Master Degree Project in Accounting

New Public Management in Universities
A structured literary review

Louise Kjellsson

Supervisor: Olov Olson
Master Degree Project No. 2016:38
Graduate School
Table of content

1. Introduction.................................................................................................................. 1
   1.1 Background.............................................................................................................. 1
      1.1.1 New public management .............................................................................. 1
      1.1.2 New public management in higher education ................................................. 2
   1.2 Purpose.................................................................................................................... 2

2. Design of the study.......................................................................................................... 3
   2.1 Overview.................................................................................................................. 3
   2.2 Study 1.................................................................................................................... 4
   2.3 Study 2.................................................................................................................... 4

3. Methodology.................................................................................................................. 5
   3.1 A structured literature review................................................................................. 5
   3.2 Developing a structured literature review................................................................. 5
      3.2.1 The research protocol ..................................................................................... 6
      3.2.2 Article impact .................................................................................................. 6
      3.2.3 Literature search and selection ...................................................................... 7
      3.2.4 Reliability and validity .................................................................................. 10

4. Study 1.......................................................................................................................... 11
   4.1 Introduction............................................................................................................. 11
   4.2 Frame of reference.................................................................................................. 12
   4.3 Approach................................................................................................................ 14
   4.4 The literature.......................................................................................................... 15
      4.4.1 University corporatisation: Driving redefinition .............................................. 16
      4.4.2 What is going on? The sustainability of accounting academia ...................... 21
   4.5 Analysis & Model 1 ................................................................................................ 23

5. Study 2.......................................................................................................................... 26
   5.1 Introduction............................................................................................................. 26
   5.2 The literature.......................................................................................................... 26
      5.2.1 Trends............................................................................................................. 26
      5.2.2 Variables ....................................................................................................... 28
   5.3 Analysis and model 2............................................................................................ 43

6. Concluding discussion and future research.................................................................. 46

7. References..................................................................................................................... 52
This master’s thesis has been written as part of a research project focusing on new public management (NPM) and its influence over universities. The research project involves researchers from Sweden, the UK and Australia, who all have much experience in this field as researchers. The project group requested for a master’s student to join the project and make a pre-study, which would provide a background for their study. The opportunity to join was offered to me during a presentation of possible thesis subjects and I immediately decided to take the opportunity.

The researchers in the project group wrote a book on the subject of NPM in 1998 called “Global warning: debating international developments in new public financial management” which discussed the negative consequences of NPM, and there is a demand for them to do a follow up on what has happened in this field since then. Some scholars argue that the usage of NPM has declined, but the project group maintains that NPM is bigger than ever, and wants to do a second study, which focuses on universities. My task then was to provide a review on the current state of NPM in universities and to identify the variables that are viewed as essential by researchers for researching NPM in universities and to develop a model that can be used as a starting point for research in this area. I have been reviewing the existing literature in order to investigate how the subject is discussed in academic circles, which variables researchers feel are essential and how universities are affected by the implementation of NPM.

The purpose of this thesis is to write a structured literary review on the subject of new public management in universities. The literature review provides a summary of the impact NPM has had on universities, and identifies the variables that are seen as essential by researchers for researching NPM in universities and combine them into a model. Articles published in scientific journals are used for the literature review, which follows the methodology of a structured literature review. The research is performed in two studies which analyse the literature and presents the essential variables for researching NPM in universities that have been identified. The first study focuses on two articles and provides an overview of the subject of new public management in universities. The second study reviews an additional ten articles and develops the findings from the first study. The results from the two studies
are presented in a concluding discussion, which features a model consisting of the variables identified through the studies along with suggestions for future research.

Acknowledgements
I would first like to thank my thesis supervisor Professor emeritus Olov Olson of the School of Business, Economics and Law at the University of Gothenburg. Through working with him, I have learned about a methodology I had never used before and a subject I had little knowledge about. He took the time to answer any questions I had about my research or writing, and took an interest in the process of writing this thesis. He allowed this paper to be my own work, but steered me in the right the direction whenever he thought I needed it. I would also like to thank the participants in my seminar group who have provided me with useful advice and suggestions regarding my thesis.
1. Introduction
1.1 Background
1.1.1 New public management
There has been a change in the management and control of public sector organisations that began in the late 1970s (Olson, Guthrie & Humphrey, 1998). It has been observed both in market-oriented and conservative governments, such as The U.K, and also in labour, socialist administrations, such as Sweden and Australia. These changes have resulted in a “new” public management.

New Public Management (NPM) has been described as “one of the most striking international trends in public administration” and having the power to re-invent governments (Leishman, Loveday & Savage, 1996, p. 26). It is viewed, according to den Heyer (2010), as a representative for a move towards a governance approach where transparency, performance management and the accountability of public sector managers and employees are regarded as essential. NPM is a public sector reform that was implemented by many western countries from the early 1980s and the mid-1990s. At the time, there was increasing pressure on public departments and governments, which is one of several contributing factors of the rise of NPM. The public sector was put under pressure to do more with less from the political world. Lapsley (2009) agrees and believes that all governments are put under the pressure to modernize its public sector. The agenda of modernization is a shorthand for the NPM doctrine which believes that private sector accounting and management technologies will provide public sector efficiency. Because of this pressure, it is suggested that governments were tempted by the acclaimed benefits of NPM to provide tools to achieve this modernization.

den Heyer (2010) claims that Reaganomics, which is represented by downsizing government activity, lowering taxes and less interference with the market economy (Blanchard, Branson & Currie, 1987), and the New Right Government of Margaret Thatcher had great influence in the early 1980s (den Heyer, 2010). There were also major economic, political and social changes happening in a number of countries, at the same time. There was pressure from the public who wanted to keep the public sector more accountable for how it used the public funds and for it to deliver better services. This resulted in public sector management having to review their structures, budgets and service delivering processes. Lapsley (2009) claims
that the adaptation of NPM by the U.K with Margaret Thatcher as the lead figure, can be viewed as the result of a strong belief in private sector business management for all organizations by politicians, and senior civil servants who are willing to implement NPM policies. The global economy and the actions of governments around the turn of the century has also pushed many to implement NPM practices. The emergence of global forms of consumerism has created the idea of the world as a single entity, instead of the traditional “strong nation states”. In this new situation, policy makers believe that the key to power lies within making the public sector more efficient, economical and effective.

Verbeeten & Spekle (2015) explain that the effects of NPM on public sector performance is still controversial after nearly thirty years of reforms. That the results of the reform programs are uncertain and they have sometimes delivered surprising and undesirable consequences, even if they have been described as best practice beforehand. The reactions to NPM have according to Hood (1991) been strong and varied. At one end of the spectra, there were those who considered NPM as the only tool to correct the irretrievable failures and moral bankruptcy of the “old” public management. However, at the other end of the spectra there are those who think that NPM leads to a destruction of more than a century’s work of constructing a distinctive public service ethic and culture.

1.1.2 New public management in higher education
Schubert (2009) claims that the academic system is one area that has been strongly affected by the implementation of NPM. There are critics who have been questioning the suitability of NPM in the academic sector since the theories behind NPM are based on economic situations rather than the academic setting. Even though it’s popular with European policymakers, there is little empirical evidence that the new governance system actually leads to an increased efficiency. Some researchers also claim that the concept of efficiency can’t be applied on the academic setting since it is difficult to define what efficiency actually means in that particular setting.

1.2 Purpose
This master’s thesis consists of a structured literary review on the subject of new public management (NPM) in universities, based on articles published in scientific journals. The purpose of the literature review is to provide a summary of the impact NPM has had on universities, and to identify the variables that are seen as essential by researchers for
researching NPM in universities. The identified variables will be compiled into a model which can be used as a starting point for research in this area. Existing literature is reviewed in order to investigate how the subject is discussed in academic circles, which variables researchers feel are essential for researching NPM in universities and how universities are affected by the implementation of NPM.

2. Design of the study

2.1 Overview
The design of this thesis is different than the usual structure of a thesis, primarily because I am not performing any empirical research myself. I am doing a literature review and my research material comes from articles published in scientific journals. I have chosen to steer away from the traditional structure in favour of a more customized design because I feel that the traditional structure does not offer the right structure for the purpose of this study. The following chapter is a description of the methodology. It will be followed by two chapters containing study 1 and study 2, and a final chapter with a concluding discussion.

My research is divided into two different studies called study 1 and study 2, and each study generates a model (M1 and M2). The motivation for having two separate studies instead of one larger was to make it easier to approach the literature and build a structure before tackling the majority of the literature. The components of the two different studies are described below.
The purpose of study 1 is to create an initial comprehension of NPM in universities and to identify which aspects that are discussed in the academic literature. Study 1 is a summary of two articles which provides a good overview of NPM in universities. These articles were chosen because they discuss different aspects of NPM in universities in relation to each other. The articles are analysed in order to build a first model called model 1, which include the essential variables for researching NPM in universities.

2.3 Study 2
Model 1 is used as the starting point for the second study which aims to develop a final model (model 2) where the essential variables for researching NPM in universities are identified. Study two is a literary review of twelve articles which have been published in scientific journals. The variables that were identified for model 1 are used in the search for the literature for study 2. Study 2 is used to confirm the identified variables in model 1, and to identify additional variables that were not featured in study 1, and to remove variables that could not be confirmed in study 2. Study 2 results in a second model (model 2), which includes the final selection of variables that I have identified as essential for researching NPM in universities. Model 2 is then analysed and conclusions are drawn from that analysis.
3. Methodology

3.1 A structured literature review
This thesis follows the methodological structure of a structured literature review (SLR). Massaro, Dumay & Guthrie (2015) explain that the purpose of a SLR is to study a corpus of scholarly literature, to develop insights, critical reflections, future research paths and research questions. The SLR methodology provides researchers with the ability to, as the title of this article indicates, “stand on the shoulders of giants”. This presents opportunities to expose more insightful and impactful research agendas, compared to using a traditional approach to literature reviews.

Literature reviews, according to Massaro et al., (2015), have the ability to contribute to understanding the development of knowledge dialogues because they involve a focus and a perspective on what authors write. Traditional reviews are valuable since they are written by someone with a comprehensive and well-founded knowledge of the subject. However, because of their subjectivity, literature review authors might not be inclusive or balanced in their selection and utility of discussion material. Traditional literature reviews therefore often suffer from questionable results as a consequence of subjectivity, bias and a lack of rigor. Analyzing and identifying previous studies creates a perquisite for producing knowledge, however a rigorous approach is needed in order to make advances on the status quo and reduce subjectivity.

SLRs have emerged as an alternative to the traditional literature review (Massaro et al., 2015). SLRs try to avoid the weaknesses of a traditional literature review by setting up a set of explicit rules which offers less bias and more transparency and techniques of ensuring validity and reliability. A SLR should be conducted based on a logical structure and a specific plan, which will contribute to the study’s ability to pass reliability and validity tests based on both qualitative and quantitative methods.

3.2 Developing a structured literature review
As mentioned before, a literature review must have a logical structure and a precise plan. Accordingly, Massaro et al. (2015) presents an explicit methodology which follows nine specific steps. The nine steps have been condensed to four for this master’s thesis. The nine step structure is actually meant to be used by graduate students and I had to condense the
scope due to time restraints. The four steps used for developing this SLR are the research protocol, article impact, literature search and selection, and reliability and validity.

3.2.1 The research protocol
The purpose of a research protocol, according to Massaro et al., (2015), is to setup the boundaries of SLRs. The research protocol aims to document the followed procedures of a study in order to increase the research reliability. A research protocol should contain information regarding the review question, the proposed methods, and how research material should be located, appraised and synthesized.

The focus of this literary review is new public management and its effect on universities. The purpose is to provide a summary of the subject and identify the essential variables for researching NPM in universities and combine them into a model.

I have chosen only to include articles published in scientific journals in my SLR. Relevant information could also have been found from other types of sources, however I needed to limit myself due to time restraints, and the scope of my study. The literature needed for this SLR is collected from the databases available through the university library of the University of Gothenburg. I have chosen to include articles which have been published between 1990 and 2015 in journals which publish research in the fields of business and political science. I have set these boundaries because my focus is on the development of NPM in universities in recent time. I limited the research fields in order to collect literature which would be compatible and stem from the same context. There is a limit on both time and scope and I therefore felt that these boundaries were necessary in order to achieve a cohesive review.

3.2.2 Article impact
SLRs require researchers to carefully select relevant material for their review (Massaro et al., 2015). The validity and relevance of all research evidence is not equal, which means that means of determining what type of research material is relevant for what purpose is needed. I have used primarily three methods of evaluating the material that I have collected during my search. The first and most important method is reading through the article quickly and focusing on the abstract, introduction and conclusion. The content of the article had to have a focus on management control in universities and be relevant to the purpose of the thesis in order to be selected. The second method that I used is looking at the number of times the article has been referenced by other scholars. Massaro et al., (2015) claims that the most
important articles in a field are known as “citation classics”. The citation classics are usually identified by using total citations (CP) or a citation per year (CPY) index. I chose to look at the total number of citations, and I kept in mind that recent articles of good quality might not have been referred numerous times since they were recently published. The more recent articles have therefore been evaluated using the other two methods.

The Third method which I use to evaluate the quality of the article is looking at which journal the article has been published in and look at the ranking of that journal. The main body of my material have been published in business journals and there is an organization called Association of business school (ABS) which provides ranking of business journals, which I have used to assess the quality. They give journals a ranking, with 1 being the highest ranking. Only a few journals are rewarded a 1, and a journal which has been rewarded between 1 and 3 is considered a respectable journal. The ranks are given based on the opinions of academics. I also include articles that are published in political science journals and I have used a portal called “SCImago Journal & Country rank” in order to evaluate that literature. In this system, journals are divided into groups based on the number of citations from the articles published in the journals. Q1 is the highest rank awarded and the respectable journals are found in the top two groups.

3.2.3 Literature search and selection
The literature search was performed in two stages, one for each study. The first search was conducted in order to get an overview of the literature within the field of NPM in universities. The second search is more focused and targets specific aspects of NPM in universities. The searches were directed at specific topics within the field, with the help of keywords identified in the first study. I used the databases available through the university library of the University of Gothenburg for both my searches. I use a “super search” function which searches through all of the available databases at the simultaneously.

The first search was conducted at the beginning of the process of writing the thesis. I wanted to get a general overview of the literature of the field and keywords such as “new public management”, “new public management + higher education” and “new public management + university” were used. Several relevant articles were found by using these keywords. I chose two of these articles to build model 1. Model 1 provides me with a first selection of essential variables for researching NPM in universities, and are used as starting point for my
second literary search. I chose the articles “University corporatisation: Driving redefinition” by Lee Parker and “What is going on? The sustainability of accounting academia” by Christopher Humphrey and Yves Gendron. I chose these articles because they are written by established researchers within the field and they were published recently in respected journals. These articles discuss several different aspects of NPM in universities which make them suitable to form a comprehensive overview of the subject.

<table>
<thead>
<tr>
<th>Article</th>
<th>Year</th>
<th>Citations</th>
<th>SCImago</th>
<th>ABS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parker</td>
<td>2011</td>
<td>93</td>
<td>Q1</td>
<td>3</td>
</tr>
<tr>
<td>Humphrey &amp; Gendron</td>
<td>2015</td>
<td>5</td>
<td>Q1</td>
<td>-</td>
</tr>
</tbody>
</table>

*Table 3.1*

I began the second search after completing model 1 and used the variables that I had identified for model 1 as keywords to further specify my searches. The variables that I identified were; external control, mass education, performance measures, accountability and corporatization. I combined these variables with the terms “new public management” “university” and “higher education” in order to acquire more information on the specific aspects of this subject that I knew were relevant for my literary review. I also used the reference lists from the articles that I had found to search for useful literature. I decided if an article was relevant based on the title and the abstract, and did not focus on the bibliometric qualities at this point.

<table>
<thead>
<tr>
<th>Articles</th>
<th>Year</th>
<th>Citations</th>
<th>SCImago</th>
<th>ABS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhoades &amp; Slaughter</td>
<td>1997</td>
<td>237</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Waugh, Jr</td>
<td>1998</td>
<td>39</td>
<td>Q1</td>
<td>-</td>
</tr>
<tr>
<td>Ackroyd &amp; Ackroyd</td>
<td>1999</td>
<td>33</td>
<td>Q2</td>
<td>-</td>
</tr>
<tr>
<td>Alexander</td>
<td>2000</td>
<td>417</td>
<td>Q1</td>
<td>-</td>
</tr>
<tr>
<td>Coy, Fischer &amp; Gordon</td>
<td>2001</td>
<td>170</td>
<td>Q1</td>
<td>3</td>
</tr>
<tr>
<td>Churchman</td>
<td>2002</td>
<td>47</td>
<td>Q1</td>
<td>3</td>
</tr>
<tr>
<td>Dearlove</td>
<td>2002</td>
<td>107</td>
<td>Q1</td>
<td>-</td>
</tr>
<tr>
<td>Lawrence &amp; Sharma</td>
<td>2002</td>
<td>212</td>
<td>Q1</td>
<td>-</td>
</tr>
<tr>
<td>Meyer</td>
<td>2002</td>
<td>99</td>
<td>Q1</td>
<td>-</td>
</tr>
<tr>
<td>Neumann &amp; Guthrie</td>
<td>2002</td>
<td>106</td>
<td>Q1</td>
<td>3</td>
</tr>
<tr>
<td>Parker</td>
<td>2002</td>
<td>119</td>
<td>Q1</td>
<td>-</td>
</tr>
<tr>
<td>Saravanamuthu &amp; Tinker</td>
<td>2002</td>
<td>61</td>
<td>Q1</td>
<td>3</td>
</tr>
<tr>
<td>Modell</td>
<td>2003</td>
<td>149</td>
<td>Q1</td>
<td>3</td>
</tr>
<tr>
<td>Steck</td>
<td>2003</td>
<td>70</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Talib</td>
<td>2003</td>
<td>16</td>
<td>Q1</td>
<td>3</td>
</tr>
<tr>
<td>Willmott</td>
<td>2003</td>
<td>125</td>
<td>Q1</td>
<td>-</td>
</tr>
<tr>
<td>Ylijoki</td>
<td>2003</td>
<td>219</td>
<td>Q1</td>
<td>-</td>
</tr>
<tr>
<td>Deem</td>
<td>2004</td>
<td>214</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Huismann &amp; Currie</td>
<td>2004</td>
<td>178</td>
<td>Q1</td>
<td>-</td>
</tr>
<tr>
<td>Lapsley &amp; Miller</td>
<td>2004</td>
<td>41</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Smith</td>
<td>2004</td>
<td>41</td>
<td>Q3</td>
<td>-</td>
</tr>
<tr>
<td>Deem &amp; Brehony</td>
<td>2005</td>
<td>442</td>
<td>Q2</td>
<td>-</td>
</tr>
<tr>
<td>Frölich</td>
<td>2005</td>
<td>38</td>
<td>Q2</td>
<td>-</td>
</tr>
<tr>
<td>Tolofari</td>
<td>2005</td>
<td>114</td>
<td>Q2</td>
<td>-</td>
</tr>
<tr>
<td>Boer, Ender &amp; Leisyle</td>
<td>2007</td>
<td>223</td>
<td>Q1</td>
<td>-</td>
</tr>
<tr>
<td>Broad, Goddard &amp; Alberti</td>
<td>2007</td>
<td>31</td>
<td>Q1</td>
<td>2</td>
</tr>
<tr>
<td>Broadbent</td>
<td>2007</td>
<td>47</td>
<td>Q1</td>
<td>-</td>
</tr>
<tr>
<td>Kim</td>
<td>2008</td>
<td>17</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Shore</td>
<td>2008</td>
<td>247</td>
<td>Q1</td>
<td>-</td>
</tr>
<tr>
<td>Schubert</td>
<td>2009</td>
<td>48</td>
<td>Q1</td>
<td>-</td>
</tr>
<tr>
<td>Elzinga</td>
<td>2010</td>
<td>5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Parker</td>
<td>2011</td>
<td>93</td>
<td>Q1</td>
<td>3</td>
</tr>
<tr>
<td>ter Bogt &amp; Scapens</td>
<td>2012</td>
<td>45</td>
<td>Q2</td>
<td>3</td>
</tr>
<tr>
<td>Rowlinson, Harvey, Kelly Morris &amp; Todeva</td>
<td>2013</td>
<td>7</td>
<td>Q1</td>
<td>3</td>
</tr>
<tr>
<td>Enders &amp; Westerheijden</td>
<td>2014</td>
<td>5</td>
<td>Q2</td>
<td>-</td>
</tr>
<tr>
<td>Gendron</td>
<td>2015</td>
<td>21</td>
<td>Q1</td>
<td>3</td>
</tr>
<tr>
<td>Humphrey &amp; Gendron</td>
<td>2015</td>
<td>8</td>
<td>Q1</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 3.2

After my second search I had a selection of 37 articles which were to be reduced to a selection of 12. The most important criterion for selecting the articles for the literature review was the relevance of the content regarding the purpose of my thesis. The articles were read through and assessed with the knowledge from study 1 as a guide. The second most important criterion was how many times the article has been referenced in other academic literature. The third and least important criterion is the ranking of the journal in which the article has been published. Some articles have not been selected despite being published in highly ranked journals and having been cited more frequently than the chosen articles. The content and its relevance for the purpose was the absolute most important criterion for selecting the literature, which is reflected in the selection of articles. After assessing the collected articles, these 12 articles were selected for the literature review.
Table 3.3

The articles chosen for this literature review focus on the western world. Northern Europe and Australia are the most discussed areas, with the UK being at the centre of attention. However, there is one article which deviates from the western perspective, which focuses on the Fiji context. The articles are based on information gathered through interviews, questioners, previous studies and literature. Half of the articles are literature reviews and are based only on previous literature with no new data collection. The other half of the articles have collected new data which has been analysed through already existing literature. None of the articles used statistical analysis to analyse the collected data. The majority of the articles did not use a specific theory as an analytical tool, however two articles used a sociological approach and one article stated that the new institutional theory was used for the analysis.

3.2.4 Reliability and validity

The reliability of a study refers to the accuracy and precision of the measurement and the fact that the research would yield the same result if was repeated (Collis & Hussey, 2014). The reliability tends to be higher in positivist studies, however in interpretive studies, which this literature review is, the reliability is often less important. The qualitative measures do not need to be reliable in a positivist sense, and the importance is instead placed on whether observations and interpretations made on different occasions and by different observers can be explained and understood. The researcher is assumed to be influencing the research under the interpretivist approach, and it is therefore difficult to achieve replication in a positivist sense. Focus is instead put on establishing protocols and procedures that establish the authenticity of the findings.

The process of selecting literature for this literature review was made in a structured manner in order to ensure the reliability of this study. The selection of articles was based on
three criterions which aimed to motivate and justify the choices that were made. The structured process of selecting the articles also meant to give full disclosure and ensure that a repeat study would yield the same results. The researcher is assumed to influence an interpretivist study, and that is also true for this study. However, I had very limited knowledge about the subject going in to this project and can therefore claim to have had an open mind and little prejudice in the selection of material.

The validity of a study refers to the extent a test measures what the researcher intended it to measure and the results reflect the phenomena under study (Collis & Hussey, 2014). The validity risks being undermined by faulty procedures, poor samples and inaccurate measurement. The most common way of assessing the validity is to assess the face validity, which involves ensuring that the tests or measures used actually measure or represent what they are supposed to.

The validity of this literary review has been ensured by the design of this study, which divided the study into two parts. The first study was made in order to provide me with a fundamental knowledge about the subject, which I did not possess before. The knowledge I gained from the first study was used as a foundation for the second, main study, especially during the search for literature. It helped me to recognize relevant information and material which concerned the subject in question and related to the purpose of the study.

4. Study 1
4.1 Introduction
The structure of model 1 is based on the concepts presented in an article called “Management control systems as a package - Opportunities, challenges and research directions”, by Malmi & Brown. The article focuses on management control systems (MSC) and how several systems conjointly become a “package”. The variables which I identify in model 1 are factors which are affecting the management of universities, which makes this article suitable. I also agree with their view of multiple systems influencing each other and becoming a package. The concepts which are discussed in this article will be used in the analysis of this study. I have considered the selection of these articles carefully, and decided on these two because they are written by experienced and well-known researchers within the field of NPM, and they were published in highly regarded academic journals. These two
articles will be analysed and a selection of essential variables will be identified, and will together constitute model 1.

4.2 Frame of reference
Malmi & Brown (2008) claim that there has been little explicit theoretical and empirical research regarding the concept of management control systems as a package even though the idea has been around for decades. There is no universal definition of management control systems, which has resulted in various orientations within the research of MCSs. Some authors have a broad very broad conception of what a MCS is and include all systems that support an organisation to achieve its goals, while others have a narrower view where management control is described as only dealing with employees’ behaviour. Malmi & Brown (2008) suggest to use the managerial problem of directing employee behaviour as a starting point when figuring out what management controls mean in a specific context. They continue by stating that systems, rules, practices, values and other activities that are put in place by management in order to direct employee behaviour should be considered management controls. If these activities are complete systems instead of a single rule, they should be called management control systems. In most organisations, there are several MSCs working simultaneously and those are referred to as a “package”.

Malmi & Brown (2008) present a conceptual typology of an MSC package, which was developed based on four decades of MCS research. The MCSs are divided into five different subgroups of controls and can be seen in the figure below, along with examples of MCSs that belong to each subgroup.

![Figure 4.1](image)

Three of the five subgroups are relevant for model 1 and the focus will therefore be on those three. The subgroups which are relevant for developing model 1 are cultural controls, cybernetic controls and administrative controls.
Cultural controls are used to regulate the behaviour of organisational members (Malmi & Brown, 2008). The authors have identified three examples of cultural control and they are; *value-based controls*, *symbol-based controls* and *clan controls*. The concept of value controls has been developed through so called belief systems, which are defined as “the explicit set of organisational definitions which senior managers communicate formally and reinforce systematically to provide basic values, purpose, and direction for the organisation”. Examples of this are mission and vision statements, credos and statement of purpose. Symbol-based controls occur when organisations create visible expressions, such as workspace design in order to develop a certain type of culture. There are researchers who argue that there are distinct subcultures within organisations, and that these subcultures can be labelled as clans. It is argued that individuals within these clans are exposed to a socialization process which instils them a set of values and skills. This process can be related to groups such as professions or divisions within an organisation. Clan controls work by establishing values and beliefs through ceremonies and rituals that are specific for the clan. Cultural controls are broad and subtle controls that usually changes at a slow pace and provides a contextual frame for other controls.

Cybernetic controls are defined as “a process in which a feedback loop is represented by using standards of performance, measuring system performance, comparing that performance to standards, feeding back information about unwanted variances in the systems, and modifying the system’s comportment” (Malmi & Brown, 2008). The cybernetic systems can be used either as an information system or as a control system depending on the situation. The authors have identified *budgets*, *financial measures*, *non-financial measures* and *hybrid measurement systems* as four examples of cybernetic controls. Budgets are the foundation of the MCS in most organisations and has the ability to tie together all the separate threads of an organisation into a comprehensive plan, and it fulfils several purposes such as performance planning and evaluation. Financial measures are often tied to the budgeting process and holds employees accountable for specific financial measures that are used for target setting. The non-financial measures are becoming increasingly important for identifying the drivers of performance and having a more holistic view of an organisation where not only financial numbers are considered to improve the performance. Hybrid
performance measurement systems consist of both financial and non-financial measures and the balanced scorecard (BSC) is probably the most well-known example.

The purpose of administrative controls is to direct employee behaviour through the organisation of individuals and groups, the monitoring of behaviour, how you make employees accountable for their behaviour and the process of specifying how tasks should be performed or not performed (Malmi & Brown, 2008). The authors have identified three examples of administrative controls and they are organisational design and structure, governance structure and the procedures and policies. Organisational design can be an important tool for encouraging certain types relationships and for reducing variability of behaviour and consequently increase predictability. Organisational structure can be viewed, and is by many researchers, as a contextual variable instead of a control tool. The authors of these paper however, argues that it is something that managers have influence over and not something that is imposed on them. The governance structure deals with the company’s board structure and composition and its various management and project teams. Governance includes the formal structures of authority and accountability, as well as the systems that implemented to ensure that representatives of various functions and organisational units meet to co-ordinate their activates both vertically and horizontally. Policies and procedures are used to specify processes and behaviours within organisations. They are sometimes referred to as action controls and are used for pre-action reviews and action accountability.

4.3 Approach
My approach for identifying the important variables has been to use the article by Malmi & Brown (2008) as a starting point. The article gives a very comprehensive view of management control systems and their components, and I therefore thought that it would be useful to guide me in identifying the essential variables. The article describes five subgroups of management controls and gives examples of MCSs within each subgroup. I have described these subgroups above and will analyse the chosen literature with this structure in mind. However, the structure will not be used exactly as it is described in the article. It is used as a template which adapts as the study progresses. I did a read-through of the two articles that I had in mind for my analysis after deciding to use the article by Malmi & Brown (2008). I felt that they were suitable for my analysis and decided to focus on
cultural controls, cybernetic and administrative controls. I will analyse each article and identify which variables they view as essential, and how these variables as a package, influence universities.

I have chosen to base my choice of variables primarily on two articles. They are "What is going on? The sustainability of accounting academia" by Christopher Humphrey and Yves Gendron, and "University corporatisation: Driving redefinition" by Lee Parker. The reason why I have chosen the article by Lee Parker is because it does a good job of presenting the different themes concerning the corporatization of the university sector, which is strongly related to NPM in universities. The article by Humphrey & Gendron is a summary of articles in a special issue of “Critical Perspective on Accounting”, which focuses on the sustainability of accounting academia and discusses issues in universities that are related to the implementation of NPM. The three authors have much experience in this field, which is why I have chosen to use their literature as a foundation for model 1.

4.4 The literature
There have been several established researchers according to Humphrey & Gendron (2015) who over the last two decades have expressed concerns over the state of academia. State funding of universities have tended to declined and the ideas of neoliberalism and NPM have become increasingly prominent. Many universities in developed countries, according to Parker (2011), have been operating in an environment where government and public sector bureaucracy has been reinventing itself in the form of what is referred to as NPM, market-based public administration and managerialism. The consequences of this reinvention have been a focus on outcomes, value-for-money in government expenditures, outsourcing of former government activates to the private sector, devolution of decision-making authority from central government with accompanying strengthened accountability and controls, a user pay philosophy, and market based competition for purchase and delivery of goods and services. Evidence of these changes can be seen in the form of corporatization of formerly budget dependant government organisations, publicly delivered services being commercialised, public-private partnerships and lowered income taxes and government expenditures.
4.4.1 University corporatisation: Driving redefinition

Universities have according to Parker (2011), experienced a rapid rate of change in their environment, structures, strategies and processes. Before, the universities operated in a sheltered environment and serving primarily elite and stable national markets and often supported by government funding. They have now been launched into a global educational market and are required to generate their own resources. This has resulted in major changes in the universities core values, fundamental missions and overall operations. These changes can be labelled as a “corporatization” or “commercialisation” of universities in developed countries, and have now been observable since the 1980s in the UK, Europe, North America and Australasia. This change can be seen in terms of culture, governance, structure and operational focus and is closely connected to the implementation of NPM. A consequence of the corporatization of universities is the mentality of using so called “key performance indicators” (KPI), which has been promoted and is forcing departments and academics to demonstrate that they are performing satisfactorily on a set of indicators of productivity that are said to be objective. Governments have had an interest of the control of research in the past as well, but the implementation of NPM has increased the administrative control over academics and their research, which reduces the threat that academia presents against the achievement of political interest.

Parker (2011) has chosen to examine the corporatization of universities from a neo-institutional sociology (NIS) perspective. NIS advocates that organisations pursue legitimacy through both formal and informal processes, with the formal processes evolving into formal organizational structures and processes and thereby becoming institutionalized. Organisations’ tendency to conform and homogenise can be seen through three different behaviour patterns, and they are coercive, mimetic and normative isomorphism. Coercive isomorphism happens when an organisation adapts to external pressure. Mimetic isomorphism occurs when an organisation voluntarily imitates other organisations’ values, characteristics, behaviours, structures and processes. Normative isomorphism takes place through the beliefs and actions of key groups within its own organisational members.

Parker (2011) explains that NIS claims that operational and financial management processes become increasingly formalised and institutionalised as organisations work towards being seen as rational and in compliance with convention. The efforts that are made in order to
project this image are also meant to reduce ambiguity and uncertainty and achieve stakeholder approval. However, the actual informal structure and processes may differ significantly from the formal communicated structures and processes. This decoupling may serve as a way to outwardly present legitimizing formal processes and simultaneously get the support from targeted potential stakeholders, avoiding conflicts within the organisation and preserving flexibility.

Accounting and accountability are important conduits, according to Parker (2011), for the influence of governmental and senior university management upon the redefinition of university identity and roles. The reason behind this is the governmental demands for increased accountability and value for money, which has resulted in a performance evaluation culture and an audit culture. NPM reflects the belief of politicians and bureaucrats that the business model of organisational structure, planning, control and performance measurement in the private sector can be applied in the public sector and yield the same efficiency. Effectiveness and productivity in the public sector is now being pursued through the implementation of accounting systems and measures through the employment of audits of quality, value for money and benchmark comparisons. The focus on accountability in the public sector has taken the form of both traditional tools such as cost allocation and budgeting, but also more modern tools such as the balanced scorecards and total quality management. Performance and outcomes are being translated into quantitative economic terms and price and cost have become the number one policy and strategy determinants. Responsibility centres have been created and there is a greater emphasis on financial accountability, at every level of the organisation. The responsibility of the government to provide and control public services has been replaced with a market-based provision with government control being retained through a cluster of market incentives, indirect performance indicators and accountability systems. This has resulted in universities being reconstituted initially through coercive pressure for reduced government budget dependence and greater value-for-money. This reconstitution has then been transformed into mimetic isomorphism as the market follows the market leaders into commercialisation.

Accounting has played a major part in the internal reorientation of university objectives and strategies, particularly through the financialisation of teaching, research and administrative planning and control (Parker, 2011). Top management are centralising funds management
and financial gains while simultaneously decentralising administrative tasks and responsibilities downwards through the management hierarchy. Accounting and financial management methods employed range from top-slicing a significant proportion of all revenue flows for the strategic discretion of top management, charging faculties, schools and units for usage of central facilities, activity based costing (ABC), service level agreements with subunits, internal transfer prices. Budgets have taken an increasingly important role in the planning and strategic decision-making and has become a vehicle for strategy-shaping and performance monitoring. The accountingization of universities has facilitated the implementation of governmental commercialisation agendas into the core of university values, roles and identities. It has turned university philosophies, missions and activities into primarily financial numbers and reduced the ability to represent and report university contributions to knowledge, society and community. Accounting has, seen from a NIS perspective, facilitated the development of a formalised image of rationality and put pressure upon institutional members to increasingly adopt a financial performance focus into their formal and informal routines.

Parker (2011) explains that the higher education sector has been reconstituted through coercive pressures to reduce the dependency of government budgets and to create greater value-for-money, which has then turned into mimetic isomorphism as the market follows the leaders in commercialisation. The commercialisation of the higher education sector is visible in the reduced levels of direct government funding, grants, subsidies and greater reliance on market generated revenues. Education has become an internationalised, global commodity which has put pressure on universities worldwide to emulate the North American and Anglo-Saxon educational and research models. Commercial strategies mean that teaching and research is being translated into calculable revenue generating functions, connections to the community and networks are exploited for consulting income, significant competition for students and resources, fee charging for educational services, strategic alliance with industry, and expansion into international markets. Governments have simultaneously achieved a higher level of indirect control through proliferating performance reporting and accountability systems.

Researchers and commentators of higher education agree that universities have been corporatized and been transformed into large commercial enterprises, whose purpose is to
satisfy demands for educational and applied services instead of being a vehicle for the pursuit of knowledge and independent thought and critique, as it used to be (Parker, 2011). Universities have adopted an enterprise culture which reflects the new managerialism of the NPM model. The organisational structure of universities has changed along with its environment and have moved towards redefining university vice-chancellors and principals as chief executive officers (CEOs). Governing councils are being reduced and made to act as corporate boards with members primarily from industry and commerce. Deans have been redefined as middle managers and are answering to their senior executives rather than being leaders and representing their disciplinary academic constituencies. The decision-making power has been concentrated to the CEO and the deputies in the senior management structure, and the management structures and control mechanisms resembles managerialism in private sector corporations. The senior management decision-making and top-down university control reflects the belief that there is a need for professional top management’s direction in order for universities to be efficient and responsive when competing in the marketplace. The objectives of universities also reflect private sector corporate philosophies where profit and prestige maximization is prominent. Image and brand have become important in order for universities to increase its revenue and profits. The academic language has gradually been replaced by corporate and business language. Professors have become middle managers, courses and programmes are viewed as saleable products and customers as customers. The new and corporate organisational structure with its top-down managerial control, seen from a NIS perspective, can be viewed as an imitation of the private sector corporate governance model, and it can be argued that mimetic isomorphism is at work here.

Parker (2011) reports that the centralised top management power has resulted in the decline in collegial modes of governance and the decision-making power is being removed from disciplines, departments and schools. Consequently, tension has emerged between management and the academic staff. Surveys of academics have shown that much of the decision-making power within universities has moved from formerly influential collegiate academic committees and academic units to university managers. Top-down executive management has become the preferred decision-making and leadership mode, which has been promoted by interventionist government control and accountability requirements.
Academics also report that a larger proportion of their working time is spent satisfying university and government administrative demands for more detailed control and reporting systems. This intensifies the pace of their work and leads to more work-related stress. Universities have to rely more on a casualised academic workforce with fixed term contracts academics, casual lecturers and tutors, and part-time teaching assistants. The mode of work for academics has also changed. The teaching is more packaged, instrumental and made to fit the graduate employment preparation focus of universities. The research is more short term focused and influenced by the funding generation. The autonomy and ability for academics to speak freely has also been compromised and has been limited by either themselves of university management. They can be fearful of either offending key stakeholders and funding sources, or jeopardizing their performance evaluation, job contracts, tenure and career prospects within the university. The commercial agreements and partnerships of the universities also presents limits.

### Summary

This article has a broad scope and includes several different aspects of the influence of NPM in universities. The cultural controls which are discussed in this article are mass education and corporatization. Mass education has become the norm in many western countries, which has altered the scale and purpose of the academic system. The class sizes and numbers of courses and programs have grown, while the purpose of universities have mitigated towards fulfilling the educational wishes of the private sector. This along with the corporatization of universities has had a large impact on the academic system, which can be observed in the culture, values and objectives of universities, which has come to resemble those of a private corporation.

Budgets, performance measures and funding are the cybernetic controls which are discussed in this article. Budgets along with financial performance measures has become important tools for management to hold academic staff for accountable for their performance and manage the universities like an enterprise. Non-financial performance measures where journal ranking and other non-financial KPIs are included, contribute to the performatization of universities. It also leads to short-termism, where the sustainability of research fields is jeopardized, in favour of performing satisfying results on the KPIs.
The administrative controls which I have been able to identify in this article are accountability, organisational structure and governance structure. The implementation of NPM has increased the pressure on the public sector to provide services that gives value-for-money and the employees in the public sector are being held accountable for how they are using the public funds. The increased accountability means that the academic sector needs to be careful of how it spends its money and be able to defend its choices, which leads to more planning and control. The organisational and governance structure of universities has come to resemble those of a corporation and the roles in the academic organisations also reflects the roles of employees in a private enterprise. Most of the power has been centralised at the top and the hierarchies have become stronger. Employees higher up in the hierarchy often have an administrative background rather than an academic, which may influence their focus.

The variables which I have identified in this article are featured in the table below.

<table>
<thead>
<tr>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural</td>
</tr>
<tr>
<td>Mass education</td>
</tr>
<tr>
<td>Corporatization</td>
</tr>
<tr>
<td>Cybernetic</td>
</tr>
<tr>
<td>Budgets</td>
</tr>
<tr>
<td>Performance measures</td>
</tr>
<tr>
<td>Funding</td>
</tr>
<tr>
<td>Administrative</td>
</tr>
<tr>
<td>Accountability</td>
</tr>
<tr>
<td>Organisational structure</td>
</tr>
<tr>
<td>Governance structure</td>
</tr>
</tbody>
</table>

*Table 4.1*

### 4.4.2 What is going on? The sustainability of accounting academia

The reduction of funding has forced many universities to create mechanisms that enhances revenue while developing cost control strategies, according to Humphrey & Gendron (2015). Researchers have observed this and have criticized the growing scope of budgetary pressures on higher education institutions. Mass education has simultaneously become the norm, which has resulted in large class sizes and “unprofitable” programs being cancelled. Research activities have to rely more on private sources of funding, which threatens the academic freedom. The concern over these tendencies are not new, but the implementation of NPM has definitely strengthened the adaptation of private-sector management methods both in research and education. There has also been an increase of administrative staff at
the centre of power, which has resulted in an erosion of educational quality and research productivity. The administrative staff have been given the authority to circumvent the faculty, take control of programs, supervise research activities and meddle in the curriculum, reducing the power of researchers and teachers.

Universities have in the spirit of market efficiency been forced to generate and accommodate larger student numbers, engage in fee-for-service education delivery, and produce research of short term application to national economic and competitive advantage (Humphrey & Gendron, 2015). This has been achieved by making government funding contingent on the universities achievement of market based KPIs, which measures productivity, customer satisfaction and graduate employment. Performance measures varies from institution to institution, but they are all influenced by a cluster of performance enhancement and hierarchizing mechanisms and it is reinforced by the isomorphic tendencies of business school accreditations, such as AACSB and EQUIS. These accreditations have great influence over the academic sector. Having certain accreditations gives prestige to a university and they are therefore willing to operate according to the demands by the accreditation organisations. The accreditations are often global which leads to a more homogenised academic system. The spread of performance measurement in academia has the potential to lead to short-termism, where researchers are forced into a race against time in order to present satisfactory performance data on their research productivity indicators. This environment encourages the so called “gap-spotting research” which formulates research questions by identifying gaps in the existing research. This type of research has been criticized for not questioning the underlying assumptions in the established literature and therefore rarely resulting in the development of new high-ranking theories.

Humphrey & Gendron (2015) states that journal ranking is seen as one of the most important factors of the transformation in contemporary research by contributing to the “performatization” of academia. Even though journal ranking started has been an integral part of academia since the end of the 20th century, has the reliability of prominent journal ranking lists been questioned as well as the long-term effects from the influence of journal rankings. Commentators have expressed concerns about the sense of intellectual stagnation as a result of a rankings race, which can be observed in the published research in established accounting journals. An “order of worth” is being established where publications in highly-
ranked are celebrated, while marginalizing other forms of research. Research which is questioning the assumptions of the literature of the top journals is often rejected and becomes relegated. Journal rankings are not neutral, but social constructions, which give rise to several questions regarding for example objectivity and its influence on the knowledge production. Ranking combined with the usage and promotion of KPIs have a tendency to favour consistent and regular publications in “quality” journals. As a consequence, academics are pushed to ensure that their metrics show appropriate performance in regards to numbers of publications every year. This increases the appeal of short-termism and affects the selection of research questions and investigating strategies.

4.4.2.1 Summary

This article had a narrower focus and most of the MSCs which were discussed in this article were also included in the previous article. In terms of cultural controls, this article discussed the phenomenon of mass education. Some features of the corporatization of universities are discussed in the article, however the term corporatization is not mentioned. Performance measures, budgets and funding were identified as cybernetic controls, and accountability was discussed as an administrative control. This article also discusses external controls, which are not featured in the conceptual typology in Malmi & Brown (2008). Accreditations is a good example of an external organization which exerts control over universities, and they have much influence regarding the types of behaviour that are encouraged.

The variables which I identified in this article are presented in the table below.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cultural</th>
<th>Mass education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Corporatization</td>
<td></td>
</tr>
<tr>
<td>Cybernetic</td>
<td>Budgets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Performance measures</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Funding</td>
<td></td>
</tr>
<tr>
<td>Administrative</td>
<td>Accountability</td>
<td></td>
</tr>
<tr>
<td>External</td>
<td>Accreditations</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.2

4.5 Analysis & Model 1

The purpose of study 1 was to get an overview of the subject and identify variables that are seen as essential for researching NPM in universities. The study is based on a small sample of
carefully selected literature and the frame of reference is based on the article "Management control systems as a package—Opportunities, challenges and research directions" by Malmi & Brown, which advocates to view the different management control systems that affects an organisation as a package, instead of separate systems.

The frame of reference presents a conceptual typology of an MCSs package where the MCSs are divided into five different subgroups of controls. I had this typology in mind when I read the literature and found that it was useful but needed to be modified slightly in order to accommodate my analysis. The typology in the article clearly separates the different subgroups and the MCSs in the subgroups. I however, after reading the literature and identifying the MCSs, found it difficult to make clear distinctions between the different subgroups and recognized that some of the MCSs influence universities in more ways than one. The MCSs also affects each other and together creates another MCS. For example, a type of culture. This means that the rigorous typology from the article is loosened and I will adapt a more fluid structure for this analysis. I have added one subcategory which I found was missing. I have also combined several variables into two main variables in order to make the model more lucid. Accountability, funding and budgets have been combined into accountability since the accountability stems from the funding processes and the increased usage of budgets. Corporatization, governance structure and organisational structure have been combined into corporatization, since the governance and organisational structure have come to resemble those of a corporation as a consequence of the corporatization of universities.

I read the literature with the conceptual typology presented in Malmi & Brown (2008) in mind and realised that I found one subcategory of controls to missing. The empirical literature discusses external controls, but they are not featured in the typology by Malmi & Brown (2008). One example of external controls which have an influence over universities, is accreditation systems of schools, such as EQUIS and AACSB for business schools. These are global systems which homogenises the global academic system, and are therefore important to include.

The norm of mass education in the west has had a cultural impact on universities. The scale of the academic system has become larger and the purpose of universities have changed towards providing the education for students which is demanded by the private sector. The
mass education has also contributed to the *corporatization* of universities. The corporatization has had a deep impact on the academic sector and I would say that it is a cultural control as well as a cybernetic and administrative control. Cultural aspects such as values and objectives have changed to resemble those of a private corporation. The cybernetic controls have been influenced by the corporatization and are more focused on financial numbers and productivity. The governance and organisational structure of universities have also been corporatized. The power structures and roles and relationships have morphed into those of a corporation.

The financial aspects of universities have become important, and it can be observed by the *performance measures* which are used as cybernetic controls. The academic sector have to rely less on public funding and have become increasingly responsible for acquiring funding from other sources. The organisations within universities are divided into responsibility centres and they are held responsible for their own budgets. They are also being held *accountable* for how they use the resources that are allocated to them, both from the public and their private financiers. Universities have become increasingly focused on performance and academics are being evaluated on their performance on both financial and non-financial KPIs.

I have based on this literary review found that external controls, mass education, corporatization, accountability and performance measures are important variables, and the article by Malmi & Brown have convince me that they exist as a package. Model 1 can be viewed in the figure below, where the five most important variables for researching NPM in universities are featured as a circle. I have chosen to illustrate the package as a circle instead of the separate box system used by Malmi & Brown (2008) because it better demonstrates that it is a package and that the different features also influence each other.
5. Study 2

5.1 Introduction

Study 2 is a continuation of study 1 and the purpose of the second study is to build the final model, called model 2. The foundation and frame of reference for study 2 is model 1 which identified 5 essential variables for researching NPM in universities. These five variables were used as the starting point for analysing the literature in study 2. The purpose of study 2 is to validate model 1 and to see if there are additional variables that should be added to model 2, or if there are some variables that should be removed.

5.2 The literature

5.2.1 Trends

Starting in the late 1970s, governments around the world have engaged in widespread and sustained reforms of their public administration (Toloffari, 2005). These reforms emerged during a time period of economic recession, but also had political and social drivers. They were instigated by the political apex and driven by the new right political ideology, which became popular in the west at the time. These reforms are collectively referred to as new public management (NPM), and are characterized by marketization, privatization, managerialism, performance measurement and accountability. Saravanamuthu & Tinker
(2002) claim that the higher education sector has been reconfigured based on the notions of NPM, and is now associated with concepts such as managerialism, corporatization, marketization, customization, modernization, professionalization and rationalization. These imperatives are motivated by the unproven belief that economic rationalism is necessary for the success of universities in the new global world, with advanced information technology and a concentration of capital in mega-corporations.

Huisman & Currie (2004) identify four global trends which has influenced the higher education system worldwide and driven the development of NPM in universities forward. The first trend is changing relationships between governments and universities. There used to be a relatively strong bond between government and higher education institutions, via funding, legislation, and planning mechanisms. However, governments have taken a step back and are allowing greater autonomy and market mechanisms. The governmental control has moved from control by legislation and procedures to justification by quality assurance and accountability measures. The ideological shift in 1980s towards the New Right led to increasing privatization of higher education and increased influence of market forces on universities.

The second trend is according to Huisman & Currie (2004) efficiency and value for money. The massification of higher education around the world has put pressure on government budgets, which has led to governments documenting value for money. The increase in student numbers have resulted in a demand for greater efficiency and effectiveness. Parents and tax-payers started to question the presumed quality of higher education. Higher education has gone from being considered a public or quasi-public good towards being seen as more of a private good, which has affected the view of value for money and the accountability issue.

The third trend is the internationalization of higher education and globalization (Huisman & Currie, 2004). Globalization has facilitated the entrance of foreign higher education institutions and business organizations into national arenas. This prompts questions regarding accountability, such as how foreign institutions should be treated and to whom and where they are accountable. A global model of quality policy in higher education has emerged since the 1980s, through professional mechanisms, such as annual conferences and the circulation of professionals, as well as the influence of international organizations such
as the Organization for Economic Cooperation and Development (OECD). Parker (2002) claims that the trend of globalization has forced universities to homogenize their education and research profiles in order to suit a North American model, which limits the diversity in various research fields.

The fourth trend according to Huisman & Currie (2004), is information and communication technology developments. The increasing technological possibilities have progressed the globalization process. Higher education institutions have the ability to work globally across national boundaries. This raises questions regarding legal and political control over less tangible or virtual institutions, which becomes more complex.

During the 1990s there were dramatic changes in the manner governments interact with higher education sector, according to Alexander (2000). Governmental authorities were no longer as receptive to the traditional self-regulatory processes which have dominated university development before. A new economic motivation emerged which is driving states to redefine relationships by putting pressure on institutions to become more accountable, more efficient and more productive in how they are using the public resources. There had been attempts before the 1990s to measure institutional efficiency and performance but they were generally met with resistance and were neglected in academic circles. Even though this trend is still prevailing, there has since been an increasing number of educational leaders who believe that the status quo is no longer an option for higher education. The higher education system has entered a new era where society will not accept the self-justifying and are putting higher expectations on the institutions. This means that the higher education must examine itself and accept to be examined by others.

5.2.2 Variables
   5.2.2.1 Mass education
One factor that has had a huge impact on the higher education system and presented it with a great challenge is the “massification” of higher education. Alexander (2000) explains that higher education has become an important component of national economic investment strategy. In today’s competitive and global environment, it has become increasingly important to investment in highly educated and skilled workers in order to have future economic growth. This view has been accepted by today’s world economy which has changed the national economic and educational needs.
There has been a considerable growth in the number of student enrolments over the last decades as a consequence of the government drive for wider community access to higher education, as well as the universities quest for additional student fee revenues (Parker, 2002). Dearlove (2002) writes that the higher education system has experienced pressure to transform from an elite system to a mass system. There has also been a demand for a more skill based higher education, with a purpose to educate students according to workplace needs and what is thought to improve the national economy. Parker (2002) adds that there is also added pressure for a greater variety of degree and subject offerings, duplicated programs offered on-site in several geographic locations, technology-based distance learning delivery and larger classes.

Parker (2002) states that the education market place has been deregulated and expanded at a fast rate. This has forced universities to become highly entrepreneurial, customer focused and revenue seeking enterprises. University activities now include internationalized curricula and student exchanges, globalized distance learning programs, offshore campuses, international collaborations between universities, co-operative university-industry research centers, joint and double degrees, franchises and in-house corporate training and certification programs.

Mass education is costly and governments have demanded universities to make their operations more efficient (Dearlove, 2002). Parker (2002) claims that there is a demand for more cost-efficient teaching, reporting systems for measurable teaching and research accountability, research grant revenues and proliferating fee-for-service teaching programs. In order to cope with the pressure, universities have chosen to streamline the planning and control of operations and finances through private sector based managerialism. Universities have also become “entrepreneurialized” as a result of trying to enhance income, according to Dearlove (2002). They have become businesses that compete in the global higher education industry and market themselves in order to attract commercial sources of income.

The massification of higher education has led to an expansion of the academic system. A highly educated population is thought to support economic growth which has pushed governments to support larger student enrolments. The academic institutions have to accommodate more students and offer a wider variety of programs and courses. A consequent issue is of course how this expansion should be financed.
5.2.2.2 Funding

Many western governments have since the early 1990s been reducing their levels of funding of universities, both in recurring funding of teaching, research and infrastructure and other capital expenditures (Parker, 2002). The funding limitations have forced small sized universities to operate in the environment of mass student education without the adequate infrastructure and resources. Larger universities have been forced to accommodate larger class sizes, lower cost contract teaching arrangements, and lower student quality student intakes for fee generation. The rationalization of universities has included postponement or elimination of building and maintenance programs, outsourcing of internal security and computer service, restrictions upon borrowings, shifting of infrastructure service and cost responsibilities from central university administration to faculties and schools, department closures and staff redundancies. Humphrey & Gendron (2015) state that since research activities are forced rely more on private sources of funding, there is a threat to the academic freedom.

Alexander (2000) contends that academics and administrators have expressed concern over the limited amount of new public financial resources available and consequent threat to the maintenance of quality in higher education. The public funding per higher education student decreased by 37 per cent in the UK during the 1990s for example (Dearlove, 2002). Consequently, the academic staff fear that universities will experience larger class sizes, less individual attention and faculty/student interaction, and consequently reduced academic performance (Alexander, 2000). Despite these fears, many governments are maintaining current policies by mandating even larger higher education enrollments without allocating corresponding public resources.

Parker (2002) claims that the revenue generation has become a top priority for universities, since they have to rely less on public funding. The current environment has forced universities to seek funding from other sources than the government to a larger extend (Dearlove, 2000). Examples of other sources of funding, according to Parker (2002), are; international student recruitment, joint research projects with industry, commercialization of research outputs, corporate consultancies, corporate in-house training programs, short course delivery to industry and commerce, and strategic alliances with professional and
business bodies. Alexander (2002) contends that many OECD governments have also shifted the funding burden to the users or students, through a wide variation of fees.

It is not only the levels of government funds that have changed, but also the system of how the funds are distributed (ter Bogt & Scapens, 2012). Nations with sophisticated higher education systems are, according to Alexander (2000), implementing new economic and managerial strategies to assess and compare university performance. The government reporting and funding mechanisms used to be completely input-based, but are now turned into being more competitive and outcome-based. The UK presents a good example of this, according to ter Bogt & Scapens (2012), where the funding of university activities has changed from being primarily contingent on student numbers. The research activities the UK are now funded on the basis of research output, while the teaching is funded primarily based on teaching inputs. Another good example is the Netherlands, where the funding of both teaching and research are contingent on teaching outputs.

The development of new funding systems can also be seen in Sweden according to Modell (2003), where in 1993 there was a reform of the government control over Swedish universities and the most significant aspect of that reform was the change in resource allocation procedures for undergraduate education. The annual funding of undergraduate education now became more contingent on performance and grants are distributed in two allocations: one (ex ante) based on the number of full-time students registered and the other (ex post) on student performance in the terms of the number of annual credits achieved.

The expansion of the academic system and the changes regarding the funding of higher education have created issues concerning the governance and management of universities.

**5.2.2.3 Governance and management**

A consequence of the development of NPM in the academic system is the altered governance and management of universities. Neumann & Guthrie (2002) contend that the traditional collegial, committee-based management model has been replaced by a hierarchical management model. This model is characterized by an increase in the number of professional management appointees in the central and faculty bureaucracy, which has resulted in a concomitant increase in their decision-making authority. Studies have shown that there has been a gradual shift in the university power base as a consequence. The
power has shifted from individual academics and disciplines towards senior management, and collegial modes of governance has been replaced by stronger managerial structures and practices, with a concentration of executive power. Parker (2002) claims that the power in universities have been increasingly concentrated to the top with the vice chancellors and principles acting as corporate CEOs.

The new type of management which has been implemented in the sector of higher education is often referred to as new managerialism (Deem, 2004). New managerialism is a set of organizational practices and values which aims to create radical changes in the organization, finance and culture of public sector services. It employs new means of ensuring accountability through external audit of short-term easily-measured outcomes and internal regulation of performance. It may be viewed as an alternative model of governmental and institutional order for higher education to the previous model which was a compromise between corporate bureaucracy and professional self-governance.

Many academics according to Dearlove (2002), despair over the end of an easy collegiality to make place for the rise of a harder managerialism that offers them less control. Outsiders, however, are concerned about the efficiency and effectiveness of higher education management and the resistance from academics to implement changes that may lead to universities better answering to the needs of society. Saravanamuthu & Tinker (2002) state that managerialist control intrudes into every aspect of University activities by promoting behaviors that conform with its goals and making non-sanctioned conduct less legitimate by not including them in the measurement process. Academics are unable to exert no effective governance, as they are seen as pawns in the labor process. This situation will persist until there is a political resolve to allow students and academics to restate their rights as members of an academic community, instead of being viewed as customer and surveillance targets.

The governance structure and the tasks that ought to be performed by the governance groups within universities have changed drastically. Neumann & Guthrie (2002) claim that the academic boards are playing an increasingly smaller role, the role of university councils is changing and there is a new management of research as a system, which focuses on measured performance, planning, management and strategic positioning. Therefore, a new corporized model of university management has evolved, which is based on business/market
principles. Alexander (2000) claims that the national government retain the prerogative to set broad policies, particularly budgetary ones, while transferring the responsibility for growth, innovation and diversification to the individual institutions. This results in governments devolving more control over programs and budgets to individual institutions, while directly interfering to ensure greater economic efficiency, quality outcome, student access, and accountability.

Senior managers in the form of faculty deans, and specialist pro or deputy vice chancellors form the new senior executive core of the policy and strategy forming group (Parker, 2002). They hold extensive personal power in the university hierarchy of authority, exercising control over several committees and a wide scope of personal decision-making power.

Accountability used to focus on mutual accountability between academic committees, but has now become one of committee and individual accountability to the senior executive. The decisions are increasingly formulated at the top management level and then passed down in the organization for implementation. Consequently, the communication also tends to flow top-down within the university hierarchy.

Some observers according to Dearlove (2002), view the trend away from a self-governing collegiality and an autonomous academic professionalism as a result of the rise of managerialism and the proletarianisation of professional labor. Both managerialism and proletarianisation refer to a separated and top-down management which have greater control over employees who experiences a reduced autonomy to organize their own work. Neumann & Guthrie (2002) state that the new model of university management has contributed to the pressure which is put on academics to produce certain kinds of “commodities”. These commodities are primarily articles in refereed journals from “new” sources of inputs such as industry collaborative schemes. The corporatization and managerialism of universities have contributed to the commodifying academic labor into discrete categories of teaching or research, and the efforts to measure, report and evaluate these activities.

Both the old collegiality and the new managerialism have problems regarding the provision of an organizational basis for change (Dearlove, 2002). Collegial governance seeks consensus through committees which makes it slow-moving, conservative and biased towards status-quo. It is also self-centered and ignorant towards resource limitations and external realities.
University management by layers of academic committees have according to Parker (2002), shown problems such as slow-moving decision-making and prevarication, vague lines of responsibilities and accountability, resistance to change, protection of established power groupings, resource inequities and limited uptake of new strategic opportunities. The new professionalized managerial system of university governance has the potential to be faster, more flexible and deconstruct inherited and decaying university power structures and resource abuses.

In focus group discussions with academics, managers from different institutions in the UK, who were attending meetings of learned societies, many participants claimed that universities had become more explicitly managed (Deem, 2004). This was felt to be more in line with a business rather than an educational institution, where traditional methods of departmental and academic committee based authority was becoming increasingly sidelined. Parker (2011) agrees and report that the centralised top management power has resulted in the decline in collegial modes of governance and the decision-making power is being removed from disciplines, departments and schools. Consequently, tension has emerged between management and the academic staff. Parker points out that surveys of academics have shown that much of the decision-making power within universities has moved from formerly influential collegiate academic committees and academic units to university managers. Many of the participants in the focus group by Deem (2004) also claim that the external audit of teaching and research had altered the climate in higher education and how academics were managed. The prevailing view in the focus groups was that money rather than academic factors was the driving force behind many decisions. An example of this is the introduction of cost centers in most universities.

The massification of education and the changes related to funding along with the new governance structure have resulted in a corporatization of universities. Several aspects of higher education have come to resemble features usually found in private corporations.

5.2.2.4 Corporatization
The concept of the corporatization of universities is founded on the fact that the ideals of “markets” have been implemented in relation to students, research funding, university funding, and staffing, which has led to measurement systems that strive to structure relationships between individual academics, departments and universities across the higher
education sector (Neumann & Guthrie, 2002). These structures are usually being described as “economic” and “managerial”. The focus of these changes is the development of performance information systems. The purpose of these performance information systems is to render activities, including research (e.g. research output, quality, training and the aptitude to attract external research inputs) and teaching (e.g. graduate outcomes, graduate employability, student satisfaction), measurable and commodifiable.

Universities in many western countries have, according to Parker (2002) gone through several changes in their strategic focus and core values and objectives since the 1980s. In order to adapt to and implement these changes, they have adopted a strategy which involves prioritization of revenue generation, resource allocation, management professionalization, organizational restructuring and strategic relationships with government and business. Parker (2011) continues that and claim that the objectives of universities have started to those of reflect private corporations where profit and prestige maximization is prioritized. Image and brand have become important in order for universities to increase its revenue and profits. Academics feel according to Deem (2004) that the culture has changed from the collegiate to the corporate and that everything revolves around planning and strategy. There is now a tension between the need for university to strategically position themselves to be competitive and the need for them to offer a space for inquiry and critique (Parker, 2002). Saravanamuthu & Tinker (2002) claim that many universities are also turning to managerialist strategies as a reaction to the reduction of public resources allocated to higher education.

Parker (2011) state that several researchers claim that universities have been corporatized and been transformed into large commercial enterprises, whose purpose is to satisfy demands for educational and applied services instead of being a vehicle for the pursuit of knowledge and independent thought and critique, that it used to be. Saravanamuthu & Tinker (2002) agrees that commercialism has changed the University’s knowledge-focused interpretive schemes, which is its mission, core values and collective values of itself and its relationship with its stakeholders. There are divergent opinions on how this issue should be dealt with. Some think that academics should reclaim their changed management role by strategically participate in discussion on how the University ought to evolve. Parker (2002) suggests that academics must re-engage in the discussion and debate concerning the
mission, shape and scope of universities. Both constructive critique and proposals reconstituting the university is required. Others argue that academic freedom and institutional autonomy should not be compromised despite the fact that industry values are not to dissimilar to those of the University.

Saravanamuthu & Tinker (2002) argue that there are two issues which are prominent regarding the corporatization of universities. The first is the risk of loss of control over academic work in return for a higher level of dependence on state funding. The second is the appropriateness of managerialism in re-defining the University's crucial role in supplying labor to the capitalist production machinery whilst maintaining the principles of social justice and democracy. The example of the UK indicates that state funding of university activities presents opportunities for bureaucratic officials to reduce public expenditure in the long run whilst shortsightedly reduce the unit cost in the short term. In 1981 the Thatcher government implemented market discipline and managerialist decision processes in the University through the University Grants Council (UGC), which replaced the long-lasting institution of collegial governance over the quality and value of research and teaching. The changes meant that more emphasis was placed on visible, measurable performance outputs such as refereed journal publications. As a consequence, unmeasured activities, such as student counselling and community activities, were prioritized. The exploitation of academic labor and student needs will be continued to be obscured if the logic of efficiency and its biased control measures are prevailing.

The scope and mode of the academic research that is undertaken is also affected by the corporatization of universities according to Neumann & Guthrie (2002). It is clear to see that project research with clearly defined time frames are favored over long-term research programs. Research activity reflects what is funded by external grants, and research which does not attract grants is improbable to be carried out or valued. The policies tend to favor applied research over more fundamental research and research processes which are low risk and do not contain time consuming data collection and analysis. Reports have shown that the number of basic and long-term research has declined and that private research funders are less interested in longer term research issues. The research modes of publication styles of “big” science and experimental science dominate those of “little” science, theoretical science and the humanities and the social sciences. As a result, the mixture and balance of
disciplines that performs research within universities is affected, with stronger focus within particular science based fields.

The new governance and the corporatization of universities have resulted in more focus on resource utilization and how and by whom the funds are spent. Different units and individual academics have therefore been increasingly held accountable for their decisions and their actions.

5.2.2.5 Accountability

Huisman & Currie (2004) claim that accountability is on the policy agenda in many systems of higher education. The attitude towards accountability in higher education varies between different countries. Accountability is in some countries institutionalized and accepted, whereas in other countries it is a more recent concept and sometimes a contested issue. There are analysts who claim that governments and other stakeholders do not have the right to make academics formally accountable for their performance, and refer to the academic freedom and professional autonomy to support their opinion. Other analysts think that the increasing focus on public, measurable accountability is the next logical step of governments retreating from closely monitoring higher education and permitting an increase in institutional autonomy.

There is not one universal definition of what accountability is, but analysts of accountability generally agree that it is the “answerability for performance” (Romzek, 2000, p. 22) or “the obligation to report to others, to explain, to justify, to answer questions about how resources have been used, and to what effect” (Trow, 1996, p. 310). Accountability is according to Huisman & Currie (2004), a constraint on arbitrary power, which discourages fraud and manipulation whilst strengthening the legitimacy of institutions that are obligated to report to appropriate groups. Accountability is also thought to raise the quality of performance by forcing involved individuals to examine their operations critically and to be reviewed from others.

Huisman & Currie (2004) argue that there has been a shift from professional to political accountability which has allowed universities to satisfy the accountability requirements demanded by the public stakeholders by introducing accountability mechanisms that mainly count existing activities. New measures are sometimes introduced which take time of academics but they usually do not exact new activities upon them. They usually do not
change the day-to-day behavior of academics and do not necessarily result in any increased quality for the students. Many of the academics who were interviewed, however, were skeptical about the effectiveness of the current measures. They were opposed to the bureaucratic procedures, the amount of work involved and the focus on quantifiable indicators. Many respondents argued for less formal, more individualistic procedures. Albrecht and Sack (2001) claims are along the same line and say that the advances in information technology and the concentration of capital under globalization make the traditional roles of accounting redundant. It is suggested that the role of accounting should steer away from acting as a watchdog and become a private consultancy relationship with the client without critically examining the legitimacy of relegating the public interest to the background.

Parker (2011) explains that the focus on accountability in the public sector has taken the form of both traditional tools such as cost allocation and budgeting, but also more modern tools such as the balanced scorecards and total quality management. Performance and outcomes are being translated into quantitative economic terms and price and cost have become the number one policy and strategy determinants. Responsibility centres have been created and there is a greater emphasis on financial accountability, at every level of the organisation. Alexander (2000) states that the methods for administrating higher education have been transformed in order to suit the new tasks and responsibilities, which universities are being admonished to adopt. The traditional relationship between government and higher education is changing in order to serve more students and maximize economic returns. The expansion of the higher education has in most cases not been supported by corresponding levels of public financial resources. Simultaneously, there has been a development of state evaluation systems, which are meant to monitor and assess institutional effectiveness and productivity. The purpose of these systems is to create efficiency by employing evaluation techniques to assess and compare the performance of universities. This has resulted in changes in the management and financing of higher education institutions.

The USA presents a good example, where the accountability of higher education systems has increased by the implementation of various performance measures which aims to determine what is called “value for resources” (Alexander, 2000). Four approaches are common for
using such value. First, value added measurements to departing students in the form of inputs, processes and outcomes. Second, efficiency measurements to assess resource usage, such as equipment, faculty and space. Third return on investment and needs measurements are being used to assess the institutional effectiveness and productivity. Fourth, measurements which are used to measure the impact of higher education in meeting individual and state needs have also been implemented.

Huisman & Currie (2004) claim that there is evidence which suggests that the management of higher education institutions is the weakest link in the accountability chain. The management need to “translate” governmental accountability policies into institutional mechanisms in order for those policies to have any real impact. There are some indications in the empirical material that institutional management was hesitant to implement these policies. One explanation for this behavior is, at least in continental Europe, that university management is still in its infancy. Institutional leaders have only recently been granted the power to really manage their institutions. Ceremonial behavior and routine leadership were routine before the mid-1980s. The roles and functions of these leaders became much stronger in the 1990s, and from the late 1990s a new generation of leaders in power emerged. These new leaders still have to get used to their new roles, which explains the slow and gradual changes. Another explanation for this behavior is a strong belief in the current leadership. Stronger accountability measures are over-looked in favor of softer ones which they think are more effective in leading in a collegial and collaborative fashion. Universities are highly autonomous where monitoring based on professional expertise is suitable.

5.2.2.6 Performance measures
Academic performance has traditionally been measured predominantly by peer review of outputs, primarily refereed journal articles, and competitive government research grants (Neumann & Guthrie, 2002). However, other forms of performance measurements are being prioritized in this new era of marketization. The research performance is being evaluated on for example, inputs in research dollars from external competitive grants, outputs in terms of postgraduate research enrolments and completions, and publication output. The refereed journal article is the dominating indicator of publishing quality in the assessment system. This is a consequence of the privileging of peer review as a generally used control
mechanism and the performance measurement drive towards standardized unit of analysis that can enable comparisons across disciplines, academic units and universities. The teaching examples of quantifiable measures are staff-student ratios, progression of students, graduate employment rates, and student evaluation scores. The administration has been introduced to measures of performance which focuses on the governance, management and workplace issues.

Universities were once viewed as cultural training grounds for young minds, but have now become major agents for government investment in human development (Alexander, 2000). Global economic advantages are emerging in nations where investments in higher education has become a priority. Higher education is viewed as a vehicle to increase the stock in human capital which leads to a more effective competitiveness in the world market. Governments are therefore unwilling to leave the universities to monitor and control themselves through their traditional peer faculty and governance processes.

ter Bogt & Scapens (2012) argue that universities have been put under various institutional pressure which has led to the implementation of new accounting practices and new performance measurement systems. Modell (2003) states that the increased emphasis on various forms of output- or outcome-based control, such as management by objectives (MBO) and the assessment of public sector effectiveness through value for money audit, has been one of the key aspects of NPM over the last decades. Most universities operated in environments where students are taking the role of customers and education is viewed as a product, according to Lawrence & Sharma (2002). Many universities use student ratings for the evaluation of teaching as a promotion tool, but also as a KPI indicator of academic staff. Student ratings are used a managerial tool to measure teachers’ accountability, to maintain quality in education and as a disciplining power over academics. Resources follow students and faculties receive funding in proportion to the number of students who choose to attend their classes.

Government funding has as established before, become increasingly contingent on their performance in research and teaching, according to ter Bogt & Scapens (2012). Research performance is typically measured by the number of publications in academic journals, with the international ranking of these journals functioning as an assessment of quality. The increased focus on journal rankings may have serious consequences in the field of
accounting, since the top journals are primarily from North America. This means that researchers who want their work published in those journals have to follow the research agenda and research methods preferred by those journals, which limits the scope of research. Research outside the norm of what is considered mainstream is being marginalized, which is endangering the creativity and innovation of research prioritized.

Teaching performance is usually related to the number of students, the degrees awarded and the quality of the education. The experience and perception of students are generally important aspects of the teaching quality. The government funding has, according to Humphrey & Gendron (2015) become contingent on the universities achievement of market based KPIs, which measures productivity, customer satisfaction and graduate employment. These performance measures are influenced by performance enhancement and hierarchizing mechanisms and they are reinforced by the isomorphic tendencies of external organizations such as business school accreditations, for example AACSB and EQUIS. The accreditations are often global which leads to a more homogenised academic system.

Modell (2003) describes the Swedish situation where the increased emphasis on various forms of output- or outcome-based control, such as management by objectives (MBO) and the assessment of public sector effectiveness through value for money audit, has been one of the key aspects of NPM over the last decades. However, there have been issues realigning local control practice with the MBO-based philosophy. The new funding system was initially considered to provide some motivation for changing local control practices from traditionally focus on planning to becoming more reliant on goal-directed performance evaluation. However, the increasing administrative resources were deployed to local planning whilst little focus was put on strengthening evaluation procedures. One reason for this is that previously centralized planning tasks were being decentralized to individual universities because of the reforms. Administrative resources also had to be dedicated to complying with new financial reporting requirements for all state authorities. More robust financial reporting might improve some motivation for reforming financial PMs, however, there is little evidence for this. There have been some attempts by universities to better estimate the cost and resource consumption attributed to undergraduate education, however, the majority of universities seem to have put limited focus on developing more elaborate cost
accounting systems for internal use, and few national guidelines for this purpose have been issued.

There are claims that the new performance measurement systems in university increase transparency and objectivity, however the accuracy of those claims are questionable (ter Bogt & Scapens, 2012). Even though the performance measurement systems (PMS) are based on seemingly objective measures of performance, the decision-making process involves those measures but more subjective information is also taken into account. The claim of objectivity in combination with a much more subjective reality can be unsettling for those who are subjected to the PMS and the decisions based on them. The new judgmental forms of performance measurement do not remove the subjectivity, instead it only relocates is at a greater distance from the subject (i.e. the individual academic). The subjectivities in the previous systems were usually located within the academic departments and were applied by the professors within each department. In the new more judgmental system, the subjectivity is located at the faculty or school level and applied by administrators from a distance. These administrators are either non-academics or academics from other disciplines, and may not be familiar with the areas they are administrating which may lead to stress and anxiety among the academics.

Because of the NPM movement in the 1980s, many countries started reducing financial resources for higher education, encouraged competition and demanded financial self-dependency (Lawrence & Sharma, 2002). A new managerialism was implemented in universities and ubiquitous management philosophies such as the total quality management (TQM) and the balanced scorecard (BSC). Both private and public sector organizations have according to Lawrence & Sharma (2002), adopted TQM or the BSC over the last decades with the purpose of becoming profitable through a customer orientation, improving market share and competitiveness. The adoption of TQM includes involvement of all members in the organization in the ambition for continuous improvement, elimination of waste and a focus on customers. The BSC approach to performance measurement has become prominent in mainstream management accounting research

Lawrence & Sharma (2002) state that the purpose of the BSC from a financial perspective is to operate as a successful and efficient business. The “internal business process” of the university can be measured in terms of quality of service. Research undertaken can be
measured in terms of their bibliometric contribution to international conferences and refereed journals. The research success of universities is increasingly measured by the amount of research funds that are attracted by their researchers. Researchers now have a commercial value and have been commodified as productive achievers of research rankings and attractors of funding. University teachers can feel stress and anxiety if scholarly competence is paralleled with the value of research contracts or number of published research papers.

The capitalist view on operating universities as efficient businesses with the aid of management tools such as the BSC has put a spotlight on the questioning of the legitimacy of higher education reforms (Lawrence & Sharma, 2002). The BSC is a steering mechanism motivated by money and power and with a purpose of bringing universities more in line with the needs and interests groups in power, and does not consider other aspects of university operations much.

5.3 Analysis and model 2
Model 1 presented five essential variables for researching NPM in universities and the purpose of this second study was to expand model 1 build a final model (model 2). Model 2 is developed based on the variables from model 1 and the changes that were identified through study 2. The structure based on the article by Malmi & Brown (2008) which was used in study 1 to categorize the variables, has been adapted and altered in order to suit the findings in study 2. The categorization of the variables in model 1 and 2 therefore differs. I had little knowledge of the field when study 1 was undertaken and I wanted to keep study 1 at reasonable size. When study 2 was completed I had gained much knowledge and I had more space to elaborate. I had become aware of what was essential and I decided to step outside the frames that had been set by Malmi & Brown (2008) in order to achieve a structure which was better suited for this literature review.

The table below provides an overview of the identified variables and the articles used in the literature review. The variables that were discussed in the articles have been awarded points between 1 – 3, based on how much emphasis that was put on that particular variable in the article. If the variable was not discussed in the article it has been awarded zero points, market - in the table. The numbers in the last column represent the frequency of which the
variables were discussed, and the numbers in the last row represents the total number of points for each variable.

<table>
<thead>
<tr>
<th></th>
<th>Cultural control</th>
<th>Cybernetic control</th>
<th>Administrative control</th>
<th>No. of variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mass education</td>
<td>Corporatization</td>
<td>Funding</td>
<td>Performance</td>
</tr>
<tr>
<td>Alexander (2000)</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Dearlove (2002)</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Lawrence &amp; Sharma (2002)</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Neumann &amp; Guthrie (2002)</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Parker (2002)</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Saravanamuthu &amp; Tinker (2002)</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Modell (2003)</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Deem (2004)</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Huismann &amp; Currie (2004)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Parker (2011)</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>ter Bogt &amp; Scapens (2012)</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Humphrey &amp; Gendron (2015)</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>12</td>
<td>11</td>
<td>20</td>
</tr>
</tbody>
</table>

*Table 5.1*

Performance measures and governance and management have received the most points. These are the variables that have the most direct impact on the academic staff and it is therefore logical for the authors to put the main focus on these variables. The changes in the management and the increased usage of performance measures have altered the working life of academics. They are being put under pressure to perform according to the performance measures whilst the decision-making authority has been transferred to administrative managers. This is also reflected in the fact that cybernetic and administrative controls have received more attention than the cultural controls. The importance of these variables is also evidenced by the fact that they have been awarded with five and six 3-pointers. This points out that these variables have not only been discussed in the majority of the literature, but also at a detailed level in several of the articles.

Mass education and funding have received the least points. These are variables which are not caused by the implementation of NPM in universities, but rather factors which have driven the development of NPM in universities forward. They are often used as background information in the articles but the main focus of the articles is not put on the massification of
universities or the funding processes. However, they are still viewed as important factors for the development of universities since the 1970s.

The level of focus on the variables varies greatly between the articles. The article by Lee Parker from 2011, for example, has a wide focus and includes all six variables. Meanwhile the article by Modell from 2003 only focus on two variables and do not include any discussion about the other variables. Both types of articles have their advantages. The articles that include several variables provide an overview of the situation and connects the different variables to each other, whilst the articles that focus on fewer variables provide more detailed information.

Mass education, corporatization, accountability, performance measures were identified as variables for model 1, and they were all discussed at length in the chosen literature for study 2. Therefore, they are also featured in model 2. External controls were included as a variable in model 1 despite the fact that it was not discussed much in either of the articles in study 1. I chose to include it in model 1 because I had seen that it is an important element in organizational research. However, the purpose of this literature review is to identify variables based on a selection of academic material, and I can therefore not include external controls since it is mentioned so infrequently in the chosen material. The articles in study 2 do not discuss external controls at all I therefore remove it from the final model.

I have chosen to add funding and, governance and management as variables. The funding of universities is a cybernetic control, and is discussed in several of the articles and they claim that the sources of funding have changed, but also that the changes in funding has had a large impact on the governance and management of universities, the offered programs and courses and the teaching and research. The governance and management is an administrative control, and it has been altered as a consequence of the massification of higher education and the changes regarding the funding of university activities. More people are involved with higher education and the interest for how it is managed has increased. The profitability aspect of universities has become more important since the funds are generated from several different sources who are all interested in how their money is being spent. There is therefore an interest that the universities are being governed by competent people who focus on more than the academic aspects of managing a university.
The six variables that have been identified can be viewed in the figure below. Performance measures and, governance and management received the most attention in the literature and are therefore marked as the two most important variables.

![Diagram of variables]

### Figure 5.1

#### 6. Concluding discussion and future research

This master thesis has been written as a structured literature review on the subject of new public management in universities. The purpose of the thesis was to provide a review on the current state of NPM in universities and to identify the variables that are seen as essential by researchers in research about NPM in universities and to display a model that can be used as a starting point for research in this area.

Six variables have been identified as essential in research about NPM in universities. These six variables conjointly create model 2 and they are listed in table below, along with which category of control it belongs to.

<table>
<thead>
<tr>
<th>Cultural controls</th>
<th>Cybernetic controls</th>
<th>Administrative controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass education</td>
<td>Funding</td>
<td>Governance and management</td>
</tr>
<tr>
<td>Corporatization</td>
<td>Performance measures</td>
<td>Accountability</td>
</tr>
</tbody>
</table>

*Table 6.1*
The article “Management control systems as a package- Opportunities, challenges and research directions”, by Malmi & Brown (2008) has been used as a frame of reference and it presents a concept where different management control systems converge and creates a management control package. This concept has been applied to the variables in my model and these variables are meant to be viewed as a package which impacts universities collectively. The variables influence each other and some of the variables have been created as consequences of other variables. The article divides the different control systems into five subgroups, and three of those (cultural, cybernetic and administrative) are discussed in this thesis and applicable to the variables that have been identified. All the identified variables are essential for understanding the effects of NPM in universities. However, performance measures, and governance and management have received the most attention in the literature and I want to underline their importance.

*Mass education* and *corporatization* have been identified as variables that are seen as cultural controls. *Funding* and *performance measures* are viewed as cybernetic controls, while *governance & management* and *accountability* are seen as administrative controls. These six variables are viewed by researchers as essential regarding research about NPM in universities, and are displayed as model 2 in the figure below. They are a consequence of NPM and impact universities as a package.

![Figure 6.1](image)
Mass education has been a common phenomenon in western countries since the late 1970s. It is an accepted belief that an educated population leads to higher economic growth, which has pushed policy makers to encourage more people to obtain a higher education. Corporations are also demanding employees with a higher education. Countries therefore have the potential to attract investments by having an educated population. This has led to an expansion of the academic system in many countries. The massification of education has made it possible for more people to obtain a higher education, and making them more desirable on the job market. However, there has also been negative consequences. When the scale of the academic system grows there is a need to streamline in order to be efficient, which has led to a lack of diversity and freedom both when it comes to the supply of programs and courses and within also within them.

The funding processes of universities have changed, partly because of the expansion. Governments have since the early 1990s been reducing the level of funding per student which has affected both teaching and research. Because of the reduced governmental funds, have universities been forced to seek funding from private sources to a larger degree than before. Private investors have their own interests and requirements for funding university activities, and the universities have to adopt to these requirements in order to receive funds. The funding limitations have caused universities to operate without the adequate infrastructure and resources, and been forced to accommodate larger class sizes, lower cost contract teaching arrangements, and lower student quality student intakes for fee generation.

The governance and management of universities have been altered by the development of NPM in universities. The traditional collegial, committee-based management model has been replaced by a hierarchical management model. The new model has resulted in a more professional management where the decision-making authorities are administrators rather than academics. Individual academics and disciplines used to have more power, which has now been redirected to the senior management. The power in universities have been increasingly concentrated to the top, and the vice chancellors and principles are acting as corporate CEOs. The consequence of the new governance and management structure is that the decision-making authority has been transferred from academics who possesses the knowledge of their academic fields to administrative professionals who have limited...
knowledge of the academic fields and are more focused on administrative and financial aspects rather than academic. This of course impacts which activities that are undertaken and how they ought to be performed.

The massification of education, the altered funding processes and the new governance and management of universities have resulted in a corporatization of universities. Many aspects of higher education have come to resemble those of private corporations. Ideas of “markets” have been implemented in relation to students, research funding, university funding, and staffing, which has led to measurement systems that strive to structure relationships between individual academics, departments and universities across the higher education sector. The strategic focus and core values of universities have changed from academic to corporate. Strategies which involves prioritization of revenue generation, resource allocation, management professionalization, organizational restructuring and strategic relationships with government and business have been implemented. Academics claim that the culture has changed from the collegiate to the corporate and that the main focus is put on planning and strategy instead of academic achievements.

The new governance and the corporatization of universities have increased the accountability aspect of resource utilization for both individual academics and units. They have been increasingly held accountable for their decisions and their actions. The inputs and outputs are often measured and benchmarked. The control of the individual has increased which has put pressure and stress on academics to perform according to the standards that are set for them. The research is usually assessed through bibliometric measures instead of looking at the actual academic contribution. This means that the research undertaken is adjusted to the North American format, the highest ranking journals and the potential to be referred.

The measurement of academic performance has changed due to the corporatization of universities. It has traditionally been measured by peer review of outputs, primarily refereed journal articles, and competitive government research grants. The research performance is now instead being evaluated on for example, inputs in research dollars from external competitive grants, outputs in terms of postgraduate research enrolments and completions, and publication output. The refereed journal article is the dominating indicator of publishing quality in the assessment system. The teaching is being assessed through measures of staff-
student ratios, progression of students, graduate employment rates, and student evaluation scores. The administration has been introduced to measures of performance which focuses on the governance, management and workplace issues. Universities have been put under institutional pressure to implement of new accounting practices and new performance measurement systems which focus on different forms of output- or outcome-based control. The negative consequence of this development is that important aspects, such as quality, diversity, freedom and innovative thinking are being overlooked, because of the focus on hard numbers.

Six variables have been identified with the help of the chosen literature. There is however, a seventh variable, external control, which I would have liked to have found more research on. The literature in study 1 mention external control briefly and I made the decision to include it in model 1 despite the limited focus in the articles. I knew that external control is an important aspect of organizational research, as evidenced by the book called “External control of organizations: a resource dependence perspective” by Pfeffer & Salancik, which has been cited over 23 000 times. As a student of a business school which is accredited by several accreditation systems, I have also seen firsthand that external organizations have great influence over universities in reality. The accreditations are viewed as great PR-tools, and universities are eager to comply with the requirements in order to receive the accreditations. Searches were made to specifically find material on external control for study 2, but it was not possible to find enough academic research to include it as a variable in model 2. I however, think that it is an important variable, especially for business schools where accreditations play a big part for acceptance amongst peers and PR-purposes. I would like to see more research on the impact of external organizations on universities and how it homogenizes universities.

Malmi & Brown (2008) has had a large impact over the process of writing this literature review. It was used as a frame of reference in study 1 and has therefore been present throughout the process. I think that I may have been too focused on the structure of the package, or box that the article presents and that might have hindered me from including controls which did not fit that structure. The limitations of the package have made it more difficult to think outside the box and narrowed the scope of the analysis. External control is a good example of a category of controls that was not included the package but perhaps
should have been. The package presented in the article has an internal perspective of control and I feel that an external perspective would help to give a more accurate description of the forces that influence the management control processes, and move the research of management control forward.

This literature review has contributed to the literature in the field of NPM in general and the field of NPM in universities in particular. The review provides a summary of how the implementation of NPM has impacted universities. It also provides an overview of the problems within universities which are consequences of the implementation of NPM. The findings can be of practical use to managers within the academic system. It provides them with a summary of the issues that academics are experiencing, and gives suggestions on what not to do.

The review of the literature has painted a negative picture of the state of the academic system. The authors of the articles in this review are in agreement that there are problems with the way universities are being managed both on a local and national level. The focus on hard numbers are overshadowing the academic aspects, which is jeopardizing the academic freedom and innovative thinking within universities. Even though the researchers are in agreement about the problems in universities there have been few suggestions on how the problems should be solved and alternative ways of managing universities. There are discussions concerning this in some of the articles. Parker (2002) for example states that academics need to re-engage in the discourse concerning the pace and direction of university change. However, few concrete suggestions on how to solve the problems are to be found in the selected literature. I would like to suggest for researchers to perform research that focus on how these problems can and should be solved at university level and how universities should be managed in the future. I would also like to suggest for research which focus on the national level and how policy-makers should tackle these issues.
7. References


Neumann, R. & Guthrie, J. 2002, "The corporatization of research in Australian higher education", Critical Perspectives on Accounting, vol. 13, no. 5-6, pp. 721-741.


Parker, L. 2002, "It's been a pleasure doing business with you: a strategic analysis and critique of university change management", Critical Perspectives on Accounting, vol. 13, no. 5-6, pp. 603-619.


