University-Government Relationship in Ethiopian Public Universities:
In the Framework of Information Asymmetry and Goal Conflicts
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Abstract

This study examines the university-government relationship, with a focus on Ethiopian public universities in the framework of information asymmetry and goal conflicts. Agency theory was used to examine organizational thinking and behavior of the agents and the relationship between agent and principal to highlight goal conflicts and information asymmetries. The study employs a parallel convergent mixed research design. A self-developed survey questionnaire was administered to 1474 participants after purposively and randomly selecting participants from the nine public universities. Data on legal issues were collected from purposefully selected legislative documents. Both descriptive and inferential statistics were employed. Results showed that public universities in Ethiopia experience strong government interference in internal affairs. It has resulted information asymmetry problems and goal conflicts. The Ethiopian government fails to materialize steering from distance and self-governance of public universities. The study concluded that the control system of the government did not conceive the loosely coupled, multidimensional features of public universities and failed to institutionalize a sound government-universality relationship. The author recommended that outcome-based funding and performance indicators be adopted, a balanced autonomy and accountability with clear boundaries be granted, effective governance structures be institutionalized, and a strong supervisory mechanism as major policy implications be established to create an effective university-government relationship.

Keywords: governance, government, university-government relationship, agency theory, information asymmetry, goal conflict

Introduction

Higher education is currently experiencing demands to synchronize its strategic goals with government objectives and increases the quality of teaching and research (Ahmad et al., 2012a, 2012b). Thus, most countries today bank on large-scale government funding to improve the quality of public universities and the relationship between governments and universities (Roger, 1995). Hence, knowledge of the dynamics of state-university relationships is vital to implement governance reform effectively. Rungfamai (2008) concluded that a good relationship between government and university is crucial in enhancing the output of both government educational policy and university productivity. Although the government is the sole source of funding for most public universities, Liefner (2003) suggested that the government (principal) links funding to performance and allocates funding based on the agent's (university) performance. A system of performance-based mechanisms promotes better alignment of universities actions and government objectives (Kivistö, 2008, OECD, 2010), confirming that universities are working to fulfill the plan set by governments and reduce their unsuccessful activities (Alexander, 2000).

A global move in the state's focus of control from direct to a more indirect form of university governance has recently been observed. This move has been necessitated by a variety of factors, mainly the demand-response imbalance, changes in the environment in which universities operate, the state's growing limitation of resources and funding, and increasing market pressure (De Boer & Goedegebuure, 2009).

These changes tend to shift university governance from a 'centralized' to a 'decentralized' system and from state control to state supervision (Schmidt & Langberg, 2007) which strengthens institutional autonomy and enhances good relationships between governments and universities. In order to meet the requirements of the above changes, governance structures within universities have required the provision of more autonomy, the introduction of new systems of accountability, the empowerment of institutions, leaders, and employees, and new governance arrangements. Thus, this study uses agency theory as a base to examine the state of the government-university relationship in Ethiopian public universities.

Agency theory plays a significant role in examining the relationship between the government and the university and the shifts in this relationship (Kim & Mahoney, 2005; Lane & Kivistö, 2008). Kivistö (2008, p. 12) defined agency theory as "a contract under which one or more persons (principal) engage another person (agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent". This contract is based on the premise that the agent possesses the skills, information, qualification, experience and abilities to perform the outlined tasks and produces good outcomes for the principal (Kivistö, 2008, p. 12). This theory helps the principal (government) to obtain the required information on the agent's (university) performance through a monitoring and auditing system. This theory mainly focuses on how the principal (government) can control the agent (university) in a context of information asymmetry and goal conflict (Ahmad et al., 2012a; Kim & Mahoney, 2005). Thus, information asymmetry and goal conflict are the focus of this study. Information asymmetry is related to the efficacy of complete and accurate information flow and interaction between principal and agent on some specific tasks assigned by the principal stated in the contract between the two parties. It occurs when the agent possesses more or better information about the details of the individual task assigned to him, his own actions, abilities, and preferences compared to the principal (Kivistö, 2007). Despite some difficulties on the government's side, Kivistö and Hölttä (2008) concluded that without some degree of government intervention, informational asymmetries would lead to degradation of quality of teaching, learning, research, innovation and to fail in market.

The next prominent theme of agency theory is goal conflict. Goal conflict occurs in a situation where the principal (government) and agent (university) desire and interest concerning certain ends are in conflict with each other. As result they would prefer different courses of action ignoring the desire by the government (Kivistö, 2007). Moreover, universities are large, complex and autonomous so that they try to achieve their own strategic direction to meet institutional priorities. This leads to goal conflicts and disagreements in vision, mission and goals between agent (university) and principal (government) (Kivistö, 2007).

In essence, agency theory minimizes bureaucratic procedures and government influences on institutional structures; the state increases the decision-making power of university leaders and it promotes more hierarchical structures for intra-university decision-making based on agency theory. In addition, the government needs to focus its own role on setting priority development objectives and monitoring the university's progress in its achievement (output control) based on performance indicators. Furthermore, the government also needs to reorganize the distribution of public funds among universities based on past performance to ensure better relationships and effective governance systems (Kivistö, 2008).

Problem Statement

Public universities are a strategic resources to revamp the human and social capital of Ethiopia, as well as the collective and individual intelligence of the country. In this regard, based on a 20-year strategic direction of the nation, the Ministry of Capacity Building (MoCB) launched a governance reform program to enhance institutional and individual capacity and to strengthen their relationship in Ethiopia with a goal of becoming a middle-income country by 2025, (Ministry of Capacity Building, 2011).

To reinforce the implementation of the governance reform, the revised Public Universities Proclamation (No. 650/2009: Articles 16 & 17) granted balanced autonomy and accountability to reduce government influence (FDRE, 2009). At the General UNESCO Conference of 1997, Ethiopia signed and confirmed to implement "self-governance, collegiality and appropriate leadership to ameliorate university-government relationship" (UNESCO, 1997, p. 28). Although various policy initiatives and directives support the enhancement of good university-government relationship, Ethiopian public universities face various challenges to promote a good relationship with the government. Challenges of the governance systems of Ethiopian public universities according to Teshome (2007), are government interference in internal affairs and institutional decision-making, leadership appointment, and dismissal. Teshome considered poor capacity of the Ministry of Education to assist and lead public universities, micro management by Higher Education boards, lack of guidance and support, absence of timely monitoring and evaluation of university performance and up-to-date reports, and lack of participatory leadership and management systems as major challenges. According to Amare (2005), a tangled government-university relationship characterized Ethiopian public universities.

Mulatu (2014) and MoE-HESO (2004) also attributed the absence of significant changes in Ethiopian public universities to excessive interventions by the government and lack of autonomy of the universities. Demewoz (2013), Kenenisa (2015), Taye (2008) and Yohannes (2010) concluded that deterioration in institutional autonomy in spite of enacted policies remains a challenge Ethiopian public universities face. Further, the balance between autonomy and accountability of public universities has been restricted as a guiding value but public universities experience excessive government intervention (Demewoz, 2013). This situation affects the government-university relationship in general and institutional performance in particular.

Cognizant of this situation, the main objective of this research was to explore the state of the government-university relationship based on the information asymmetry and goal conflicts. To this end, the study was guided by the following research question: What do government-university relations look like in Ethiopia's public universities? This research question, addressed through the conceptual lens, was derived from agency theory. It explored the relationship between public universities as agent and the government as principal in carrying out their institutional mandates and the level of influence of government control and supervision mechanisms the government used to manage public universities. This perspective enables us to analyze this relationship from two points of view: information asymmetry and goal conflicts, in which public universities deal with in carrying out their day-to-day activities to achieve the intended results.

Government-University Relationship: Theoretical Overview

Although mutually beneficial relationships between universities and governments are highly desirable, this has never been easy to achieve and they are in a continuous process of change in almost all higher education systems worldwide (Liefner, 2003). Governments have made dramatic changes in the size, structure, governance and funding arrangements for universities so that they can better address public demands and compete as centers of excellence globally (Ahmad et al., 2012b; Kim & Mahoney, 2005).

There have been many theories applied to analyzing issues related to change in the relationship between governments and universities. The agency theory emerged as a useful and vital theoretical structure in the discipline of sound governance of public universities and has proven to be a major hypothesis for research on university-government dynamics (Ahmad et al., 2012a; Lane & Kivistö, 2008). Lingenfelter (2004) argued that the importance of freedom of thought, expression and the corollary freedoms to teach and to learn, often are the starting point for discussion of the relationship between the university and the government. Focusing on the procedures and issues of initiating governance reform from the government (principal) to the university (agent), agency theory examines organizational thinking and behavior of the agents. It also examines the relationship between agent and principal to highlight goal conflicts and information asymmetries (Rungfamai, 2008). Saam (2007) further explained that informational asymmetries occur because the principal cannot observe the competencies, intentions, knowledge and actions of the agent. Meanwhile, goal conflicts happen when the agent and principal have different goals and the agent undertakes a different course of action than the one desired by the principal (Alvarez & Hall, 2006; Kivistö, 2007).

Agency theory focuses on the central question of how the principal can control the agents in the context of information-asymmetry and goal conflict. Furthermore, as agency theory suggests, a goal conflict constitutes the main reason behind problems in the agent-principal relationship (Shapiro, 2005). The theory can also deal with issues of public university governance and provides clear and insightful explanations for problems arising from the university-government relationship (Kim & Mahoney, 2005; Rungfamai, 2008). In this regard, universities are experiencing increasing demands to harmonize their strategic goals and activities with the government objectives to increase the quality of teaching, learning,

research, and community services (Kettunen, 2006). According to Alexander (2000), in many countries the government could give incentives for pursuing activities that are consistent with the government objectives over autonomous functions of the university. Besides, a system of performance-based-agency reward promotes better alignment of university actions and government objectives (Kivistö, 2007; OECD, 2010). In addition, Lane and Kivistö (2008) argued that since the government and university operate and exist as public authorities, this type of operation requires a political-economy-based academic system provided by Agency Theory. Lane and Kivistö pointed out three reasons for the suitability of agency theory for the government-university relationship. First, they record the funding of universities by the government obtained from different sources. Second, they ensure that the performance of the university is continually measured to align it with government objectives. Third, they monitor and understand the dynamics of multiple principal-single agent relationships.

A review of government-university relationship revealed that neither the desire of public universities for resources nor the desire of governmental leaders for accountability and cost-effectiveness could be easily obtained. Achieving the public interest in higher education requires things that are in conflict, including institutions with enough freedom to be responsive, competitive, effective, and efficient; responsiveness to public needs as explained by democratically elected representatives; and a substantial commitment of public resources to achieve sound governance and cost-effectiveness. No matter how receptive, sensitive and amicable governmental officials and public universities leaders are, they will have different views on these issues. Every state also needs an effective means of articulating and pursuing the public agenda for higher education. The work, as suggested above, is a constant balancing act between legitimate but conflicting values. In this regards, a sound and balanced university-government relationship is required to achieve institutional mandates. On the other hand, Verhoest (2005) outlined three control methods the way the principal can reduce informational asymmetry and goal conflicts with the agents. The first method is creating efficient monitoring systems for measuring and evaluating the agent's performance, skills and environmental conditions. Next, instituting bonds and promissory arrangements where the agent provides assurance that it will perform actions in the interests of the principal. Third, it is important for principals to establish adequate and effective systems of financial incentives that link rewards to performance. This list outlines a comprehensive set of measures that can be taken to resolve agency problems.

The Changing Role of Government-University Relationship

Higher education dynamics have been changing fast globally and are becoming very intricate because of the multiplicity of the number and types of public universities (ACU, 2015; Altbach et al., 2009; Fielden, 2008; Heslop, 2014; UNESCO, 2015). Meanwhile, the role of the state in governing public universities has also changed (De Boer & Goedegebuure, 2009; Fielden, 2008). Consequently, the shifts in governance primarily result in institutional autonomy in universities and are limited to the role of government in some areas (Christopher, 2012; Hanada, 2013; Trakman, 2008). Thus, governments mainly measure institutions' performance against their institutional strategy (Fielden, 2008).

There is always a conflict of interest in terms of priority regarding whose objectives come first (Taye, 2008). Universities want to focus on the pursuit of knowledge as a self-determined institutional objective, and on the other hand the government sets to achieving the national priorities (economic, social, political, environmental and technological) (Lingenfelter, 2004). Thus, the governance challenge is to achieve the appropriate balance between the government steering and institutional autonomy in the pursuit of a better alignment between institutional initiative and the nation's economic and social development goals. These dynamics result in the replacement of an old model (total state control model) with contemporary models (state supervision models), which are recognized by many scholars (OECD 2007; Schmidt & Langberg, 2007) and have resulted in substantial changes in the way activities are organized and managed in public universities (Varghese, 2009). The rationale behind the state control model does not recognize the loosely coupled, multifaceted character of public universities (Van Vught, 1993).

Despite the paradigm shift to the government supervision model, in many countries the actors and agencies try to steer an object by using strict rules and major control mediums. To overcome the above challenges, an efficient state supervising model is of paramount importance. Auditing, monitoring and feedback are the main emphases under the "state supervision model", or "self-regulation" model (OECD, 2008, p. 69). In this model, the involvement of government actors is limited and has a weak impact. Furthermore, the government is chiefly an actor that watches the policies, rules, and regulations played by the main actors.

Although the shift towards the state supervision model has some side effects, giving more autonomy to public universities enhances their internal efficiency and effectiveness and regulates the measures to assure sound governance (Fielden, 2009; OECD, 2003). Thus, the government sets the broad guideline by which the public universities are governed and operated, whereas fundamental decisions about the aim and objectives are left to individual public universities. Consequently, distinctions are made by policy makers between a tight and loose managerial control of universities and a tight and loose goal-setting capacity of the government in public universities (OECD, 2008; Van Vught, 1993).

Such order may suggest two dimensions of governance: procedural and substantive dimensions (OECD, 2010). Procedural (administrative) dimensions include financial and management capacities of public universities, aspects of personnel policy (setting salaries, creation and suppression of posts); and student policy (selection of students, the level of tuition fees). The substantive (academic) dimension includes the freedom to set up courses, choose the content and methods of courses, conduct research and define organizational goals vis-a-vis environment. It also wants to choose the personnel and students according to organizational and academic goals and standards (OECD, 2008). These two dimensions of governance are similar to the dimensions of autonomy such as financial and academic (Berdahl, 1999).

In sum, the practice of steering deals with the government incentive structure that shapes the behavior of the higher education actors towards national policy goals. It is linked with a less

interventionist and facilitative role of the government in providing more direction for public universities over a greater number of areas. In addition, public universities are considered as a vital strategic vehicle for governments to achieve their national objectives. Thus, the government can achieve those ends without compromising the independence of the universities.

Research Design, Methods and Materials

This study used a parallel convergent mixed research method to examine the state of universality-government relationships based on the pragmatist points of view (a deconstructive pattern that advocates the use of mixed methods in research) through concurrent strategy (Creswell, 2012). Mixed methods provide a better understanding of the research problem and question (Creswell, 2012; Giddings, 2006; Neuman, 2006), and help to minimize the risk of validity, reliability and subjectivity issues (Philip & De Bruyn, 2013). Furthermore, the integration of qualitative and quantitative findings may provide this study with more support and more certainty, leading to greater confidence in the outcomes (Boyd et al., 2012). The quantitative data complemented the qualitative data generated from focus group discussions, key informant interviews, open-ended items on the surveys, empirical materials and other relevant documents. This was done in line with Creswell's (2012) advice that mixed methods help to gain broader perspective from the different types of data or study groups within the study.

Target Population, Sample and Sampling Techniques

Since 2015, 41 public universities have been established in Ethiopia, 31 of which were included in the present study. The public universities fall into four categories, grouped by the Ministry of Education based on their age (the 8 oldest, first generation universities; 13 Second generation; 10 third generation; and 10 fourth generation or most recently established universities). The fourth-generation universities were not in the target population, because they were the most recently established universities and not well organized in terms of their governance. Of these, the present study is delimited to nine (N-total number of teaching staff and academic leaders =7510) public universities from 1st, 2nd and 3rd generation universities, namely, Jimma University, Arba Minch University, Wolaita Sodo University, Dire Dawa University, Axum University, Debre Berhan University, Woldia University, Wachamo University, and Wolkite University.

The target population for this study was the entire academic community of the nine sampled public universities. Academic leaders (i.e., presidents, vice presidents, directors, deans, and department chairs) and academic staff members (on duty, permanently working and teaching postgraduate and undergraduate courses, both Ethiopians and expatriates) were the participants of this research. Administrative staff (directors, including institutional transformation directors, institutional quality assurance directors, research directors, plan and program directors, academic program directors, finance directors, and human resource management directors) and student councils who had been active in these institutions at least

two semesters were the subjects of the study. To maintain anonymity of the institutions and participants, each study unit and participant was identified by a code letter.

In determining sample size, the purpose of the study, the nature of the data sought, and the size and characteristics of the population were considered. In addition, Israel's (2013) three criteria, which were used in determining the appropriate sample size, were considered. These criteria include the level of precision, the level of confidence or risk, and the degree of variability in the attributes being measured. For the purpose of this study, the sample size was determined using the standard tables for sampling, using the 95% confidence level. Then, standard tables and formulas indicating an estimate of the sample size were developed by the author (Israel, 2013).

Academic leaders were sampled by taking 50% of the total population due to its small size (see Table 1). Thus, academic staff participants were drawn from the individuals available in the institutions to complete the questionnaires on the day the researcher visited their universities. A purposive sampling technique was utilized to select directors, presidents and vice presidents, all of whom served as key interview participants (administration staff (HR directors) and Student Council) and FGD participants (three deans and three department heads) - six in each group.

Based on the standard table of estimation, the sample size for a population of all nine public universities was 1658 (4.3%). Of these, 1586 (95.7 %) were survey participants (presidents, vice presidents, directors, deans and department heads) while the remainder participated in focus group discussions (FGDs) and interviews. The 54 participants in the nine FGD sessions were three deans and three department heads in each session those were not part of the survey. Two human resource directors and two student council members from each university participated in the 18 interview sessions. The sample size for the study participants is summarized in Table 1.

The public universities were selected for the study using the proportional stratified random sampling technique to ensure representation from the strata of the designated groups of institutions. A multi-stage sampling method was employed in the selection of academic leaders (department heads, deans, presidents and vice presidents), administrative staff (directors) and academic staff (lecturer). Colleges, school, faculties, and departments were randomly selected. For the selection of instructors, a random sampling technique was used.

Table 1: Sample Size/Sample Population

Name of University	Academic leaders				Academic Teaching staff (on duty)	
	MLM (dean and DH)		TLM (P, VP, directors)			
	TP	SP	TP	SP	TP	SP
Jimma University	58	29	16	8	1403	238
Arba Minch University	66	33	26	13	1435	243
Wolaita Sodo University	47	24	13	7	890	151
Axum University	52	26	23	12	720	122
Debre Berhan University	50	25	21	11	703	119
Dire Dawa University	40	20	12	6	680	115
Woldiya University	48	24	27	14	724	123
Wachamo University	34	17	25	13	485	82
Wolkite University	39	20	17	9	470	81
Total	434	218	180	93	7510	1275

Source: MoE (2015/2017)

Note: TP–Target Population; TS- Target sample; TLM –Top Level Manager; MLM–Middle Level Manager.

Instrument

The purpose of the survey was to generate quantitative data about the views of the academic community in public universities' governance about the government-university relationship. The study used a self-developed questionnaire. Furthermore, the focus group discussion protocol, key informant interview guide, and reviews were used to collect the qualitative data. Triangulation of information from survey, focus groups and the documents consulted were used to determine the validity and truthfulness of the findings. Once study participants were identified, instruments of data collection were developed based on the literature and the research model and research questions were then developed. Thereafter, the instruments were pre-tested as described below, to establish the validity and reliability of the tools with the help of experts in the area of the study and using Cronbach's alpha test. Data collection was carried out following the pilot test of instruments at Hawassa University.

Survey Questionnaire

Data were collected from academic leaders (Presidents, directors, academic deans and department chairs) and instructors administered by means of standardized and self-developed survey questionnaires. Two sets of survey questionnaires comprised of both open-ended and closed-ended question items were prepared in English language. The survey instruments in general were developed based on the research model, which comprised all aspects of university-government relationship. The instruments were self-administered accompanied by a cover letter that provided the necessary details about the study. The survey questionnaires, in their cover pages, explained to all participants why they received an invitation to participate in the survey, the purpose of the study, the expected amount of time to complete the instruments (from 45 minutes -1 hour), and confidentiality issues. Participants were also assured the anonymity of their responses to encourage their honesty and truthfulness.

The data collection process was carried out by the researcher and the process took a reasonable duration. A total of 1586 questionnaires were dispatched to the two groups of survey participants and 1474 questionnaires were collected. In order to maintain anonymity, no item asked for names or other identifying information. Given the comprehensiveness of the survey tools, the researcher allowed two days for survey participants (academic leaders and staff) to complete the questionnaires. While it was difficult to distribute and collect the questionnaires from academic leaders and staff, the administration of the questionnaire to academic leaders was relatively successful because it was carried out on the spot in the offices and some of the academic leaders were supportive.

Interviews

Unstructured interviews were employed to collect qualitative data. Interviews aimed to identify participants' emotions, feelings, and opinions regarding a particular research subject. The researcher held interviews for approximately one to one and a half hours using both English and Amharic languages for more clarification and understanding of the issues of the research. Both languages were used because respondents may have had some difficulties in describing their views in only one language. Human resource directors and student councils were participants in the interviews with nine public universities. The participants were interviewed regarding similar issues. All interviews were recorded using an audio recorder, and handwritten notes were taken. The information was compiled into categories and transcribed by the researcher.

Focus Group Discussions

Focus group discussions (FGDs) were employed to provide a more in-depth look into the issue under study. This was used to understand how deans and department heads describe their experiences in the practices of governance in the framework of autonomy, accountability and empowerment. FGDs helped to get detailed information not obtained through survey questionnaires. Discussions were carried out to generate ideas of divergence and convergence between deans and department heads. Deans and department heads (three from each) who were not part of the survey questionnaire were participants in the FGDs.

The construction of the FGD protocol was made by breaking down the research questions into thematic discussion questions. Then simple and dynamic questions that could generate spontaneous responses and rich descriptions were formulated in advance. Those selected for the discussions (N=54) were chosen purposefully based on their university experience and seniority which was set after discussing this with their academic vice presidents and college/school and faculty deans based on chain of command. FGD participants were nominated by their academic vice presidents and college deans and they were approached informally, after obtaining information about their experience, to gather information on university governance. By contacting purposefully selected deans and department heads, there were discussions scheduled which were held at times convenient to the participants. Then face-to-face discussions were held with the deans and department heads of the participating institutions in the Amharic and English languages. The discussions were conducted in all nine universities in appropriate halls and classrooms. Each focus group was consisted of six participants that were led by the researcher. In total, nine focused group discussions each lasting for about one to one and a half hours were conducted. Participants were assured anonymity and confidentiality of their responses. They were also advised to keep the confidentiality of issues raised in the discussions.

Reliability & Validity

Content validity was determined by employing knowledgeable experts in the area of study and by distributing a sample of the questionnaire to participants in the study population to ensure clarity and relevance of the questions. Some questions were found to be irrelevant and deleted. Reliability was a measurement concern generally associated with the credibility of research findings or interpretation of findings (Schwandt, 2001). The reliability of the survey instruments was tested to determine the manner in which items in each domain were effectively grouped together. To this end, Cronbach's alpha coefficient was used to measure internal consistency of items (Table 2). The reliability value of the constructs was 0.93 for the questions on the university-government relationship. After checking the accuracy of the surveys and rejecting unnecessary questions not related to the variables, the survey was carried out.

Table 2: Overall Instrumental Reliability in Cronbach Alpha Value (α)

No	Items	No. of items	Alpha (α)
1	University-government relationship	8	0.93

Source: Survey data, 2017

The survey data recorded on the two sets of survey questionnaires were first coded before being analyzed along with the research questions. Both descriptive and inferential statistical methods were employed in data analysis. Data generated from the questionnaire were presented in a table and then analyzed using means, standard deviation, and one-way ANOVA. Furthermore, linear and multiple logistic regressions, principal component analysis (PCA), factor analysis for examining the contribution of predictor variables to the dependent

variable (university-government relationship) and for answering research questions were instrumental accordingly. (see the result and discussion section below).

Materials

The research used various materials to achieve its objectives. Some of the materials used were SPSS Version-21, Stats, and Version 13 software for statistics and Data Science for quantitative data analysis interchangeably, whereas Hyper-TRANSCRIBE Version 1.6 V.10.0 was employed to analyze the qualitative data.

Results and Discussion

University relations in Ethiopia's public universities

This section is mainly concerned with the relationship between government and universities (the nine Ethiopian universities under study) on the bases of agency theory. Agency theory postulates two main points (informational asymmetry and goal conflict) to determine the relationship between agent (university) and principal (government). In order to answer this research question, participants were required to rate the practices of state-university relationship mainly from information asymmetry and goal conflicts points of view. The academic leaders (top-level managers-presidents, vice presidents and directors and middle level managers-deans and department heads) were required to rate the practices of government-university relationship from their experiences, while academic staff (lecturers) were asked to rate the overall practices of their respective universities in the framework of university-government relationship.

In Table 3, key practices of government-university relationships are listed. Eight variables were specified to examine the state of the relationship between the government and university. The first constructed five-point Likert scale was rearranged into three-point scales for managing the variables appropriately. Three-point Likert scales were instrumental based on the acknowledgment of Preston and Colman (2000) (1-Disagree=1-1.667, 2-Undecided=1.668-2.334 and 3-Agree=2.335-3.00). The responses were as follows

Table 3: Descriptive Statistics for Mean and Analysis of Variance to University-Government Relationships

U-G Relationship Variables	Mean	SD	SS	DF	MS	F	Sign.
1. Fast & flexible analysis & reporting of data	1.56	0.96	105	2	52.8	176.7	***
2. Quality & timely information	1.64	0.86	0.7620	2	0.381	1.66	0.190
3. Well-designed direction toward objectives	2.68	0.70	0.2121	2	0.106	0.46	0.630
4.Well-designed strategic plan	2.48	0.69	1.15	2	0.575	2.51	0.082

5. Strong alignment with U-G Strategic Plan	2.49	0.69	5.654	2	2.82	12.32	.***
6. Have a good financial resource strategy	1.64	0.94	0.7604	2	0.380	1.66	0.191
7. Autonomous to use the funds	1.73	0.93	0.750	2	0.375	0.57	0.565
8 Autonomous to use internal financial resources	1.63	0.87	2.63	2	1.32	7.45	0.006
Aggregate Weighted Mean and SD	1.98	0.83					
Note: Minimum and maximum mean value ranged from 1-3 respectively. (disagree, undecided, agree)							

Source: Survey data, 2017

The first section treated three variables related to information asymmetry. Accordingly, the data in Table 3 revealed that most participants rated the practices of public universities in providing fast and flexible analysis and reporting of data which assist the government to make accurate strategic decisions (M=1.56, SD=0.96, p<0.001) unfavorably. The mean score depicts a statistically significant difference amongst the groups at 0.001 level of significance. Likewise, the practice of public universities producing timely and quality information relevant to government requirements was not favorably rated by most respondents (M=1.64, SD=0.86) between and within the groups (p=0.190). Although access to well-designed strategic direction of public universities to achieve the desired goals of the government was highly rated by most respondents (M=2.68, SD=0.70), differences between and within the groups were not statistically significant (p=0.630). The mean score of the variable is not significant between the groups**.**

This section thoroughly analyzed the extent of goal conflict between the government and university in line with desires and interests in certain outcomes. Five variables were used to examine the state of government-university relationship from goal conflict points of view. Accordingly, access to a well-designed strategic plan to increase the institutional responsiveness in line with government objectives was favorably rated by the majority of respondents (M=2.48, SD=0.69) at a statistically non-significant level of difference between and within the groups (p=0.082). The mean score of the variable was not significant between the groups, which is by chance rather than sample error. High alignment of the strategic plans of public universities and the government was also rated favorably by most respondents (M=2.38, SD=0.79) at a statistically significant level of difference between and within the groups **(**p<0.001**)**. This further shows a significant difference in the mean score among the groups at 0.001 level of significance.

Access to a strong financial resource strategy, authority to use all funds without the influence of government, and better uses of internal financial resources as part of the strategy to generate funds in line with government objectives were not favorably rated by the majority of

respondents, respectively (M=1.64, SD=0.94; M=1.74, SD=0.93; and M=1.63, SD=0.87). The results show that the mean scores of the first two variables amongst the respondents are not significant, (p=0.191 and 0.565), respectively, while the last variable mean score was statistically significantly different among the groups at the $p<0.05$ level of significance.

These findings revealed the problem of information asymmetries in Ethiopian public universities. The government (principal) failed to audit and monitor the performance of universities and to take necessary and timely corrective measures to address the problem. On the other hand, whereas two of the variables consistently denied the conflicts of interests between the university and government, three of the variables showed goal conflicts because of the absence of financial autonomy. Hence, the problem of information asymmetries and goal conflicts resulted in unbalanced and weak university-government relationships.

Table of Inter-Image Correlation

The requirement for principal component analysis (PCA) under the Kaiser-Meyer-Olkin measure of sampling adequacy (MSA) should be greater than 0.50 for each individual variable and for all variables (Kaiser, 1974). For all incorporated variables in the PCA, the measure of sample adequacy was greater than 0.5 on iteration 1; this also implied that it is supporting these variables retention in the analysis.

KMO and Bartlett's Test of Sphericity

The Kaiser-Meyer-Olkin statistic was used to measure sampling adequacy. The range of KMO statistics lies between zero and one. According to Kaiser (1974), the values closed to one illustrate that the pattern of correlations is relatively compact. Consequently, the factor analysis should yield distinct and reliable factors. Kaiser recommended that the acceptable values are greater than 0.5. Hutcheson and Sofronious (1999) ranked values between 0.5 and 0.7 as moderate, those between 0.7 and 0.8 as good, between 0.8 and 0.9 as better, and values above 0.9 as excellent on the acceptance scale. Thus, on iteration 1, Measure of Sample Adequacy (MSA) for all of individual variables included in the analysis greater than 0.50, supporting their retention in the analysis.

Table 4: Anti-Image Correlation Matrix for Appropriateness of Factor Analysis

Anti-Image Correlation		1	2	3	4	5	6	7	8
	1	0.878^a							
	2		0.867^a						
	3			0.936^a					
	4				0.924^a				
	5					0.900^a			
	6						.0924^a		
	7							0.916^a	
	8								0.938^a

Source: Survey data, 2017

Table 5: KMO and Bartlett's Test of Sphericity

Kaiser-Meyer- Olkin measure of sample adequacy	0.847
Bartlett's test of Sphericity - approximate chi-square ($X^{2)}$)	5237.72
DF	28
Sign.	***

Source**:** Survey data, 2017

Furthermore, the overall measure of sample adequacy (MSA) for a set of variables included in the analysis was high (0.847), which significantly exceeds the minimum requirements of 0.50 for overall MSA. The probability associated with Bartlett's test of sphericity was <0.001 with chi-square 5237.72, and 28 Degree of Freedom, which satisfies the requirement.

Factor Loading

Stata analysis verified eight linear components of university-government relationships within the given data set from 13 variables. The association of Eigenvalues and each factor describe the variance was explained by particular linear components identified by principal component analysis. Eigenvalues are also displayed in terms of percentage of variance explained. Thus, the total variance was explained by the first factor or component under initial Eigenvalues was 51.05% (table 6).

Table 6: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.084	**51.05**	51.049	4.084	51.04	51.049	2.971	37.18	37.137
2	1.112	13.895	64.944	1.112	13.89	64.944	2.225	27.81	64.944
3	1.001	11.014	75.958	1.001	11..01	75.958	2.131	16.43	75.958
4	0.496	6.229	82.187						
5	0.443	5.538	87.725						
6	0.408	5.100	92.829						
7	0.348	4.356	97.181						
8	0.226	2.819	100.00						
Extraction method: principal component analysis, the eigenvalue cut point =1 (Kaiser, 1974)									

Source: Survey data, 2017.

In Table 6, using the output from iteration 1, there are three Eigenvalues greater than 1.00. The latent root criterion for number of factors to derive would indicate that there are 3 components to be extracted from these variables. A three components solution would explain 75.958% of total variance.

Data presented in Table 7 below examined the content of questions developed that loads on to the identical factors to try to verify common themes. In this analysis, factor loadings less than 0.4 were not displayed. The requested factor loading to identify the common themes was = > 0.4. Fielden (2005) indicated that ordering variables by loading size also substantially simplify the interpretation. Thus, the table above illustrated that the values of factor loading for all eight components were greater than 0.4, with an overall alpha value of r=0.8629.

Table 7: Rotated Principal Components (Eigenvectors) Matrix

| Variable | Information Asymmetry | Goal Conflicts | | Alpha Value Reliability /α/ |
	System Issues Component-1	Financial Issues Component-2	Strategy Issue Component- 3	
1	0.5844			
2	0.5719			
3	0.4871			**0.8629**
4			0.4548	
5			0.8533	
6		0.5704		
7		0.6006		
8		0.5553		
Extraction method: principal component analysis; **rotation** method: Varimax with Kaiser Normalization				

Source**:** Survey data, 2017

Accordingly, the items that load highly on factor one appears to relate to system issues between state and university. Hence, this factor is labeled as information asymmetry. The items that load highly on factors two and three all appear to relate to strategic and financial issues. Therefore, these components are labeled as goal conflict. The results of this factor analysis appear to portray that the initial question items in certainty is a collection of two subscales - goal conflict and information asymmetry - which is the basis for agency theory to measure government-university relationships of Ethiopian public universities.

Table 8: ANOVA & Multiple Regression Analysis of University -Government Relationship

Model	β	SE	t	df	F	R	R²	Sig.
1 University-gov't. RSH								
System issues	0.481	0.0219	21.90	16	4.40	0.488	0.5105	***
Strategic issues	0.511	0.0223	23.60					
Financial issues	0.465	0.0292	15.95					
Constant	1.970	0.0307	92.40					

Source: Survey data, 2017.

As shown in Table 8, the multiple regression model is statistically significant (p<0.001) in predicting how the independent variables (system issues, strategic issues, and financial issues) measure the extent of effective university-government relationships (dependent variables) in the framework of information asymmetry and goal conflict in Ethiopian public universities. A one-way ANOVA test further suggests that a statistically significant difference exists between and within the groups (F=4.40, p<0.001, DF=16). The F tabulated value at the 1% level of significance was 4.015. Successively, the F tabulated value was less than the F calculated (value = 4.40), confirming that the overall model was significant. Moreover, the value of R^2 was 0.5105, revealing that 51.05% of the total variability (DV) was explained by independent variables.

According to the p-value of the multiple regressions for each predictor component after principal component analysis (PCA) at the cutoff points of Eigenvalues (1) and communality requirement (0.4), each of the three components contributes to the regression model. Therefore, the regression weight of the second component (strategic issues) is highest, as the results of β- value revealed (0.5109), followed by the first component (system issues) and third component (financial issues) (0.4812 and 0.465) β-values, respectively, at the p<0.001 significant level.

The findings further showed that a unit improvement in system issues (fast and flexible data analysis and reporting, and quality and timely information relevant to government to make sound decisions), will lead to a 0.481 unit contribution to promoting an effective system of university-government relationships. Similarly, a unit increasement in strategic issues (having an improved strategic plan that focuses on responsiveness to government objectives, high alignment of government and institutional objectives) will lead to a 0.511 unit influence to enhance the system of effective relationship between the government and the university. A unit improvement in financial issues (having improved financial resources strategy, autonomy to uses funds internal or external without the influence of the state) will lead to a 0.465 unit contribution to ameliorate the system of relationships between the university and the government. As understood from the analysis of multiple regressions, all of the variables

(three components) have a significant positive influence to promote an effective university-government relationship in Ethiopian public universities.

Qualitative Data Analysis

This section examined the university-government relationships qualitatively. The FGD and Key Interview (KI) participants were asked to reflect their views on the relationship between the university and the government. Accordingly, most FGD participants claimed that: "A strategic plan and strategic objectives are in place, and all are designed by the government. Therefore, the university is working to achieve those strategic objectives initiated by the government, which did not contextualize based on the local and institutional priorities." Echoing a similar concern, participants from other FGDs decried that absence of a strong system of supervision; strong interference and control by government organs, "even sometimes more than control"; control of universities for the security of the state; limited autonomy at the college and departmental levels; and interference by top officials in decision-making characterized universities.

Participants in key interviews also reflected their views on the university-government relationship. According to one KI participant, "Excessive interference by top management and governing board" was common. The other KII remarked, "The University is considered as one branch of the zonal sector rather than as a federal institution". The fact that the board nominates zonal officials who failed to perform well in the other sector without the consent of the college and department supports the above findings. Other KI participants also reacted to this question during interviews. One of the KI participants stated, "Lack of a decentralized governance system is the main feature of my university. Students in institutional governance were not engaged. Unless the agenda is a student case, student representatives have no chance to attend the management meetings, even though the legislation gives them the right to participate". The above responses confirm an autocratic governance system in these universities.

Document Review

The Higher Education Proclamation (HEP) 650/2009 granted responsibility to public universities to establish an efficient system for statistical data collection and information exchange among universities, their units and the Ministry of Education (FDRE, 2009, Article 27(1), p. 4992). Although policy directives and initiatives were put in place, there are controversies in the practices and legal documents, as the ESDP IV Report revealed (MoE, 2015). Furthermore, the Ethiopian Education Development Road Map document acknowledged weak trends of collecting, organizing, analyzing data, and providing reports in the institutional performance in public universities by education leaders (MoE, 2017). Thus, these information asymmetry problems of public universities reduced government effectiveness to supervise the institutional performance in a well-organized manner. Moreover, it impeded the promotion of a sound government-university relationship (MoE, 2015). Therefore, the results of the documentary review were consistent with the findings of our quantitative and qualitative data analyses.

Similarly, HEP 650/2009 also stated that, "every public university shall determine with the MoE or the concerned government organ a strategic plan agreement for a period of five years" (FDRE, 2009, Article 65:1, p.5025). This implied that public universities were not given institutional autonomy to design and develop institutional strategic plan without external pressure. To the contrary, HEP 650/2009, Article (44, 2) states that the responsibility of governing boards is to supervise and confirm that public universities implement the provision of this proclamation whether or not sound governance is realized. This article restricts the interference and control of government officials in university affairs and delegates to them a supervisory role. The results of both the quantitative and qualitative data analyzed were complement to each other and portrayed the excessive control and interference of the government in the internal affairs of public universities. This situation has created lack of trust and a poor relationship between universities and the government.

Discussion of Major Findings

The Ethiopian government demands a strong and effective system of governance to manage public universities and to fulfil the goals outlined in government strategic priorities. To realize and achieve these goals, the government-university relationship needs to play a key role. In this study, the relationship between the government and public universities in Ethiopia was examined in the framework of agency theory. The findings indicated that although universities and governments have common concerns and assumptions on the agent-principal relationship, the elements of providing fast and flexible analysis of data and reporting of information that is necessary for government to make accurate and strategic decisions to improve the relationship were not in place. Moreover, though timely and quality information on public university functions significantly influence the supervision and management of their performance (Lane & Kivistö, 2008), this linkage was not fully realized in most Ethiopian public universities. This problem also indicated the failure of government to manage the financial environment of the public universities, which are fully funded by the government, demanding cost-effectiveness of this investment and streamlining university goals with the objectives of the government's strategic plan. The findings of the current study indicated weakness in information flow and interaction between the government and universities in performing various prescribed tasks.

Although public universities have institutional autonomy to determine their own strategic directives, strategies and objectives at the national, regional, local and institutional levels demand to achieve vision and mission (FDRE, 2009). Kivistö and Hölttä (2008) in their empirical findings support some degree of government intervention on strategic issues, but lack of institutional autonomy and excessive intervention of government and its authorities characterize Ethiopian public universities. Ethiopian public universities are operating with a replica of the strategic directions, strategic plan and financial resources strategy prepared by the central government (Ministry of Education) (MoE 2015, 2017) to achieve its objectives. Thus, the universities lack institutional autonomy to prepare their own financial resources' strategy and using internal and external sources of funding without the influence of the government.

In supporting these findings, the multiple regression model predicted how the independent variables (information asymmetry and goal conflicts) measure the extent of an effective university - government relationship (dependent variable). Thus, the multiple regression model confirmed the fitness of the data with R^2 57.7 % of dependent variable explained by independent variables at p<0.001 level of significance. These findings were consistent with the qualitative and quantitative survey data, which complement each other.

The empirical study of the OECD (2007) portrays a widespread institutional tendency to shift from the centralized to the decentralized system of governance toward greater autonomy of institutions in line with governance and management strategies. In this regard, the findings of this research were inconsistent with the above OECD report and Teshome's (2007) empirical work, which reported limited interference by the government. On the other hand, the results were consistent with Baye's (2008) research findings, which acknowledged excessive government interference in public universities.

Conclusion

This study indicated that the Ethiopian government and universities need to work cooperatively to ensure both a sound governance system and a better relationship. The study results revealed that public universities are experiencing information asymmetry and goal conflicts. This problem has upset the balance between government steering and institutional autonomy in the pursuit of a better alignment among institutional initiatives and government strategic objectives. We, therefore, concluded that the control mechanisms of the government did not conceive the loosely coupled, multidimensional features of public universities. The required relationship between government and university was not institutionalized but was manifested by excessive government intervention.

Policy Implications

The following policy implications are forwarded based on the major findings of the study and conclusions:

Adopt Strong Supervision Mechanism; Outcome Based Funding and Performance Indicators: At the national level, the government should create an enabling environment for universities and grant the autonomy necessary to function optimally. Moreover, because of greater accountability and transparency concerns, the government should institutionalize strategic approaches to manage public funds and track the performance of public universities. The government should also institutionalize a strong supervision mechanism, outcome-based funding approach (allocation of fund based on the achieved result) and key performance indicators that are an efficient mechanism to manage the agent performance and minimize conflicts of interests between the two parties. Moreover, the government should establish an advanced information management system to easily supervise and manage the performance of public universities and to exchange up-to-date information. The government should establish key strategic performance indicators to help to examine the level of performance of universities and their accountability and reward high performing and achieving institutions.

Granting more Autonomy with Clear Boundaries Between University and Government Organ Roles and Responsibilities (MoE, Governing Board)

At the National Level: First, in order to grant more institutional autonomy to public universities, the legal and policy documents need to be revised, particularly the Higher Education Proclamation, 650/2009 **(**FDRE, 2009), Growth and Transformation Plan-II 2011/12 (FDRE, 2011), and the Education and Training Policy (FDRE, 1994). Second, the government should grant and respect the institutional autonomy, particularly in establishing the governing boards and top management executives of public universities based on proclamations and academic merits. Third, the government should grant financial autonomy and help strengthen the internal and external financial capacity of universities by designing and institutionalizing various financial strategic approaches while granting greater autonomy to use their funds effectively and efficiently to achieve national, regional, local and institutional goals. Fourth, strong interference by governing boards, the Ministry of Finance and the Economic Development and Federal Procurement Agency should be minimized and managed through the development of better strategic monitoring and evaluation mechanisms.

At the Institutional Level: Since universities are sources of creative and innovative excellence, granting more freedom to academia is of central importance. Universities should also grant academic autonomy to scholars in order to solve national, regional local and institutional problems and to facilitate sustainable development. Furthermore, universities should decentralize their financial management system to strengthen the financial autonomy of middle and operational level managers to enable them to make sound decisions and maintain good relationships.

References

Ahmad, A. R., Farley, A., & Naidoo, M. (2012a). Analysis of government-university relationship from the perspective of agency theory. *Journal of Education and Practice, 3*(6), 12-21.

Ahmad, A. R., Farley, A., & Naidoo, M. (2012b). Impact of the government funding reforms on the teaching and learning of Malaysian public universities. *HE Studies, 2*(2), 114.

Alexander, F. (2000). The changing face of accountability: Monitoring and assessing institutional performance in higher education. *Journal of Higher Education*, 411-31.

Altbach, G., Reisberg, L., & Rumbley, E. (2009). *Trends in global higher education. Tracking an academic revolution.* Paris, UNESCO.

Alvarez, RM & Hall, TE 2006, 'Controlling democracy: The principal-agent problems in election administration', *Journal of Policy Studies*, vol. 34(4), pp. 491-510.

Amare, A. (2005). Academic freedom and the development of higher education in Ethiopia: The case of Addis Ababa University 1950-2005. *Ethiopian Journal of the Social Sciences and Humanities*, *3*(2), 77-80.

Association of Commonwealth Universities (ACU). (2015). Higher education: What role can the Commonwealth play? Background paper for discussion at the 19th Conference of Commonwealth Education Ministers.

Baye, Y. (2008). Academic freedom at Addis Ababa University: An overview of its past & current experiences. In T. Assefa (Ed.), *Academic freedom in Ethiopia* (pp. 19-62). Addis Ababa: FSS.

Berdahl, R. (1999). Universities and government in the 21st century: The US experience. In D. Braun & F. X. Merrien (Eds.), *Towards a new model of governance for universities. A comparative view* (pp. 59-77). London: Jessica Kingsley.

Boyd, B., Santos, M., & Shen, W. (2012). International developments in executive compensation: Corporate governance. *An International Review, 20*(6), 511-518.

Christopher, J. (2012). Governance paradigms of public universities: An international comparative study. *Tertiary Education and Management, 8*(4), 335-351.

Creswell, J. W. (2012). *Educational research planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston: Pearson.

De Boer, H., & Goedegebuure, L. (2009). The changing nature of the academic deanship. *Leadership, 5*(3), 347-364.

Demewoz, A. (2013). University governance: Autonomy and accountability in Ethiopian public institutions. Dissertation, Addis Ababa University

FDRE (Federal Democratic Republic Ethiopia). (2009). *Higher Education Proclamation No. 650/2009*. Negarit Gazeta. Addis Ababa.

_____ (2010). Growth and Transformation Plan I. Ministry of Finance and Economic Development. Addis Ababa, Ethiopia.

_____ (1994). Ethiopian Education and training policy. MoE, Addis Ababa, Ethiopia.

Fielden, J. (2008). Global trends in university governance. World Bank Education Paper Series. Washington, DC: World Bank.

Giddings, L. S. (2006) Mixed-methods research: Positivism dressed in drag. *Journal of Research in Nursing, 11*(3), 195–203.

Hanada, S. (2013). Japan's higher education incorporation policy: A comparative analysis of three stages of national university governance. *Journal of Higher Education Policy and Management, 35*(5), *537-552.*

Heslop, L. (2014). *Understanding India: The future of higher education and opportunities for international cooperation*. British Council. Retrieved from http://www.britishcouncil.org

Hutcheson, G. & Sofronious, N. (1999). *The multivariate social scientist*. London: Sage.

Israel, G. D. (2013). *Determining sample size*. Agricultural Education and Communication Department, University of Florida, IFAS Extension, PEOD6

Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika, 39*, 31–36.

Kenenisa, D. (2015). Reforms in Ethiopian higher education systems in a global context: Continuities, changes and challenges. PhD dissertation. Addis Ababa University.

Kettunen, J. (2006). Strategic planning of regional development in higher education. *Baltic Journal of Management, 1*(3), 259

Kim, J., & Mahoney, J. (2005). Property rights theory, transaction costs theory, and agency theory: an organizational economics approach to strategic management. *Managerial and Decision Economics, 26*(4), 223-242.

Kivistö, J. (2007). *Agency theory as a framework for the government-university relationship*, Higher Education Group/Tempere University Press.

Kivistö, J. (2008). An assessment of agency theory as a framework for the government-university relationship', *Journal of Higher Education Policy and Management*, vol. 30(4), pp. 339-50.

Kivistö, J & Hölttä, S (2008).'Information as a regulative element in higher education systems' *Tertiary Education and Management*, vol. 14(4), pp. 331-44.

Lane, J. E., & Kivistö, J. A. (2008). Interests, information, and incentives in higher education: Principal-agent theory and its potential applications to the study of higher education governance. *Higher Education, 23*, 141.

Liefner, I. (2003). Funding, resource allocation, and performance in higher education systems. *Journal of Higher Education, 46*, 469-489.

Lingenfelter, P. (2004). The state and higher education: An essential partnership. *New Directions for Higher Education,* no. 127.

Ministry of Capacity Building(2011). Report on CSRP. Addis Ababa: Ministry of Capacity Building, Federal Republic of Ethiopia.

Ministry of Education (MoE) (2017). Ethiopian Education Development Roadmap: An integrated executive summary draft. Addis Ababa, Ethiopia.

_____ (2015). Education Sector Development Program V. Addis Ababa, Ethiopia.

_____ (2004). Higher education system overhaul. (HESO) Addis Ababa, Ethiopia, MoE. .

Mulatu D. (2014). Staff perception towards leadership in transforming Wolaita Sodo University: Qualitative inquiry. *OALib Journal* 01(06), 1-19

Neuman, W. L. (2006). *Social research methods: Qualitative and quantitative approaches* (6th ed.) Boston: Allyn and Bacon, Pearson

OECD (Organization of Economic Cooperative Development) (2008). *Tertiary education for the knowledge society.* Paris: OECD.

_____. (2003). Changing patterns of governance in higher education". *Education Policy News*, *11*(1), 4-12.

_____ (2007*).* Funding systems and their effects on higher education systems. International Report. OECD-IMHE Study-Germany, 1-23

_____ (2010). Performance-based funding for public research in tertiary education institutions*:* OECD-Norway Workshop, Paris.

Philip, H., & De Bruyn, P. (2013). A mixed methods approach to combining behavioral and design research methods in information systems research. *ECIS 2013 - Proceedings of the 21st European Conference on Information Systems.*

Roger, K. (1995). What is higher education for? Strategic dilemmas for the twenty-first century university. *Quality Assurance in Education, 3*, 14 -20.

Rungfamai, K (2008). Higher education and institutional-autonomy policy in Thailand: The perspective of Agency Theory. MA thesis in Higher Education (HEEM), University of Tampere.

Saam, N. (2007). Asymmetry in information versus asymmetry in power: Implicit assumptions of agency theory. *Journal of Socio-Economics*, *36*(6), 825-40.

Schmidt, E., & Langberg, K. (2007). Academic autonomy in a rapidly changing higher education framework. *European Education, 39*(7), 80-94.

Schwandt, T. A. (2001). *Dictionary of qualitative inquiry* (2nd ed.). London: Sage Publications, Thousand Oaks, California.

Shapiro, S. P. (2005). Agency theory. *Annual Review of Sociology'*, *31*(1), 263-84

Taye, A. (2008). Academic freedom in Ethiopia: Perspectives of teaching personnel; conceptualization and determinants. *Forum for Social Studies*, Addis Ababa, Ethiopia.

Teshome, Y. (2007). The Ethiopian higher education: Creating space for reform. Addis Ababa: SMUC.

Trakman, L. (2008). Modelling university governance. *Higher Education Quarterly*, 62(1/2), pp. 64-83.

UNESCO (United Nations Educational, Scientific and Cultural Organization). (1997). Recommendation concerning the Status of Higher Education Teaching Personnel. Paris. UNESCO.

UNESCO. (2015). Paris: UNESCO, Institute for Statistics Data on Education. Retrieved from http://data.uis.unesco.org/

Van Vught, F. (1993). *Governmental strategies and innovation in higher education*. London: Jessica Kingsley.

Varghese, N. (Ed.) (2009). *Reforms in higher education: Institutional restructuring in Asia*. Paris: IIEP-UNESCO.

Verhoest, K (2005). Effects of autonomy, performance contracting, and competition on the performance of a public agency: A case study', *Journal of Policy Studies*, vol. 33, no. 2, pp. 235-58.

Yohannes, H. (2010). Governance in Ethiopian HEIs: State-university relationship. Thesis, Tampere University