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BE304E

OUTPUT BASED FUNDING SYSTEM VIEWED FROM PRACTITIONERS' PERSPECTIVE: THE CASE OF UNIVERSITY OF NORDLAND

BY

MESFIN GHIRMAI ABRAHAM

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I dedicate this master thesis to Amanuel Mesquina Berhane, for his compassionate and unwavering support throughout the whole master program.

ABSTRACT

Output based funding system is used by governments to channel research funding according to ex post assessment of institution's research output and education results. This thesis attempts to assess output based funding system from practitioners' perspectives at University of Nordland. It focuses upon ethical challenges and conflicts of interest associated with the output based funding system. Data collected based on 15 interviews and relevant documents issued by Norwegian Ministry of Education and Research. Accountability, principal-agent theory and new public management perspectives, are used as frame of references and qualitative research method is utilized. The main findings of the thesis identify the following ethical challenges and conflicts of interest associated to OBFS:

People at the university are confronted with ethical challenges when making decisions whether or not to focus on areas that are measurable by the performance indicators in order to increase the financial returns to the institution and publication points to the researcher. Because some researchers would like to extend their focus to areas that they see fit to safeguard the fundamental values of the institution even if it is not measureable by the indicators to secure funding. Many researchers are concerned that free research could disappear slowly if the focus is only to the research areas where publication points are scored.

The much higher financial reward attached to external funding poses an ethical challenge when decision makers have to consider to go after larger financial proceeds from EU projects by depriving free research or conduct pioneering, critical and creative research to enhance the research diversity as well as fostering national and cultural identities. In the sense that people at universities are facing difficult choices between their economic needs and weighting the string attached with external funding. e.g. matching targeted areas of research.

Conflicts of interest emerge between the administration and researchers when they seek external funding because from the managerial accountability perspective the administration has to pressure researchers to earn publication points to augment their budget, which means to focus on areas that are measurable by the indicators. Whereas from the personal accountability perspective, the researchers would like to do research in areas they would like to study because they would like to choose where to spend their time as they are not directly responsible for the financial health of the institution.

Conflicts of interest emerge between the Ministry of education and the researchers when it comes to publication points because from the political accountability perspective, the ministry would like to have stronger scrutiny of articles so that to avoid bias and criticisms when they evaluate the articles to decide on publication points. Whereas, researchers, once they deliver their articles would like to avoid the time spent in explaining details of their articles and lengthy consultations that follow including phone calls and e-mails. They would prefer to use their time to develop another research article or similar of their interest.

Conflicts of interest also emerge between the Administration and the researchers when it comes to dissemination of research findings. From the managerial accountability perspective, administration would like to see researchers do more research on measurable projects to supplement its budget. Whereas, from personal accountability and in some cases from professional accountability perspective, researcher would like to deliver their findings to the end users to positively change way of life because they don't believe findings are made to be shelved.

Conflicts of interest emerge between the administration and the researcher from the principal-agent theory perspective when the goals of the administration differ from the goals of the researcher. For example, the administration (acting as principal) would like to see researchers conduct research that generate income to the institution. Whereas, the researchers (acting as an agent) could have different goals may be to conduct free research or carry out national and cultural identity to be relevant to the society without paying attention to the financial interest of the principal.

Key words: Output based funding system, University of Nordland, Ethical challenges, Conflicts of interest, Accountability, Principal-agent theory, NPM

ACRONYMS

UiN	University of Nordland
OBFS	Output Based Funding System
PP	Publication Points
EU	European Union
NPM	New Public Management
NOKUT	Norwegian Agency for Quality Assurance in Education
SIU	Cooperation in Higher Education

Table. 1 Overview table of completed interviews

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1. INTRODUCTION

The higher education environment has been undergoing profound change. During the last few decades, more and more countries started to implement management concepts from the private sector into their administrations (Aucoin, 1990; Behn, 1995). It follows the doctrine that the public sector is inefficient but can transform itself to become more efficient by introducing new management concepts, especially from the private sector (Gruening 2001; Moynihan 2008). Proponents of New Public Management (NPM) associate the implementation of these concepts with higher public sector performance (Hood 1995; Osborne and Gaebler 1992; Paterson 1988). They also argue that the public sector would benefit more from the experiences of the private sector to survive in a competitive environment than from traditional concepts of administrational science.

Output-Based Funding System (OBFS) is a relatively recent policy tool developed by many Governments in tertiary education for both education and research activities (Geuna and Martin, 2003; Whitley and Glåser, 2007; Frolich, 2008). OBFSs are used by governments to channel research funding according to ex post assessment of institution's research output and education results. Higher education authors often view the changing relationship between universities and their governments in the context of New Public Management (NPM) reforms (for example, Herbst, 2007).

Herbst describe the rationale of performance funding as "funds should flow to institutions where performance is manifest: 'performing' institutions should receive more income than lesser performing institutions, which would provide performers with a competitive edge and would stimulate less performing institutions to perform. Output should be rewarded, not input" (Herbst, 2007, P.90). The underlying idea of OBFS is that education institutions may lose sight of the intended results if they are not held accountable by coupling performance to resource allocation (Talbot, 2007). The intent behind this movement is to measure what results are brought about by institutions and to use that information to help better manage public funds and better report on the use of those funds (Mayne, 2010).

Funding shifts, however, have not taken place without receiving attention. Some observers have been convinced that changes in resource allocation may lead to unintended negative consequences especially in terms of basic research outputs (e.g. Geuna, 1999; Ziman, 1996). Others have argued in favor that the whole way of science-society interaction is changing in the global knowledge economy leading the science system to produce more socially relevant

and applicable knowledge (e.g. Etzkowitz and Leydesdorff, 2000; Jacob and Hellstrom, 2000; Nowotny et al., 2001). Some other studies have also claimed, in contrast, that while researchers utilize new funding opportunities, they succeed in balancing scientific and extra-scientific interests. Therefore, funding shifts do not strongly affect the actual practices of research, for example, publication behavior (Albert, 2003; Behrens and Gray, 2001; Van Looy et al., 2004).

The Norwegian public sector has been undergoing through several reforms in the last few decades. Such as Transition from gross to net budgeting for education, Quality reform, Health reform, and Police reform can be mentioned as examples. Reforms have been almost always carried out in an attempt to streamline the performance and accountability of the public sector. Higher education in public sector are included as part of a larger whole Quality reform in trying to ensure government's efficiency through the performance-based funding and promoting greater flexibility for government agencies in discharging their responsibilities. Since 1990, Norwegian higher education institutions have used result-oriented planning, which emphasizes management according to objectives and the measurement of results. The government's priority is to further refine funding arrangements for higher education institutions and is geared towards rewarding achievements and results while safeguarding important but vulnerable academic areas and activities.

The rationale provided by Norwegian government for the OBFS is to increase research activities and allocate resources to centers performing excellent research (European commission, 2010 p.120). Sivertsen reports the goal of the Norwegian publication indicator to be "to measure and stimulate the research activity at the level of institutions and to enhance the focus and priority they give to research as organizations" (Sivertsen, 2009, p.6). Government statements of OBFS rationale thus reveal several independent themes: resource concentration, encouraging international (i.e. English-language) publication and the general pursuit of excellence. While the resource concentration theme bears some similarity to the research for increased efficiency of NPM reforms, research excellence is more reminiscent of the newer "public values" movement (Stoker, 2006).

There were strong initial concerns that the system would increase the number, but not necessarily the quality, of publications (Strehl, 2007, p.51). The publication numbers in outlets classified in both the upper and lower ranks have increased at a similar rate (Schneider, 2009; Sivertsen, 2010). However, there is some hesitancy in attributing this improvement to

the new model, although web of science data show Norway's share of output increasing (2000-08), when that of other Nordic countries is decreasing (Sivertsen, 2009). The OBFS does not incorporate any qualitative assessment; there was concern that areas of research in which the production of articles/monographs is not the norm will be discriminated against (Strehl, 2007, p.51).Concerns have focused more on humanities and other disciplines with an emerging research culture.

The rising concern with evaluation has been significantly stimulated by concerns about the massification of higher education, and also by a changing relationship between higher education institutions and governments, from a model of State control to a model of State supervision (Neave and van Vught 1991), that brought increasing institutional autonomy and a growing influence of market mechanisms in higher education institutions' regulation and governance mechanisms. This has led to more extensive accountability and scrutiny of an institution's activity. Thus, universities are nowadays 'sandwiched' between imposed external evaluations (linked to the extrinsic dimension of quality) and their self-evaluation of the pursuit of their own objectives (the intrinsic dimension of quality) (Sarrico and Dyson 2000).

As a result Norwegian Universities live today in a society where their once privileged situation and the financial commitment for their academic values can no longer be taken for granted. The goals attributed to OBFS revolve around getting students to complete their study programs, encouraging research excellence and sometimes international publishing, which are not designed to fully address the fundamental values and responsibilities associated with universities. The OBFS also apply performance indicators to measure research and education performance of the institutions. However, creative researchers may find it difficult to fit into the already known or established parameters of indicators for excellent research when they want to ask new questions for new solutions. University is considered by many people to be a place where researchers are able to find new solutions for questions that has not got answers. Researchers could find it difficult to measure their innovative thoughts through the already known best practice of research in order to fit for the excellence promoted by the OBFSs. Universities under the OBFS are also, as never before, being subjected to the external evaluation of their performances.

The motivation of this thesis emanates form the huge debated revolving around OBFS in Norwegian higher education landscape mentioned above. Ten years after implementation and experience of practicing OBFS, it makes sense to look more closely to see what happens to

some of the elements of the debate in Norway. This thesis, therefore, attempts to describe and analyze how output based funding system is viewed from practitioners' perspective at University of Nordland. In doing so, this thesis contributes to the discussions in formulating policy goals that are not well addressed in the current OBFS.

In order to tackle the problem, the researcher has formulated two research questions:

1. **What ethical challenges are associated with OBFS?** For the purpose of this thesis, ethical challenges are addressed with the possible links to OBFS in the frame of reference and the researcher has made explicit reflections the way it is linked with other elements of the frame of reference in the summary of the frame of reference in section 2.4. of this thesis.
2. **What conflicts of interest are associated with OBFS?** For the purpose of this thesis, conflicts of interest are addressed with the possible links to OBFS in the frame of reference and the researcher has made explicit reflections the way it is linked with other elements of the frame of reference in the summary of the frame of reference in section 2.4. of this thesis.

In order to tackle the main objective frame of reference guided by three perspectives is elaborated. It includes Accountability theory, Principal-agent theory and discussion on New Public Management concepts. The rationale behind these selections emanates from the goals of OBFS. It is supposed to be simple, objective, and transparent so that people will know what is expected of them and therefore reward results based on the observed performance using some performance indicators which resembles the assumptions and discussions promoted by the selected perspectives.

The remainder of this thesis is structured as follows: chapter 2 deals with frame of reference for studying the phenomenon of my interest followed by chapter 3 which deals with research methodology utilized. Chapter 4 of the thesis presents the empirical findings of my research followed by analysis in chapter 5 and the final chapter 6 concludes my research and reveals proposals for future research.

2. FRAME OF REFERENCES

The frame of references part presents the theoretical foundation of the thesis. The information provided here will be used to analyze the research questions in the analysis part in section 5 of the thesis. OBFSs are used by governments to channel research funding according to ex post assessment of institution's research output and education results and Universities operate as public bureaucracies, at least in part responsible to the government that fund them and endow them with the power to grant degrees. Therefore, in order to assess the possible dimensions and links of ethical challenges and conflicts of interest that are associated with OBFS can be best understood through the help of accountability, principal-agent theory and new public management concepts. The assumptions behind these perspectives will help discuss the phenomenon of my objectives.

2.1. New Public Management concepts

The major rationale for the shift of public policies towards increasing output orientation and the use of external competitive funding mechanisms relates to the principal-agent dilemma, as well as to the ideas of the New Public Management (NPM) that market-like mechanisms create an incentive towards enhanced performance. The principal-agent dilemma (Van Der Meullen, 1998) reflects a situation in which the government or a governmental agency is attempting to enhance its own or wider societal targets, for instance, via public research funding programs. As it does not have the appropriate know-how and human resources to conduct the mission, it needs to "delegate" the actual implementation of tasks (research) to specialized organizations such as universities. It faces at least two problems in the implementation of programs. First, it needs to screen out the best possible actors to conduct the mission and second, it cannot control all the activities of relatively independent actors. If it does not choose to trust the actors, it needs both appropriate selection and control mechanisms, which ensure that the principal's targets are fulfilled.

Ideas rooted in the NPM have provided some practical answers to these problems (e.g. Pollitt, 1993). In general, in the science and technology policy the NPM has meant the increasing use of results as a screening mechanism and the use of targeted external funding with related evaluation practices as a control mechanism. The general idea behind competitive mechanisms has been twofold. First, it has included the idea that if money is given to the best performers, it will most likely produce better results. Therefore, the allocation should be based on earlier results. Second, if the allocation is based on results, it creates a general incentive for all the actors to achieve better results in order to become more competitive.

Furthermore, the shift of focus to results enables a detailed assessment of activities, which, in turn, means enhanced control possibilities.

In many studies concerning the impact of funding to research activity, the implicit or explicit theoretical assumption is that dependence on external resources (resource dependence theory: Pfeffer and Salancik, 1978) forces research organizations and researchers to alter their activity as conditions for funding change. The starting point here is that there is no straightforward mechanism from funding incentives to research activity, but rather that it is the complex mix of different allocation mechanisms, funding sources and their varying criteria of funding which creates incentives for change or stability in the system. At times these incentives balance each other and at other times they reinforce each other (Benner and Sandstrom, 2000; Geuna, 1999).

There is no doubt that research activity is affected by several other contextual elements from cultural practices to the political legitimization of a system. For example, research assessments and the overall science policy "climate", while not being directly connected to funding, may have consequences on an institutional level (Jongbloed, 2007). On the other hand, researchers and universities are highly able to adapt their behavior and organization to new external requirements in ways that do not affect their pattern of activity too much if requirements do not match their interests (Calvert, 2000; Krucken, 2003). Furthermore, external policy pressures and incentives are mediated by existing disciplinary cultures (hakala and Ylijoki, 2001).

There are also social factors that have given impetus to the drastic reforms in public administration. Social factors involve the relationship between the people and their governments; or between delegated and elected officials and electors. It bears repeating here that all these factors – political, economic and social – feed each other. Lynn (2003, p. 20) puts it nicely when he states that even if the enthusiasm for and implementation of NPM differ in different countries, there are still universals, even when there is no consensus on what they are: If there is a transcendent issue, it is the relationship between bureaucracy and democracy, between administration and the people, between managerial responsibility, on the one hand,and popular sovereignty and the rule of law on the other. This social factor is even more succinctly articulated by Aucoin & Neintzman (2000); Lynn, (2003): All governments must now govern in a context where there are greater demands for accountability for performance on the part of a better educated and less deferential citizenry, more assertive and

well-organized interest groups and social movements, and more aggressive and intrusive mass media operating in a highly competitive information-seeking and processing environment.

One of the arguments of the NPM was the lack of openness on the part of governments; the ordinary man hardly knew how the government functioned. There was no involvement of the citizen in the processes that involved him as a service user, and there was no choice or voice. In the case of the USA, for instance, Cohen & Eimicke (1998) claim that 'societal upheavals', such as assassinations of public figures, protests against wars and the lack of economic opportunities for blacks and other ethnic minorities, 'served to undermine the American public's faith in its government that [had been] nurtured and deepened' by the professionalism and discipline in the public administration sector up to 1971. Cohen & Eimicke argue that the political upheavals challenged the basic institutions of American democracy to their very core and raised the question: 'could our government still provide the mechanism through which we could govern ourselves fairly and peacefully?' The proponents of NPM thus believed that politicians, elected and appointed, were the primary threat to 'ethical government', and thus decentralization, community control, and maximum feasible public participation in government decision making were stressed.

Even in New Zealand, NPM reform process took in its stride and strengthened the community rule and treaty rights of the Maori, attempting to equate their social and political status to that of the majority whites and facilitating opportunities for them (Boston et al, 1996). Everywhere, the better educated, less-deferential citizenry was demanding rights for different groups, demanding greater insight and participation. Apart from taking cognizance of the new breed of citizenry and its new sets of expectations, Bovaird & Löffler (2001) also present the element of demographic changes in the countries of the Organization for Economic Cooperation and Development as an additional factor for reforms. In these countries, the aging population has impacted demand for social services, the employment base and the need for taxes to sustain expense imbalance caused by a falling taxpayer population and a rising retiree population.

However, When New Public Management-oriented reforms are implemented in public organizations there are different ways to assess the effects of these reforms. One, rather broad approach is to look at whether the reforms have changed the decision-making behavior of central political and administrative actors or their role enactment in general (Christensen and Lægreid 2001, Pollitt and Bouckaert 2000). A key challenge is considered to be finding the

right balance between local autonomy and central government control, or, put differently, to fulfill the government goal of «centralization of policy and decentralization of delivery responsibility». The expectation engendered by this official model (Pollitt et al. 2004) or the «public interest perspective» (James 2003) is that structural devolution and more managerial autonomy combined with performance management will improve performance and efficiency without having negative side-effects on other values like control and democracy.

One potential problem is that political executives will lose control and that it will be difficult to maintain trust. Obviously, there is a dynamic interplay between increasing autonomy for agencies and state commercial entities and the political–administrative control of those units. In prescribing both enhanced autonomy and more control and re-regulation, NPM reforms perpetuate an enduring tension and conflict. On the one hand, subordinate organizational units are to gain more autonomy, both from the political leadership and from other actors. On the other hand, central political control is to be enhanced by strengthening frame-steering and regulatory power. Another problem for performance–management systems is that they potentially allow the involved parties to «cheat» (Hood 2002). The dynamics and tensions indicated reflect the fact that the NPM movement generally and the performance management system specifically are double-edged swords or hybrids that assume both autonomy and control. On the one hand, they are based on economic organization theories, like public choice or principal–agent models, which are based on the assumption of distrust (Boston et al. 1996). Agencies and state commercial units are assumed to be self-interested bodies that need to be controlled through specified performance contracts, performance control and assessments. Thus there is an element of centralization and the slogan is «make the managers manage».

At the same, the NPM movement is also derived from management theories whose basic assumption is mutual trust. According to these theories, subordinate units and superior bodies have common interests and the only way to increase the efficiency of public bodies is to give operating managers more discretion and leeway in deciding how to use allocated resources. The best way to improve organizations is supposedly to allow more autonomy and flexibility. Thus there is an element of decentralization and the slogan is «let the managers manage».
One of the main doctrines of NPM is managerial discretion combined with transparent targets and ex-post control by result or performance (Hood and Bevan 2004). In setting targets, evaluating output information and applying rewards and sanctions it represents a specific type of regulatory system. Performance management allows a lot of autonomy and flexibility in the use of allocated resources and in choosing the means and measures. However, the price public

bodies have to pay for their increased freedom is to accept a more rigid performance–management system, which includes performance indicators and performance monitoring and assessment. The system is thus a mixed one that prescribes both centralization and decentralization and it is an empirical question in which direction it will tend in practice.

2.2. Accountability

From the most primitive tribal systems to loosely structured alliances to the most sophisticated production systems, social systems of any sort demand, general agreement about expectations and rules guiding behavior. Indeed, such agreement is not only demanded, it exists by definition, and is inherent in the very concept of ‘‘social systems.’’ i.e, social systems can be defined in terms of shared expectations. This implies that there are means to elicit conformity through observation, evaluation, and sanction according to how people respond to those shared expectations. Thus, accountability is at the root of viable social systems.

Social systems in general can be defined in terms of common sets of shared expectations for behavior. Accountability, then, might be thought of as the adhesive that binds social systems together. Without the capacity to call individual agents to answer for their actions, there is no basis for social order, for shared expectations, or indeed, for the maintenance of any type of social system (Tetlock, 1992). Organizational responses to the need for accountability from its members include the creation of such mechanisms as formal reporting relationships, performance evaluations, employment contracts, performance monitoring, reward systems (including compensation), disciplinary procedures, supervisory leadership training, personnel manuals, etc. In addition to these formal mechanisms, organizations promote several informal sources of accountability. These include group norms, corporate cultural norms, loyalty to an individual’s superior and colleagues, even an emphasis on and respect for the customers of one’s outputs. What becomes quickly obvious is the potential complexity of the web of accountabilities in which an employee is embedded. To this myriad can be added the notion of self accountability (Schlenker & Weigold, 1989). Thus, we can readily see that people are constantly influenced by the potential for scrutiny and evaluation, and indeed, they likely expect to be held accountable.

Accountability means having to answer for one’s actions, and particularly the results of those actions. It is a multilayered concept which defines a relationship of control between different parties, and has a connection to trust. As such, accountability is a social practice pursuing

particular purposes, defined by distinctive relationships and evaluative procedures (Ranson 2003). One has to answer questions about what has happened within one's area of responsibility and provide a story or an account of practice; what has happened and why it has taken place. Within the school system often the answers are evaluated by a superior against some standards or some expectations, which means that accountability is located within hierarchical practices of bureaucracy. But accountability is also an important dimension of professionalism. This dimension highlights that the teacher is morally responsive to the student's and the parents' needs, as well as responsive to the public through the mechanism of the state. In moral terms accountability can be seen as keeping to ethical standards held by teachers as a group and as individuals (Møller 2005; Sockett 1993).

Accountability entails a relationship in which people are required to explain and take responsibility for their actions: "the giving and demanding of reasons for conduct" (Roberts & Scapens, 1985, P.447). Accountability also "involves the fundamental [sic] of honesty, openness, adequate disclosure and careful, effective application of resources" (Greiner, 1990, P.31). How accountability is defined has changed, underlining the importance of language as agent of ideology in shaping understanding. In theoretical research, accountability has discipline- specific meanings, for example, auditors discuss accountability as if it is a financial or numerical matter, political scientists view accountability as a political imperative and legal scholars as a constitutional arrangement, while philosophers treat accountability as a subset of ethics. Securing accountability involves shared agreement about how it is manifested. An accountability relationship "presupposes agreement about what constitutes an acceptable performance (including) the language of justification" (Day & Klein, 1987, p. 5; Stewart, 1984). Accountability is shaped by social norms or aspirations and "involves the generation of a social consensus about what counts a good conduct and acceptable performance" (Day & Klein, 1987, p. 64). How we define accountability is dependent on the ideologies, motifs and language of our times.

The discourses of accountability are often a mixture of several forms of accountability (Elmore 2003, Sirotnik 2005). Sinclair's (1995) refinement of different forms of accountability offers a lens through which we may more closely examine manifestations of accountability. A distinction between five forms of accountability can be made. It encompasses political, public, managerial, professional and personal. Political and public accountability concerns being responsible to the mandate and function of that particular organization in society, and being responsible towards the local community of which one is a

part. Managerial accountability refers to a person's position in a hierarchy and responsibility towards superiors concerning tasks that are delegated. The point is that schools as collective entities are accountable to the higher levels of the educational system. It focuses mainly on monitoring inputs and outputs. There is also a professional accountability, where a person's commitment to a community of professionals makes him/her perceive a duty to adhere to the standards of the profession. This is about teaching as a moral endeavor. Codes of ethics have for instance become a familiar part of the rhetoric of professional control of the work in schools, even though the influence of these codes is uncertain. Professional accountability implies that teachers acquire and apply the knowledge and skills needed for successful practice. In addition, it involves the norms of putting the needs of the students at the centre of their work, collaborating and sharing of knowledge, and a commitment to the improvement of practice.

Finally, the category personal accountability can be included, i.e. the values that are sacred to a person. It concerns fidelity to personal conscience in basic values such as respect for human dignity and acting in a manner that accepts responsibility for affecting the lives of others (Harmon & Mayer, 1986). It rests on the belief that ultimately accountability is driven by adherence to internalized moral and ethical values. Because it is enforced by psychological, rather than external, controls, personal accountability is regarded as particularly powerful and binding.

Personal accountability can also be reinforced by an organizational culture where "the articulation of shared values and beliefs can be truly become a way of doing" (Denhardt, 1991, P. 30). It is likely to expect that emotional labour will be stressful if personal values are in conflict with other kinds of accountability. However, personal standards of good teaching are to a great extent implicit. Collective and critical reflection, which could serve as a protection against arbitrariness in teaching is needed. Those responsible for schools cannot rely on personal accountability alone. It is not the individual who is awarded autonomy in school, but the profession. As a profession teachers and school leaders should enter the public debate with their critique and internal defined criteria of teacher professionalism.

2.3. Principal-Agent theory

The evolution of agency theory in economics is divided into two mainstreams: positivist stream and principal-agent stream (Eisenhardt, 1989). The differences between these two main literature streams are pointed out as the following. The positivist literature, in general, is

less mathematical and more empirical in its orientation. Positivist researchers have paid attention on identifying situations in which the principal and the agent are likely to have conflicting goals and then describe the governance mechanisms that limit the agent's self interest behavior (Eisenhardt, 1989 p.59). The biggest concern for the positivist camp has been to describe the governance mechanisms that resolve the agency problem. The other camp is called principal-agent researchers. They are concerned with a general theory of the principal-agent relationship and tend to be highly-formalized, using formal logic and mathematical proofs. Thus it is less accessible to organizational scholars. However, in general, these two camps share a common unit of analysis: the contract between the principal and the agent. More importantly, the two main streams are complementary. Positivist literature identifies various contract alternatives, and principal-agent stream shows which contract is the most efficient under varying levels of uncertainty in the analytical framework (Eisenhardt, 1989 p. 60).

There are three possible concepts of "what", "why" and "how" that may explain the framework of agency theory. These three questions of what, why and how are used to simplify the theoretical concepts within agency theory. To begin with, the "what" question of the first concept is to describe what assumptions are used to formulate agency theory? The basic assumptions could be found in the combination of two notions: Human behavioral assumption between two parties (behavioral paradigm*)* and a contractual agreement between two parties (contractual paradigm) (Moe, 1984).

Fundamentally, behavioral assumptions are used to explain other concepts related to agency relationships between the principal and the agent within agency theory. Indeed, the behavioral paradigm tries to explore and investigate the underlying thoughts and motivations of decision-making when people have to make a decision. On the other hand, the notion of a contractual paradigm is a reflection of when two parties make an agreement to form agency relationships. When the contractual relationships are formed, the principal tries to monitor the agent's behavior with the fear that the agent will not perform effectively and efficiently, or the agent will behave opportunistically (as a result of behavioral assumptions). This, eventually, has led the principal into the creation of control mindset toward the agent.

Indeed, the contractual paradigm from the second notion illustrates how two parties form an agency relationship over one another. In simple terms, an agency relationship (a contractual relationship) consists of two people. One person (the principal) hires the other (the agent) to

perform a given task. Indeed, the agency relationship takes place when an individual who performs the action is the agent and the affected party is called the principal. The agency relationship normally functions through a contract, which is often chosen and designed by the principal. Subsequently, it is the agent's decision whether to accept the contract or not.
In the second concept, the "why" question describes why there are problems in the agency relationship between the principal and the agent. The basic explanation of what causes agency problems is based upon two factors. These two factors are inherently embedded in the principal-agent relationship. Indeed, the root of agency problems is comprised of two inherent features embedded in the agency relationship: Conflicts of interest and information asymmetries (Kivisto, 2005 p.13).

Conflicts of interest or divergence of interests or goal conflicts is the first inherent feature of the principal-agent relationship. From the view of behavioral assumption, the principal make an assumption that there are different self-interests (conflicts of interest) between the principal and the agent. When both parties have decided to have a contractual relationship, hidden goals between the principal and the agent of creating the agency relationship are incompatible (Shapiro, 2005 p.278). The different self-interests have consequently formulated agency problems.

Information asymmetries are the second inherent feature of the principal-agent relationship. What is asymmetric information then? Information asymmetries are the disparity in information between two parties that, in the ideal economic model, both parties are assumed to have perfect information in a transaction. But in reality, information is often asymmetric and incomplete. This is because the principal cannot observe all activities the agent does, especially the agent's dedication towards its assigned tasks. Sometimes, the agent bends the rules to better serve the principal or appear to be behaving well. Under the condition of information asymmetries, there are two challenges for the principal to deal with. First, the principal cannot perfectly and costlessly, monitor the agent's behavior (Barney & Hesterly, 1996). The second challenge is how the principal can receive the complete information about the agent's behavior and activities.

Consequently, one of the biggest concerns arising from the conflicting interests and asymmetric information is *opportunistic behavior (opportunism)*. Williamson (1975 p.26) defines opportunism as "pursuing self-interest with guile". In other words, opportunistic behavior means that the agent will exploit all the information asymmetries as much as

possible in order to ensure that he or she (the agent) maximizes his or her own interests at the expense of the principal.

In the third concept (design of contractual relationships), the "how" question, is to clarify how the principal responds to the opportunism of the agent that is derived from the goal conflicts and information asymmetries. Under the condition of incomplete and asymmetric information between two parties, agency theorists, therefore, are interested in incorporating a behavioral-control approach in order to analyze that why, and how these inefficiencies (agency problems) arise, and how they can be corrected. The interrelationship between the agent and principal is examined by the principal in order to ensure that the agent performs his or her agreed upon task in the most efficient manner in the eye of principal.

Indeed, the principal is fearful that the agent will exploit asymmetric information by behaving opportunistically; therefore, the principal has to design a perfect relationship contract, if possible, in order to reduce agency costs derived from agency problems. *Agency costs* are defined by Barney et al. (1996) as a type of transaction cost that needs to be incurred by the principal to protect his or her interests from the probability that agents will engage in behavior that is incongruent with those interests. Information asymmetries and conflicting interests within university governance can be found in many forms. One form of conflicting interests in the government-university relationship, for example, can be referred to what should be the role of the university in society. The different perspectives on the role of the university are whether social and cultural functions or economic function may lead to opportunistic behavior from the point of view of the government. Kivistö (2007, pp. 56-66) classifies information asymmetries of the government-university relationship into three dimensions: 1) informational asymmetries resulting from work; 2) information asymmetries resulting from organizational complexity; 3) information asymmetries resulting from complex production technology.

A classification of the opportunism of the agent (the university) can be divided into political, economic and structural opportunism. *Political opportunism* occurs when the main motivation of the agent to accept a contract with the principal results from maintaining or raising its status quo rather than from economic rationale. For example, when a task is assigned, the acceptance of the task implies a political strategy of the agent to survive in the system since the given task is a coercive tactic of the principal. The strategy of maintaining or raising status

quo of the agent is done through the acceptance of the contract without questioning or warning the principal of the feasibility, efficiency and effectiveness of the goals.

Economic opportunism occurs when the agent is primarily motivated by the self-Interest of economic gain. This means that the agent will take advantage of the contract whenever he or she sees a loophole in the contract. In this sense, the rational choice of utility maximizing from the part of the agent's interests is considerably emphasized. Individual and collective gains in terms of economic profit are calculated when the agent starts behaving opportunistically and *Structural opportunism* occurs when the agent resides in an embedded opportunism environment. The structural environment has a tendency to intensify opportunistic behavior of the agent. Opportunism of the agent is exposed consciously or unconsciously through the interaction among actors in the system. Such opportunistic behavior can be penetrated through the cultural embeddedness of a system such as favoritism and immature bureaucracy.

Moreover, the agent sometimes bends the rules to better serve the principal in order to appear to be behaving well. This pattern of opportunistic behavior could mean 'opportunistic cross-subsidization' (Lane & Kivistö, 2008, p. 161). For example, the government provides the same level of financial support to undergraduate and graduate student, but the university may actually distort the rules of the contract by spending more on prestige-generating graduate students against the will of the government. The opportunism of the university in this case means the graduate students are taught by expensive expert scholars in small classes while the undergraduates are taught in large classes by less-expensive, relatively inexperienced teaching assistants.

University opportunism compels the principal to monitor the behavior of the agent by designing a mechanism of control and motivation. The mechanism is closely intertwined with the provision between the aspect of control and incentives. The aspect of control normally functions through information and monitoring systems. The aspect of incentives proceeds with the combination between an exchange of utility between the principal and the agent to satisfy both parties' interests and an implicit control mechanism to prevent the opportunistic behavior of the agent. Fundamentally, the government plays a significant role in designing contractual relationships that align conflicting interests of both parties through the mechanism of information, monitoring and incentive systems.

It is difficult to identify these closely interconnected functions of these three systems of information, monitoring and incentive mechanisms. However, the intimately intertwined transactions assist the principal to design a satisfactory mechanism of behavioral control. Indeed, the design of an efficient incentive structure is closely linked with the development of monitoring systems as well as the mechanism for inducing the agent to reveal as much of his privately held information as possible (Moe, 1984, p. 756). Incentives, in fact, implicitly target at the creation of an environment in which it is possible to control the agent's behavior. Incentives for the agent can be perceived either as separate entities from the information and monitoring systems or a combination with the information, monitoring systems as mechanisms of behavioral control.

The government may provide two sorts of incentives: intrinsic and extrinsic incentives (Lane & Kivistö, 2008, p. 173). In terms of the separate units of information and monitoring systems, the form of incentives can be found at both institutional and sub-institutional levels. At the sub-institutional level, the extrinsic incentives are, for example, future income and career advancement for academic and administrative staff. The combination between funding mechanism, and information and monitoring systems are often found on the institutional level. Resource allocation for the university as an entire organization is often used as a governmental instrument of behavioral control via economic agreements. The intrinsic incentives can be defined as incentives of status and power, self-esteem, behavior according to moral norms. The application of agency theory in university governance could be penetrated via design of contractual relationships (system of control). The government has to construct the design of contractual relationship in order to constrain the opportunistic behavior of the university. The basic assumption of such design is to monitor and control the opportunism of the university that is derived from informational asymmetries and divergence of interests between the government and the university.

University governance under the economics agency theory reflects how the structure of contractual relationship is based upon behavior manipulation and economic incentives. The key question of the government is how to utilize economic incentives in order to manipulate the university to act in accordance with the government's education goals, and limit opportunism. In this sense, economics agency theory tends to utilize economic agreements as a mode of motivation and control in order to curb opportunistic behaviors and receive the best performance from the university. According to Lane and Kivistö (2008), economics agency theory tends to understand and examine relationships as bilateral relationships between one

principal and one or more agents. From the perspective of economics agency theory, the contract is understood to be an instrument enabling economic co-operation between the principal and the agent. The main objective of the contract is to explicitly set the task for the agent, and introduce the detailed means through which the agent will be compensated for performing the task.

The economic incentives utilized to control and guide the university's behavior can be found in the arrangements of resource allocation. The application of funding mechanism is a major source of provision for compensating the university which devotes its effort to complete the given task. Moreover, the economic-incentive arrangements are also an attempt to overcome the problem of university opportunism. Indeed, the government as the principal has to find an optimal level, where the power of governmental purse starts to really affect the behaviors of the university (Gornitzka, Stensaker, Smeby & de Boer, 2004, p. 97). Economics agency theory proposes two alternative dimensions for the principal to overcome the agent's opportunism: behavior-based contracts and outcome-based contracts (Eisenhardt, 1989). These two ideal types of agency contract can be operationalized for the analysis of the government-university governance in two terms of governance procedures: behavior-based governance and performance-based governance (output/outcome-based governance) (Kivistö, 2007, pp. 106-109).

Behavior-based governance is a direct and centralized resource allocation from the government. The economic intention of behavior-based governance is to reward the university on the basis of the university's observed effort in performing educational policy. The key control mechanism is the combination between input-based resources of the government and observed behavior of the university through tight bureaucratic mechanisms. The power of purse and authority of the government has an economic interplay between reward and punishment. This type of governance is more centralized and bureaucratic. The government itself plays a significant role in controlling the university's behavior. The mechanism of resource distribution mirrors a tighter control towards the reliance of previous behavior and performance of the university. The accountability of academic self-governing is under close attention of monitoring mechanisms that can be seen in the classical governance where bureaucracy has an influence on the distribution of input-based resources.

Indeed, the government controls the university opportunism through a conventional and centralized economic approach comprised of two interrelated factors. The first factor is the

observed behavior of the university through the bureaucratic system. The university has to report what it has done and what it is expecting to do according to the conventional rules, regulations and law of bureaucratic procedure. The second factor is input-based resources from the government. The government exerts its power of control directly through the centralized resource allocation or input-based resource allocation. Broader instances of input-based resource allocation are incremental funding (historical allocation) and line-item budgeting.

The incentives from allocating resources that agree on the contract are determined by promised results rather than achieved results (Burke & Modarresi, 2000, p. 434). In other words, behavior-based governance puts more emphasis on what the government should do for the university in term of resource allocation rather than what the university should do for the government. This type of input-based resource is mainly based on traditional budgeting focusing mainly on tradition-input factors such as current costs, student enrollments and inflation increases (Burke & Modarresi, 2000, p. 434).

A theoretical concept clarifying this governance approach can be found in the work of Liefner (2003). Liefner describes this form of governance through the type of resource allocation. Fixed budgets or stable allocation illustrating this behavior-based governance have effects on the agent's behavior (the university) through less concern of possible failure from the government. The agent enjoys the flexibility (under the government's rules) to operate in any manner the agent wishes because the government guarantees funding and salaries regardless of performance (Liefner, 2003, pp. 477-479). Ideally, this form of resource allocation on the agent's behavior is based upon non-competitive conditions of allocation. Types of activities and efforts on the given goals depend upon motivation and interests of the agent. It may create a mismatch of interest between the government and the university.

Performance –based governance is described as an indirect and less-centralized resource allocation from the government. Performance-based governance is a type of university behavioral control mechanism that relies primarily upon input- and output-based resources of the government and the university's outputs via self-regulation mechanism of the university (cf. Liefner, 2003;Kivistö 2007). The government decides how much autonomy should be allocated to the university. In this type of governance, it appears that trust is one of the key determinants for agency relationships between the government and the university. In this type of governance, the university appears more trustworthy than in the behavior-based

governance in terms of resource allocation. The government gives a block grant to the university with the notion that the university itself has the capacity to manage its own affairs in a more flexible and responsive manner than the government. However, this does not signal that the university under performance-based governance is more trustworthy than the university under behavior-based governance. Rather, it can be seen that either the government shifts the burden of producing the output into the hands of the university or the university has a better and closer position to respond actively to the changing environment.

The incentives given to the university through performance-based governance are primarily to motivate the less-motivated universities to work harder and perform according to the given criteria. Ideally, the main hypothesis of introducing competitive elements or performance-based funding into universities can be conceptualized from (Liefner, 2003, pp. 477-479):

1) Agents that have been rather inactive before the introduction of performance-based resource allocation will have to work harder.

2) With performance-based resource allocation agents will tend to avoid projects with a high chance of failure. Departments and individuals will concentrate on activities where success can be expected because they will have to meet a formula's criteria or market demand.

In general, the term 'performance-based governance' can be defined as *a contractual agreement between both parties on the amount of government funding and pre-determined outputs* (Kivistö, 2007, p. 106). Performance-based governance is normally arranged through performance-based resource allocation that is accessed via output indicators such as exams passed, credits accumulated and the number of undergraduate or graduate degrees and the number of publications (Kivistö, 2007., pp. 106-107). Examples of performance-based resource allocation are project funding and contract-mission-based funding.

2.4. Summary of key frame of reference assumptions:

The key assumptions of the frame of reference are summarized to reflect on the core points that the researcher's intends to examine the empirical data in Part 4 and apply in the analysis part of this thesis.

2.4.1. New Public Management (NPM)

NPM is a set of assumptions and value statements about how public sector organizations should be designed, organized, managed and how, in a quasi-business manner, they should function. The basic idea of NPM is to make public sector organizations much more businesslike and market-oriented. The competitive mechanisms include the idea that if money

is given to the best performers, it will most likely produce better results. Therefore, the allocation should be based on earlier results. If the allocation is based on results, it creates a general incentive for all the actors to achieve better results in order to become more competitive. Furthermore, the shift of focus to results enables a detailed assessment of activities, which, in turn, means enhanced control possibilities. However, a key challenge is considered to be finding the right balance between local autonomy and central government control. The expectation engendered is that structural devolution and more managerial autonomy combined with performance management will improve performance and efficiency without having negative side-effects on other values like control and democracy.

Another problem for performance–management systems under NPM is that they potentially allow the involved parties to cheat because it assumes both autonomy and control simultaneously. On the one hand, Agencies and state commercial units are assumed to be self-interested bodies that need to be controlled through specified performance contracts, performance control and assessments and on the other hand, subordinate units and superior bodies have common interests and the only way to increase the efficiency of public bodies is to give operating managers more discretion and leeway in deciding how to use allocated resources. The best way to improve organizations is supposedly to allow more autonomy and flexibility. Therefore, Conflicts of interest and ethical challenges are expected to emerge in fine tuning autonomy and control at any levels: When strategies adopted by universities in response to output funding seek to maximize the returns (funding) they receive; when the response of assessment to performance differs more among institutions. For example, a poor assessment may lead to close a study program, while another may decide to invest more resources to improve outcomes of that study program; autonomy is a sensitive issue for scholars at both institutional level and individual levels. Different Reactions may arise when they feel pressured inappropriately.

2.4.2. Accountability

Social systems in general can be defined in terms of common sets of shared expectations for behavior. Accountability, then, might be thought of as the adhesive that binds social systems together. Without the capacity to call individual agents to answer for their actions, there is no basis for social order, for shared expectations, or indeed, for the maintenance of any type of social system. The discourses of accountability are often a mixture of several forms of accountability. For the purpose of this thesis five forms of accountability are identified.

Namely: Political; Public; Managerial; Professional, and Personal accountabilities. Potential ethical challenges are also assumed as follows:

Political and public accountability concerns being responsible to the mandate and function of that particular organization in society, and being responsible towards the local community of which one is a part. Ethical dilemma may emerge when the university or factions within the university accept an educational Policy accompanied with some incentives from the government where it does not indicate that the university has a mutual benefit with the government. Although such policy has a negative impact on the university's benefit, the university has to accept such a policy. This is because the government possesses superior political power that can explicitly or implicitly alter or even replace the status quo of the existing university with a new one. Managerial accountability: refers to a person's position in a hierarchy and responsibility towards superiors concerning tasks that are delegated. The point is that schools as collective entities are accountable to the higher levels of the educational system. Conflicts of interest and ethical challenge may emerge in the way the administrative or management bodies of the university discharge their responsibilities. For example the nature of strategies that could be adopted in order to augment their budget needs.

Professional accountability: where a person's commitment to a community of professionals makes him/her perceives a duty to adhere to the standards of the profession. Professional accountability invokes the sense of duty that one has as a member of a professional or expert group, which in turn occupies a privileged and knowledgeable position in society. Conflicts of interest and ethical dilemmas could emerge in making decisions related to the financial survival of their institutions and other issues that are central to research and education in each profession or discipline especially when they are expected to behave in certain way through rigid performance indicators. External policy pressures and incentives could also be met with bitter resistance that stem from the existing disciplinary cultures. Personal accountability: the values that is sacred to a person. It concerns fidelity to personal conscience in basic values such as respect for human dignity and acting in a manner that accepts responsibility for affecting the lives of others. Personal accountability involves values that are rationalized to individual's personality or way of thinking right from the early days of his/her life. Conflicts of interest and ethical challenges could emerge when a staff member is confronted with prioritizing alternatives or choices that contradict his understanding of personal accountability on the one hand and adhering to managerial pressures on the other hand. For example, when an individual feel pressured to meet a deadline ethical challenge may emerge as a result of the

need to adhere to the deadline or what he believes is personally accountable. It could also be when staff member's personal aspirations and expectations are in conflict with professional service to the university. For example, a teacher may be ethically challenged to decide whether or not to attend his family party or being available in his office to prepare lecture notes for the next day and student consultations. Ethical challenge could also emerge when individuals within the university have different interpretation of the intensions of the OBFS. For example, OBFS measures educational performance based on the number students completed their study programs. This could mean to some the intention was to let students pass and they should not fail students but still to others they should fail students if they deserve to fail because the intention was not to let pass student. At the same time OBFS has two levels of publication to compete with, that could still have different sense making among actors in the university. So there is potential to emerge ethical challenges.

2.4.3. Principal-Agent Theory

The principal-agent dilemma reflects a situation in which the government or a governmental agency is attempting to enhance its own or wider societal targets, for instance, via public research funding programs. However, it faces problems in implementation of programs due to the inherent assumptions of principal agent theory:

1. Trust: Government does not have the appropriate know-how and human resources to conduct the mission; it needs to delegate the actual implementation of tasks (research and education) to specialized organizations such as universities. It faces problems in the implementation of programs because it cannot control all the activities of relatively independent actors. If it does not choose to trust the actors to ensure that the principal's targets are fulfilled. However, Ethical challenge may emerge when universities break or ignore the intention of government. For example, the government gives a block grant to the university with the notion that the university itself has the capacity to manage its own affairs in a more flexible and responsive manner than the government. It can be seen that the university has a better and closer position to respond actively to the changing environment.

2. Conflicts of interest: When both parties have decided to have a contractual relationship, hidden goals between the principal and the agent of creating the agency relationship are incompatible**.** Goal differences are also expected within the university (unitary agent) among staff members be it administrative or academic. Individual agents have their own preferred interests responding to a given task. Indeed, the same incentives provided in the contract will have a different effect on different agents. Ethical dilemma may emerge in university

governance because some agents may prefer monetary rewards from the government without much concern with having autonomy. Conversely, other agents may have an interest in having more autonomy to manage their own affairs rather than much concern about receiving direct financial support from the government. One form of conflicting interests in the government-university relationship, for example, can be referred to what should be the role of the university in society. The different perspectives on the role of the university are whether social and cultural functions or economic function.

3. Information asymmetry**:** is the disparity in information between two parties. Information is often asymmetric and incomplete. This is because the principal cannot observe all activities the agent does, especially the agent's dedication towards its assigned tasks. Highly professionalized nature of academia, with faculty and administrators viewed as experts. This expertise creates a knowledge imbalance, as it is usually not possible for politicians or other actors in the governing structure to monitor and assess and the complexities in the organizational structure often create a favorable conditions for high level of information asymmetry. Consequently, one of the biggest concerns arising from the conflicting interests and asymmetric information is opportunistic behavior (opportunism). Opportunistic behavior means that the agent will exploit all the information asymmetries as much as possible in order to ensure that he or she (the agent) maximizes his or her own interests at the expense of the principal. The researcher assumes the following opportunistic behaviors could be relevant to this thesis:

When a task is assigned, the acceptance of the task implies a political strategy of the agent to survive in the system since the given task is a coercive tactic of the principal. The strategy of maintaining or raising status quo of the agent is done through the acceptance of the contract without questioning or warning the principal of the feasibility, efficiency and effectiveness of the goals. Economic opportunism occurs when the agent is primarily motivated by the self-Interest of economic gain. This means that the agent will take advantage of the contract whenever he or she sees a loophole in the contract.

The agent sometimes bends the rules to better serve the principal in order to appear to be behaving well. This pattern of opportunistic behavior could mean 'opportunistic cross-subsidization. For example, the government provides the same level of financial support to undergraduate and graduate student, but the university may actually distort the rules of the contract by spending more on prestige-generating graduate students against the will of the

government. The opportunism of the university in this case means the graduate students are taught by expensive expert scholars in small classes while the undergraduates are taught in large classes by less-expensive, relatively inexperienced teaching assistants.

3. RESEARCH METHOD

The research method section is intended to elaborate philosophical and methodological assumptions underlying the research paper, as well as to provide an overview of the research methods and data capturing techniques used including research design, primary and secondary data sources, reliability, validity and ethical issues.

3.1 Philosophical background of the Research

According to Burrell & Morgan (1979), philosophy of science concern about the different ways of understanding and looking at the world (Ontology), how knowledge can best be acquired (Epistemology), and whether people are governed by external influences (—human nature). It is also concerned about how researchers collect information from —reality and how this data is analyzed. Since failure to think through philosophical positions of management research affects the quality and design of management research (Easterby-Smith et al., 2008), it is important to highlight the researcher‘s philosophical viewpoint that triggers the research design. The researcher belongs to what the literature refers to as social constructionism. I share beliefs that: —[…..] —*Reality" is not objective and exterior, but is socially constructed and given meaning by people" (Easterby-Smith et al, 2008 P.58)* which give birth to interpretive methods. The researcher attention is more on the ways that people make sense of the world especially through sharing their experiences with others via the medium of language (Easterby-Smith et al., 2008 p.58).

This paper, therefore, attempts to understand how people perceive the OBFS through sharing their experiences. I found it appropriate to use interviews in order to share what kind of meaning practitioners attach to OBFS during their involvement in practicing the system. Data was contained within the perspectives of those people involved in practicing the OBFS, and shared with my advisor in consultation meetings in gaining, interpreting and analyzing the data.

3.2. Qualitative Research Method

Qualitative research relies on methods based on multiple meanings of individual experiences, meanings socially and historically constructed, and with the intent of developing a theory or pattern (Creswell, 2003). It views reality as socially constructed phenomena that provide detailed insight into the concepts and premises, what people think and do and their underlying principles, and what they are often unaware of (Forsythe, 1999; Robson, 2002). It does not predefine dependent and independent variables, but focuses on the complexity of human sense

making as the situation emerges through social constructions such as language, consciousness, shared meanings, documents, tools, and other artifacts (Klien and Myers, 1999). Qualitative research methods are optimally suited to understand a phenomenon ―from the points of view of the participants and its particular social and institutional context, and makes use of methods such as interviews, observations and document analysis involving case studies to explain the what, why and how of a social phenomenon (Stoop and Berg, 2003). A qualitative study explicitly follows a nondeterministic perspective and attempts to explore the phenomena of interests in its natural setting and the researcher has no control over the study environment (Howard and Borland, 1999; Orlikowski and Baroudi, 1991). Due to dynamic nature of the real world setting, interpretive, qualitative, study is carried out in an open, natural or "real‖ environment (Robson, 2002) which made it impossible to get outcomes that can be replicable and reproducible given that similar settings exists.

The research design is influenced by the type of data. If data are to be in the form of words, then qualitative strategy is initiated. The selection of research strategy also depends upon the specific purpose of evaluation such as establishing the worth or value of something (Howard and Borland, 1999). If the focus is on processes, an interpretive approach is applicable (Robson, 2002). Similarly, the types of research methods also influence the selection process. For instance, if it is a case study, or an ethnography study or a grounded theory study, then a qualitative approach is used (Robson, 2002). Usually, the research questions give the direct explanation of the likelihood of a research strategy for instance; how and why questions often indicate qualitative designs because they are more difficult to pin down (Robson, 2002). Though it is also required to initially decide what type of data collection method will be used in qualitative research, the nature and the number of methods to be employed can change as data collection continues.

Qualitative research is, however, limited in terms of inferential power (generalizability). I.e. according to Borland (2001) the conclusions derived from one study may not be generalized to other study. However, Borland recognize the fact that when conducted with appropriate level of structures and a balance of objectivity and subjectivity to increase certainty, it provides theories, models, and descriptions of human experiences and perceptions within the particular contexts. The objective this paper is therefore not to generalize but to contribute the ongoing discussions of funding in higher education establishments.

3.3. Research Design

Qualitative research design is suitable when the purpose is to understand what is going on, gaining new insights and shed new light on a phenomenon. It also emphasized that qualitative approaches are related to an exploratory design and focuses on achieving understanding (Grønhaug & Ghauri, 2002). The data collection method used is qualitative to be consistent with ontological assumptions underlying social constructivism as interpretations cannot be sufficiently captured by quantitative methods. Case study research excels at bringing us to an understanding of a complex issue or object and can extend experience or add strength to what is already known through previous research. Case studies emphasize detailed contextual analysis of a limited number of events or conditions and their relationships. Researcher Robert K. Yin defines the case study research method as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used (Yin, 1984, p. 23).

The detail that can be included in case studies allows the reporting of complex dynamic and unfolding interactions or events, human relationships and other factors in unique situations. The depth of the personalized and contextual detail gathered from the case studies allowed analysis of the complexities of relationships, context, skills experiences and beliefs of each of the case study participants. Case studies can penetrate situations in ways that are not always accessible through numerical analysis (Cohen et al., 2000). The research methodology is interpretive case study grounded in new public management concepts and principal-agent theory in which the researcher places all data, decisions and methodological approaches through a filtering lens that is shaped through personal experiences and beliefs.

The researcher put effort to assess how people connect with the world they are interpreting by applying open-ended questions in semi-structured interviews so that to create an opportunity where respondents can share their views based on their past and present experiences. The time span for my research goes back to 2003 when the reform was introduced. While most of my data represents what is going on now, after ten years. To bridge this gap the researcher prepared an interview guide designed to include my respondents' reflection through the whole period of their involvement in the new OBFS or model to generate a more representative sense of their perceptions. Due to the given time limit for the research study, however, the researcher found it beneficial to choose a case study where it is not necessary to travel far to

collect data. This makes data collection easier, and allows going in depth because it is easier to conduct follow-up interviews.

Interviews are one of the most important sources of case study information (Yin 1994, p. 84). Open-ended interviews are a common approach because they ask both specific fact-based questions as well as questions aimed at gaining the interviewees opinion about an event. Interviewees can serve as informants providing insight on the topic of interest that is possible only because of their direct involvement with the event in question. Yin (1994) suggests audio recording interviews to ensure an accurate rendition of the responses. Timely transcription, coding and analysis are necessary in order to avoid forgetting, oversimplifying or losing interest in the interview responses (Miles 1979). The same individual collecting the data should also code and analyze the data (Glaser 1978). While presenting case study evidence, sufficient citation of the data sources is required to gain the reader's confidence that the subject has been thoroughly researched.

University of Nordland was, therefore, chosen as a research setting for the thesis for practical purposes. Two faculties were also selected. Graduate school of business and faculty of social science. Fifteen semi-structured interviews were made, as described in the table below, with people from Administrative and academic staff members. Academic staffs are the key respondents because they are directly related to the research and production credits, including teaching, supervision and examination work. Besides academic staffs are therefore important actors in the OBFS, since their work is directly related to university's income. Data collected from the academic staff can therefore say something about how they experience the OBFS and highlight their assessments of the challenges and opportunities of the system. On the other hand, in order to get insight into issues at institutional level, administrative staffs were also interviewed. Data collected from administrative staffs will highlight how they perceive the challenges and opportunities regarding education and research issues in connection to the old system. Informants were selected thoughtfully to represent all actors of the academic life. Researchers, lecturers, deans, faculty directors, central administration officials including the rector, finance manager and personnel administration at the University of Nordland.

Position	Department	Date	Abbreviation
Administrative staff (Rector)	University of Nordland (UIN)	15.03.12	R-UIN1
Administrative staff (Finance Manager)	University of Nordland (UIN)	22.03.12	FM-UIN2
Administrative staff (Personnel Administration)	University of Nordland (UIN)	21.03.12	PA-UIN3
Administrative staff (Dean)	Faculty of social science (FSS)	12.03.12	D-FSS1
Administrative staff (Faculty Director)	Faculty of social science (FSS)	13.03.12	FD-FSS2
Academic staff (Professor)	Faculty of social science (FSS)	23.03.12	P-FSS3
Academic staff (Associate professor)	Faculty of social science (FSS)	13.03.12	AP-FSS4
Academic staff (Associate professor)	Faculty of social science (FSS)	14.03.12	AP-FSS5
Administrative staff (Dean)	Graduate school of Business (GSB)	19.03.12	D-GSB1
Administrative staff (Faculty Director)	Graduate school of Business (GSB)	14.03.12	FD-GSB2
Academic staff (Professor)	Graduate school of Business (GSB)	12.03.12	P-GSB3
Academic staff (Professor)	Graduate school of Business (GSB)	09.03.12	P-GSB4
Academic staff (Associate Professor)	Graduate school of Business (GSB)	27.03.12	AP-GSB5
Academic staff (Assistant Professor)	Graduate school of Business (GSB)	26.03.12	ASP-GSB6
Academic staff (College Teacher)	Graduate school of Business (GSB)	26.03.12	CT-GSB7

Table 1: Overview table of completed interviews.

Every effort was made to conduct the interviews in-person and was successfully conducted in-person. Participants were deliberately selected on the basis of their affiliation with the output based funding system. Due to the specific nature of the interview selection, potential participants were approached individually in order to limit any feelings of coercion to participate or not participate. The aim of the interviews was to have participants outline how they perceived decisions made under OBFS and why they believed the decisions were made in the fashion that they were made. Participants were encouraged to let their responses go outside the expected scope of the interview if they felt their stories were important to the events.

Interview guide that was used is attached in Appendix P.86. Interview guide was prepared carefully targeting to collect data that could provide a deeper understanding of the issues. It was, therefore, an objective that the questions should not lead to short and quick answers such as “yes” or “no” and the interview guide was provided to informants in advance in person.

Each interview followed a semi-structured list of questions. Interviewees were asked the same set of questions and were welcome to comment outside these specific questions. To analyze the interviews, responses were coded and aggregated into main themes related to the two research questions, which is the process recommended by Stake (1995) and Yin (1994). To ensure consistency in the coding, the researcher administered the interviews, transcribed the audio recordings and coded the responses. Coding was applied for easy retrieval and review of interview responses.

All interview responses in the written thesis have a footnote indicating a corresponding numbered transcript from which the response came. Each interviewee was given specific code to ensure anonymity. The footnoting was done to show that multiple interviewees made the same point and that no one interviewee was overly referenced. Each interview lasted for about 60 minutes on average. All interviews were sound recorded and later transcribed and send to each informant for confirmation and later a follow up questions were send via internet and all were replied. The semi-structured nature of the interview has enabled my informants to make contributions by coming up with fresh relevant questions and discussions. At the same time allowing me to introduces additional questions during their discussions in a friendly environment.

3.4. Primary and Secondary Data sources

Primary data is new information collected by the researcher while secondary data is material that has been collected in earlier by someone else than the researcher (*Easterby-Smith et al., 2008*). The data collected in this research is both primary and secondary. I collected primary data from my respondents through semi- structured interviews. The reason why I chose semi-structured interview was to help me collect the information relevant to my interest and to make sure that my respondents understood the questions. Secondary data was collected from various sources such as books, management and accounting journals, quality reform documents, articles, and internet search engines. Some of my secondary data are also collected from internal UiN official report documents and others such as brochures, and advertising aids.

3.5. Data Analysis

When you are working with quantitative data there‘s no requirement that the person that analyze the data is the same one that collected it. But when you are dealing with qualitative data it may not make much sense to analyze data that other researchers has collected. This is

because you are occupied with communicating the meaning of what has been collected. My data is derived from notes taken during the interviews and the transcription from the sound recordings of the interviews. The secondary data collected from various sources mentioned above is mainly used in the presentation of UiN and its background as well as in the presentation of the quality reform that led to the new OBFS.

3.6. Reliability, validity, and ethical aspects

Reliability means ―the consistency of results obtained in research. Whether another researcher could replicate the original research or the same researcher could replicate the original research at a different time (Johnson & Duberley, 2000 p.46). To enhance the studies reliability I have conducted several interviews and consultations with different people at different hierarchical levels and read relevant secondary data both from the internal documents of UiN, ministry of research and education websites, and the Quality reform for the proposition no. 1(2001-2002).

During the interview, effort has been made not to influence respondents through asking leading questions, body language etc to ensure their honest reflections. As a single case study, the intention of this paper is not to generalize but to describe and analyze how practitioners' perceive the OBFS. However, huge amount of information was collected to make sure the information I received were relevant. As mentioned above, all interviews were voice recorded and later, transcribed as document and send to each interviewee so that they confirm and / or edit their thoughts to eliminate biases during the interview session. Moreover, during the interview, respondents were given the opportunity to ask clarification to make sure they understood the questions properly and as a result some interviewee used the opportunity by asking me to rephrase the questions before they respond, consequently, the risks of misunderstanding were minimized and no tensions or nervousness were observed during the interview sessions.

In qualitative research validity is closely connected to data. Data is not reality itself but rather a representation of it. To which extent the data represent the phenomena is important responding to in a study like this. Easterby-Smith et al (2008) states that validity is the extent to which measures and research findings provide accurate representation of the things they are supposed to be describing. A qualitative study like the one performed in this research paper will have difficulty in order to defend its validity. One weakness of the study‘s validity is related to the selection of respondents. It proves difficult to claim its validity since the

respondents chosen were only those directly involved in the budgeting model. The study would seemingly have had an increased validity if respondents who are not directly involved but have vested interest in the model were interviewed. A point that strengthens the validity of the study is that it focused on giving the respondents a thorough description of what I wanted to study ahead of the interview personally. The interview guides were also sent to each one of them well before the interview sessions.

The ethical aspect is primarily concerned with that the research process is done truthfully and that it at the same time does not violate ethical aspect. I have been occupied with communicating the purpose of the study to the participants. This is not only important for the validity of the research paper but also important from an ethical point of view. The participants were able to comment on the transcribed interviews.

4. EMPIRICAL DATA

This part of the thesis presents empirical data mainly collected from the 15 interviews held with the administrative and academic staff members of University of Nordland and secondary data from Ministry of Education and Research and internal documents of University of Nordland to provide background information about the quality reform that was introduced into the Norwegian higher education.

4.1. The Quality Reform

It is impossible to describe and analyze the present status of higher education in Norway without reference to the latest reform of the sector – the Quality Reform. This reform, implemented since a 2001 white paper, and amendments in legislation in 2002, is referred to throughout the thesis. The two main reasons for the Quality Reform are:

1. The need for quality improvements in higher education and research (student drop-out, delays before graduation, emphasis on student learning and better follow-up of students)

2. The Bologna Process and Norway's obligations in that respect.

The Quality Reform encompasses the following elements:

• Change in governance structures at the institutional level allowing institutions more autonomy concerning organization and management issues.

• Increased institutional autonomy, for example concerning the introduction and repeal of courses and study programs, and what study programs institutions want to offer.

• A new funding formula for the institutions more aimed at the accomplishment of results and institutional output than the former funding system.

• The introduction of a compulsory national quality assurance system and the establishment of an independent quality assurance agency (the Norwegian Agency for Quality Assurance in Education - NOKUT). Accreditation of institutional status is introduced along with systematic evaluations of institutional quality assurance systems.

• A new degree structure according to the Bologna Process, introducing a bachelor's, master's and PhD degree system according to the 3+2+3 model, and the launching of a new grading system based on the ECTS.

• New forms of student guidance, evaluation and assessment intended to improve the follow-up of students, reduce drop-out and interruption of studies, and to stimulate students to complete their studies at a younger age.

• A new scheme for financial support to students, linked to the former point in that it is designed to stimulate timely completion of studies.

• More emphasis on internationalization as a means to improve the quality of Norwegian higher education, and the establishment of the Norwegian Centre for International Cooperation in Higher Education (SIU).

The model aims at stimulating student progression and enhancing the development of new, attractive study programs. Promoters of the reform viewed the previous funding system as the cause of structural imbalance between research funding and education funding. In their opinion research funding had been far too closely linked to education and the number of students, allowing for too little discretion in the separate funding of research according to its particular needs and considerations. To some extent the new funding system separates the funding of research and education within institutional block grants (UFD 2005: 74).
In other words the model aims to improve education as measured by the credits and graduates produced, increase research as measured by research publications, and enhance external relevance as measured by external funding. Formal explicit links between the funding system and national higher education policies have been established as a result of a reform in Norwegian higher education (the Quality Reform). According to the Ministry of Education and Research, the performance-based funding system will improve the quality of research and higher education, as these are best safeguarded by means of a funding system that emphasizes results.

The system is thoroughly documented in the Ministry of Education (2006), and only the essential outlines of the document are reproduced. The system applies to all universities and colleges apart from the two state arts colleges. The OBFS is based on the institutions to compete for resources and represents a clear turning from input-based financing to reward of profit. The funding was revised in 2006 and currently consists of three main components: A basic component, an education component and a research component. Basic component represents about 60% of the total allocations to the institutions, education component of approximately 25% and research component on average about 15%. The basic component is intended to support stability and selected priorities, such as special needs for a variety of

disciplines and subjects, special needs for different regions, and operating expenses and maintenance costs for buildings. The basic component is intended to cover part of the expenses for teaching and research to make the higher education institutions less vulnerable to fluctuations in the number of students (UFD 2005: 72–74). Basic component ratio is lowest for the private colleges and universities and the highest for the state colleges. In addition to these block grants from the Ministry of Education and Research, the institutions finance their activities through external funding from the Research Council of Norway in particular and other research agencies or contractors in general.

Education component is the result controlled on the basis of the published credits and the number exchange students at the various institutions. This component has so called open frame. This means that the fixed administrative prices to different study categories per 60 point unit (and as an exchange student), and the institutions will have directly results in their allocation if the trial production increases in relation to the result previous year. With regard to the research component, one-half of the funds are redistributed on the basis of performance and one-half is related to quality and strategic considerations, which include funding of positions for doctoral students. In contrast to the education component, there is a ceiling limiting the higher education institutions' revenue generation. The higher education institutions that do increase their revenues perform the best in comparison to other institutions (Proposition to the Storting 1 2001–2002: 150–160). In the 2005 budget the research component is based on the production of scientific publications and the degree of funding from the EU and the Research Council of Norway (Proposition to the Storting 2005–2006).

The research component has a strategic component and a result based redistribution of research funds. The strategic section includes special funds for fellow positions, scientific equipment and other strategic research funding. The result-based redistribution fund is based on institutions'' production of the number of doctoral degrees, the publication points, and size in dollars at the European Union and Norwegian research council project. The fixed pot of result based redistribution research funds financed by checking out as far as we can see the distinction between strategic research and basic allocation primarily by accounting technical nature in both cases we are talking about the results of independent awards from the Ministry to the individual institutions. One can perhaps say that the strategic research gives the Ministry a certain action (discretion) within a model where the basic component is over time while the award through the results-oriented components supplied by the mechanical approved rules.

Funds from the institutions (i.e. by reducing the institutions' base appropriations) are based on the indicators from previous years. Then re-distribution of this pool based on institutions' relative score of targets. In 2007, re-distribution pot at about 1.2 billion or about 8%. The final budget for an institution is the sum of these components. One of least seemingly important difference between education and research component is that the administrative cost of teaching is determined exogenously, while prices for the various activities included in the re-distribution, determined by the total production takes place in the sector. Basic component and research components have fixed frames, while the education component is open. This means that government expenditure to the sector, in principle, has an open frame and is directly dependent on the study production each year.

When implementing the Quality Reform, the Ministry of Education and Research stated that "the design and use of the financing model for universities and colleges must support major educational and research policy goals and strategies. In the view of the Ministry, quality considerations in education and research are best safeguarded by means of a financing system that emphasizes results" (Report to the Storting 2000–2001: 62–63). The Mjøs Committee, which proposed the new funding system, underscored the cultural and societal rationale for higher education and argued that "the challenge lies in establishing funding arrangements that make the institutions better able to perform the tasks assigned to them by society" (NOU 2000: 14: 43). According to the Committee, funding based on results is appropriate because society has the right to expect results when large amounts of money are invested in higher education. A formula-based funding system also increases the possibilities for rational planning (NOU 2000: 14: 43–44).

4.2. Perceived Ethical challenges associated with OBFS

This section presents informants' expressions collected from the interviews that were made with 15 staff members of University of Nordland. Large amount of information were collected which I intend to summarize into four themes that I believe are central to their reflections. Effort has been made to represent each informant's opinion.

4.2.1. The role of university to society vs. the OBFS

All academic and administrative staff perceive University as part of the higher education system charged with responsibility to educate young students to make sure that candidates are graduating from different programs to match the demands or needs of the society both in

terms of providing candidates for jobs and to perform research programs targeted at solving current and future social problems. Universities play an important role in society through educating students, making good research and communicating the research results to the general public. AP-FSS4 pointed out two important roles that should be played by universities: the first role is knowledge for its own reason. Universities have to be able to do basic research without any purpose other than knowing more and the second role is, to establish a communication corridor with the society in order to be able to understand society's needs so that to ensure relevance and by extension funding. It is very important that universities should carry out these two roles at the same time.

In addition universities should have to be critical actors and have to respond to the needs of the society when it comes for instance to regional, national and international commitments in providing education and research. D-GSB1, has described university as a place where people challenge the old thoughts and create new knowledge based ongoing research and development projects. University is basically fundamental resources of any society. AP-GSB6, also describe the need for university is to generate new knowledge and bring it to scholars and students and some part of it should have relevance to local industries and business entities. Furthermore the main quest for university as pointed out by P-GSB4 is to give the opportunity to the student to develop practical skills but also theoretical and ethical skills. Universities should provide students a valuable knowledge to develop their character, personality, skills but also knowledge that could contribute to develop the society at local, national and international level to make a better world in a way. So it is very important to include values, ethical reflections in the knowledge not only practical or technological knowledge but also how to use the knowledge i.e. Ethical and theoretical reflection.

AP-FSS4 has pointed out that the university is dependent on society in terms of funding. Universities have to show relevance to regional and national commitments to justify the consumption of resources collected from tax payers. Universities have to pay a role as critical actors and providers of education and have to be locally engaged in developing the work life of the society. However, OBFS encourages researchers to engage in sourcing external funding on areas that has little relevance to the local communities. R-UIN1 further describes the OBFS when it comes to research as "*small kind of gift from the state*" because research is funded mostly from the basic funding. It is not that based on how many research papers or research articles are written. It is small recognition which helps increase the number of students in millions over some years but not that big. The main force of OBFS is students

graduating from the programs. The funding for research under OBFS has at least contributed to the thinking in the universities that we should count the number of articles or books so that we know what the university really contributed into the research society. Since some money is connected to this and the university has to report this very strictly to be able to get the money from the state, now we care to know the number of articles and books produced in each year that is something that ten years ago we didn't know. R-UIN1 believe that OBFS is increasing the reporting behavior of the universities as a whole allowing member of parliament and government information in detail about what universities are doing. From this point, we could imagine the level of control or pressure in processing time and bureaucracy associated to the report.

4.2.2. Source of funding study programs and research activities

Under the OBFS, the source of funding has an overwhelming impact on how faculties and individuals inside the faculties think and focus. AP-FSS4 believes that when the economy of the faculty is not solid, people try to generate income by adapting to the OBFS by finding ways to produce more students and more research. To that effect European Union and Norwegian research council projects are best and next best respectively due to the amount of money involved. The question with the involvement of more external funding in the OBFS will be whether universities manage to keep the core of being free research? There will always be negotiations when decision makers see incidents that threaten our integrity.

AP-FSS4 thinks the debate or negotiation and the pragmatism vary depending on the area of research in question. It is difficult to draw a line marking the boundaries when it comes to university's involvement with external sources of funding. The appropriate question would be how solid universities are to preserve their core values of integrity. The more money universities have to make on their own, obviously the more dependent they are going to get and that is the overall caution they have to do. Since we live in a decade that highlights business efficiency promoted by new public management concepts, universities have great understanding for the finance provided by tax payers and their decision making is not without consultation with the providers of the money. Universities must get sufficient basic component to be able to say no to demands that threats their core values.

R-UIN1 further pointed out that, sourcing external funding is the main question because the four old universities are funded 100% of their cost from the government so that they should build up their competence, their research areas, and their study programs and so on. From

early 1990s up to 2000 new universities has come into the sector. University of Nordland is one of them. As a new university, the government funding is not as strong as the old universities. Therefore university of Nordland has to find some kind of partnerships between societies outside the university to find ways of having income into the institution. However, dealing with sourcing external funding is not easy because we have to make a case by case decision taking into account the ethical dimension of the projects that are presented to us. So we could not be a part of finding ways to do non sustainable projects. That means university has to be careful about how to involve its professors in projects. It is an interesting part of professors' work to daily ask themselves how to make good choices of this type. Of course if all costs are covered by the state 100% this would not have been a concern. Currently 20 to 25% of University of Nordland's income comes from this kind of partnerships or external funding.

P-GSB4, however, pointed out that the involvement of external funding is okay as long as the ground research is based on resources from within the institution or University. The kind of research that is financed from outside is more focused upon practical questions. Firms or companies or other institutions that pay for research, they ask questions that they want to have answers or discussed to but one of the main thing in universities is to ask questions to that could not be sold; the research could not be sold in the market because this is more fundamental knowledge. For instance questions concerning the established paradigms. So it is important also to initiate projects asking fundamental theoretical questions. The OBFS is not capturing the full values of the university; it is focusing on some part of the values and left many others disregarded.

P-GSB4 also claims that researchers are using more and more time to filling application forms of every kind before the research starts so they use more and more resources to get money not to do research. The other problem is not for profit based research could be the losing part of this system and that is very bad because that is the main thing in the university. The other things are also important but the main thing is to be cultural institution educating people to go into the world and change the world to be a better place. And if the research is funded in a way that are developing people to work within the established system without asking questions then we are not a university anymore we are something else.

AP-GSB6 sees external funding sources as an opportunity and sign of being relevant to local community or industry if the university has an explicit strategy and the funding is harmonized with that strategy but if universities keep changing the research and education just because of

the funding, it could be a serious threat for the universities existence in the future. However, looking at the strategy of university of Nordland's, AP-GSB6 thinks it is too loosely defined. We have to look at the strategy of the University of Nordland, if a study program is harmonized the strategy and if, for a period, the number of students are few, it should be kept alive through difficult times for strategic reasons. But as AP-GSB6 sees it the university has no strategy for now that can be used in such a way, of course we have very few exceptions. AP-GSB6 mentioned few examples to support his argument, two years ago there was a bachelor program in informatics social science that was cancelled and this year we have IT and Business and probably will be cancelled in the middle of this year for lack of enough student applicants. The decision time horizon is too short sighted. Besides it is the youth or potential students who are making the decision, through their preferences, whether the study programs are to survive not the central government or even the university. The key performance indicators are not helping to steer the higher education.

According to FD-GSB2, due to the fact that there is more incentive in the OBFS to do research with European Union projects than national projects under Norwegian research council, the future research area as well as research findings will be pretty much the same across universities. European Union projects are focus on specific areas and if all researchers are working at specific areas the diversity within universities will become a casualty. At the same time the focus on education becomes weaker through time because doing research is becoming more and more important for the researchers, the institutions and the external funding agencies.

D-GSB1 believes that as long as it is not the only source of funding the research going on in the university, external funding is a good thing it tend to increase the relevance of the research taking place because it is enabling the governmental bodies such us the research council and European union at least to put effort where they want the universities to develop new knowledge. In many ways it is sort of a good tool in order to promote new areas or areas where the government think is especially important to future development of the society. The weakness is that you know some core elements that need to be part of the academic infrastructure of a university could be left behind in this type of funding. We also need other sources enabling us to fund research especially the basic research in the university. At the organizational level, most universities are pretty much aware of the need for getting external funding for the research programs and in that case there might be an increase focus on

approaching the proper channels of funding and the proper programs that makes the future funding predictable but not at the individual level.

D-GSB1 thinks that when it comes to external funding, the private companies are very good at putting some distance between the role as funding sponsor and as influencing factor of what comes out of the research. I think this arm length distance between the researcher and the outside funding body is crucial for keeping university's integrity in doing research. We don't let any private companies or governmental bodies influence the conclusions of research. They might influence the area where we do research; they might provide us some interesting angels or aspect that they want us to look at; but the research process and the outcome of the research process should remain a non negotiable territory of the researcher.

FM-UIN2 says the OBFS has strongly encouraged universities to do research projects with European Union and Norwegian research council through the income incentives attached to it. However, all applications for these funding needs to match to the type of program both in European Union and Norwegian research council and that is a little bit of concern whether that is the right direction for the free research. When it comes to the sources of funding from state or external funding, D-FSS1 does not believe to depend 100% on either of them is good for the system and it good that the OBFS constitutes 60% of state and 40% external funding. But when university is involved with private sponsors' especial attention must be taken to ensure that the result is independent of the sponsors. The researchers must be given an opportunity to do the research in his way so that he see it from different angles and reach a conclusion of his own and that conclusion must be accepted by the sponsors.

P-FSS3 claims that, when it comes to the research component, in the OBFS, there are several performance indicators when we look at the system as a whole. The university gets an extra pay from external funding for research projects. For instance if you have research from Norwegian research council, the institution will get a bonus from the Norwegian government and if you have a research from European Union projects, the institution will get a bonus from Norwegian government which is much higher , more than double, than the bonus generated from Norwegian research council. However, according to P-FSS3, the European Union funding is in a way over rated in the OBFS. The scientific quality of projects funded by European Union is not necessary very high. In fact they are more action oriented research with a very narrow perspective and apply instrumental way of thinking if you compare to the national funding by Norwegian research council which is much more open. P-FSS3 claims

higher scientific quality in some of the research funded by Norwegian research council than that of European Union. Top management of universities encourages very strongly their employees to go for European Union projects. But large part of the staff members of universities are less interested and have little relevance to apply for funding from European Union. For P-FSS3, the way universities weighted European Union and Norwegian research council funding is not making real sense.

4.2.3. Performance measurement indicators

Besides, when it comes to research publication journals, the idea with the OBFS is that the highest level journals should or supposed to direct authors to the strongest and most powerful journals available. But there is much work to do in order to select journals for level two (highest level). In Norway this is more or less a political process actually. When the system was established a preparing committee suggested that level two should be defined by citation scores or citation indexes but they instead made this more political decision in the national committees for the different disciplines. There is one national committee for business administration, political science etc. this national committee actually is the arena where this decision is taken, what journals should count more than the other ones. P-FSS3 doesn't think that these rankings express our present international community's ranking of the journals. P-FSS3 think one should try to develop some kind of objective criteria for dividing journals into level one and level two or we could otherwise simply remove level two. But P-FSS3 doesn't believe there is a willingness to do that by decision makers. P-FSS3 further suggests some kind of citation index where if a journal rise above certain level of citation then it should come to level two.

AP-FSS5 sees that OBFS measures only research articles in journals with review arrangements. Performance indicators are made to be simple and predictable based on objective and measurable criteria. There are also a lot of research and educational activities which the performance indicators are unable to detect. The indicators generally look at the results not at the processes or writing an articles or making preparation of lectures. However, AP-FSS5 suggests that OBFS should be made more detailed so that people also get points from for instance writing articles in newspapers or journals targeting the general public not only articles with the review arrangement. Similarly AP-FSS4 described his experience; when it comes to research application form European Union or Norwegian research council, as lacking an incentive to people to make the applications. The problem is after a hard work and spent a lot of time on preparing the application, even if the application was rated very good

but just not good enough to be the best to get the funding, no points or payments are made under the OBFS for the invested time and work. The problem is not only the project will not get money but also difficult for the researcher to justify his effort to his supervisor. AP-FSS4 therefore suggests that internally the faculty has to have an incentive or has to have to reward behavior even if that may not payoff at all. The publication system should reward more activities. The existing OBFS may be working well at macro level for the government but not at micro level. AP-FSS4 says our aim is to produce students as many as we can to increase our income. We have a relation with quantity because we are so embedded in what other universities do and we got the common sense from other universities but we always need to preserve the quality. But that is part of the dynamics. We see or we are encouraging our department on these faculties to make courses for sell because we need the money that is tempting but so far we are determined to keep higher quality courses.

The transparency and reporting behavior of OBFS has exposed those researchers who did not publish any article for five years. That is a good thing about the system according to P-GSB3 because the university communities have been aware of the fact that a lot of researchers haven't produced any research for many years. At least 20% of the researchers at Norwegian universities have not produced one point at the last five years or similar, that indicates that the OBFS have revealed that a lot of people did not do anything and that is good thing. However, one cannot say that one person who has published five papers in two years is better researcher than other researcher who publishes four papers in the same years. Because the papers are inaccurate indicators of performance may be due to the wide range of the level one journal.

AP-GSB6 believes that the performance measurement indicators does not measure performance especially when it comes to new ideas, methods and theories because they are set up by people from administrative areas not scholars. The problem with that according to AP-GSB6 is that nobody is protesting. There is no protest from members of the board of the university stating that these parameters may be not going to give the correct measures, they are just reporting back. Alternatively, AP-GSB6 suggests a peer review between the scholars or universities or evaluation groups making mediation of the work both quality and quantity relating research article production and student production part of it. AP-GSB6 thinks that universities had a better function before the OBFS came into use.

FD-GSB2 believes that the performance indicators for the education component only measures how many credits the student gets and not the grades which would mean the quality

of the output is not measured. OBFS doesn't measure the candidates but course production. Of course when we have to report to the ministry of education and research we will have to use as many as 40 indicators but without any effect to the funding. Besides the indicator for the education component is only one and that is the student points. Nevertheless, it is easy, predictable and comparable with other universities based on the indicators to see relative positions.

R-UIN1 does not believe that the performance indicators for the research articles are perfect because the two levels make up 80% of the journals for the level one and 20% for level two. But it is very difficult to say that the articles published in 20% journals are three times better than the articles published in the 80% or level one journals. In a way it is a signal about quality more than a quality measurement. But signal to researchers and to society of quality but it is not perfect. It would have been possible to measure quality using more sophisticated measures but what comes into trouble is to compare one discipline with another. The way Norwegian academic society use of only two categories are the way of trying to get an inter disciplinary measures into the way of thinking and that is not that bad even though it is not perfect according to R-UIN1.

D-FSS1 thinks that there is a general shift toward that everything can be put into some indicators and accordingly measure the outcomes but that is not the case when you see it from a social scientist perspective; some important things are not measurable. For example, if we put a parameter of a good health and bad health, I think life is not depending on good or bad health. We need more than that like love, family, democracy etc are values that we must preserve. On the other hand, positive side of the system is that, it allows everybody to see why other departments get the funding because in the old system, we didn't know why one department gets more money than the other. We see if we have more students, more research we get more funding. The system is open and transparent that is a good thing.

4.2.4. Dissemination of knowledge

When it comes to communicating research findings to the general public, AP-FSS4 has claimed that the OBFS has failed to deliver the findings to the supposedly end users because there is a gap between where the findings are published and the people who supposed to learn from it. The research articles are published in scientific journals and are examined by mainly scientific researchers not the general public. AP-FSS4 sighted an example to clarify his argument saying if you publish an article on management issues in Norwegian municipalities

in one of the Norwegian scientific journals, the readers could be some researchers but not readers from municipalities and that means they don't learn from it. But a researcher can get the article published in Norwegian popular magazines that municipalities actually are reading. However, publishing articles outside the two identified journals does not count for points or payments. AP-FSS4 hopes to see the system updated to address the communication issue in the near future because more and more people are acknowledging that the system is not communicating enough with the people who should be using the knowledge. In a similar manner R-UIN1 believes that the existing OBFS is not communicating the research findings to the general public or there is no incentive in the system to do so. The discussion on how to give kind of incentive for the researcher by the institution to have a kind of public publications in newspapers and magazines fails to find a proper method how to measure it and also how to build up a fair system.

D-GSB1 strongly believe that at least in Norway, the credit that the individual researcher gets from working with society or doing this sort of communication or presenting results from research is very little. Researcher gets very little credit from OBFS but it was also the case before the introduction of the OBFS. This is an old historical problem that academic institutions have been facing for many years. But we need to work on it because this is a vital problem to promote the use of new knowledge. Besides when you read an article published in one of these journals the research is likely two years old. If you take time form the researcher actually doing the research until it end up to the journal is old. This has to be improved to provide timely information to users.D-FSS1 strongly believes that researchers must be able to communicate outside their researcher communities. Researchers should give their research findings or result an opportunity to stand on its own feet and go outside in to the community because with the OBFS researchers have the right to do research but not the means to deliver their research findings to the general public.

Some researchers have excellent research results that could make a difference in the world. But the world people will not hear about it and such excellent results could be wasted for the lack of communication. D-FSS1 strongly suggest for ways to allocate additional funding to the basic component meant for the communication. In addition to this D-FSS1 also see the need for an applied research based on communities to do some actions and then see if the actions get the expected result. For example, if we want to educate Norwegian children in a different way to get them better in mathematics, we have to try it and we have to tell about the result to the teachers, parent and politicians who are responsible for the education system. The

existing system does not support such things. OBFS has to follow strict rules about excellent research. We have to have some funding for development and execution projects too according to D-FSS1.

4.3. Perceived Conflicts of interest associated with OBFS

This section presents informants' expressions collected from the interviews that were made with 15 staff members of University of Nordland. Large amount of information were collected which I intend to summarize into four themes that are central to the interviews. Effort has been made to represent each informant's opinion.

4.3.1. New knowledge production

Production of new knowledge is a bit problematic in the OBFS (R-UIN1), if you take a static view on the journals; all journals have their own history, their own research tradition, their own discipline, their own methods and theories etc. If you take the 20% of the journals in the higher group, they are quite traditional, they are discussing the traditional problems, traditional ways of thinking, traditional ways of doing research and if someone has a new idea about how to manage to improve some kind of system, that someone will struggle a bit finding ways of publishing such research. The very conservative traditional way of thinking in developing new theories and methods has also contributed to the problem of new knowledge production. R-UIN1 explains that the conservative tradition demands to do and re-do the research several times before it is a kind of robust new idea and new knowledge because conservative researchers are defending the conservative view that is taking part in the research society.

AP-FSS4 sees the need for production of new knowledge arising from responding to demand and free research for the dynamics of research knowledge that emerges by coincidence. AP-FSS4 stated two examples to defend his reasoning one is that the invention of steam engine before the demand for it and the second is the demand leading the invention sighting the desperate need for early warning of enemy aircraft during World War II in British defense force leading the invention of radar. For AP-FSS4 both realities exist and equal attention for both must be given; responding to existing demands and free research is quite important when it come to the production of new knowledge. However, AP-FSS4 believe the pressure to publish in the OBFS is so heavy that researchers do not get enough time for free research.

According D-FSS1, the OBFS provides some funding opportunities for basic research but also external funding are available at Norwegian research council or European Union projects

but the problem is that researchers with supposedly new ideas have to convince decision makers for funding. The dean at the faculty has to be convinced to allocate scarce resources among research groups the same goes for the external funding agencies. So the so called new ideas may not get funding at all. D-FSS1 claims that new thinking (paradigm shift) is not suitable in the OBFS environment. The strange new ideas will not come under the established center of excellence because the center of excellence is build up with the rules that we see today as a really excellent method. If you go to something completely new thing then you should be outside this center.

P-FSS3 perceives publishing articles as a kind of discussion platforms and great events leading to great progress in questions like democracy, good governance etc depending on the discipline at stake. But if you operate in the field where you have strong commercial interests like pharmacy or technology, it is always a risk been part of this great discussions. The problem of publishing new knowledge is more acute in disciplines like you have where always more money is involved. P-FSS3 uses an example to support his reasoning by mentioning the risk and difficult to publish some preliminary observation giving hints on what they are doing. For P-FSS3 publishing articles fits better in social science than in technological research on pharmacy or similar to that.

P-GSB4 believes that OBFS is good at promoting number of research publications in level one and level two journals but the researchers asking new questions to step outside the well known or excellent research traditions. According to P-GSB4, to go step further, researchers have to ask new questions to develop new methods, theories and so on. However, research topics asking such question will not have the best opportunity in OBFS because the focus is upon well known research traditions discussing of doing research on clear cut research questions and publish the results in well known journals. P-GSB4 suggests opening up for students or researchers thinking a new directions or shifting paradigm an opportunity to fund their projects even if that fall outside the existing OBFS measurements. P-GSB4 does not think the OBFS is supporting such kind of thinking or research because that kind of research is hard to define as excellent research because you did not know the result. It is not established paradigm. There are no journals where you go other ways more in experimental kind of research. P-GSB4 says OBFS is okay for one kind of research but border crossing research would not fit into this system.

OBFS is not playing a positive role when it comes to new production of knowledge (P-GSB3). It only encourages number of publications of the same idea but written differently. Of course professors in Norway have 50% of their time to do free research of their own interest but when you need some external funding to support your research then the professor need to adapt to what the society want or the thoughts in the bureaucracy and then the professor is not free anymore. If you come up with new idea that the decision makers at the EU haven't thought about the new idea, you will never get the money. According to FD-GSB2, there is no journal to publish for a very new idea. Most of the research articles are based on common research within well known areas.

PA-UIN3 argued that the problems that researchers face in finding ways of publishing border crossing or innovative research is because they don't fit to the box and the journals. OBFS is not to be blamed for this because it has existed even in the old system. It could be because of the historical, traditional or disciplinary issues are to be blamed. However, even if the problem is not caused by the OBFS, is not made to solve it.

D-GSB1 has a different opinion when it comes to new knowledge production. D-GSB1 claims that creativity and the ability to look at different type of programs from a new angle increases the chance of publications. According to D-GSB1, it is more likely that you will be noticed if you doing research in new areas. But it creates a little bit more work and needs more time to run projects of that type. D-GSB1 believes that there are excellent research activities taking place at universities around the world and in different private enterprises that are challenging the known knowledge. Researchers are developing new technology, new ways of thinking, and creating different society for the future. There are rooms for creating new ideas and thoughts but there will always be some areas which are more difficult to find and difficult to bring forward.

In the quest for internationalizing the Norwegian research society, the OBFS has been a great success according to P-FSS3 due to the opportunities created to travel for international conferences and access to international networks. However, when the system of publication points was made, we were eager to find a system that should run more or less automatic but what we experience is actually quite a lot of job. Someone has to sit and read each application to figure out which article should have a point or not in the system. No one is quite sure whether or not the article will give you a point or not because there are many unclear boarders. P-FSS3 believes that quite many hours of the work spent every year to solve which article

should get a point or not and in that respect the system may not be efficient as it was believed to be initially.

4.3.2. Cooperation between actors

AP-FSS5 partly blames the OBFS for the difficulty to cooperate between faculties on research and education programs. There might be some potential for cooperation in the system but AP-FSS5 believes that it has something to do with the attitudes of decision makers or some other traditional barriers. In order to apply for programs at the direction of Norwegian research council, you have to make collaborating teams and networks between more researchers between different institutions and that should encourage cooperation more than previously. But my experience witness very little cooperation between faculties, there might be some exception but not many. According to AP-FSS4**,** the OBFS encourages cooperation when compared with the tradition in social science because the problems are bigger and explicit. OBFS encourages researchers to seek alliances within Norwegian university sector and they also encourage researchers to have international collections. For instance in social science, if you apply on a very big scale program without having any international context you will not get the money.

Cooperation between different disciplines is limited due to the fact that each discipline has its own tradition and areas of concern and the OBFS is not to be blamed for that according to R-UIN1. Cross disciplinary research work has been difficult to find ways to publish it even in the old system. According to AP-GSB2 the cooperation is increasing but it is much on personal level. If you know someone at the university or other universities, you make projects together not so much generated from the system. FD-GSB2 sees that under OBFS cooperation within university is difficult because all faculties want to have the highest production of student and research points. FD-GSB2 claims that previous experience of cooperation on some study programs with other faculties was at least not easy.

D-GSB1, however, believes that OBFS has no negative effect on cooperation within university. According to D-GSB1 there are several ongoing cooperative projects on various study programs at the University of Nordland. Besides there always be areas like the Aqua culture faculty that have a basic finance which is not related to any output which is more than 90% at the moment while the output based component in our faculty is less than 50% at the moment. University of Nordland is spending money big time in developing the faculty and it is of course the business school and other faculties that are paying for this. Such steps are

necessary to be able to develop new ideas, new programs and new areas of research because this is the only way forward. Such possibilities only prove that we are capable despite that OBFS to encourage development of new programs even if it is not creating the income.

OBFS is creating some sort of predictability of the budget. Faculties will know approximately what their budget will be in two years ahead of us when they know the output for the current year and the only thing that will happen with this budget is the sort of appropriation that the board of the university can use in order to make strategic adjustment to the whole activities of the university. In many cases the budget system is creating harmony between faculties and is actually promoting the development of home grown programs because if one faculty had 50% master program in collaboration with another faculty each will get half of the income, there will be no discussion.

ASP-GSB6 thinks cooperation and OBFS are loosely coupled. It could be that the university has a lack of management because we have this autonomy for the scientific work and employees therefore they do what they think are best but the coordination in management is not good enough. Of course employees have some goals that they must achieve but that are very simple goals like publication, teaching etc. In the whole there is lack of management in when it comes to coordination the university as institution. FM-UIN2 believes that the quest for external funding on bigger projects under OBFS demands researchers to work together as a team to secure external funding which is meant to induce cooperation between researchers in different universities and nationalities.

FD-FSS2 claims that there is less cooperation in the OBFS because there are sharp lines between faculties. There are no enough cooperation between the faculties, for instance, facilities employ different individuals to work on the same kind of subject which should have been done by the same faculty or group. However, it is also not fair to blame it all to the OBFS; faculties have internal problems as well. Involvement of external sourcing of funds as kind of mystery (P-FSS3) because a professor position has 50% of the time dedicated for research but still everybody in the institution expects him to apply for external funding for doing research. If the professor is quite successful at that external market, what is happening is actually, the professor fund a part of his service that is actually formal part of his position or service. The extra money he makes is send to a black hole and that is how the system works right now. If professors stop doing external funding then the institutions have to reduce some activities. So the present activities are dependent on some kind of external income.

4.3.3. Quality and Quantity of education and research activities

P-GSB3 is skeptical to OBFS. He believes that OBFS has definitely led to have more researchers interested in publication. They tried to publish more but then it becomes more quantity than more quality. He argued that the level one publication journal comprises all things so the qualities of many papers or articles that are published are very poor. But still you get one point. The main quest has become to get it published. He further argued that especially young researchers are not worried about the quality. The OBFS's implication particularly on young researchers is that they do not use so much time to read what other people have done instead they are more interested in getting their articles published. He claims the focus is more on quantity and does not believe that OBFS has increase the quality. The quality according to P-GSB3 is getting poorer because the existing publishing journal group is too broad; especially level one is almost everything. He suggests that if there will be three or four levels it would be better to see the level of quality.

P-GSB3 also discusses publication points with greater details as follows: publication point (PP) is measured not only at institutional level but also at departmental and individual level. Comparisons of percentage growth rates in PP between the institutions are done by up to two decimal places of accuracy. What is actually measured, it seems as if one becomes less and less concerned. P-GSB3 compared the situation with the contents of the New Year's speeches in the old Eastern bloc countries where the leaders informed about the number of tons of nails or the number of pots that were produced last year, but without mentioning either quality or benefit for the population. Although only 2% of the funds to universities and colleges are allocated on PP, It has received great attention at all levels within the system. When the system was introduced, the aim was clearly to reach a single number of research activities so that one can easily follow the development over time in an institution and to compare the activity between institutions. Moreover, the system would give each institution an incentive to further research, since the allocation of research funds to the institution increases its share of the national publication points.

In calculating the number of PP, P-GSB3 observed that PP emphasized the written contributions by publication type and level. A distinction between peer-reviewed articles in journals, scholarly monographs and chapters in scientific anthologies at level one and level two publications in which at level two with the highest quality. Sections of journals and publishers at level one and level two obviously debatable; they are settled by Norwegian researchers and based on a fair amount of discretion. Moreover, the weights chosen quite

arbitrary. Why, for example a scientific monograph on the level two count just 8 times more than an article on level one? Why not 5 times more or for that matter, 15 time more?

Introduction of PP has led to a significant increase in the number of research bureaucrats and paper use because the PP shall be calculated at the individual, departmental and institutional level to report to management, board and Ministry according to P-GSB3. OBFS leads to that people are more interested to look for journals that can give them easy points than trying to publish in good journals. The two journal levels where you get one point for the level one and three points for the level two is an open discussion when it comes to the objectivity of the decisions behind what journals should be level one and level two. Of course one can argue that if someone has published a lot of articles in one journal that someone will want that journal to be a level two or the highest standard. P-GSB3 thinks that one main drawback with the system is that there is no objective or clear requirement to decide whether a journal should be level one or level two. The parameters used to decide the grouping of level one and level two is open to discussion.

Similarly, D-FSS1 does not believe that the fact that the number of research quantity will increase quality. OBFS might lead to more writing which would mean the same research written in different ways just to get more points and more money but the result is not better. It leads to getting better and better in writing in a special way but not getting better in research. Because getting to write in a better way is not getting better research. For R-UIN1, however, since the large part of the research and education comes from the state as a basic component independent of what universities are really doing today or tomorrow. There is a quality control system which is taking care of the quality of education. NUKUT is a body which is taking care of the quality of educational system. NUKUT issues a report every five years where they have a kind of evaluation of all faculties in Norway doing the similar subjects so that to compare the status of each university in the research.

Similarly, Norwegian research council issue evaluation reports every ten years. So universities are quite concern about quality all the time because if they don't get a good enough quality, the basic component funding would be turned down. All universities would like to have this external evaluation to favor their quality standard. In other words, the basic component is dependent on the report of quality assurance i.e. NUKUT and is not to be taken for granted. Should universities fail to demonstrate the required quality by NUKUT, not only the basic component part of the funding will be turned down but also may be status of the

institution would be reconsidered. So the OBFS based on indicators, research and production of candidates but always is regulated, or controlled or viewed externally from experts on education and research so that the quality has to be in mind.

AP-FSS5 also believes that the system certainly encourages researchers to publish more than previously. From that perspective may be the quantity matters more than the quality in the OBFS. AP-FSS5 stated that researchers cannot legitimize their position as researchers without publishing but in some cases it may result in an inflation of publication for their own sake irrespective of the message or the idea which has to do with the quality of the article. Yet another, AP-FSS4, claims that there is an incentive in the OBFS to decrease quality due to competitive market that asks for quantity. The OBFS clearly rewards quantity. It pays off to publish several articles in the lower level journals than time consuming but deep studies in the higher level journals. However, AP-FSS4 recognizes the increase in quality in terms of the OBFS is encouraging people who previously were not publishing to publish. Forcing people to publish is good thing about the system but research topics that require several years with some uncertainty of publishing them will get less attention in OBFS.

On the contrary, D-GSB1 believes that the OBFS doesn't affect the quality of education at least in his experience. He argued that students not attending a program do not necessarily have to do with the quality of the program. He also believes that the two categories for publishing research journals are enough because there will always be a discussion whether this will be good or bad but what we need is some sort of system enabling us to measure the output of all these time and money we spent on research and this is one approach to that effect. However, D-GSB1 doesn't like the OBFS especially when it comes most of the funding at Norwegian universities heavily focusing on the teaching programs more than on the research part.

It is a very small part of the university's budget that is related to the research taking place at the university. D-GSB1 doesn't like this type of funding for high level education because there will always be fluctuations in the way the recruitment of students than the quality of students that enter the type of programs. We have seen that in the engineering programs around Norway, we have seen it in law schools at bigger and smaller universities and we see that in business school. Having this kind of fluctuations in the funding makes it difficult to maintain good quality based faculties. Because the need to adjust to the funding. If I should have recommended the funding I would not say that you should basically have component

that is related to the student points that are created by the system. But there should always be a basis which is bigger related to maintaining good faculties.

According to P-GSB4, the end goal of economy is not to increase quantity, or consumption or production but it is to increase the quality of life. Increase in material welfare could be measured to GNP but how to measure quality of life. May be it is impossible to quantify quality may be quality is an experience. To increase quality, could that be measure through the number of articles published in well known scientific journals? I am not sure but we can say, that may be the quality system in these journals are better so therefore we can say that the highest standard of the journal better quality of the research may be but that is within specially defined paradigm. When you ask other questions they may not think the quality is good enough to be established in these journals but in my opinion the quality could be very high even if it is not fit to the established system. Universities must give a space to the other questions and researches as well, and find a way to fund it based upon the universities resources. That is what the main idea of establishing a university. May be the most important research for the future is not very popular today. There is no obvious connection between the two. He suggests that the funding system should not be limited to research projects based on today's popularity of the research questions, methods or theories.

AP-GSB6 believes that there is higher possibility to seek easier fields and there is no incentive to dive into the hard areas where that should be some of the quest for a university. But as an employee, we are free to choose but people tend to go for soft targets to for publication points. AP-GSB6 claims increase in productivity in terms of numbers but not necessary in terms of quality and relevance. Similarly, ASP-GSB6 does not think that the quality in scientific ways is better now. He sees the OBFS as more to get the output of the students that would also be a negative effect of the quality. He doesn't think quality is better now but the effectiveness does.

FM-UIN2 on the other hand claims that the quality and quantity has increased under the OBFS in the last ten years. FM-UIN2 emphasized the increase in quality particularly in the education part due to the several quality systems introduced for education as a result of the OBFS. According to FM-UIN2 the research quality has also improved due to the fact that the system requires for researchers to work together as a team which was not the case ten years ago. PA-UIN3 also thinks that the quality has improved because a lot of people are now doing

research than ten years ago and most of them are using international channels to publish their articles but PA-UIN3 is not sure whether that is a prompted by the OBFS.

P-FSS3 expresses positive confrontation with the OBFS when it comes to enhancing quality at least in some aspects of social science. P-FSS3 describes his experience by taking the PhD students in social science both in University of Nordland and elsewhere. For years PhD students in social science typically monograph was the norm and nobody ever thought about articles. The problem with monograph today is that it gives absolute no points, unless it is published by formal publisher which is unrealistic for most of social scientists, in the OBFS. So today students typically write articles. They need four or five articles in the thesis. Of course one can argue on the side that this present fragmentation of their project by cutting their work into piece here and there on the other side this actually quite another kind of working in process so what they do today is they travel to conferences present papers becoming articles.

P-FSS3 thinks students working on articles today are much more involved in external networks than students who work internally on monographs. P-FSS3 believes that students are much more involved and less locally oriented than they were some years ago. He claims that in social science, doing more in terms of articles has actually raised the quality. Similarly R-UIN1 think the OBFS has mainly increase both quality and quantity but of course recognizes some opportunistic behavior on the part of some researchers as a result of adapting to the system which is of course, difficult to eliminate from any system. The OBFS rewards three points for the 20% of journals as higher level and 80% of the journals are rewarded with one point. This means that the quality of an article published in the 20% is three times better than the article in the 80% of journals and the number of articles in the 20% is reported to be increasing.

4.3.4. Opportunistic behaviors induced by OBFS

It is very difficult to eliminate opportunistic behavior in any system but (P-GSB3) to mention some of the observed manipulations in the OBFS, since conference proceedings give one point, a lot of researchers would like to that even though the proceedings in many cases are not been thoroughly reviewed but you get one point. Since many of these conferences are not very good it is easy to get one point and many researchers are aware of that trying to go for conferences is becoming more opportunists. But it is not illegal to do so, the system encourage researchers to do so. AP-GSB6 believes that the OBFS has encouraged researchers

to break down one big study in to pieces to increase their number of publication and that is a little degeneration of the quality what university use to be. He also sees a common interest to stop failing students even if the level of knowledge is not good enough then you put “E” instead of “F” and everybody is happy. The department, the student and the local administration all have the same interest that the student passes. The only victim is the employer in the job market later by hiring incapable candidate of doing the job that university certifies him that he would. If an exam taken from ten years ago and put it for students today, to large extent they will fail according to AP-GSB6 hypothesis based on his experience. According to FD-FSS2, the system has encouraged some desperate faculties to produce master thesis in order to get a research points. Some have also paid foreign editors to produce articles and thesis for the same purpose. OBFS has obviously led to some opportunistic behaviors in recent years.

According to P-GSB3, the increased focus on the Publication point has also led the researchers go after publication channels that provide "light" publication points. In practice, this means channels in which the academic requirements to get things in print are low. Number of reported publication point rose by nearly 60% from 2004 to 2009 nationwide. Supporters of the publication point claim that this shows that the publication point has had a positive impact on research activity. Here it is easy to be fooled: In the same period, namely the number of journals and number of publishers who provide publication point with respectively 40% and 116%. The basis for calculation of the publication point is thus substantially expanded in this period. This means that publication point reported grossly overestimates the development of research activity.

P-GSB believes that the increase in the number of publishing channels signals a fourth effect of publication point: The institutions may in fact on behalf of proposals from scientists propose new journals and publishers should give publication point. This means that many see it more appropriate to work to influence the journals and publishers that will pay off (where they have published) than to work on getting published articles in the already existing good publication channels. Another effect of publication point is that the supply of good Norwegian textbooks is poorer, the writing of traditional textbooks do not publication point. Because should one gets publication point for books, they must have a "scientific character". P-GSB3’s general impression is that most scientists think publication point is a ridiculous measure of research activity and that they are going to smile when it reported on recent developments in the PP. What concerns me is that the protests among scientists are greater,

but that they would rather try to adapt the system as best as possible. A nearby thought may unfortunately be that some researchers see opportunities to hide their lack of research in easily bought publication point.

According to AP-FSS4, universities are conservative and people at universities do not like other people telling them what to do and the OBFS has been telling them just that for the last ten years. For this reason, AP-FSS4 believes, when it comes to research, OBFS has been met by bitter resistance in the minds of researchers. However, he also argue that universities have matured to the idea that they have to be more out going to make applications for funding, doing better against getting points for the Norwegian research council, European Union projects etc. He argued that universities are adapting and at the same time a bit skeptical. The OBFS is both the carrot people accept but also problematic because it is very narrow. Much of the research activity will not fall into that very narrow system. He described the system as "*The map does not fit very well to the landscape*" and suggest that they system should be open for some sort of negotiation to better fit the realities of research.

D-FSS1 believes that OBFS is a very good system because we then have a more reflected focus of what we are doing. The system is predictable and easy. If we do what is required from us, we should be able to get more funding and able to do more research and to provide the market with skilled labor and do some basic research as well. However, D-FSS1 argues that OBFS has too little communication when it comes to deliver the research results to the general public.

According to P-FSS3, under the OBFS for colleges and universities, the 60% of the total budget is kind of basic or base line budgeting. Only 40% of university's income is based on results. Besides, this 40% is also divided into teaching and research activities. In the teaching activities, there is a fixed price for every 60 ECTS points. So when a student studies full time for a year it gives the university some amount of money depending the kind of education. This strategy means that if the student could grow significantly the ministry of finance or education will increase the budget so there will come up with more money. It means it is not a given base. The government will make money available but the opposite is the case when it comes to research. In the research activities, there is given sum of money which is distributed among the institutions on things like publication points based on external funding for research projects etc. This means that when all universities start to be more and more productive in terms of publishing each and one article will count less and less in funding system. In other

words, the incentives have become weaker during time. So for P-FSS3, "*universities are in a situation where the incentive of doing more teaching is stronger than doing more research*". FD-GSB2 believe that under the OBFS many researchers are becoming more focused in getting publication points at level one journals which might lead to diminished focus on quality.

When it comes to decide what to do with study programs with few students, P-FSS3 has said it is quite an urgent discussion in the social sciences faulty because there are a lot of courses and programs with very few students. There is a prevailing discussion about what to do with these programs. The faculty leaders are considering programs or courses with less than ten students to be cancelled. That is one result of the system but I think most people will agree that it a limit in terms of scarce resources to have courses with a few students. On the other hand it is a bit complicated because the supply side of education is much more stable than the demand side (preferences of students) and some of the staff members stayed half of their lifetime with the university. While student preferences vary from year to year. So trying to find this balance is quite difficult and challenging. P-FSS3 describes the weighting given to teaching and research as the main cause for the humanities or other programs with few students to end up closed down. Humanities in Norway are quite good in research to publishing but they have acute problem of recruiting students and the system and the system for teaching is much more than the research. They are losers in the system. So there is a need for some other kind of funding for small disciplines as appendix to main system serving the humanities in a special way.

When a task is assigned, the acceptance of the task implies a political strategy of the agent to survive in the system since the given task is a coercive tactic of the principal. The strategy of maintaining or raising status quo of the agent is done through the acceptance of the contract without questioning or warning the principal of the feasibility, efficiency and effectiveness of the goals. This theoretical assumption resembles with the fact that most of the administrative staff members fail to discuss or identify ethical challenges or pretend to simply fail to see elements of ethical challenges could be interpreted as opportunistic strategy of the actors in the administrative services. May be they are in a state of denial.

5. ANALYSIS OF EMPIRICAL DATA

In this part of the thesis, I will conduct the analysis of the empirical data. I will be using the framework of reference to provide the basis for my conclusions. I look at how practitioners perceive the OBFS at the two faculties of the University of Nordland how it has been implemented and what challenges have been experiencing as a result of the system. The literature in the frame of reference supplies me with the tools I need in order to analyze the two research questions.

5.1. Ethical challenges and conflicts of interest from Accountability perspective

Political and public accountability concerns being responsible to the mandate and function of that particular organization in society, and being responsible towards the local community of which one is a part. University must be supportive of the government in implementing policies and programs, but also responsible to the society. University of Nordland staff members believe that one of the main roles of university is to educate young students, making good research and communicating the research results to the general public and thus improve society's standard of living. By doing so, discharge their public accountability. Professors and researchers public accountability involves among others, answering to the expectation from the general public to discuss and contribute to public concerns about administrative activities through local newspapers, magazines, TV- channels and conferences and so on.

When it comes to political accountability, R-UIN1 has pointed out that university is part of the authority for education and research. As a university we have a law and in this law university is charged with implementing policy goals set for the university sector. Political accountability of the university in this regard involves detailed reporting to the government every year about how we are succeeding in our goals and plan on how we intend to proceed for next year. Government representatives also interview the board of the university and the secretary of the board every year to make sure that the money allocated for the university is used as intended. The UON staff members are sandwiched between the strong control and supervision of the state and discharging their responsibilities to answering public concerns and disseminating of knowledge to the general public. Researchers have pointed out that the OBFS lacks practical incentive when it comes to dissemination of knowledge. It gives the right to disseminate knowledge but not the means to practically carry it out. However, most of my informants said they will continue to publish in channels that are not earning points if that is what it takes to reach to the people regardless of whether they get a point or not because one of the values behind university is to be accountable to the public.

Faculties under OBFS have developed stronger expectation from teachers and researchers by stressing the necessity of the student points and publication points for the financial survival of the university. This expectation makes the university community to think about the institution and they are no more as free as they were in the old system according to my informants. Besides, Norwegian research council obviously is political administrative with a long arm. The way research council operates obviously is different now than it was before. The amount of open programs are fewer, the application or order is sharply defined. There is both greater will and greater ability to steer to give direction to research and we have to jump if not we will not be able to secure funding. From this perspective the ethical challenge appears to be whether to stand firm to ensure integrity or compromise that integrity and involve in projects with some sort of reservations just help stabilize the financial conditions of the university.

Managerial accountability refers to a person's position in a hierarchy and responsibility towards superiors concerning tasks that are delegated. The point is that schools as collective entities are accountable to the higher levels of the educational system. It focuses mainly on monitoring inputs and outputs. My informants have pointed out that faculty deans and directors have responsibility to monitor the education and research activities and report to Ministry of education and research through the consultation meetings or other channels available to them. Therefore the dean has to ask researchers as to their intentions for research and teaching for the specified period of time which could constitute to some a little erosion of freedom even if, they still are free to choose their own topic but they must choose or consider if it is right for them to be part of the academic staff. Researchers and professors are expected to report their intentions to administration.

Another strategy adopted in OBFS has induced a conflict between the professor's position and the expectation for external funding as described by P-FSS3, a professor service have 50% of the time dedicated for research but still everybody expect him/her to apply for external funding for doing research project. What is happening is actually, he/she fund a part of his/her service that is actually formal part of the position or service. The extra money he/she makes is send to a black hole because when you do more teaching than we actually have funding for. If we stopped doing external funding, the faculties have to reduce the activities. So the present activities are dependent on some kind of external income.

The faculty deans and administrators expect researchers to apply for external funding without any incentive to encourage the same. The performance indicators are unable to detect the

effort and time lost at applications that fail to be the best to earn the funding. Even if the application was rated very well in the system, there is no point or payment or for that matter recognition for the time lost in the application, thus the researcher risks justifying his time to his supervisor. AP-FSS4 suggests that internally the faculty has to have an incentive or has to have to reward behavior even if that may not payoff at all. As D-GSB1 pointed out, at the institutional level, most universities are pretty much aware of the need for getting external funding for the research programs and in that case there might be an increase focus on approaching the proper channels of funding and the proper programs that makes the future funding predictable but not at the individual level.

As pointed out by P-FSS3, universities are in a situation where the incentive of doing more teaching is stronger than doing more research. The education component is open frame while the research component is not. But the publication point has received more attention in the system even though it represents smaller percentage. This could be one way of discharging faculty's managerial accountability to implement pledged strategies because they can do little about student preferences when they try to recruited students to their programs but they can do more than little to pressure their employees (researcher) to publish so that they increase their funding. Another reason could be strategy adopted to kind of supplement the budget deficit on the basic component compared in an attempt to catch up with other developments in the sector as way of consolidating recently obtained university status.

Deans and directors of faculties have shifted focus to cheaper and profitable study programs to maximize their income according to my informants stating the MBA program at the Graduate School of Business as an example. The numbers of students have increased dramatically in the last years due to flattering student preference or application to that program. However, there are other programs which might be relevant to the development of the society in the future but currently has lesser demand from students. The OBFS is set to follow suit of student preferences and thus has to be met with implicit managerial challenges by decision makers at the faculty and university board to kind of balancing the fluctuating student preferences form year to year and future relevance of programs despite the pressure from OBFS.

Professional accountability, where a person's commitment to a community of professionals makes him/her perceives a duty to adhere to the standards of the profession. This is about teaching as a moral endeavor. Codes of ethics have for instance become a familiar part of the

rhetoric of professional control of the work in schools, even though the influence of these codes is uncertain. Professional accountability invokes the sense of duty that one has as a member of a professional or expert group, which in turn occupies a privileged and knowledgeable position in society. Research and education activities are affected by several other contextual elements from cultural practices to the political legitimization of a system as pointed out by (Jongbloed, 2007). Thus people at universities today have to deal with many important challenges that have something to do with the financial survival of their institutions and something to do with what is central to research and education. For example, research assessments and the overall science policy "climate", while not being directly connected to funding, may have consequences on an institutional level On the other hand, researchers and universities are highly able to adapt their behavior and organization to new external requirements in ways that do not affect their pattern of activity too much if requirements do not match their interests (Calvert, 2000; Krucken, 2003).

According to AP-FSS4, universities are conservative and people at universities do not like other people telling them what to do and the OBFS has been telling them just that for the last ten years. Thus, OBFS has been met by bitter resistance in the minds of researchers. However, people at the universities have matured to the idea that they have professional accountability to be more out going to make applications for funding, doing better against getting points for the Norwegian research council, European Union projects etc. Thus teachers and researchers are struggling to preserve their professional values as well as trying to adapt to the system to help their institution survive even though they are skeptical especially about the very narrow focus of OBFS that much of their activities are not represented by the performance indicators. As one of my informants described it "The map does not fit very well to the landscape".

Personal accountability can include the values that are sacred to a person. It concerns fidelity to personal conscience in basic values such as respect for human dignity and acting in a manner that accepts responsibility for affecting the lives of others. This kind of accountability is regarded as particularly powerful and binding. It is likely to expect that emotional labour will be stressful if personal values are in conflict with other kinds of accountability. Personal accountability involves values that are rationalized to individual's personality or way of thinking right from the early days of his/her life. Thus conservative tradition of preserving values associated with the university and its role to society is quite strong to be tarnished by the introduction of a system that focus on some performance indicators which are believed to be by most researchers incapable of capturing the whole complexity of the activities expected

from higher education. My informants have discussed many examples that could cause ethical challenges.

Researchers are engaged in ground research because they believe it is necessary to contribute to the future development of society regardless of its relevance to the OBFS's demand for publication points in the prescribed channels of publication. Researchers are striving to push the scientific frontier even further through free research against the pressure induced by the OBFS to kind of legitimize your relevance to the academic staff through number of publication points. Professors are aware of the common interest to stop failing students but all academic staff that were interviewed expressed the temptation to do so if they see it from the financial returns point of view but the quality of education is much more important than the earning of points for them. So they rather spent more energy and time to get the students to the required quality level if they wish to support the institution get income not at the cost of quality. So such phenomenon clearly constitutes ethical issues because not everybody is expected to have the same sense making on such issues. The weighting given to integrity i.e. quality is much more worth preserving than the income. They feel accountable to themselves to do the right thing. But this doesn't of course mean to undermine the effect or temptation or the unconscious tendency of lowering the mean grade of students. But they have to struggle to find the balance all the time.

The OBFS, according to my informants, has failed to encourage dissemination of the findings to end users but still researchers are publishing articles meant to deliver those findings through newspapers and TV-channels without expecting any income out of it. Because for the researchers preserving and contributing to national and cultural identity of the society is worth more time than the money they would get from publishing in journals that have less relevance to their society. They consider themselves accountable to be relevant to the society. Discharging personal accountability has therefore compelled professors and researchers to refuse compromising their perceived values. They have chosen instead to adapt to the system or kind of negotiate between what is right and wrong to find ways to support their institution by earning funds without compromising their values.

5.2. Ethical challenges and conflicts of interest from Principal-agent perspective

The principal-agent dilemma (Van Der Meullen, 1998) reflects a situation in which the government or a governmental agency is attempting to enhance its own or wider societal targets, for instance, via public research funding programs. As it does not have the appropriate

know-how and human resources to conduct the mission, it needs to "delegate" the actual implementation of tasks (research) to specialized organizations such as universities. The underlying assumptions used to formulate the agency theory are the behavioral paradigm which tries to explore and investigate the thoughts and motivations of decision making when people have to make a decision and to make sure that the principal monitors the agent's behavior to perform effectively and efficiently. However two factors are inherently embedded in the principal-agent relationship: Conflicts of interest and information asymmetries (Kivisto, 2005 P.13).

All my informants believe that one of university's roles in society is production of new knowledge to solve current and future social problems and is considered as one of the fundamental values of the institution. According to my informants new knowledge can be produced from responding to demand and from ground research for the dynamics of research knowledge that emerges by coincidence. AP-FSS4 has used an example of the invention of steam engine before the demand for it and the invention of radar following the demand for it. So both realities exist and equal attention for both must be given.

All my informants believe the incentive for the production of new knowledge under OBFS is very weak. However they have a different explanation for the cause. For instance R-UIN1 associate it to the history and research tradition of the journals available. From a static view on the journals, all journals have their own history, own research tradition, own discipline, methods, theories and so on. Researchers in these journals discuss the traditional problems, traditional ways of thinking; traditional ways of doing research and these new ideas will struggle a bit in publishing such research findings. In addition the traditional way of thinking in developing new theories and methods has contributed to the problem of new knowledge production because conservative tradition demands to do and re-do the research several times before it is a kind of robust new idea and knowledge. AP-FSS4 believes that the pressure to publish in the OBFS is so heavy that researchers do not get enough time for free research. D-FSS1 claims that researchers with supposedly new ideas have to convince decision makers to fund their projects. The dean at the faculty has to be convinced to allocate scarce resources among research groups and the same logic goes to external funding agencies. So the so called new ideas may not get the opportunity at all. D-FSS1, P-GSB4 and P-GSB3 claim that the focus of the OBFS is limited to the established paradigm. The researchers asking new questions to step outside the well known or excellent research traditions to develop new

methods, theories and so on will not have the best opportunity in the OBFS because new ideas will not come under the established center of excellence.

Administrative and Academic staffs have a divided perception when it comes to education and research quality under the OBFS. The Administrative staffs believe that the OBFS has increased the quality and quantity due to the fact that the large part of the research and education comes from the state as a basic component independent of what universities are really doing today or tomorrow. To ensure quality, the government has established a quality control system both for education through NUKUT and research through Norwegian research council. NUKUT issues a report every five years where they have a kind of evaluation of all faculties in Norway doing the similar subjects so that to compare the status of each university in education. Similarly, the Norwegian research council issue evaluation reports every ten years. So universities are quite concern about quality all the time because if they don't get a good enough quality, the basic component funding would be turned down. All universities would like to have this external evaluation to favor their quality standard. In other words, the basic component is dependent on the report of quality assurance i.e. NUKUT and is not to be taken for granted. Should universities fail to demonstrate the required quality by NUKUT, not only the basic component part of the funding will be turned down but also may be status of the institution would be reconsidered.

Even though the OBFS is based on indicators such as student and publication points, university communities are aware that quality is always regulated or viewed externally from experts on education and research. The Rector of the university, as internal controller, draws especial attention to focus on quality both at education and research during sessions with other administrative and academic staffs to make sure that quality is always a priority. R-UIN1 believes that the OBFS rewards three points for the 20% of journals as higher level and 80% of the journals are rewarded with one point. This means that the quality of an article published in the 20% is three times better than the article in the 80% of journals and the number of articles in the 20% is reported to be increasing thus quality is increasing.

P-FSS3 also pointed out that the OBFS is enhancing quality at least in some aspects of social science. For years PhD students in social science monograph was the norm and nobody ever thought about articles. The problem with monograph today is that it gives absolute no points in the OBFS. Unless it is published by formal publisher which is unrealistic for most of social scientists. So today students shift to writing articles. They need four or five articles in the

thesis. Of course one can argue on the side that this present fragmentation of their project by cutting their work into piece here and there on the other side this actually quite another kind of working in process so what they do today is they travel to conferences present papers becoming articles. P-FSS3 thinks students working on articles today are much more involved in external networks than students who work internally on monographs. P-FSS3 believes that students are much more involved and less locally oriented than they were some years ago. He claims that in social science, doing more in terms of articles has actually raised the quality.

Academic staffs, however, are skeptical to OBFS. P-GSB3 believes that OBFS has definitely led to have more researchers interested in publication. They tried to publish more but then it becomes more quantity than more quality. P-GSB3 argued that the level one publication journal comprises all things so the qualities of many papers or articles that are published are very poor. But still they get one point. The main quest has become to get it published. AP-FSS5 also believes that the system certainly encourages researchers to publish more than previously. From that perspective may be that the quantity matters more than the quality in the OBFS. AP-FSS5 claims that researchers cannot legitimize their position as researchers without publishing but in some cases it may result in an inflation of publication for their own sake irrespective of the message or the idea which has to do with the quality of the article.

AP-FSS4 claims that there is an incentive in the OBFS to decrease quality due to competitive market that asks for quantity. The OBFS clearly rewards quantity. It pays off to publish several articles in the lower level journals than time consuming but deep studies in the higher level journals. However, AP-FSS4 recognizes the increase in quality in terms of the OBFS is encouraging people who previously were not publishing to publish but research topics that require several years with some uncertainty of publishing them will get less attention in OBFS. AP-GSB6 believes that there is higher possibility to seek easier fields and there is no incentive to dive into the hard areas where that should be some of the quest for a university. But as an employee, we are free to choose but people tend to go for soft targets for publication points.

P-GSB3 also observed that publication point emphasized the written contributions by publication type and level. A distinction between peer-reviewed articles in journals; scholarly monographs; and chapters in scientific anthologies at level one and level two publications in which at level two with the highest quality. Sections of journals and publishers at level one and level two obviously debatable; they are settled by Norwegian researchers and based on a

fair amount of discretion. Moreover, the weights chosen quite arbitrary. OBFS leads to that people are more interested to look for journals that can give them easy points than trying to publish in good journals. The two journal levels where you get one point for the level one and three points for the level two is an open discussion when it comes to the objectivity of the decisions behind what journals should be level one and level two. Of course one can argue that if someone has published a lot of articles in one journal that someone will want that journal to be a level two or the highest standard. P-GSB3 thinks that one main drawback with the system is that there is no objective or clear requirement to decide whether a journal should be level one or level two. The parameters used to decide the grouping of level one and level two is open to discussion.

All my informants perceive that the OBFS has an influence on institutional strategies. Universities are encouraged to offer educational programs according to market demand and to enhance research quality. Such strategies are perceived to have undermining less popular educational programs and creative research activities outside the areas of mainstream research. There is a big fear among my informants that the diversity of research activities may be adversely affected because OBFS do not reflect some of the distinctive character of small, specialized programs that are not measurable by the indicators provided, such as publication of articles in newspapers and other journals, activities to disseminate research findings targeting local communities and art activities preserving social values.

D-GSB1claims that due to the stronger incentive of OBFS to teaching programs than research activities, it has become difficult to draw strategies to maintain quality based faculties. Because there will always be fluctuations in the way the recruitment of students than the quality of students that enter the type of programs. And thus faculties have to adjust to the funding. From the perspective of agency theory, the major concern about university governance highly emphasizes opportunism costs. Opportunism costs are the costs resulting from opportunistic behaviors by the university contrary to the interests of the government (Kivistö, 2007, p. 197). Therefore, the opportunism costs of the university are the focus of attention in this thesis when the government wishes to decrease agency costs. Two main contributing factors of opportunism costs are derived from the divergence of interests between the principal and the agent and information asymmetries. According to the Ministry of Education and Research, the intention of the performance-based funding system is to increase the quality of research and higher education: “Quality considerations in education and research are best safeguarded by means of a financing system that emphasizes the results

attained and by introducing a partial distinction between teaching and research in the calculation of budgets" (Report to the Storting 2000–2001). Financial rewards based on publication in international review journals and books, along with increased internationalization and improved support systems for faculty exchange, are seen as important means of accomplishing these goals.

The ministry of education and research has introduced different kinds of mechanisms to solve the inefficiencies that may arise as a result of opportunistic behaviors from the universities. one way is to set a rigid indicators of performance directly linked to the income of the university and another is control mechanisms on strategic basis and carrying out consultation meetings on regular basis to monitor behaviors and tendencies as to where the agencies might be heading to. However, based on my informants, OBFS with its financial reward has created incentives to behave opportunistically as discussed below:

- Most of my informants believes that the OBFS has encouraged researchers to break down supposedly big studies in to pieces to increase their number of publication and that is viewed as degeneration of the quality contrary to what the OBFS is striving to achieve.
- Most informants claim that researchers may find it more attractive to conduct mainstream research, which are more easily published in journals, than pioneering, critical and creative research undermining the fundamental values of the institution and national and cultural diversity of the society. Or look for journals that can give them easy points than trying to publish in good journals
- The OBFS through its strong financial reward to publication points has encouraged some desperate faculties and individuals to cheat or sort of playing with the system by adapting to it through various ways and techniques which is by the way difficult to eliminate from any system but some have tried to produce master thesis and even hire foreign editors to produce articles in order to secure funding from the system according to my informants.
- One of my informants have observed that, proceeding from conferences give a researcher a point even though the proceedings in many cases are not been thoroughly reviewed. Many researchers are aware of that and have become a way of earning points than it was expected initially.

- One of my informants believes that the increase in the number of publishing channels signals a fourth effect of publication point. The institutions may in fact on behalf of proposals from scientists propose new journals and publishers should give publication point. This means that many see it more appropriate to work to influence the journals and publishers that will pay off (where they have published) than to work on getting published articles in the already existing good publication channels.

5.3. Ethical challenges and Conflicts of interest from NPM perspective

The major rational for the shift of public policies towards increasing output orientation and the use of external competitive funding mechanisms are related to the ideas of New Public Management (NPM) , that market-like mechanisms create an incentive towards enhanced performance. The main ideas rooted in the NPM are the increasing use of results as a screening mechanism and the use of targeted external funding with related evaluation practices as a control mechanism (e.g. Pollitt, 1993). The rationale suggested by Proponents of NPM is that funds should flow to institutions where performance is manifest: 'performing' institutions should receive more income than lesser performing institutions, which would provide performers with a competitive edge and would stimulate less performing institutions to perform. Output should be rewarded, not input" (Herbst, 2007, P.90)

All academic and administrative staff perceive university as part of the higher education system charged with responsibility to educate young students to make sure that candidates are coming out from different programs to match the demands or needs of the society both in terms of providing candidates for jobs and to perform research programs aiming at solving current and future social problems. Universities play an important role in society through educating students, making good research and communicating the research results to the general public. Furthermore the main quest for university as pointed out by P-GSB4, is to give the opportunity to the student to develop practical skills but also theoretical and ethical skills. Universities should provide students a valuable knowledge to develop their character, personality, skills but also knowledge that could contribute to develop the society at local, national and international level to make a better world in a way. So it is very important to include values such as theoretical and ethical reflections on how to use the knowledge.

As stated above, the ideas behind NPM are to reward performance based on results that are measurable via some performance indicators. However, the complexity of education and research environment makes it difficult to appropriately measure performance and to come

out with performance indicators that are capable of capturing the whole complexity in an easy and cost effective manner. As a result people at the universities live today ethically challenged balancing the requirements related to sourcing the income on the one hand and preserving the fundamental values of the institution that they represent on the other hand.

Under the OBFS, the sourcing of fund has an overwhelming impact on how faculties and the individuals inside the faculties think and focus. The dependency on external resources, as suggested by Pfeffer and Salancik (1978), compel universities and researchers to alter their activities as condition for funding change. AP-FSS4 pointed out that when the economy of the faculty is not solid; people try to generate income by adapting to the OBFS by finding ways to produce more students and more research. Consequently, the place for free thinkers to do whatever research even if it is not related to the society is dead and buried. The question with the involvement of more external funding in the OBFS will be whether universities will be invaded or hold their balance? Whether universities manage to keep the core of being free research? There will always be negotiations when decision makers see incidents that threaten their integrity. AP-FSS4 thinks the debate or negotiation and the pragmatism vary depending on the area of research in question. It is difficult to draw a line marking the boundaries when it comes to university's involvement with external sources of funding. The appropriate question would be how solid universities are to preserve their core values of integrity. The more money universities have to make on their own, obviously the more dependent they are going to get and that is the overall caution they have to do.

Furthermore, R-UIN1 pointed out that, sourcing external funding is the main question because the government funding is not as strong as the old universities. University of Nordland has to find some kind of partnerships between societies outside the university to find ways of having income into the institution. However, dealing with sourcing external funding is not easy because of ethical considerations in the decision making, people have to think about what could be right or wrong as university to be a part of the projects offered by external funding agencies. People are confronted with ethical considerations every time they consider being part of a project funded externally. That means university has to be careful about how to involve its professors in projects. It is an interesting part of professor's work to daily ask him/her self how to make good choices of this type. Currently 20 to 25% of University of Nordland's income comes from this kind of partnerships or external funding. This means that at least 20% of the institution's income is exposed to ethical considerations. Of course all my informants agree that if all costs were covered by the state 100% this would not have been a

concern. The basic component for the University of Nordland is less than the other older universities would mean also UIN is more exposed to ethical dilemmas than the other older universities.

Moreover, due to the fact that strong incentives are introduced through OBFS to do research with European Union projects than national projects under Norwegian research council, the future research areas as well as research findings would be pretty much the same across universities. The fact that EU projects require applications to match their specified research areas; which could constitute, according to my informants, a threat to national and cultural identity in particular and research diversity in general. As a result researchers are challenged ethically whether consciously do ground researches that will not generate money to their institution or go for projects that generate money at the expense of ground research. It is a hard choice between contributing to the institution on the one hand and your discipline in terms of preserving integrity on the other hand.

NPM follows the doctrine that the public sector is inefficient but can transform itself to become more efficient by introducing new management concepts, especially from the private sector (Gruening 2001; Moynihan 2008). NPM associate the implementation of these concepts with higher public sector performance (Hood 1995; Osborne and Gaebler 1992; Paterson 1988). From a static view, the OBFS has successfully increased the internal efficiency of the universities because part of the income of university from the government is connected with some kind of result where universities are counting the number of student points or candidates from the system and number of research publication points. Universities now look into the number of students leaving with diploma which was not the case in the old system. As pointed out by AP-FSS4, we live in a decade that highlights business efficiency promoted by new public management concepts, universities have great understanding for the finance provided by tax payers and their decision making is not without consultation with the providers of the money. In addition, the transparency and reporting behavior induced by the OBFS has revealed those researchers who did not publish any article for years. The university communities have become aware of the fact that a lot of researchers haven't produced any research for many years hence the OBFS has improved the efficiency in a sense that it has provoked many researcher to produce articles whom never had produced otherwise because now production of student points as well as research articles are expected in a way to legitimize relevance to the institution they have subscribed to.

However, from a non-static view, many of my informants claim inefficiency under the OBFS, researchers are using more and more time filling application forms of every kind before the research starts implying that researchers use more and more resources to get money not to do research. Top management strongly encourages their employees to go for European Union projects but when they do after a hard work of preparation and longer processing time and unfortunately fail to secure the funding, there is no recognition of that work time or payment for the whole effort and energy invested in the application even if their application was rated very well in the system. Moreover, when the system of publication points was made, one was eager to find a system that should run more or less automatic that was a kind of a dream but actually it is not the case. Someone has to sit down and read each application to figure out whether the article should have a point or not in the system. Which means a researcher is not quite sure whether his article will give him a point or not because the system constitutes so many unclear boarders. Quite many hours of work spent every year to solve such problem. In that respect it may not be efficient as it was supposed to be initially. According to P-GSB3 claims that the introduction of publication point has led to a significant increase in the number of research bureaucrats and paper use because the publication point shall be calculated at the individual, departmental and institutional level to report to management, board and ministry.

All my informants recognize that to some extent we should encourage partnerships between public and private as suggested by NPM because the combined resources from public and private will push our development an extra pace than with only one of them. As D-GSB1 pointed out that external funding as long as it is not the only source of funding for research, it tend to increase the relevance of the research taking place because it is enabling the government bodies such us the research council and European Union at least to put effort where they want the universities to develop new knowledge. It could be a good tool to promote new areas where the government thinks is especially important to future development of the society. However, some core elements that need to be part of the academic infrastructure of a university can be left behind due to the ethical challenges that this kind of funding entails. Universities must also have other sources enabling universities to pursue research strategies not directly in line with research areas covered by the European Union and Norwegian research council.

When universities are involved with external sources of funding especial attention must be given that the result is independent of the funding agencies. The researcher must be given an opportunity to do the research in his/her way so that he/she see it from different angles and

reach a conclusion of his/her own and that conclusion must be accepted by the funding agencies because that is one way universities preserve their values and integrity. According to D-FSS1 there is a conflict between the discipline based values of social science and the focus induced by the OBFS which has something to do with funding and getting money. There are a lot of arguments in trying to divert the attention from ethics, social values, commitments to democracy and society in general to the emerging focus of getting money from the system. The ethics is very relevant to sourcing external funding in the sense it should be done within quite strict rules (P-FSS3). External funding according to my informants has brought significant developments but the complexity of the administrative procedures for this financing weakens the efficiency of these interactions between the researchers and the funding agencies.

The changing relationship between higher education institutions and governments, from a model of State control to a model of State supervision (Neave and van Vught 1991), that brought increasing institutional autonomy and a growing influence of market mechanisms in higher education institutions' regulation and governance mechanisms. This has led to more extensive accountability and scrutiny of university's activity.

From the autonomy perspective, the board of the university enjoys complete freedom and flexibility to make a decision on how to use the allocated resources based on strategic interests of the university. Faculties are also free to adopt their own research and study programs. Researchers are also free to choose any research topic of their interest but they are not free not to choose one. From state control and supervision perspective, there are different control mechanisms for the education and research activities some of them are linked to OBFS and others are not. Rigid performance indicators related to student points and publication points for education and research respectively are control mechanisms directly linked to OBFS and the NUKUT evaluation report every five years and Norwegian research council evaluation report every ten years for education and research respectively are another control mechanisms which are not linked to OBFS. As a result tension exist while UIN adopt strategies in line with issues that fall under their autonomous territories in quest of maximizing their return on income/funding on the one hand and adapting to a government's strict reporting requirements in relation to how efficient resources have been utilized on the other hand.

5.4 Summary of main findings:

The quest for external funding poses threat whether universities will be invaded or preserve their core values and integrity given the opportunistic behaviors pointed out in the empirical data of this thesis. Research diversity is threaten under OBFS due to the incentives available for researcher seeking external funding from European Union projects that has to match prescribed research areas. The need for other sources enabling universities to pursue research strategies not directly in line with research areas covered by the European Union and Norwegian research council is emphasized. The OBFS has successfully increased the internal capacity of the universities because part of the income of university from the government is connected with some kind of result where universities are counting the number of student points or candidates from the system and number of research publication points. Universities now look into the number of students leaving with diploma which was not the case in the old system. The OBFS, however, has been criticized for the procedures when it comes to applications for external funding from EU and NRC due to the bureaucracies required to be carried out to get the funding and evaluation of research findings for publication points. A lot of processing time and inconveniences to the authors.

The focus of the OBFS is limited to the established paradigm. The researchers asking new questions to step outside the well known or excellent research traditions to develop new methods, theories and so on will not have the best opportunity in the OBFS because new ideas will not fit into the established center of excellence. Administrative and Academic staffs have a divided perception when it comes to education and research quality under the OBFS. The Administrative staffs believe that the OBFS has increased the quality and quantity due to the fact that the large part of the research and education comes from the state as a basic component independent of what universities are really doing today or tomorrow. Academic staffs, however, are skeptical to OBFS. It has definitely led to have more researchers interested in publication. The main quest has become to get it published because researchers cannot legitimize their position as researchers without publishing. But in some cases it may result in an inflation of publication for their own sake irrespective of the message or the idea which has to do with the quality of the article.

Sections of journals and publishers at level one and level two obviously debatable; they are settled by Norwegian researchers and based on a fair amount of discretion. Moreover, the weights chosen quite arbitrary. OBFS leads to that people are more interested to look for journals that can give them easy points than trying to publish in good journals. The two journal levels where you get one point for the level one and three points for the level two is an

open discussion when it comes to the objectivity of the decisions behind what journals should be level one and level two. The OBFS has an influence on institutional strategies. Universities are encouraged to offer educational programs according to market demand and to enhance research quality. Such strategies are perceived to have undermining less popular educational programs and creative research activities outside the areas of mainstream research.

OBFS with financial reward has created incentives to behave opportunistically. Some examples are: slicing supposedly long studies into pieces to increase publications; conducting soft targets from the mainstream research; cheating etc. When a task is assigned, the acceptance of the task implies a political strategy of the agent to survive in the system since the given task is a coercive tactic of the principal. This theoretical assumption resembles with the fact that most of the administrative staff members fail to discuss or identify ethical challenges or pretend to simply fail to see elements of ethical challenges could be interpreted as opportunistic strategy of the actors in the administrative services.

Professors and researchers public accountability involves among others, answering questions and expectations from the general public through discussing public concerns about administrative activities through local newspapers, magazines, TV- channels and conferences and so on. OBFS has no incentive to disseminate research finding to end user. It pays to produce the article, to publish the article but not to disseminate the result to the public thus discharging public accountability is difficult for researchers and professors. OBFS has induced a conflict between the professor's position and the administration's expectation for external funding. A professor service has a 50% of his/her time dedicated to research but under the OBFS, the administration expects him/her to apply for external funding. What is actually happening is a professor is funding part of his formal service. The faculty deans and administrators expect researchers to apply for external funding without any incentive to encourage the same. The performance indicators are unable to detect the effort and time lost at applications that fail to be the best to earn the funding. Even if the application was rated very well in the system, there is no point or payment or recognition for the time lost in the application, thus a researcher risks justifying his lost time to his supervisor.

Universities are in a situation where the incentive of doing more teaching is stronger than doing more research. The education component is open frame while the research component is not. But the publication point has received more attention in the system even though it represents smaller percentage. This could be one way of discharging faculty's managerial accountability to implement pledged strategies because they can do little about student

preferences when they try to recruited students to their programs but easier to pressure researcher to publish so that they increase their funding. Teachers and researchers are struggling to preserve their professional values as well as trying to adapt to the system to help their institution survive even though they are skeptical especially about the very narrow focus of OBFS that much of their activities are not represented by the performance indicators. UIN staff members have developed a successful culture of working together in pursuit of developing new programs through internal cross subsidization to implement their strategic interests in the region even if it is not generating any income for institution in short run despite competition based funding.

Personal accountability involves values that are rationalized to individual's personality or way of thinking right from the early days of his/her life. Thus conservative tradition of preserving values associated with the university and its role to society is quite strong to be tarnished by the introduction of a system that focus on some performance indicators which are believed to be incapable of capturing the whole complexity of the activities expected from higher education. Discharging personal accountability has therefore compelled professors and researchers to refuse compromising their perceived values. They have chosen instead to adapt to the system to support their institution get funding.

6. CONCLUSION

In response to the divided opinion over the output based funding system in the Norwegian higher education, the purpose of this thesis has been to describe and analyze how output based funding system is viewed from practitioners' perspective at University of Nordland. I have analyzed the OBFS using three perspectives namely: Accountability theory, principal-agent theory and new public management concepts. To this end, I have formulated two research questions to address the topic:

1. What ethical challenges are associated with OBFS?
2. What conflicts of interest are associated with OBFS?

People at the university are confronted with ethical challenges when making decisions whether or not to focus on areas that are measurable by the performance indicators in order to increase the financial returns to the institution and publication points to the researcher. Because some researchers would like to extend their focus to areas that they see fit to safeguard the fundamental values of the institution even if it is not measureable by the indicators to secure funding. Many researchers are concerned that free research could disappear slowly if the focus is only to the research areas where publication points are attained. Based on the opportunistic behaviors pointed out in the empirical data, the quest for external funding poses a threat whether universities will be diluted or preserve their core values and integrity. OBFS encourages institutions to seek external funding, especially from European Union projects, where they should match prescribed areas of research. The much higher financial reward attached to external funding from EU projects poses an ethical challenge when decision makers have to dwell on going after larger financial proceeds from EU projects by depriving free research or conduct pioneering, critical and creative research to enhance the research diversity as well as fostering national and cultural identities. In the sense that people at universities are facing difficult choices between their economic needs and weighting the string attached with external funding. e.g. matching targeted areas of research. Similarly, when the number of students and credit production are the most important components, study programs with small number of students are disfavored in the OBFS. The ethical challenge emerges because assessment of the issue differs more among facilities; a poor assessment may lead to close a study program, while another may decide to invest more resources to improve outcomes of that department. The end goal of OBFS is to make sure that performing institutions are rewarded and less performing institutions are inspired to perform more through some performance indicators. But areas in between what are counted and are

having indicators for and what the university should do is not clearly given in managing the university under OBFS. This could mean that decisions regarding issues that fall in the buffer zone are exposed to subjective interpretations and fine-tuning them is easier said than done. Another challenge could also emerge from the fact that the OBFS has induced faculty leaders to expect their professors to conduct research and seek external funding largely from EU and Norwegian research council to augment their budget. However, the professor service has a defined percentage of his/her time dedicated to free research. The problem for the professor could be twofold the expectation to seek external funding is by itself a pressure because if they didn't some activities have to disappear that is one thing and the other is that if the professor is able to generate money from external funding, that would mean he or she is financing part of his official service to the institution.

Conflicts of interest emerge between the administration and researchers when they seek external funding because from the managerial accountability perspective the administration has to pressure researchers to earn publication points to augment their budget, which means to focus on areas that are measurable by the indicators. Whereas from the personal accountability perspective, the researchers would like to do research in areas they would like to study because they would like to choose where to spend their time as they are not directly responsible for the financial health of the institution. Conflicts of interest emerge between the Ministry of education and the researchers when it comes to publication points because from the political accountability perspective, the ministry would like to have stronger scrutiny of articles so that to avoid bias and criticisms when they evaluate the articles to decide on publication points. Whereas, researchers, once they deliver their articles would like to avoid the time spent in explaining details of their articles and lengthy consultations that follow including phone calls and e-mails. They would prefer to use their time to develop another research article or similar of their interest. Conflicts of interest also emerge between the Administration and the researchers when it comes to dissemination of research findings. From the managerial accountability perspective, administration would like to see researchers do more research on measurable projects to supplement its budget. Whereas, from personal accountability and in some cases from professional accountability perspective, researcher would like to deliver their findings to the end users to positively change way of life because they don't believe findings are made to be shelved. Conflicts of interest emerge between the administration and the researcher from the principal-agent theory perspective when the goals of the administration differ from the goals of the researcher. For example, the administration

(acting as principal) would like to see researchers conduct research that generate income to the institution. Whereas, the researchers (acting as an agent) could have different goals may be to conduct free research or carry out national and cultural identity to be relevant to the society without paying attention to the financial interest of the principal.

Based on the above mentioned findings, I draw the following reflections:
The OBFS encourages focus on fewer but highly demanded study programs and mainstream research projects, thus limiting the diversity of academic activities. I think, it would be right to introduce another component to support free research and programs with acute student recruitment problems. The funding system has substantial influence on the university's education and research strategies. This would mean that strategies will be adjusted to the flow of money discriminating against unpopular educational programs and small disciplines with emerging research culture. Similarly, smaller programs, e.g. humanities, with fewer students have become losers in the OBFS even if they are quite good at conducting research. Besides under OBFS "student preferences" seem to get overstated rating in the steering of higher education. I think higher rating should be given to university scholars and policy makers to ensure a sustainable development even if that seems less democracy. Faculties under OBFS are exposed to uncertainties and fluctuations in recruiting students into their study programs. This would mean that they have to adjust to unstable flow of funding. Therefore difficult to maintain sustainable quality based faculties. From the static view, the OBFS through its competitive incentives supposed to encourage a fragmented entities seeking to maximize their own interests, but what I have found out is that actually faculties and department are helping each other out to achieve institutional goals through financing each other's projects, At the same time the protests against OBFS among academic staff members are greater but they would rather try to adapt the system as best as possible. This would mean that they are loosely coupled or they are showing their loyalty to the system alongside their own professional aspirations. It seems that the contributions of universities to national economy and cultural identity are devalued in OBFS that focus on research excellence at the international level (i.e. published in English). There may be circumstances in which any of these value conflicts becomes professionally as well as politically unacceptable.

6.1. Limitations and Suggestions for future research

As with any study, this thesis has its limitations. The scope of the study is limited to only two faculties of University of Nordland. Due to limited time the other two faculties of the University of Nordland are not included. Besides the total number of individuals interviewed

are 15. It would have been better to include opinions from the other two faculties. I believe for the topic enough representation is retained. The frame of reference meant for the ethical issues as well as accountability are selected to shed light on general terms due to the time and page limits given to this thesis. However, further research would be interesting to know how other practitioners in other smaller and bigger universities in Norway express their experiences with OBFS. Likewise, further research would be interesting to know why academicians are protesting against the OBFS and yet choose to adapt to it. I would be also interesting to know how universities contribute to national economy under the umbrella of OBFS or the way it is communicated.

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APPENDIX

Interview guide for the master thesis

1. What are the main goals and objectives of university of Nordland as higher education establishment?

2. The main reason for introducing **O**utput **B**ased **F**unding **S**ystem (OBFS) in Norway was to increase research activities and allocate resources to centers performing excellent research. To reward outputs instead of inputs. What thoughts have you made about the OBFS?

    2.1 How do you relate the privatizations tendency of OBFS with the fundamental values of universities?

    2.2 How independent is a researcher to pursue his choices under OBFS?

    2.3 There is a concern that OBFS leads to focusing on areas that generate money. What is your response based on your experience?

3. To what extent do OBFS indicators measure your performance in your opinion?

4. How do you see OBFS increasing productivity in terms of quality and quantity?

    4.1 There is a concern that OBFS may increase the number of publication and not the quality. What is your response to such concern?
    4.2 There is a claim that the increase in number of publication is due to manipulations to increase output and not quality. What do you say?

5. What is your argument for the claim that OBFS leads to gaming? For example. There is an incentive to breaking down a supposedly deeply studied long research into parts to get more publications.

    5.1 What kind of conflicts does exist between the faculties to increase their outputs under the OBFS?

    5.2 How about the conflicts between researchers and administration or departments in your opinion?

    5.3 How about the conflicts between superiors and subordinates?

6. How does the fundamental values of the university as an institution affected by the OBFS? For example, the not-for-profit nature?

6.1 To what extent does OBFS support university's strategic goals in terms of strategic decision-making? For example, whether to close down a study program because it is not profitable or investing more resources to make it profitable.