art World, 1940-1985.' Chicago, IL: University of Chicago Press, 1987.
- Cunningham, S. (2001) 'From cultural to creative industries, theory, industry and policy implications', Culturelink, Special Issue, pp. 19–32.
- Daily, C.M., Dalton, D.R., (1994). 'Bankruptcy and Corporate Governance: The Impact of Board Composition and Structure.' *Academy of Management journal Vol. 37, No. 6 (1994), p. 1603-1617.*

- Daily, C.M., Schwenk, M. (1996). 'Chief Executive Officers, Top Management Teams, and Boards of Directors: Congruent or Countervailing Forces?' *Journal of management Vol. 22, No. 2 (1996), p. 185-208.*
- Dalton, D.R., Daily, C.M., Ellstrand, A.E., Johnson, J.L. (1998). 'Meta-analytic reviews of board composition, leadership structure, and financial performance'. *Strategic Management Journal 19 (3):* 269-290 MAR 1998.
- Dalton, D.R., Daily, C.M., Johnson, J.L. (1999). 'On the measurements of board composition: Poor consistency and a serious mismatch of theory and operationalization.' *Decision Sciences 30 (1): 83-106 WIN 1999.*
- Donaldson, L., & Davis, J. H. 1991. Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management*, 16: 49-64.
- Eikhof, D.R., Haunschild, A. (2007). 'For art's sake! Artistic and economic logics in creative production.' *Journal of Organizational Behavior, 28, 523-238.*
- Fama, E.F., Jensen, M.C. (1983). 'Separation of ownership and control'. *Journal of Law and Economics, Vol. XXVI (June 1983).*
- E. F. Fama (1980). 'Agency problems and the theory of the firm.' *The Journal of Political Economy 88, April, 288-307.*
- Fleischer, A., Hazard, G.C. & Klipper, M.A. (1988). Board games: The changing shape of corporute power. *Boston, MA: Little, Brown.*
- Florida, R. (2002). The rise of the creative class: And how it's transforming work, leisure, community and everyday life. New York: Basic Books.
- Gales, L.M., Kesner, I.F. (1994). 'An analysis of board of director size and composition in bankrupt organiza- tions.' *Business Research, 30: 27-39.*
- Galloway, S. Dunlop, S. (2007). 'A critique of definitions of the cultural and creative industries in public policy.' *International Journal of Cultural Policy, vol. 13, No. 1.*
- Goodstein, J., Gautam, K., Boeker, W. (1994). 'The effects of board size and diversity on strategic change.' *Strategis Management Journal, Vol. 15, 241-250.*
- Hambrick, D. C., Mason, P.A. (1984). Upper echelons: The organizations as a reflection of its top managers. *Acad. Management Rev. 9* 193-206.
- Hermalin, B., Weisbach, M. (1998). 'Endogenously Chosen Boards of Directors and Their Monitoring of the CEO.' *American Economic Review 88: 96-118.*
- Dalton, D., & Daily, C. (2001) 'Director stock compensation: An invitation to a conspicuous conflict of interest?' *Business Ethics Quarterly, 11: 89-108.*
- Hillman, A.J., Dalziel, t. (2003) 'The boards of directors and firm performance: Integrating agency and resource dependence perspectives.' *Academy of Management Review, Vol 28, No. 3, pp. 383-396.*
- Hillman, A.L. (2000). 'Poverty, inequality, and unethical behavior of the strong.' *Fiscal Affairs Department, working paper WP-00/187, International Monetary Fund, Washington, DC.*
- Hillman, A., Keim, G., & Luce, R. (2001). 'Board composition and stakeholder performance: Do stakeholder directors make a difference?' *Business & Society, 40: 295-314.*

- Hillman, A., Cannella, A., & Paetzold, R. (2000). 'The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change.' *Journal of Management Studies, 37: 235-256.*
- Hillman, A., Zardkoohi, A., Bierman, L. (1999). 'Corporate political strategies and firm performance: Indications of firm-specific benefits from personal service in the US government.' *Strategic Management Journal*, 20: 67-82.
- Holbrook, Morris B., and Michela Addis (2007). 'Taste versus the Market: An Extension of Research on the Consumption of Popular Culture.' *Journal of Consumer Research 24.3 (2007): 415-24*
- Holbrook, Morris B., and Michela Addis (2007). 'Book Reviews :The Consumption Experience-Something New, Something Old, Something Borrowed, Something Sold: Part 4.' *Journal of Macromarketing, Vol. 27, 303.*
- Holbrook, M. (1999). 'Introduction to consumer value', in Holbrook, M. (Ed.), *Consumer Value: A Framework for analysis and research*, Routledge, New York, NY, pp. 1-28.
- Holcomb, T.R., Holmes, R.M. Jr., Connelly, B.L., (2009). 'Making the most of what you have: managerial ability as a source of resource value creation. *Strategic Management Journal, Vol. 30, Issue 5., pp. 457-485.*
- Holland, T.P. (2002). 'Board accountability Lessons from the field.' *Non-Profit Management & Leadership, Vol. 12, No. 4, Summer 2002.*
- Jensen, M., (1993). 'The modern industrial revolution, exit, and the failure of internal control systems.' *Journal of Finance 48, 831 D880*.
- Johnson, J.L., Daily, C.M., Ellstrand, A.E. (1996) 'Resource Dependence Theory: A Review'. *Journal of Management December 1, 2009 35: 1404-1427*
- Jones, C., Anand, N., Alvarez, J.L., (2005). 'Manufactured Authenticitiy and creative voice in cultural industries.' Journal of Management Studies Vol. 42, Issue 5, Pages 893 899
- Kogut, B. (2002). 'The network as knowledge: Generative rules and the emergence of structure'. *Strategic Management Journal, Vol. 21, Iss. 3, pp. 405-425.*
- Lampel, J., Lant, T. and Shamsie, J. (2000). 'Balancing act: learning from organizing practices in cultural industries'. *Organization Science*, *11*, *3*, *263*–69.
- Levine, S., White, P.E., (2001). 'Exchange as a conceptual framework for the study of interorganizational relationships'. *Administrative Science Quarterly, Vol. 5, No. 4 (Mar., 1961), pp. 583-601.*
- Lockett, A. Thompson, S. (2001). 'The resource-based view and economics'. *Journal of Management, Vol. 27, No. 6, pp. 723-754.*
- Miller, D., Shamsie, J. (1996). 'The resource-based view of the firm in two environments: the hollywood film studios from 1963 to 1965.' *The Academy of Management Journal, Vol. 39, No. 3 (Jun., 1996), pp. 519-543.*
- Miller, J.L. (2002). 'The board as a monitor of organizational activity: the applicability of Agency Theory to Nonprofit boards.' *Nonprofit Management and Leadership, Vol. 12, Iss. 4, pp. 429 450.*
- Miller, L.E., Weiss, R.M., MacLeod, B.V. (1988). 'Boards of directors in nonprofig organizations: Composition, activities, and organizational outcomes. *Nonprofit and Voluntary Sector Quarterly, Vol. 17, No. 3-4, 81-89.*

- Mintzberg, H. (1983). 'Power in and around Organizations'. Prentice-Hall, Englewood Cliffs, NJ.
- Mizruchi, M.S., Stearns, L.B. (1994). 'A longitudinal study of borrowing by large American corporations.' *Administrative Science Quarterly, Vol. 39, 1994*
- Mizruchi, M.S. (1994). 'Social Network Analysis: Recent Achievements and Current Controversies'. *Acta Sociologica October 1994 vol. 37 no. 4 329-343.*
- Nahapiet, J., Goshal, S. (1998). 'Social Capital, Intellectual Capital, and the Organizational Advantage'. *The Academy of Management Review, Vol. 23, No. 2 (Apr., 1998), pp. 242-266.*
- O'Regan, K., Oster, S.M. (2005). 'Does the Structure and Composition of the Board Matter? The Case of Nonprofit Organizations'. *Journal of Law, Economics, and Organization 2005 21(1):205-227.*
- Oster, S.M. (1995). 'Strategic management for nonprofit organizations: theory and cases'. *Oxford University Press US*, 1995
- Parker, L.D. (2003). 'Financial Management Strategy in a Community Welfare Organisation: A Boardroom Perspective.' *Financial Accountability & Management*, 19(4), 341–374.
- Parker, L.D. (2007). 'Internal Governance in the Nonprofit Boardroom: a participant observer study.' *Corporate Governance: An International Review, Vol. 15, Iss. 5, pp 923-934.*
- Pfeffer, J. (1973). 'Size, composition and function of hospital boards of directors: A study of organization-environment linkage', *Administrative Science Quarterly, 18, pp. 349-364*.
- Pfeffer, J. and G. R. Salancik (1978). The External Control of Organizations: A Resource Dependence Perspective. *Harper & Row, New York*.
- Pfeffer, J. (1972). 'Merger as a response to organizational interdependence', *Administrative Science Quarterly*, 17, pp. 382–394.
- Potts, J., Dopfer, K. (2008). 'The general theory of economic evolution.' Routledge, 2008
- Potts, J., Cunningham, S., Hartley, J., Ormerod, P. (2008). 'Social network markets: a new definition of the creative industries'. *Journal of Cultural Economics, Vol. 32, No. 3, pp 167-185.*
- Price, James L. (1963) 'The impact of governing boards on organizational effectiveness and morale.' *Administrative Science Quarterly, 8: 361-378.*`
- Provan, K. G. (1980). 'Board Power and Organiza tional Effectiveness Among Human Service Agencies'. *Academy of Management Journal 23, 221-236.*
- Radbourne, J. (2003). 'Performing on boards: The link between governance and corporate reputation in nonprofit arts boards'. *Corporate Reputation Review, Volume 6, Number 3, 1 October 2003 , pp. 212-222.*
- Rechner, P.L., Dalton, D.R. (1991). 'CEO duality and organizational performance: A longitudinal analysis'. *Strategic Management Journal Volume 12 Issue 2, Pages 155 160.*
- Rochester, C. (2003). 'The Role of Boards in Small Voluntary Organisations'. in Cornforth, C. (ed.) The Governance of Public and Non-profit Organisations: What Do Boards Do? London: Routledge.
- Steane, P. Christie, M. (2001). 'Nonprofit boards in Australia: A distinctive governance approach'. *Corporate Governance: An International Review, Vol. 9, Iss. 1, Pp 48 58.*
- Stearns, L.B., Mizruchi, M.S. (1993). 'Board composition and corporate financing: The impact of financial institution representation on borrowing'. *The Academy of Management Journal, Vol. 36, No. 3*

(Jun., 1993), pp. 603-618.

- Stoline, M.R. (1981). 'The status of multiple comparisons: simultaneous estimation of all pairwise comparisons in one-way ANOVA designs'. The American Statistician, Vol. 35, No. 3 (Aug., 1981), pp. 134-141
- Throsby, D. (1994). 'The Production and Consumption of the Arts: A View of Cultural Economics'. *Journal of Economic Literature 32: 1-29.*
- Van Hoomissen, T., Ben-ner, A. (1994). 'The governance of nonprofit organizations: Law and public policy'. Volume 4 Issue 4, Pages 393 414.
- Voss, G.B., Cable, D.M., Voss, Z.G. (2000). 'Linking organizational values to relationships with external constituents: A study of nonprofit professional theatres.' *Source: Organization Science, Vol. 11, No. 3, Special Issue: Cultural Industries: Learning from Evolving Organizational Practices (May Jun., 2000), pp. 330-347.*
- Walsh, J.P., Seward, J.K. (1990). 'On the efficiency of internal and external corporate control mechanisms.' The Academy of Management Review, Vol. 15, No. 3 (Jul., 1990), pp. 421-458.
- Weisbach, M., (1988). 'Outside directors and CEO turnover.' *Journal of Fniancial Economics 20, 431–460*
- Westphal, J.D., Zajac, E.J. (1997). 'Defections from the Inner Circle: Social Exchange, Reciprocity, and the Diffusion of Board Independence in US Corporations.' Journal article by James D. Westphal, Edward J. Zajac; Administrative Science Quarterly, Vol. 42.
- Westphal, J.D., Zajac, E.J. (1998). 'The Symbolic Management of Stockholders: Corporate Governance Reforms and Shareholder Reactions.' *Administrative Science Quarterly, Vol. 43*
- Westphal, J.D. (1999). 'Collaboration in the boardroom: Behavioral and performance consequences of CEO-board social ties.' The Academy of Management Journal, Vol. 42, No. 1 (Feb., 1999), pp. 7-24.
- Carpenter, M., & Westphal, J. (2001). 'The strategic context of external network ties: Examining the impact of director appointments on board involvement in strategic decision-making.' *Academy of Management Journal*, 44: 639-660.
- Wiehl, J.G. (2004). 'Roles and responsibilities of nonprofit health care board members in the post-Enron era'. *Journal of Legal Medicine, Volume 25, Issue 4 December 2004*, pages 411 439.
- Wijnberg, N.M., Gemser, G. (2000). 'Adding value to innovation: Impressionism and the transformation of the selection system in visual arts'. *Organization Science, Vol. 11, No. 3, Special Issue: Cultural Industries: Learning from Evolving Organizational Practices (May Jun., 2000), pp. 323-329*
- Wijnberg, N.M. (2004). 'Innovation and organization: Value and competition in selection systems.' Organization Studies October 2004 vol. 25 no. 8 1413-1433.
- Williamson, O.E. (1984). 'Corporate Governance.' *Yale Law Journal 1197. Wolfson, Nicholas. 1980. "A Critique of Corporate Law," 34 University of Miami Law Review 859.*
- Yermack, D. (1996). 'Higher market valuation of companies with a small board of directors.' Journal of Financial Economics 40, 185-211.
- Zald, Mayer N. (1967). 'Urban differentiation, characteristics of boards of directors and organizational effectiveness.' *American Journal of Sociology*, 73: 261-272