Tampere University

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Institutional Autonomy and its Mechanisms in Ethiopian Higher Education

Perspectives of Formal and De Facto Autonomy in the case of Adama Science and Technology University

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The doctoral journey that started in September 2017 was a different experience for me. As a member of the Leadership and Management of Ethiopian Universities (LMEU) project, the mobility (south−south and south−north) was exciting. I experienced a cold winter season for the first time on 8 January 2018 at Tampere. The outbreak of the COVID-19 pandemic, which complicated life and my study, was also part of my doctoral journey. Thus, so many ups and downs have been experienced with different individuals standing at my side, and I want to thank them.

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Dedication

This dissertation is dedicated to my late father, Obo Hirko Lebeta, whom I love most and who passed away in March 2020 during my PhD studies.

<div align="center">
Bultossa Hirko
March 2022
</div>

ABSTRACT

This study is aimed to describe the extent of the practices of formal autonomy and explaining why and how de facto autonomy diverges from formal autonomy at Adama Science and Technology University (ASTU). Methodologically, it is a sequential mixed-method case study design. The first phase is quantitative and its data were collected using a survey questionnaire from 238 participants (94% of the sample population of 253). The sampling technique employed is optimum allocation stratified sampling, which was followed by systematic random sampling. The analysis of these data was conducted using frequency, percentage, mean and standard deviation, and one-way ANOVA. The second phase of the mixed method case study is qualitative. Its data were collected using semi-structured interviews administered to 17 participants, and document analysis. The results of the quantitative phase of the case study show that ASTU's de facto and formal autonomy are different from one another. As the qualitative phase indicated coercive mechanisms (policy, political power, financial rules and regulations, performance evaluation, market and stakeholder contexts, knowledge power, dependence, and lifespan) are the identified reasons and mechanisms for the difference observed between de facto and formal autonomy. In addition, the state's desire to bring change as a social mechanism, and profession network as a cultural mechanism are reasons and mechanisms for the discrepancy between de facto and formal autonomy. Therefore, to maximise ASTU's benefits of its given autonomy, it is suggested that the university should be made responsible for its funding and reduce its resource dependence. The state should also gradually decrease the amount of funds it has been providing. In addition, the financial rules and regulations should be customised to the context of the university with a reasonable accountability scheme. Besides, making the assignments of university leadership purely merit-based and maintaining secularism are also suggested to reduce ASTU's political dependence. This study in general implies that de facto and formal autonomy could not often appear the same, and autonomy cannot be absolute. Thus, studying the extent of institutional autonomy based only on the provision side is misleading.

Keywords: Institutional Autonomy, De Facto Autonomy, Formal Autonomy, Environmental Mechanism

TIIVISTELMÄ

Tässä väitöstutkimuksessa kuvataan muodollisen autonomian laajuutta ja tutkitaan, miksi ja miten tosiasiallinen autonomia poikkeaa muodollisesta autonomiasta ASTU-yliopistossa (Adama Science and Technology University, ASTU) Etiopiassa. Tutkimus on toteutettu monimenetelmäisenä tapaustutkimuksena. Tutkimuksen kvantitatiivinen osio muodostuu lomaketutkimuksesta (N 238), jonka analysoinnissa hyödynnettiin kuvailevia tilastomenetelmiä ja monimuuttujamenetelmiä. Tutkimuksen laadullinen aineisto muodostuu puolistrukturoiduista teemahaastatteluista (N 17) sekä dokumenttiaineistosta. Tapaustutkimuksen määrällisen vaiheen tulokset osoittavat, että ASTU:n tosiasiallinen ja muodollinen autonomia eroavat toisistaan. Laadullisen analyysin perusteella voidaan todeta että, pakottavat mekanismit ovat keskeisiä syitä tosiasiallisen ja muodollisen autonomian välillä havaittuun eroon. Lisäksi keskushallinnon muutoshalukkuus ja ammatillisten verkostojen toiminta ovat syitä ja mekanismeja tosiasiallisen ja muodollisen autonomian väliseen eroon. Tutkimukseen pohjautuen voidaan päätellä, että ASTU saisi mahdollisimman suuren hyödyn muodollisesta autonomiasta, ottamalla vastuun rahoituksestaan. Tämä vähentäisi sen resurssiriippuvuutta. Valtion voisi vastaavasti vähitellen vähentää yliopistolle myöntämiensä resurssien määrää. Rahoitussäännöt ja -määräykset olisi räätälöitävä yliopiston kontekstiin sopiviksi, ja niihin olisi liitettävä kohtuullinen tilivelvollisuusjärjestelmä. ASTU:n poliittisen riippuvuuden vähentämiseksi tutkimukseen pohjautuen esitetään myös, että yliopiston johto nimitettäisiin puhtaasti ansioiden perusteella. Tämä tutkimus tukee käsitystä, että tosiasiallinen ja muodollinen autonomia eroavat toisistaan ja, että sen laajuuden tutkiminen vain säännöksen perusteella on harhaanjohtavaa.

Avainsanat: autonomia, korkeakoulutus, korkeakoulupolitiikka, Etiopia

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ABBREVIATIONS

AASTU	Addis Ababa Science and Technology University
ASTU	Adama Science and Technology University
EUA	European University Association
HE(I)	Higher Education Institution
KAIST	Korea Advanced Institute of Science & Technology
MoE	Ministry of Education
MoFED	Ministry of Finance and Economic Development
MoSHE	Ministry of Science and Higher Education
MoST	Ministry of Science and Technology
POSTECH	Pohang University of Science & Technology
SD	Standard Deviation
SPSS	Statistical Package for the Social Sciences

I.   INTRODUCTION

'Universities cannot perform well if they do not benefit from autonomy'. (Iwinska & Matei, 2014, p. 19)

1.1   Research background

The institutional autonomy of universities has been given attention in the contemporary higher education landscape (Bladh, 2007). The widely shared assumptions among higher education institutions worldwide that emphasise greater autonomy in universities are to: realise competitiveness by transmitting and discovering the truth, properly shouldering enormous responsibilities in building a knowledge-based economy and society (Alexander, 2000; Altbach et al., 2011; Maassen, 2000), survive in a service market (Salmi, 2007), promote modernisation (Shattock, 2014) and 'economic competitiveness and human capital development' (Dee, 2006, p. 136). Hence, institutional autonomy came to the centre of nations' higher education reform agenda (Oba, 2014). The pre-1989 reform agenda, which was created under the heading of 'more institutional autonomy', in Germany is an illustration of states' prevailing concern for the provision of institutional autonomy in their respective higher education institutions (Kehm, 2014, p. 19).

In addition, institutional autonomy has been emphasised in universities to cope with changes observed in terms of massification, diversification, reduced public funding, heightened market competition and the demands of economic structure (Altbach et al., 2011; Salmi, 2009; Shattock, 2014; Woldegiorgis & Doevenspeck, 2013). Institutional autonomy is considered an instrument that enables universities to protect their discretion from political or ideological pressures and to maintain the right to make their own judgments and to guard faculties' academic freedom (Hong, 2018; Pan, 2009). Moreover, scholars suggested that substantive institutional autonomy is helpful in increasing efficiency, enhancing quality and adapting to the global context (Aghion & Hoxby, 2009; Stensaker, 2014), improving innovativeness and responsiveness (Estermann et al., 2011), defining purposes effectively and enhancing flexibility (Altbach et al., 2011),

promoting change from inside (Neave et al., 2006), generating more funds, diversifying its system, enhancing its relevance (Maassen et al., 2017) and many other important aims.

To unpack the benefits that institutional autonomy is exhibiting, several countries have reformed their higher education governance to promote institutional autonomy (Salmi, 2007). To this end, governments in many countries, including Ethiopia, have attempted to decentralise authority and decision-making power to educational institutions (FDRE, 1994; Neave et al., 2006). Besides, it is common for universities, themselves, to claim more institutional autonomy. For instance, university rectors in European countries involved in the Bologna process (Glasgow Declaration, 2005) requested substantive autonomy. Moreover, there is a tendency among universities to compromise the size of their budgets for the sake of increased institutional autonomy (Salmi, 2007).

Although states have been given due consideration in providing institutional autonomy for their respective universities, the practice varies across countries, periods and dimensions (Iwinska & Matei, 2014). The variation observed among countries has been attributed to the 'national contexts, circumstances, academic and political cultures of states' (Dill, 2001; Zgaga, 2012, p. 3). Consequently, universities often do not assume a similar pattern in their autonomy (Bain, 2003). For instance, in countries with a form of federalism, the state of institutional autonomy varies among states (Kehm, 2014). Similarly, there is variability in the provision of institutional autonomy within the non-federal government system. Institutional autonomy could also vary across dimensions within a single institution (Enders et al., 2013; Stensaker, 2014) and across periods with changing government forms (Befekadu & Bultossa, 2018).

1.1.1   Dynamics of institutional autonomy

Environmental pressures influence the socio-economic, political and cultural affairs of countries and the likely demands of the society that the government is expected to address (Maassen, 2000). This, in turn, put the governments of all nations under strong public pressure to be more efficient and effective, forcing them to see alternative ways of delivering services that are economically sound and appropriate to occasional societal needs (Dickinson, 2017). From the literature, it is possible to categorise the dynamics of state higher education governance relationships into three generations (ivory tower, strict state control and limited state control).

The first two generations (ivory tower and strict state control) belong to two philosophical assumptions (idealist and realist). Idealists consider higher education institutions an 'ivory tower' within which scholars quietly pursue knowledge. During this era, the relationship of universities with external society is very limited and they work for their own sake (Pan, 2009; Reilly et al., 2016). This can characterise universities as self-reliant, untouched, separate from other sectors and elitist. Thus, this period can be considered the decade when universities enjoyed maximum institutional autonomy. Conversely, as a second trend, realists challenged the ivory tower and suggested that locking doors and ignoring the values and traditions of a society is difficult for service institutions, such as higher education. Such realists advocate strict control (Pan, 2009). Furthermore, the changes observed in the higher education system (massification and diversification), which have budget implications, also challenged the idea of an ivory tower (Bladh, 2007). Hence, relaxed university autonomy elapsed, and increased government control was in place (Bladh, 2007).

Third, the New Public Management (NPM) reform that emerged during the 1980s brought a new way of thinking about government–university relationships. This reform assumes that strict state control from distant and extended interventions regarding every decision of the university is uneconomical, inefficient and ineffective (Braun, 1999). Hence, NPM recommends that state actions must be 'ultimately limited to guaranteeing social order and correcting the worst effects of the environment' (Magalhaes et al., 2013, p. 245). Accordingly, governments were forced to reconsider and shift their traditional extended control to a somewhat relaxed kind of government–university relationship (Braun, 1999; Dobbins & Knill, 2015; Dunleavy & Hood, 1994; Enders et al., 2013; Zgaga, 2012). Therefore, in a contemporary higher education governance relationship, the experiences of these traditions are at the heart of a state of institutional autonomy.

Judging institutional autonomy from the provision side may be misleading because what is given does not guarantee the actual practices. Thus, considering the two sides of institutional autonomy is worthwhile to better understand the benefits of institutional autonomy: the provision side (formal autonomy) and the practice side (de facto autonomy). The provision of institutional autonomy is often formal and guided by a given regulatory framework, such as 'constitutions, laws or decrees' (de Boer & Enders, 2017, p. 61). These regulatory frameworks specify what is allowed, restricted or prohibited, and it can be taken as formal autonomy (de Boer & Enders, 2017). In Ethiopia, the formal autonomy of universities is defined in higher education proclamations (FDRE, 2003, 2009, 2014, 2019). Part

of formal autonomy, which is practically exercised by universities in their decision-making processes, is de facto autonomy. Different pressures and mechanisms in the context in which a university operates might make these two sides of institutional autonomy appear different. The rationale is that giving autonomy does not guarantee the exercise of it (Enders et al., 2013). Thus, considering the two sides, de facto and formal autonomy, in the understanding of institutional autonomy seems sensible.

When the autonomy of universities is challenged in some form or another, difference between formal and de facto autonomy might be observed (de Boer & Enders, 2017). It has been indicated, for instance, that institutional autonomy might be denied by the state (Salmi, 2007). Some studies illustrate that formal autonomy has not always been implemented to the extent that it is provided for several reasons related to the institutional environment and the capacity of the focal organisation. Since universities are not entities that can stand alone, they may depend on their environment to a varying degree. Accordingly, the environment could impose resource and normative pressures (de Boer & Enders, 2017). Furthermore, as noted by Badran (2017), the legal framework that guides a decision may not allow independent action. Alternatively, the university might lack the competition to take independent action, which consequently makes de facto and formal autonomy vary from one another.

Assuming that the level of formal autonomy is constant (be it low or high), the contentions of this study are the extents of formal autonomy that is practically exercised, and the reasons and mechanisms that create difference between de facto and formal autonomy. Hence, Adama Science and Technology University (ASTU) is taken as the case university as a research context. ASTU is one of the two technical universities in Ethiopia. It is found 90 km from the capital city (Addis Ababa) to the northeast. Adama Science and Technology University (ASTU) has been through different governance dynamics to reach its status. In 1993, it was established as a technical college, then became a technical teacher's training college, and finally grew to a full-fledged university in 2006, as Adama University. Later, it was renovated and became ASTU in 2011. Since it was upgraded to the university level, ASTU has experienced a governance relationship with three government-sector ministries (MoE, MoST and MoSHE). Therefore, ASTU's experience in governance relationships with several government sectors is presumed to be an advantage for studying de facto autonomy.

1.2   Statement of the problem

Institutional autonomy, as granted in legal documents, differs from what is exercised in practice. Even though institutional autonomy has two faces (formal and de facto), a large and growing body of literature on institutional autonomy, especially recent studies, focuses a great deal on states of institutional autonomy: formal institutional autonomy (Altbach et al., 2011; Bain, 2003; Enders et al., 2013; Estermann et al., 2011; Maassen et al., 2017; Moses, 2007; Bjørn Stensaker, 2014), a level of formal university autonomy (de Boer et al., 2010; Saint, 2004), external influence on institutional autonomy (Ege & Bauer, 2017; Yesilkagit & van Thiel, 2008; Zha & Hayhoe, 2014), the importance of institutional autonomy (Mai et al., 2020; Zha & Hayhoe, 2014), the relationship between formal autonomy and de facto autonomy (de Boer & Enders, 2017), the relationships of formal and de facto independence (in the political and business field) (Badran, 2017; Maggetti, 2007), and institutional autonomy and neo-liberal politics (Kodelja, 2013). Furthermore, the existing body of research in the Ethiopian context has also been intended to focus largely on the academic freedom of teaching staff (Assefa, 2008; Degefa, 2015), but not otherwise.

Conversely, a glance at the literature reveals that 'very little attention has been given to link formal and de facto autonomy together, and even less has been said about the balance between these two aspects (Badran, 2017, p. 70). Besides, de facto autonomy has not been traced much in the study of institutional autonomy in higher education (de Boer & Enders, 2017; Fumasoli & Gornitzka, 2014). Focussing on the de facto side of institutional autonomy can better explain the actual governance relationships between state and universities. Besides, looking at the balance between formal and de facto autonomy might be helpful to question why what is formally provided is practically denied. This signifies that this study is worthwhile in a context where the state imposes excessive control on universities affair.   Thus, this study is intended to show why and how de facto autonomy appears different from formal autonomy in a university governance system.

1.3   Purpose of the study

The purpose of this mixed method single case study is to describe the extent of the practices of formal autonomy and explain why and how discrepancies might appear between formal and de facto autonomy in Ethiopia, specifically Adama science and

technology university. To this end, this study was guided by the following three research questions:

1. What are the practices of exercising formal autonomy at ASTU?

The formal autonomy of Adama Science and Technology University (ASTU) is defined in the Ethiopian higher education proclamation (FDRE, 2009; 2019). Based on this legal framework, describing the extent of ASTU's perceived capacity to exercise its given autonomy is required. To answer this question, the four dimensions of university autonomy (organisational, academic, financial and staff) were employed as a conceptual model. In addition, to at least glance at whether there is a difference between the scores of the groups of respondents, the following null hypothesis was set.

H0: There are no significant distinctions among the scores of groups of respondents (respondents with disparate years of service in university as well as various academic ranks, levels of education, and colleges to which they belong).

Furthermore, the explanation of the reasons and mechanisms that make de facto autonomy appear different from formal autonomy was guided by the following two research questions.

2. Why does ASTU's de facto autonomy diverge from formal autonomy?
3. How do assorted mechanisms make de facto autonomy diverge from formal autonomy at ASTU?

These research questions are used to understand the reasons and mechanisms that shape and reshape de facto autonomy to appear different from formal autonomy. To this end, the concept of institutional isomorphism (isomorphic pressures) was adapted as a conceptual framework while answering these questions. Besides, this study also seeks to identify the theoretical and practical implications of this thesis, which is assumed to be addressed through the triangulation of the literature and case study data.

1.4   Structure of the dissertation

This dissertation comprises eight chapters, which can be categorised into four parts: conceptual, methodological, empirical and reflective. The first four chapters emphasise the conceptual and contextual foundations and the rationale of this study. The first chapter concerns the background of the study, statements of the

problem, the purpose of the study and research questions. Chapter 2 comprises the conceptual model of the study, which includes contextual and multi-dimensional perspectives of university autonomy with operational components. Chapter 3 presents the conceptual framework that includes institutional theory and one of its strands, institutional isomorphism. Chapter 4 incorporates the historic background of higher education governance relationships after 1950, which was intended to provide readers with an overview of the context and the tradition of institutional autonomy in Ethiopia.

As the second category, Chapter 5 encompasses the research methodology that specified the research methodological choice, research strategy, research design, case selection and units of analysis and detailed procedures of the research. The intention is to provide readers with the rationale and trustworthiness of this research. The empirical parts of this study, as the third category, included chapters 6 and 7. Chapter 6 presents the quantitative phase that informs the second phase, which presents the analysis and interpretation of data obtained through the questionnaire and checklist. Chapter 7 discusses the qualitative phase of the study and presents the data analysis obtained through interviews and document analysis. The reflective part of Chapter 8 includes the discussion and conclusion that mainly contains the major findings of the study, conclusions drawn and their implications. It also encompasses the contributions of the study, delimitations, limitations and propositions for future research. To visualise the organisation of this study, it is demonstrated in Figure 1 below.

Figure 1. Structure of the Dissertation

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II. CONCEPTUAL MODEL OF INSTITUTIONAL AUTONOMY

This chapter contains the concept of autonomy (contextual and dimensional) and the conceptual and operational components of institutional autonomy and institutional autonomy in higher education.

2.1   Perspectives on institutional autonomy

Two perspectives are common in the literature in defining autonomy (contextual/situational and dimensional autonomy). While *contextual definition* refers to the classical concept of autonomy, dimensional definitions specify an institutional-level understanding of autonomy in a contemporary governance system.

2.1.1   Contextual perspectives on autonomy

Autonomy, as a construct, has been defined differently by different scholars. The classical definition of autonomy is equated with self-steering/ruling in which organisations can freely determine the rules and norms they believe are productive and the ability, willingness or capacity for self-thought and action (Bain, 2003; Ballou, 1998; de Boer & Enders, 2017; Pizanti & Lerner, 2003; Verhoest et al., 2004). These definitions have two notions: protection and the capacity to act. The first concerns freedom from external intervention, the freedom to choose without getting anybody in one's way, non-interference or no coercive measures. The second dimension, the capacity to act, refers to options, desires and capacities to exercise those choices and competencies to determine one's affairs. This included the social and material support and resources needed to practically take up options and make decisions (Verhoest et al., 2004). This implies that autonomy has two faces: inward and outward interactions. While *inward interaction* indicates the extent to which the environment allows an entity to steer itself, *outward interaction* is the

capacity and competency of an entity to respond to external pressures. Thus, autonomy is a concept defined in terms of declared freedom and the capacity to entertain possibilities.

Based on the concept of autonomy defined above, institutional autonomy has traditionally been approached as an idea of self-governance. It is also defined as the process through which a given entity is structurally and symbolically independent from another powerful entity (Abrutyn, 2009). Similarly, *institutional autonomy* is defined as 'the ability to translate one's preferences into authoritative actions, without external constraints' (Maassen et al., 2017, p. 39) These days, it is characterised as a decision-making process and its relationship with its environment as regards its operations and affairs (Ashling et al., 1999; Pan, 2009), which is considered a mutual relationship between autonomy and accountability (Maassen et al., 2017). *Institutional autonomy* is also defined from public university autonomy perspectives. The public university autonomy concerns the influence of external stakeholders (politicians, bureaucrats and sector ministries), which are sufficiently powerful to dominate their relationships (Maassen et al., 2017).

Given the above definitions, one must ask: '[I]s self-ruling/governance or the freedom of university absolute?' In answering such questions, it has been argued that the autonomy of organisations, in one way or another, is never without external environmental intrusions (Estermann et al., 2011) and it is impossible to find a single independent social institution (Bain, 2003). As a complement to this assumption, Pan (2009) and Salmi (2009) defined *institutional autonomy* as a semi-independent decision-making space characterised by empowerment in a manner of responsibility with some sort of room for the external environment to intervene in an organisation's self-steering.

These definitions specify that there are two actors: the environment and the focal organisation. While the environment can determine the state of institutional autonomy, the focal organisation is expected to maximise its benefits over what is formally allocated. Thus, the state's governance philosophy and the focal organisation's capacity to negotiate and protect its niche determine both formal and de facto autonomy.

Institutional autonomy in this study is perceived, then, as the process of a governance relationship between the corporate environment (the state and other environments) and the university. Besides, it is conceptualised in this study as a semi-independent relationship, because the two extreme (absolute dependent and independent) relationships are ideal (Fumasoli & Gornitzka, 2014; Salmi, 2009). Again, it is possible to view institutional autonomy as having two faces: formal

autonomy (what is legally provided) and de facto autonomy (what is practically exercised).

Formal and de facto autonomy

Formal autonomy defines the power and competencies and discretions in governance relationships between the state and the university (Maassen et al., 2017). Though the power of the principal (state) and the decision-making spaces of the focal organisation (universities) are formally defined, the actual practice might deviate from what is prescribed. Hence, the concept of de facto autonomy, which is interchangeably used by different scholars with real autonomy (Enders et al., 2013), autonomy in use (de Boer & Enders, 2017) and living autonomy (Fumasoli & Gornitzka, 2014), became a concern. De facto autonomy represents the actual autonomy that a focal organisation is exercising, which might range from a very low to a high level. In the rare case, it might go beyond discretion based on the venue of influence that the environment could impose (de Boer & Enders, 2017).

To gain a better insight into what makes de facto autonomy diverge from formal autonomy, let us investigate some empirical evidence from the literature. De facto autonomy (autonomy in use) is found to be less than formal autonomy for financial, structural, cultural and environmental reasons (Christensen, 2011). It is indicated that universities' dependency on the state is a mechanism that facilitates government intervention in universities' affairs (de Boer & Enders, 2017). Hence, de facto autonomy is limited. Verhoest et al. (2004) indicated that de facto autonomy is a function of the competencies and involvement of the institution and its respective environment, which can range from no involvement to high involvement through either direct or indirect intrusion (Verhoest et al., 2004). For example, it is indicated that when an 'agency is fully dependent on a principal for funding, the actual decision-making competencies of the agency are severely constrained' (Verhoest et al., 2004, p. 105). Empirical evidence has also shown that when governments take the lion's share in financing HEIs, de facto autonomy can easily deteriorate. The amount of government budget appropriation is inversely related to the extent of de facto autonomy (Kehm, 2014; Oba, 2014; Stensaker, 2014).

In addition, it is indicated that increased financial dependence on a government constitutes a threat to institutional autonomy (Ordorika, 2003). Moreover, de Boer and Enders (2017) suggested that an organisation's dependence on externals for critical resources promotes the overwhelming power of the

provider over the focal organisation, which could limit its likely competence to exercise formal autonomy. Conversely, when there is mutual dependence or an interrelationship between a principal and an agent, there is the possibility that de facto autonomy exceeds formal autonomy (de Boer & Enders, 2017). Thus, it is argued that resource power is directly related to the intervention of the government, which could severely limit de facto autonomy. That is, the higher the university's dependence on government resources (funding), the higher the state's intervention in the university's decision-making space (Dant & Gundlach, 1999; de Boer & Enders, 2017; Verhoest et al., 2004). Similarly, Ordorika (2003) suggested a similar view but with different wording: 'Resource providers have the capability of exercising great power' (Ordorika, 2003, p. 363). Thus, revenue diversification and cost recovery are suggested for universities to enjoy more de facto autonomy (Bain, 2003).

Furthermore, the autonomy of fund-receiving organisations from a government or other sources is subject to the budgeting system of the fund providers. For example, when fund providers allocate money in an earmarked line-item budgeting mechanism, de facto autonomy becomes limited. Conversely, the provision of a budget as a block grant leads to relatively better de facto autonomy. It gives room for the allocation of money in line with the priorities of the focal organisation. In the case of funds to be generated by HEI, autonomy is a function of government regulations and procedures to use and hold it, such as tax and other restrictions. Besides, the discretion of universities in making a decision 'over how, when and where the money should be spent' gives the chance to make cost analyses, contain costs for some services and focus on investments with a high, quick return (Bain, 2003, pp. 28–30). Accordingly, de facto autonomy becomes greater.

Christensen specified that strategic indirect steering through extended reporting, emphasised auditing and evaluation; performance management and other administrative measures have the power to limit the extent of de facto autonomy. In principle, de Boer and Enders (2017) argued that performance contracts obliged universities to focus on predetermined policy targets rather than on their interests. Similarly, it is confirmed that university leaders' anticipation of 'state output funding, performance monitoring and bonding of universities via performance contracts are known mechanisms' that could render the level of de facto autonomy less than formal autonomy (Enders et al., 2013, p. 14).

The other mechanism is that the environment, especially a government, can use its political power to influence universities. The pressure might be imposed

in the form of a nomination, appointment and performance evaluation of the head of the institution. Specifically, the conditions that facilitate a government's extra intrusion into the decision-making space of institutions are the extent to which the head of an institution is appointed and accountable to the government and the extent to which members of a supervisory board represent a government and are appointed by a government (Verhoest et al., 2004). Similarly, Enders et al. (2013, p. 14) indicated that university leaders' anticipation of 'state political and administrative positions' could place the level of de facto autonomy at less than formal autonomy. The government also stipulates economic and political tasks as mechanisms to control universities, such as appointing university presidents, prescribing government values in the compulsory curriculum and establishing political bodies in university governance (Pan, 2009, pp. 33–34).

Moreover, the fear of sanctions from the larger environment might limit the extent of de facto autonomy.

> When an agency knows that it is heavily controlled on explicit norms under the threat of substantial sanction, it will narrow its use of delegated decision-making competencies and thus will act less autonomously than potentially possible. …The threat of sanctions may be expressed as the extent to which government funding is linked to the performance of the agency. (Verhoest et al., 2004, p. 106)

Verhoest et al. (2004) consider the attempt to provide formal autonomy on one hand and exert excessive control on the other, which is a 'paradox of autonomization'. This implies that 'there is no linear relationship between formal and de facto autonomy' (Yesilkagit & van Thiel, 2008, p. 145).

Ordorika (2003) also identified three conditions (capacity of university, government interest and trust) for government intrusion in a university's decision-making space. The first is when a university, itself, seeks government intervention for an incident that the university cannot control with its own decisions, such as a conflict in the form of student activism. Second, the government, itself, takes direct action when it is threatened by events at a university. Finally, it happens when the government seeks change in the university. However, when a government lacks interest, it leaves a university to make decisions independently. For instance, 'academic programmes, curricular issues or degree requirements, in general, are of little interest to Mexican government officials', who are preoccupied with maintaining political control over universities (Ordorika, 2003, p. 376). Furthermore, the subordination of university officials, creating 'political allegiance or ideological conformity', creates an informal chain of command that facilitates state intervention (Ordorika, 2003, p. 384). Besides, the political dependency of university officials to maintain their position and the political will of university

executives lowers the de facto autonomy of universities 'in those areas that are of fundamental interest to the government' (Ordorika, 2003, p. 382).

Likewise, rules and regulations, procedures and principles paralleling formal autonomy have the power to limit de facto autonomy. Although the government had given substantive formal autonomy to universities, de facto autonomy remains restricted through mechanisms such as national rules and regulations. In addition, 'agreements about the minimum and maximum salaries, detailed descriptions of staff positions and career ladders, job appraisals and procedures for promotions' at the national level can limit the extent of de facto autonomy (Enders et al., 2013, p. 11). Besides, de facto autonomy is susceptible to approval and incentive mechanisms. Although universities are autonomous in selecting and determining the number of students at the master's level, both the accreditation and approval for the development of new educational programmes are constraining mechanisms (Yesilkagit & van Thiel, 2008).

The government also uses incentives as a mechanism to entertain its research interests, and universities compromise their rights in exchange for the incentive (Enders et al., 2013). This entails that whatever level of formal autonomy (low, moderate and high) is given to universities; there are mechanisms that governments systematically or indirectly impose to control or intervene in the decision-making spaces of universities. Furthermore, as noted by Maggetti (2007, p. 273), the reduced government steering capacity or lessened capability to monitor, control and influence for different reasons might allow institutions to exercise their autonomy maximally.

The extent of de facto autonomy has also suggested the function of the lifespan of the institution. For instance, Maggetti (2007) indicated that older institutions exercise higher de facto autonomy than younger ones. Therefore, as it is evidenced in the literature discussed above, whatever substantive formal autonomy is provided, de facto autonomy is susceptible to pressures imposed in the form of financial, political, knowledge power, rules and regulations, approval and incentives, the political will of university officials, the capacity of the sector to govern the university, the maturity level and other potential pressures. Hence, formal autonomy does not guarantee the actual practices.

2.1.2   Multi-dimensional perspectives on institutional autonomy

The contextual perspectives presented above (see Section 2.1.1) provide the classical and generic definitions of *autonomy*, *institutional autonomy*, *formal autonomy* and *de facto autonomy*. The intention is to provide an overview of these concepts in general and the way they are conceived in this study. Specifically, it is aimed to emphasis on how these two sides of university autonomy are shaped to appear different from one another (Badran, 2017; de Boer & Enders, 2017; Fumasoli & Gornitzka, 2014). This section, as a complementary, is aimed to provide a conceptual model that could break the concept of institutional autonomy into varying specific dimensions that facilitate the identification of the variables included in this study.

To define institutional autonomy from the perspectives of disparate dimensions, scholars have provided several models, some of which are discussed as follows. In this regard, Berdahl (1990) is the first to define *autonomy* in terms of its multi-dimensional nature in higher education. He distinguished autonomy as substantive autonomy, which he calls determining the 'what' of the mission, and procedural, which refers to the mechanisms or structures that help organisations to pursue their mission (the 'how' of the mission). Though he did not precisely specify the variables, the attempt made is helpful to at least break the generic concept in to two significant dimensions. Although Berdahl contributed to a better understanding of university autonomy, his definition fails to differentiate aspects of substantive and procedural autonomy with clear indicators. For instance, teachers are considered part of the substantive autonomy of the university; however, universities are not mainly established to recruit teachers.

Similarly, Dobbins and Knill have tried to break Berdahl's two-dimensional model into more specific indicators (Dobbins & Knill, 2014). They extended Berdahl's procedural autonomy to include 'state, university and social relationships, decision-making structure, quality control and management arrangements as general higher education arrangements' (Findikli, 2017, p. 399). They also introduced two important sub-dimensions (personnel and financial autonomy). Nevertheless, this definition of the multi-dimension of institutional autonomy has been criticised for the impossibility of its actual integration into the real context of universities and for the increased complexity of the process (Findikli, 2017).

Other scholars have also tried to define *autonomy* in a multidimensional fashion, generally without specifying the type of organisation. For instance, Christensen explained the dimensional concepts of autonomy as formal

bureaucratic, which further splits into structural, legal and financial autonomy. In general, Christensen's formal bureaucratic autonomy is conceptually similar to Berdahl's procedural autonomy. which exempts some of the interventions of the principal and delegates to an agency (Christensen, 2011). The elements of formal bureaucratic autonomy (structural, financial and legal) could be categorised under procedural autonomy. Christensen emphasises the relationship of departments with their organisation-level leaders, which is a business-oriented concept. Similarly, this definition conceptually overlaps among the three dimensions (Verhoest et al., 2004) in which legal autonomy could be explained in terms of structural and financial autonomy.

Furthermore, based on business organisations and the perspective of agency theory, Verhoest and his co-workers define *institutional autonomy* in terms of two dimensions, which they call competencies (capacity/ability) to act and the absence of constraints in using competencies (Verhoest et al., 2004). Based on these, they defined institutional autonomy in terms of six dimensions grouped under two definitions they call *competencies* and *constraints*. First, the organisational competencies are associated with managerial autonomy, which refers to an organisation's freedom to determine inputs and the management of resources (human and financial); and *Policy autonomy*, which refers to the extent to which organisations determine their core mission independently.

Second, as environmental constraints they identified: structural autonomy, which is about protecting an agency from the intrusion of a government that might be manifested hierarchically; the financial autonomy dimension according to these scholars is related to the extent to which the institution is responsible for its funding and the likely losses; legal autonomy (Verhoest et al.'s (2004) is about the legal status of the institution to protect itself; and interventional autonomy, which is related to the extent to which the institution is free from administrative requirements such as reporting(Verhoest et al.'s (2004). However, what they consider managerial and policy autonomy does not seem to belong exclusively to organisational competencies. Besides, they perceived formal autonomy in terms of a continuum, ranging from the absolute autonomy of an institution to a high level of intrusion from a government. Though these scholars contributed to the understanding of the link between autonomy and performance, their definition complicates the concept of institutional autonomy and creates overlapping concepts (financial and managerial autonomy) that thwart the identification of variables. In addition, this type of categorization also criticized, particularly in its

inability to equally fit the governance relationship between private and public institutions.

The European University Association (EUA) has also been trying to establish a scorecard for university autonomy since 2009. It has been through different steps; the scorecard published in 2017 is the third undertaking. These efforts have been aimed at developing a common understanding and structure and thereby solve the diverse concepts and challenges of university autonomy. Currently, the EUA university autonomy scorecard serves European universities as a reference in describing university autonomy (Pruvot & Estermann, 2017, p. 8). It is useful in highlighting the elements of substantive autonomy and discussing institutional autonomy (Nokkala & Bladh, 2014). However, the EUA university autonomy scorecard has been criticised for its method of data collection and indicator construction (Nokkala & Bladh, 2014). Despite these limitations, it specifies the indicators under its four dimensions of university autonomy, which are clear in understanding university autonomy.

According to the EUA autonomy scorecard, *organisational autonomy* refers to autonomy regarding executive leadership, which deals with the selection, the appointments, the term of office and dismissal of the executive head, internal academic structures and governing bodies (Pruvot & Estermann, 2017). *Financial autonomy* refers to autonomy related to the allocation of public funding, keeping a surplus of public funding, borrowing money, the ownership of land and buildings and students' financial contributions (Pruvot & Estermann, 2017). *Staff autonomy* regards the freedom to recruit staff, determine staff salaries, and decide the dismissal of staff and staff promotions (Pruvot & Estermann, 2017). *Academic autonomy* refers to the autonomy of the university to determine student numbers, admission mechanisms, the introduction and termination of degree programmes, the language of instruction and designing academic content (Pruvot & Estermann, 2017). From these definitions, organisational autonomy, financial autonomy and staff autonomy seem the specific version of Bardehl's procedural autonomy, which constitutes the means to achieve the purpose for which universities are established. The definition of *academic autonomy* fits Berdahl's substantive autonomy.

A summary of scholars' perspectives of multi-dimensional autonomy is presented in Table 1, below.

Table 1. Summary of Multi-dimensional Perspectives of Autonomy

Contributors	No. of dimensions	Dimensions of institutional autonomy defined	Limitations
Berdahl (1990)	Two	• Substantive (determining the 'what') • Procedural (determining the 'how')	Genera (it did not precisely specify indicators)
Dobbins & Knill (2014)	Three	• Substantive (determining the 'what') • State, university and social relationships; decision-making structure; and management arrangements • Personnel and financial autonomy	Impossibility of actual integration into the real context of universities Overlapping of concepts (management arrangement and personnel and finance dimensions)
Christensen (2011)	Three	• Formal bureaucratic • Legal autonomy • Financial autonomy	Differentiating formal bureaucratic and legal autonomy is difficult, and it is not specific.
Verhoest et al. (2004)	Six	• Managerial • Policy • Structural • Financial • Legal • Interventional autonomy	Overlapping of concepts (managerial, structural and financial autonomy) Complicating the concepts
EUA (2009)	Four	• Organisational • Academic • Financial • Staff autonomy	Overlapping of indicators Complications made in weighting Indicator construction

Table 1 above summarises some of the multi-dimensional models of autonomy including the author and the number of dimensions with their observed limitations. Dobbins and Knill's (2014) three dimensions, Christensen's (2011) three dimensions and Verhoest et al.'s (2004) six-dimensional model were not chosen because of their limitations discussed so far. Although Berdahl (1990) and the EUA university autonomy scorecard are not impeccable, the researcher combines the two into a single model to frame the quantitative phase of this study for the following reasons. Even though Berdahl's (1990) two dimensions of university autonomy have been criticised for their generic nature, they ease the definition of university autonomy variables because they categorise them as the means and end. Thus, one can judge a given variable based on the mission of the universities.

Beside its limitations discussed above, European university autonomy scorecard is prepared in the context of Europe, and its appropriateness in other contexts has not yet been proven. However, the researcher found that it better fit the study with minor modifications for two main reasons. First, the model was developed to address university autonomy in particular. Second, it specifies the elements of university autonomy without complicating the concept. Thus, to overcome the

overlapping concepts in this model, the Berdahl two-dimensional model can be helpful. Conversely, the EUA autonomy scorecard also helps to break Berdahl's generic definition into more specific ones. It is also found useful in highlighting the elements of substantive autonomy and in assessing and discussing institutional autonomy (Nokkala & Bladh, 2014). The modification made is simple and straight forward: it rejects the weighting system of the EUA autonomy scorecard because it is not yet standardised. In addition, the weighting system has been utilised to compare universities in Europe and adds no value to the purpose of this study. However, its four dimensions, with their respective variables, are found helpful to describe the extent of the practice of formal autonomy. Therefore, it is possible to use it in combination with Berdahl's multi-dimensional concept as represented in Table 2 below.

Table 2. University Autonomy Multi-Dimensional Model

EUA Four-Dimensional University Autonomy			
Academic	Organisational	Financial	Staff
Teaching • Student selection • Curriculum • Education programmes Research Community engagement	Executives • Nomination • Appointment • Removing from office organisation	• Allocation of funding • Keeping a surplus • Tuition fees • Borrowing money • Budget transfer • Internal expenditures	• Recruitment • Selection • Compensation • Staff promotion
Substantive	Procedural		
Berdahl's two-dimensional university autonomy			

Note. The table above is a modified version of Berdahl (1990) and Pruvot and Estermann (2017)

2.1.3   Operational components of the multidimensional model

As discussed above, the multidimensional model chosen to frame this study has four dimensions (academic autonomy, organisational autonomy, financial autonomy and staff autonomy). Thus, what these dimensions represent in this study is operationalized as follows.

Academic autonomy

Academic autonomy is often confused with academic freedom. *Academic autonomy* refers to the freedoms of a university in determining all matters related to its core missions, specifically teaching, research and third missions. Conversely, *academic freedom* refers to individual professional freedom not to be questioned for what academicians do during teaching and research endeavours without interference (Ashby & Anderson, 1966; Maassen et al., 2017).

Bain (2003, p. 36) characterised an academic autonomous university as a university that independently 'design and deliver curriculum programmes, courses and contents, develop a curriculum without prescription from external sources (Aghion & Hoxby, 2009) and determine graduate standards. This entails that if there is an external direction on the relevance of the curriculum, it is the manifestation of the state's extended control. It has also been suggested that autonomous universities have the freedom to determine research themes and how to pursue them (Bain, 2003). Similarly, the EUA defines *academic autonomy* as the freedom to decide on degree supply, curriculum and methods of teaching as well as areas, scopes, aims and methods of research. Student-related issues are also part of university autonomy (Estermann et al., 2011, p. 9).

Thus, this study described the extent to which ASTU has been exercising its given autonomy (formal autonomy) in teaching, which includes the development and delivery of curriculum and student-related issues (determining the admittance standard, number of students and freedom in selection); setting research themes and procedures, and determining the type and amount of services that a university is supposed to deliver to society (see Table 3; Item 2, below).

Organisational autonomy

The concept of organisation has been described 'as the structural expression of rational action (as a mechanistic instrument designed to achieve specified goals') (Selznick (1948), as cited in W. Rechard Scott (2001, p. 23)*)* The term *organisational autonomy*, while it has been used by the EUA, is universities' freedom to 'set conditions for status and role of executive heads and external members' and determine universities' internal organisational structure (Estermann et al., 2011, p. 9). According to Ordorika, the term *political autonomy,* which encompasses the 'hiring, promotion and dismissal of faculty; the selection and dismissal of rectors, directors and administrative personnel; and the definition of terms of employment

appointment of university leaders' (Ordorika, 2003, p. 371). This definition conceived similar concept with organizational autonomy defined thus far. Whatever the case may be, in this study, *organisational autonomy* refers to the dimension that is expected to encompass discretion in setting conditions for selecting, appointing or dismissing university executives, determining members of boards and conditions upon which they could be selected and their term of service, the freedom to determine an internal organisational structure and to decide their own goals and plans (strategic and operational) independently (see Table 3; Item 1, below).

Financial autonomy

Financial autonomy refers to the freedom of universities to attain, assign, utilise funds upon their apparent need flexibly. If governments provide universities with greater funding and incentive schemes but with restricted autonomy, it might lead to low efficiency (Michavila & Martinez, 2018). This shows how university autonomy is important to efficiently utilise and transform itself through its own decisions. Higher education institutions are among the sectors that require huge resources for their functions. University unit costs increase occasionally because of their professional labour-intensive nature and increased expansion, massification and diversification (Johnston, 1996, as cited in Bain, 2003). This, in turn, heightened the tension between universities and government governance relationships. While governments are worried about the huge amount of money they allocate to the universities for which they are accountable for tax pairs, universities are concerned with responding to the governmental expectations in which financial autonomy is the instrument (Bain, 2003).

According to the EUA, financial autonomy includes the freedom of universities in 'acquiring and allocating funds, deciding on tuition fees [and] accumulating surplus' (Estermann et al., 2011, p. 9). Access to funds and the discretion of universities in taking part in decision making regarding their management (planning, generating/obtaining from government, utilising) are the core elements of institutional autonomy (Bain, 2003). According to Ziderman and Albrecht (1995), cited in Bain (2003), sources of funds for HEIs could be categorised three ways: government appropriation, donations by non-government organisations and funds generated by institutions themselves (tuition fees, consultancy, renting and selling other services). Besides, freedom to determine the compensation and benefits of university staff is considered a characteristic of institutional autonomy.

Therefore, this study included the extent to which formal financial autonomy has been exercised to determine recovery costs (tuition fees) and expenditures; to flexibly use and reallocate government appropriations; to generate funds from diverse sources and determine when, where, how much and how of the funds, holding surpluses, and the absence of a budget approval procedure by a government (Aghion & Hoxby, 2009). In addition, the approaches of budgeting (earmarked line items, block grants) the controlling mechanisms such as administrative rules and regulations, reporting and auditing, budget templates and the responsibility scheme in place are the concern as far as financial autonomy is concerned (see Table 2.6, Item 3).

Staff autonomy

The term *staff* represents individuals working for a given university, which can be categorized into line and supportive. Staff autonomy is considered a component of institutional autonomy that enables universities to set conditions freely for the management of their staff, from recruitment to retirement. Michavila and Martinez (2018) argued that universities increasingly want to gain autonomy in hiring and setting workloads for academic staff. According to Bain (2003), autonomous institutions are characterised by the freedom to determine the profile and criteria in the recruitment, promotion and firing of their staff. Staff autonomy is a function of several factors, such as regulations and legal frameworks, public labour law and others. Some countries in Europe are subject to different kinds of restrictions, such as setting minimum or fixed salaries, negotiating with other parties etc. (Estermann et al., 2011). Therefore, this study considered the recruitment, promotion and dismissal of academic staff in describing the extent to which Ethiopian public universities are exercising their formal autonomy (see Table 3, Item 4 below).

2.1.4   Variables

Based on the components of the four dimensions of the EUA university autonomy scorecard, Ethiopian higher education proclamations (FDRE, 2009, 2019) were consulted as a source of formal autonomy. The identified variables were refined as per the combined version of EUA university autonomy scorecard and Berdahl's (1990) two-dimensional definitions. Finally, the dimensions, descriptions and their respective variables were identified (see Table 3 below).

Table 3. Formal Autonomy Dimensions, Descriptions, and Variables

No.	Dimensions	Descriptions	Variables
1	Organisational autonomy	• The extent to which a university undertakes the nomination and appointment of executive heads and a university board • Determining the university's internal structure • President performance evaluation	• Nominating university president • Selection and appointment of vice presidents • Replacing president and vice presidents • Nominating the three voting members of the board • Select and appoint leaders of a university senate • Select and appoint academic units and departments • Setting its internal organisational structure • Conducting a performance evaluation of the president
2	Academic autonomy	• The extent to which a university makes decisions about a student, educational programmes, curriculum, research and community service	• Determining the number of students to be enrolled • Determining student selection criteria and selecting students • Developing and terminating educational programmes and curricula • Determining the research theme • Offering education and training through diverse programmes • Providing community service
3	Financial autonomy	• The extent to which a university exercises its decision-making space in managing its finance	• Determining the size of tuition fees • Internally disburse the amount it generated • Determine the amount to be assigned to different activities • Undertake procurement activities and determine expenditures • Share of a budget from different sources • Determining the budget template • Modality of budget appropriation • Ability to borrow money, transfer budget and hold unspent money
4	Staff autonomy	• The extent to which a university is free to manage its academic staff	• Instituting rules and procedures for the recruitment and promotion of academic staff • Determining the recruitment, promotion and removal of academic staff • Determining the size, quality and responsibility of academic staff Determining teaching and research loads

However, there is some variability between the scorecard and what is employed in this study. The rationale for the adoption of the variables in this study is that the formal autonomy of different countries and contexts is not the same. Therefore, the adaptation of some variables was made to make them fit the actual situation of the regulatory framework that defines formal autonomy in Ethiopia. To mention some of them, variables included in the organisational autonomy dimension of the EUA University scorecard are almost all included except variables such as the dismissal of university leaders and determining the term of office, both of which are not made part of the discretion of ASTU by the legal framework.

As far as the academic autonomy dimension is concerned, the European University Association's university autonomy scorecard includes variables such as determining the salary of academic staff and determining the language of instruction. However, these variables were excluded because they are not part of formal autonomy in Ethiopia. Furthermore, in the same dimension, the variable related to the quality assurance of the university is also excluded because there is no alternative body responsible for assuring the quality of universities in Ethiopia. In the dimension of financial autonomy again, though it is part of the EUA university autonomy scorecard, the Ethiopian higher education proclamation does not include borrowing money from financial institutions as an area of university discretion, and thereby, it is excluded.

In summary, the variables included in Table 3 above are specific to the context of Ethiopian higher education policy. When higher education policy is modified or changed and affects formal autonomy, the adjustment of variables will be required in the Ethiopian context. It also serves as a benchmark for further studies to be conducted in different countries because all countries may have distinct formal university autonomy.

III. INSTITUTIONAL THEORY AS A THEORETICAL FRAMEWORK

As presented in the previous chapter (see Chapter 2), contextual/situational perspectives and multi-dimensional concepts were presented and operationalised so that it facilitates the description of the extent of de facto autonomy in the quantitative phase of this study. This chapter again presents the conceptual framework that guided the explanation of the potential differences between formal and de facto autonomy in the qualitative phase. It describes why institutional theory is preferred over other organisational theories. To this end, it starts from organisational theory and continues to a specific strand of institutional theory, institutional isomorphism, and how it is used to understand why and how de facto autonomy is shaped to appear different from formal autonomy.

3.1   Institutional theory

Theories broaden the understanding and perspective of the relationships between organisations and the larger environment (Hatch, 1997). An organisation is not an independent entity; because it is shaped by the context wherein it is situated and affected by varied pressures imposed by its environment (Scott, 2001). Organisations that are responsive to its environment in a highly esteemed fashion are considered more legitimate and are expected to survive (Parsons, 1990). Accordingly, organisations are interacting and responding to environmental demands to secure their legitimacy. Thus, during the interaction process, two major actors are common: the environment and the focal organisation.

In this regard, different kinds of organisational theories have been trying to deal with organisations and their relationships with their environments. Two periods have been distinguished: The first is during the late 1950s and early 1960s. This period is characterised by the introduction of the concept of environment in an organisational analysis as a general system theory (Hatch, 1997). The second period started in the late 1970s and continues to this day, assuming that the

environment is influential and that the focus is how the influence operates (Hatch, 1997). The theories in both periods have their peculiar characteristics and help frame the perspective of organisations and environment relationships differently.

For instance, system theory is very general and relies on how organisations function in their environment by focussing on the inputs. However, the influences of the environment are not emphasised a great deal (Kessler & Tuckman, 2013, p. 818). In addition, contingency theory tends to explore how organisations can flexibly fit their ever-changing environment in a unidirectional fashion whenever they are threatened (Hatch, 1997; Zha, 2009). This entails that both system theory and contingency theory fail to explain the mechanisms through which powerful environments impose their influences to perpetuate their interests, values and expectations. Thus, they are not appropriate to be employed in this study.

Conversely, theories that belong to the second period deal with the 'how' of the influence exerted by the external environment (Hatch, 1997). Even though the resource is at the heart of every organisational function, resource dependency theory cannot explain how non-resource relationships operate. For instance, Kessler and Tuckman (2013) indicated that resource dependency theory focuses on the interaction between organisations and their environment, emphasising the transaction of a resource. Likewise, it fails to explain how a given practice is instituted in organisations; rather, it explains how organisations learn to protect themselves from harsh environmental domination (Hatch, 1997). Similarly, population ecology theory advocates dependency on a resource, as resource dependency theory does. Its assumptions share Darwin's theory of the survival of the fittest and rely on the competition among organisations to 'explain why there are so many different kinds of organizations' (Hatch, 1997, p. 86). Hence, these two perspectives of organisation–environment relationships seem to make less sense than institutional theory, as far as the purpose of this study is concerned.

Principal agency theory, the family of institutional theory, assumes that the relationship between the principal and agent is made based on the contractual agreement to pursue a given purpose (Kessler & Tuckman, 2013). However, the higher education system takes a long time to measure its results, and thereby, it is difficult to apply, as financial economics does. Agency theory is among the most utilised in framing the study of institutional autonomy in business and political science fields of study (Dant& Gundlach, 1999; Yesilkagit & van Thiel, 2008) and few higher education institutions (de Boer & Enders, 2017). Nonetheless, HEIs have fluid goals that make it difficult to measure whether universities are performing up to the contractually agreed performance indicators precisely within a

short time. Rather, it might be possible to apply to the financial autonomy of higher education institutions.

Even though there is no theory without limitations, these theories do not seem in a position to frame how organisations converge to their environmental influences while realising their survival (Kessler & Tuckman, 2013). However, neo-institutional theory, which belongs to the second period of organisational theories, focuses on how organisations converge to the external pressure, which in turn brings the institutionalisation of practices (Hatch, 1997; Kessler & Tuckman, 2013). Thus, this is the main reason that this study intended to employ institutional theory as a conceptual framework. Since institutionalism is a grand theory, it requires focusing on some strands to manage its alignment with a particular study. Thus, institutional isomorphism, which is one of the strands of institutional theory, is appropriate for conceptualising how environmental pressures restrict the practice of universities while exercising their formal autonomy. To acquire the whole picture of institutional isomorphism, it seems helpful to focus on institutional theory.

3.1.1   Old and new institutionalism

Institutional theory has been through an evolutionary process right from its inception by Selznick's work of 'the Tennessee Valley Authority' and 'Organizational Weapon' in 1949 and 1952, respectively (Kessler & Tuckman, 2013). Based on the publications made later, scholars have tried to differentiate institutional theory as old and new institutionalism (Gunn, 2015; Kessler & Tuckman, 2013). Selznick's work includes 'leadership and administration' and those indicated above are considered an old-institutional theory. Nonetheless, Meyer and Rowan's two influential papers in 1977 and DiMaggio and Powell in 1983 have been considered the foundation of new institutional theory (Cai & Yohannes, 2015; Gunn, 2015; Kessler & Tuckman, 2013). The change made was not a mere chronological naming, but it is based on conceptual and methodological shifts (Kessler & Tuckman, 2013). The shift made is generally from an organisation's behaviour to the relationship of the organisation to its environment(Cai, 2010). The following summary (see Table 4) is made from different sources to brief the differences between old and neo-institutional theories.

Table 4. Characteristics of Old and New Institutional Theories

Characteristics	Old institutionalism	New institutionalism
Roles of the environment	Organisations are embedded in the community. Organisations become effective by personal loyalties and organisational treaties	Concentrate on a non-local environment. Organisations become effective with organisational fields and have a macro-level outlook.
Bases on the behaviour	Socialisation process and internalisation of organisational values	Cultures and cognitive bases of learning behaviour are at play
Views of conflict and change	Examining intergroup conflict in the organisation. Deal with organisational strategies to manage conflict	Organisational Stability, persistent and continued order in protecting its legitimacy
Focus of analysis	Informal interaction process within an organisation Focused on a formal legal structure independent of human action	Inter-organisational interaction process and synthetic rules and procedures as a basic building block of institution

Source*: organised from different sources (Cai & Yohannes, 2015; Gunn, 2015; Kessler & Tuckman, 2013; Meyer & Rowan, 2006)

Old and new institutionalisms are not exclusively different because new institutionalism is derived from old institutionalism. As indicated in Table 4 above, 'old' institutionalism focuses on group conflict and organisational strategies. It examined how organisations constrain individuals' interests. Furthermore, it examines the way informal structures influence the formal structure of the organisation. It is also perceived that organisations seek legitimacy and acceptance from the larger environment. To this end, old institutionalism suggests that organisations must follow rules and regulations. Yet, it is criticised for its ignorance of the impact of cognition and learning in human behaviour (Huisman & Tight, 2013; Meyer & Rowan, 1977).

The new institutionalism comprises several key elements, some of which are presented in Table 4 above, which characterise it. It tries to see all types of individuals interacting in a socially organised environment, which is assumed to be guided by rules, regulations and norms. This environment constrains and shapes actions, and all players in the environment must conform to those rules. Thus, the role of the environment is much more prominent in the new institutionalism than in the old one. In addition, the new institutionalism emphasises the cultural and learning behaviour of the organisation more than old institutionalism. Likewise, while old institutionalism focuses on group conflict, neo-institutionalism emphasises stability to protect legitimacy. The other point that helps to compare is organisational interaction (see Table 4 above). While old institutional theory considers informal interaction within the organisation, the new institutional theory

emphasises inter-organisational interaction and the formal structure (Powell & DiMaggio, 1991). Therefore, new institutionalism is found appropriate to the purpose of this study, which very much focussed on macro level environmental relationship, and cultural and cognitive behaviours.

Generally, organisations are recognised to be 'rationalised' systems with sets of roles and associated activities laid out to reflect the relationship of means and ends in such a way that they pursue defined goals (Scott, 2004). Formal organisations are characterised by their structure: 'the positions, policies, programmes and procedures of modern organisations' (Meyer & Rowan, 1977, p. 343). Consequently, its survival is subject to its formal and informal interactions with its environment. Organisational relationships might happen in the form of formal contractual, staff participation in a common enterprise (professional networking) or board of directors, or informal organisational ties in the form of personnel flows. These forms of relationships might make influences of a different kind that promote similar forms on one another (DiMaggio & Powell, 1983).

The assumption is that the formal structure of an organisation and its actual day-to-day work activities are distinct. While formal structure is a blueprint for activities in the form of policies, laws, rules and procedures that guide the function of a formal organisation (Scott, 2004), the day-to-day activities might not fit it. Empirically, it is shown that what is formally set either by policy or law does not fit with practices in organisations (Meyer & Rowan, 1977). Thus, institutional theory is used to understand and explain the interaction between a given organisation and its environment. In this relationship, institutionalism dictates how rules, regulations, policies, work processes and structures are gradually shaped and reshaped by the pressures exerted from the environment in the form of formal and informal mechanisms.

In addition, organisations respond to environmental pressures through copying other experiences, and professional networking in the form of consultancy to secure their survival. That is why organisations follow similar procedures, rules, regulations, values and policies to achieve their purpose and execute their mission. Accordingly, new institutionalism became a focused theory by several scholars across different disciplines to examine organisational relationships ranging from micro-to macro-level (Scott, 2004), such as politics, economics, sociology and higher education (Cai & Yohannes, 2015; Gunn, 2015; Meyer & Rowan, 2006).

Therefore, neo-institutional theory is characterised by three features. First, 'institutionalisation of structure (certain policies or positions), the process through which the powerful organisation requires others to adapt the structure (coercive);

social advocacy to endorse certain policies or positions (normative); organisations adopt the policies and positions by their initiatives (mimetic). Second, the 'institutionalisation process' refers to adapting structure resulting from environmental pressure. Third, 'decoupling the structure' refers to the difference between adoption and implementation of the structure (ceremonial)(Kessler & Tuckman, 2013, pp. 506–507). Correspondingly, new institutionalism is found to fit the purpose of this study, which emphasises inter-organizational interaction (the state and the university, the organisational field) and the macro-level outlook, in shaping the behaviour of the focal organisation. The mechanisms are isomorphic pressures that consider the direct and/or indirect, formal and/or informal influence of the larger environment and the focal organisation's desire to appear legitimate in shaping actions.

3.1.2   New institutionalism and higher education studies

The importance of formal education in modern society transcends the use of institutional analysis in education as a social science study. Institutional theory is helpful to understand how education connects with other institutions in the environment, what constraints are taking place, and what autonomy and accountability factors are imposed in the changing institutional landscape (Meyer & Rowan, 2006). Though the emergence of institutional theory dates back to the 1940s, it captured the attention of education researchers since the 1990s (Meyer & Rowan, 2006). 'Provider pluralism, widespread calls for more accountability (more tight coupling), and the more central role of education in social fabric' are among the reasons that urge educational researchers to utilise institutional theory in educational organisations (Meyer & Rowan, 2006, p. 2). Thus, the change in educational organisation and the effort to bring conformity with the norms and values promoted institutional analysis in the field.

Despite its very late application, institutional theory has become useful in higher education research (Bidwell, 2006). As summarised by Bidwell (2006), new institutionalism has been employed to study the expansion of education, educational reforms, class interest in the education system, the behaviour effect of institutional form, educational organisation and their control. Higher education policy and management are among the issues dealt with by institutional analysis (Tight, 2012). In higher education policy and management, the primary focus of higher education researchers is to employ institutional theory in higher education

institutions and their relationships with their operating environments (Cai & Yohannes, 2015).

In addition, Bidwell, recommended new institutionalism to study the process of institutionalisation of rules, regulations, policies and norms in higher education institutions. This includes how educational institutions regulate relative potency and its appropriateness to educational contexts and how they respond to environmental constraints and organisational fields (Bidwell, 2006). The assumption is that educational organisations are typically subject to stronger institutions than technical pressures (Scott, 2004, p. 17). Hence, the relationship between environment and organisations often depends on environments' demands, such as technical, economic, social, cultural and organisations' interest to secure legitimacy for their survival (Hatch, 1997, p. 83). To this end, the key concepts of institutional theory employed to study higher education policy and management are ' isomorphism and institutionalisation' (Cai & Yohannes, 2015, p. 9).

Organisations have been striving to secure their survival in a competitive environment by adapting to the interests of the internal and the value of external environments. The view of educational organisations held by shared beliefs and 'maintain legitimacy by conforming to institutional norms, values' (Meyer & Rowan, 2006, p. 6), can be considered an adaptation to the external environment. Bidwell argued, in this regard, that the survival of a university is a function of adequately adapting and fitting to the desires of its environment (Bidwell, 2006). Based on their bibliometric review, Hsu et al. (2018, p. 384) indicated that the core of institutional theory in studying higher education lies in the institutional fields as a source of 'institutional conformity, and embeddedness pressure'. The institutional field, universities worldwide in this case, imposes different kinds of pressures through different mechanisms.

Universities in every corner respond to pressure differently based on their peculiar characteristics. The common element of universities, inevitably, all of them are required to respond to the pressure imposed from the organisational field. The institutional field itself is susceptible to pressure from the social context. Thus, the environment within which the university is situated determines the kind of response a university could make (Hsu et al., 2018). Universities might not always deliberately respond to formal and informal pressures to promote their efficiency. Nonetheless, universities sometimes compromise their productivity and ceremonially converge to environmental pressures. Market, bureaucratic state, other universities and stakeholders such as families might impose pressure that could shape the behaviour and the interest of higher education institutions.

The application of institutional theory has increased from time to time. Hsu et al. (2018) indicated that, according to their database, several higher education studies have been guided by institutional theory, which was 14 in 2008 and grew steadily to 171 in 2017 (Hsu et al., 2018). A few higher education studies framed by the theory of new institutionalism include the expansion of higher education (Karataş Acer & Güçlü, 2017), enforceable civil rights for students in higher education (Konur, 2000), the institutionalisation of service learning in higher education and understanding high-risk decision making (Turner & Abgulo, 2018) Though these studies used institutional theory for different purposes, they have common elements that they share with this study, which is the relationship between the environment and university. More specifically, the study 'Understanding Higher Education Decision Making' by Turner and Abgulo (2018) is similar to this study.

This implies that new institutional theory has been employed to frame studies that are concerned with how policy is made, the behaviour of universities and policymakers and the dynamics within the relationships between universities and the state. Therefore, new institutionalism, specifically institutional isomorphism can be adapted and applied to study policy change and dynamic relationships between universities and state, and is found applicable at a macro level..

3.1.3   Institutional isomorphism

Neo-institutionalism is assumed to describe the process by which practices and organisations become institutionalised. Besides, a neo-institutional theory is concerned with key actors in the institutional environment, how this environment is organised and the pressure that the environment exerts on organisations (Meyer & Rowan, 2006). It serves as a framework often used to explain the diffusion of practices and structural arrangements across organisations emphasising the effects of the environment (Kessler & Tuckman, 2013). The repetition of actions could be maintained through legal and political, cultural and social influences, which are the elements of institutional isomorphism (Hatch, 1997).

Institutional isomorphism is one of the key concepts of new institutionalism and is a 'constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions' (DiMaggio & Powell, 1983). Organisations want security and legitimacy. The

assumption is that they can be perceived as legitimate if they adopt the prominent structure and ways of interacting as other organisations in the same field. It is indicated that uncertainty and constraints are among the factors that insist the organisation learns from the more established organisations in the field, which gradually shape the structure, culture and inputs and develop similarity among these organisations (DiMaggio & Powell, 1983). It has been suggested that organisational characteristics are shaped and reshaped with diverse environmental characteristics (DiMaggio & Powell, 1983; Scott, 2004). Organisations conform to their environmental characteristics to secure resources, political power and institutional legitimacy. Thus, the concept of institutional isomorphism is a 'useful tool for understanding the politics and ceremony that provide much modern organisational life' (DiMaggio & Powell, 1983, p. 150).

Isomorphism mechanisms are a function of every organisation and environmental interaction. Scot (2004) argued that institutional forces shape work arrangements and organisational systems. There are three types of institutional isomorphism that are not distinct: coercive (explicit rules and laws derived from the environment), normative (norms, values and expectations come from professional training and organisation members) and mimetic (desire to look like other organisations to respond to uncertainty) (Hatch, 1997). This is in line with a *social institution*, which is defined as 'cognitive, normative and regulative structures and activities that provide stability and meaning to social behaviour', ranging from small scale to society-wide social interactions (Scott, 2004, p. 33).

Coercive isomorphism

Coercive isomorphism includes both formal and informal impositions from the larger environment on focal organisations intended to promote certain organisational behaviours. For instance, organisational behaviour comprises formal structures such as policies, rules, procedures and decision-making competencies that are accepted as a proper element of the organisation (institutionalisation of structures). Government mandates in financing higher education institutions and community expectations are among the sources of coercive pressure. This kind of institutionalisation is forced by formal and informal pressures exerted by governments and other powerful organisations (coercive; Hatch, 1997; Kessler & Tuckman, 2013; Meyer & Rowan, 2006).

The interactional process between universities and their environment is characterised by potency and responsiveness (Meyer & Rowan, 1977). While the environment imposes pressure in the form of legitimate power and expertise power, those who possess legitimate power use both formal and informal coercive mechanisms to influence universities. Thus, coercive isomorphism is a powerful pressure to limit the practices and actions of a given organisation and determine 'how things are actually done and who practically does them' (Kessler & Tuckman, 2013, p. 506). Meyer and Rowan (2006) indicated that government controls can take the form of regulating the curricula of educational institutions. Thus, state rules are considered homogenising forces as a component of isomorphic principles.

Normative isomorphism

Normative isomorphism is considered a cultural pressure imposed without direct conformity requirement, like coercive isomorphism. For instance, the kinds of experience that could be disseminated through training and the movement of professionals within an organisational field in the form of consultancy, employment and transfer have no binding requirement. Thus, while individuals move from one organisation to another, they can bring ideas and experiences with them. This mechanism has the power to shape the policies, cultures and work processes in a focal organisation. Likewise, changes in educational organisations are seen as a process of growing isomorphism brought into 'conformity with norms and values institutionalised by the state and professions' (Meyer & Rowan, 2006, p. 3). Thus, organisations can conform to the values, norms and technical traditions that professionals either bring with them or gain through training. Hannan and Freeman emphasised that mimetic and normative mechanisms involve managerial behaviours. This is because organisational leaders learn appropriate responses and adjust their behaviour accordingly (1977).

Mimetic isomorphism

Pressure from environmental uncertainty, the poor understanding of new technologies and ambiguous goals can challenge the function of universities. To cope with these kinds of situation, organizations mimic the policies, rules, procedures and best practices from another organisation that is considered successful. Thus, to survive in an unpredictable world environments, organisations

tends to emulate others that are sought to be more legitimate and successful (DiMaggio & Powell, 1983). This can be considered a mimetic isomorphism pressure that can be imposed from organisational fields. This means successful organisations use their expertise power to influence universities without any conformity requirements. According to Ramirez (2006, p. 1), 'Much literature in universities emphasises the importance of the national context in shaping its institutional goals and organisational forms'. The reality in which different universities share several commonalities promotes the principles of institutional isomorphism as an influence from a common organisational field (Ramirez, 2006).

Generally, the notion of isomorphism is a mechanism that leads to increased conformity enforced by legal and political, cultural and social pressures from organisational fields, working in the same environment, professional experience and the state (DiMaggio & Powell, 1983). The principle of isomorphism, with special emphasis on legitimatisation, is helpful in explaining the diffusion of highly rationalised forms of management (Meyer & Rowan, 2006, p. 9). Thus, institutional analyses can help scholars to learn the connection between educational institutions such as universities and other institutions in society and how pressures shape and reshape its functions.

Specific to this study, higher education researchers have been employing institutional isomorphism to identify and analyse patterns of universities' response to the pressure imposed by the external environment. For instance, the legitimacy of universities and their role has been challenged by the pressure imposed from their environment (political, economic, social and technological). The reason why universities submit to this pressure is to maintain their survival, which might result in homogenising the shape of the institutions (Croucher & Woelert, 2016).

Similarly, Stensaker and Norgard (2001) studied innovation and its diffusion in universities; Cai (2010) examined how global higher education influenced governance reform in China. Levy, in Meyer and Rowan (2006), suggested that institutional isomorphism applies to the study of public universities. Therefore, the principles of isomorphism could be applied to the field of higher education in general and the analysis of institutional autonomy of higher education in particular.

3.1.4　Institutional isomorphism as a framework for studying de facto autonomy

Institutional autonomy is one of the components of Ethiopian education policies, and its implementation could be shaped and reshaped by pressure from the state and other environmental factors. The implementation of policy and institutional autonomy, in this case, may diverge from what is promised for different reasons. Thus, the assumption is that universities' practices could be shaped by the pressure imposed by the powerful environment and its desire to maintain legitimacy.

As discussed thus far, institutional autonomy is a relational concept that is characterised by the relationship between an institution and its environment, state authorities and a wider society. It is a kind of multi-modal relationship with several shapes: bureaucratic, legal, political or professional (Maassen et al., 2017, p. 242). Since institutionalisation is a matter of legitimacy and power (Meyer & Rowan, 2006), the relationship might be reciprocal, in which both the institution and the environment could influence one another. In this kind of relationship, the powerful environment in terms of its resources, jurisdiction, political and regulatory power can shape the more dependent institution's practices (Badran, 2017).

Institutional autonomy is also considered an explanation of how each institution comes to be differentiated by strategic actions within the notion of institutional differentiation. The assumption is that institutional autonomy is formally defined in each context by law (formal autonomy). Conversely, all universities in each context might not practically exercise their given autonomy in a similar fashion (institutional differentiation). Simultaneously, de facto autonomy might not be a copy of formal autonomy in actual practice. This implies that formal autonomy does not guarantee de facto autonomy, in which the recipient organisation could compromise part of its autonomy in exchange for its legitimacy (Badran, 2017).

Institutional isomorphism is a process that considers how rules, norms, procedures and policies are established, adapted, declined or disused. Besides, it is helpful to examine the environmental effect on organisational forms (Scott, 2004). It could also frame studies intended to examine the discrepancy between preferred and actual authority systems in which it could be shaped by cultural, social and political processes (Scott, 2004, p. 4). The response of organisations to pressure and expectations is not always acquiescence. They can also compromise, avoid, defy and manipulate the environment to defend their interests (Scott, 2004).

Moreover, public universities are commissioned with heightened responsibilities that require alertness, innovativeness and flexibility to deliver up to the expectations of the environment (Maassen et al., 2017). These universities, especially those that are highly dependent and are expected to conform to the prescriptions of the government, defined expectations, ideas and practices. This implies universities constantly interact with their environments. Thereby, their practices and policies might be shaped and re-shaped to converge and realise supremacy and/or legitimacy.

Taking isomorphism as a concept of adapting to external pressure, institutional isomorphism is assumed to be helpful to explain institutional pressures that could shape ASTU's de facto autonomy. The three types of institutional isomorphism mechanisms (coercive, normative and mimetic) discussed earlier could shape universities (Kessler & Tuckman, 2013, p. 381). These could be manifested in the form of a political/regulatory mechanism intended to realise the interest of the state (coercive). Political/regulatory mechanisms can be taken as the jurisdiction of the state to institute binding policies, formal and informal rules, regulations and procedures that guide state–university power relationships. A *social mechanism* is a cognitive approach in the form of emulating a selective environment to realise its fitness. This concerns converging to best practices such as wilfully copying technologies.

A *cultural mechanism* concerns the diffusion of a work or professional culture that could appear in the form of professional networking that could be made through experience exchange approaches and/or consultancy services (normative; Bidwell, 2006). A cultural mechanism can also make it possible to assume the culture of the larger environment, whose values and norms directly or indirectly affect the decision-making competencies of the university. Thus, studying de facto autonomy and formal autonomy, which may stand on disparate footing, could be guided with institutional isomorphism principles that encompass both formal and informal forms of coercive pressure (Magalhães et al., 2013), cognitive pressure and normative pressure.

In line with this reality, several studies have employed institutional isomorphism to explain why universities are shaped and have been trying to have a similar form with other prominent universities (Zoljargal, 2020). It is also applied to higher education studies, in which universities reform to cope with the ever-changing global higher education environment (Mejía et al., 2020). Based on the assumptions defined above, institutional isomorphism was found appropriate to explore why de facto autonomy diverges from formal autonomy and what and how

different mechanisms shaped the practice of exercising autonomy. The divergence between formal and de facto autonomy might be due to potential mechanisms that might be imposed from the state in the form of rules, regulations, informal intrusions and other pressures imposed from stakeholders and the market (coercive) that might have resulted from professional networking (normative). In addition, ASTU might have learned from other universities, possibly other technology universities as an organisational field (mimetic; Kessler & Tuckman, 2013).

Therefore, it is possible to conclude that the discrepancies between policy formulation and implementation, formal autonomy and de facto autonomy might appear unlike as a result of the interaction and the relationship of the organisational environment. Particularly in state and university relationships, the power of supremacy does not originate only from the state. Hence, institutional isomorphism seems appropriate to frame why and how different mechanisms create discrepancies between formal autonomy and de facto autonomy.

3.2   Summary

Figure 2, below, summarises the concept of institutional isomorphism and how it could frame the study of de facto autonomy.

Figure 2. Discrepancy between Formal and De Facto Autonomy Model
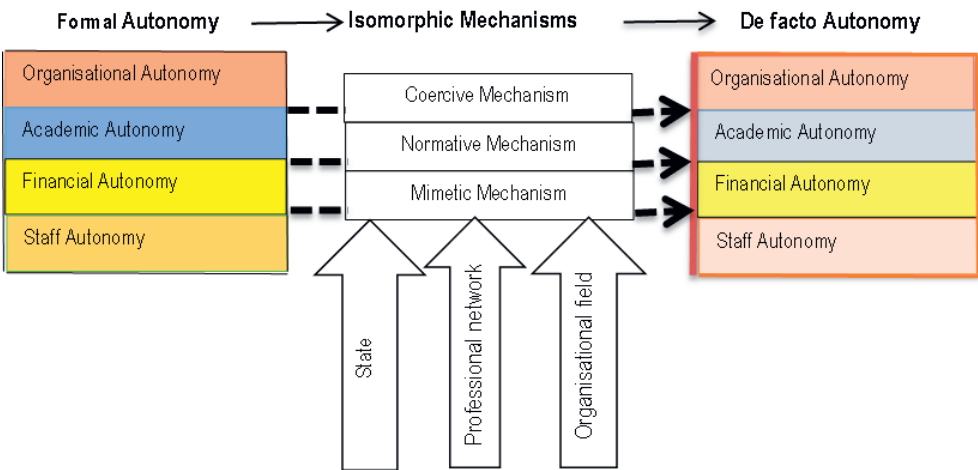
This formal and de facto autonomy discrepancy model (see Figure 3.1 above) represents the assumption behind the utilisation of institutional isomorphism in studying de facto autonomy. Four assumptions were included in the model and they will be explored below.

i.   The four dimensions of formal autonomy are dissimilar.

A given autonomy might be substantive for one dimension of autonomy and not for the other dimension. For instance, while formal organisational autonomy is limited, formal academic autonomy might be relaxed. To illustrate the potential differences among the four dimensions of institutional autonomy, each box of formal autonomy is filled with different colours (see Figure 2 above).

ii.   The four dimensions might not be uniformly influenced by the environment

The environment might strictly control one dimension of institutional autonomy and might be loosely for the other dimensions. For instance, the state might steer strictly on financial autonomy, and may not be that strict on academic autonomy. To demonstrate the potential difference between formal autonomy and de facto autonomy, the corresponding color for one dimension of formal autonomy is different but related somehow. For instance, the color used to fill organizational formal autonomy, and organizational de facto autonomy is both orange, but with different weights (for formal organizational autonomy it is Orange 40% lighter, and it is 60%darker for de facto autonomy) (see Figure 2 above).

iii.   De facto autonomy is not pretty similar with formal autonomy.

Resulting from isomorphic pressures (coercive, normative and mimetic) that might be imposed from the environment, de facto autonomy might have a different shape. Alternatively, de facto autonomy can be shaped by environmental pressures and appear different from formal autonomy. The variation between the border color of formal autonomy was selected to demonstrate the difference between formal autonomy and de facto autonomy (see Figure 2, above). While the border color of formal autonomy was made black, the border colour of de facto autonomy

was made dark red. The colours were selected randomly and have no other implications except for demonstrating the difference between the two.

iv. Sources of isomorphic pressures

The sources of isomorphic pressures might be numerous, depending on the context where the university is situated. Based on the concept of institutional isomorphism, sources of isomorphic pressures include organisational field (organisations with similar businesses), state and non-state environments (the market, the community and industries) and professional network (the movement of professionals from one organisation to another; see upright arrows in Figure 2, above).

Therefore, de facto autonomy could be shaped and reshaped by isomorphic mechanisms and appear distinct from formal autonomy.

IV. INSTITUTIONAL AUTONOMY IN ETHIOPIAN HIGHER EDUCATION

As noted by Monalisa (2014), institutional autonomy is a function of government ideology in the higher education landscape. This means that the institutional autonomy of higher education could be influenced by politicians (Kehm, 2014). Thus, as indicated by Befekadu and Bultossa (2018, p. 8), an understanding of the state of institutional autonomy in Ethiopian higher education considers the three state forms in the country (1950−1974, 1974−1991, 1991 to date).

4.1 Institutional autonomy in Ethiopian HE (from 1950−1974)

During the first era of the history of higher education in Ethiopia (1950−1974), its type of government was a feudal monarchy. It was a highly centralised system of state governance in which the role of the emperor was very involved. The 'unpublished university charter, 1954', indicates that every legal framework had been considered provided by the emperor as a gift for his citizens (Befekadu & Bultossa, 2018, p. 9). This means the emperor took the lion's share of every decision, including the fate of higher education.

In Ethiopia, as different countries' governments do, higher education institutions have been keeping pace with the changing world order to be competitive and maintain sustainable development. Consequently, it introduced higher education into its education system with Addis Ababa University College in 1950. As noted by Befekadu and Bultossa (2018), the foundation of higher education in Ethiopia was based on three major factors. First, Emperor Haile Selassie aspired to establish higher education because he 'believed that Ethiopia was defeated in the battle with Italy because of lacking technologies that Italy was armed with' (Befekadu & Bultossa, 2018, p. 8). Second, the provision of overseas post-secondary education was expensive, and the country could not afford it. Third, the public demand for postsecondary education steadily increased. Hence,

the intention of the then-Ethiopian government to introduce post-secondary education was competitiveness (Befekadu & Bultossa, 2018).

Experiences around the world attest that higher education institutions (HEIs) often copy the governance systems of more experienced countries. For example, 'American HE institutions, at the formative stage, copied their inspiration from England, France, Germany and others', according to Brickman (1972), as cited in Befekadu and Bultossa (2018, p. 9). They also considered the experiences of how most African countries established their higher education systems, which is connected to their respective colonising countries. Consequently, the Ethiopian experience with establishing HEI seems unlike other African countries. Aklilu (2017) noted that, unlike other African countries, Ethiopia did not belong to any country to copy its higher education governance. Hence, the country has been imitating various countries for its postsecondary education policies. Canada and the United Kingdom (UK) were the countries from which the post-secondary education governance experience was copied. Likewise, 'its staff was deployed from countries such as Canada, America, the UK, India, Egypt and others' (Befekadu & Bultossa, 2018, p. 9).

Thus, at a formative stage, the freedom of the country to determine its HE governance system and the country to copy ended with a lack of focus and frequent changes of direction in higher education policy. Besides, the country's effort to establish a higher education institution that could promote the holistic development of the country, different countries have imposed their policies (Befekadu & Bultossa, 2018). This again leads higher education governance in Ethiopia to lack a precise policy that can be defined with two different cases.

One is the case of the first HEI (Addis Ababa University College), founded by the Ethiopian state initiative during the 1950s and other new colleges established in subsequent years. These HEIs were governed by the emperor as a rector, the Ethiopian Ministry of Education whose minister was the emperor, the university board whose chair and members are assigned by the goodwill of the emperor and the president, who was directly assigned by the emperor. Clearly, every decision was made directly or indirectly by the emperor (Befekadu & Bultossa, 2018). This implies that the board and the president's assignments were nominal, and the HEI's fate was decided by the state.

The second case is Haromaya 'agricultural college', founded by the joint efforts of the Ethiopian and American governments. According to Aklilu (2017), the responsibility for financing AAUC was given to the American government through a 'point-four' aid initiative established by then-American President Harry

Truman (Befekadu & Bultossa, 2018, p. 11). The appointment of the president of the college was made by the American government, and the president was empowered to make every decision without any interference by the Ethiopian state and its subsequent governing bodies (Aklilu, 2017), as in the case of AAUC discussed earlier.

The then-government was dependent on point-four aid, sponsored by America, for the financing required to run the university. Thus, the Ethiopian state lacked the power to govern this university. The university was completely free of potential influences from the government. Thereby, it enjoyed substantive institutional autonomy. The lack of such uniformity in higher education governance triggered the government to initiate a policy that guides every HEI in the country. Therefore, the Ethiopian government has initiated a policy that promotes the state's role in all higher education institutions, including Haromaya Agricultural College. The themes of the initiated policy were: shaping university−state relationships, guiding actions in higher education institutions and securing efficiency in utilising human and financial resources (Aklilu, 2017). Accordingly, this policy was intended to bring all higher education institutions under the scrutiny of the state.

In realising the control of HEIs by the state, the Ethiopian government initiated a new policy that merged seven colleges under the governance of the renovated AAUC, called the Haile Selassie First University (HSIU). The intention was to create better coordination among HEIs and the efficient utilisation of resources (Amare, 1988). Besides, referring to Assefa (2008), Befekadu and Bultossa (2018) indicated that the second government measure was the introduction of a new higher education policy (HSIU charter) focusing on two issues: granting autonomy to HEIs to protect themselves from external interference and securing resources for universities that could enable the proper functioning and work that would fulfil societal expectations.

Figure 3. Governance Structure of HSIU

Rector	- - - - -	The Emperor
Board of trustees	- - - - -	Assigned by the Emperor
President	- - - - -	Assigned by the Emperor
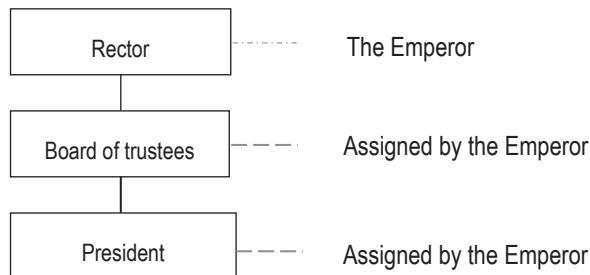
As indicated in Figure 3 above, at HSIU, the emperor was at the top as a minister of MoE and the rector. At the second echelon was the university board, the members of which were assigned by the emperor, and the university president was the next layer. This implied that the state's role in running the university was dominant. Conversely, according to the HSIU charter, the university's staff could not belong to the board, except the president, or it excluded the power of the professoriate from university governance. The board was empowered to define rules and policies and the assignment of the HSIU president. The board was also given the freedom to establish and lead faculties, colleges, institutes etc. for HSIU (Befekadu & Bultossa, 2018).

Moreover, the university president was given the right to recruit and dismiss staff and determine the salary and per diems of HSIU with the approval requirement of the board (Befekadu & Bultossa, 2018). This entails that the state had increased interest in controlling and steering higher education. In addition, universities were given substantive autonomy regarding finances and human resources, which may have exceeded current practices in Ethiopia.

Although this higher education era in the history of higher education in Ethiopia was highly centralised, it is perceived that HSIU enjoyed substantive university autonomy. HSIU could either refuse or accept instructions or directives made by the government. Besides, HSIU could autonomously determine student and academic programmes (Befekadu & Bultossa, 2018). This shows that HEIs at the formative stage exercised autonomy beyond their discretion.

On the contrary, the higher education system in general was influenced by state ideology. For instance, the system was poorly expanded, and limited access was not fairly distributed across the nations and nationalities residing in the country. According to Amare (1988), while '50−55% of college and university students were from an Amharic-speaking society, 10−15% were from a Tigrigna-speaking community of the enrolment from 1951 to 1973' (Befekadu & Bultossa, 2018, p. 15). This entails that the system was off limits for the vast population of the citizen in the country constituting only 30-40% access. Thus, the system was elitist, and it was poorly aligned with the interest of the society (Amare, 1988).

The higher education governance system in Ethiopia, from 1950 to 1973 was characterised by a lack of focus and inefficiency. According to Levine (1964, as cited in Amare, 1988), the reason was that the higher education system was dominated by different countries' ideologies, such as 'Soviet communists, Western capitalists, and Ethiopian clergy' who had been fighting for supremacy. Consequently, 'the old order was condemned by the public, more importantly by

university students that forced the regime to make a policy change called "education sector review (ESR)" in 1973' (Befekadu & Bultossa, 2018, pp. 15–16). However, the state could not implement the new policy because the regime was overthrown soon after. Therefore, this period can be characterised by the introduction of a higher education system, highly centralised government and paradoxically relaxed university autonomy.

4.2   Institutional autonomy in Ethiopian HE (from 1974−1991)

This period covers the time from the downfall of the emperor's regime to when the Ethiopian People Revolutionary and Democratic Party (EPRDF) came to power (from 1974−1991). The substituting regime, a military junta (Derg), was aggressive in assassinating, exiling or battering intellectuals and students to the point of extinction, which worsened the chronic workforce deficiency in the country (Befekadu & Bultossa, 2018).

This military government (Derg) had been working against its predecessor's order. It was a highly centralised state that monopolised every decision at the centre. Similarly, higher education governance was also known for extended government intrusions in university affairs. Referring to Amare (1988) and Saint (2004), Befekadu and Bultossa (2018, p. 15) illustrated that the state was intervening in universities' affairs in such matters as 'security surveillance, determining courses to be studied and banning student organisations and academic promotions. The military government was found ignorant of all that the old regime initiated, except one of the recommendations of education sector review, which suggested the establishment of the Commission for Higher Education (CHE). Scholars such as Amare (1988) argued the military government established the commission intending to put higher learning institutions under close surveillance (Befekadu & Bultossa, 2018).

According to Amare (1988), the established commission for higher education was made responsible for determining universities' 'budget, student admission, academic standards, research, external assistance, accreditation' and other policies. Though it was given huge responsibilities, it was subordinated to the Council of Ministers, which reports to the head of the state (Befekadu & Bultossa, 2018).

Besides, the state had intervened in the internal affairs of HEIs through public involvement in senate decisions. The composition of the senates of HEIs in

Ethiopia during this era was dominated by state political institutions such as the 'MoE, the Central Planning Supreme Council, the All-Ethiopia Trade Union [and] Peasant and Addis Ababa Urban Dwellers' Association' (Befekadu & Bultossa, 2018, p. 16). In addition, colleges and universities' mergers were made with state decisions. For instance, as noted by Amare (1988) and quoted by Befekadu and Bultossa (2018, p. 17), in 1977, the Commission of Higher Education merged departments; faculties and institutions, and closed one college.

The military government also urged higher education institutions to incorporate the political ideology that the ruling party wanted to include. For instance, HE institutions in Ethiopia were indoctrinated and required to teach Marxist and Leninist ideologies as compulsory. This type of state intrusion diminished the role of higher education institutions in determining their affairs. Thus, it is possible to characterise the Ethiopian higher education era from 1974 to 1991 as one of strict scrutiny and centralisation. Consequently, as noted by Saint (2004), the higher education system was known for its poor quality and research output and poor collaboration with the international community' (Befekadu & Bultossa, 2018, p. 17). Besides, during this era, HEIs were criticised for their lack of commitment to societal demands (Teshome, 2005).

Finally, in addition to the other political, social and economic problems observed, the rebel forces fighting the then-military government were able to overthrow the regime. The military government and its ideologies were removed from power. In summary, the governance of higher education during the military government in Ethiopia can be characterised by strict government intervention and heightened control of government to the extent that it decided internal academic decisions.

4.3.   Institutional autonomy in Ethiopian HE (from 1991 to date)

According to Befekadu and Bultossa (2018), in Ethiopia, peaceful government change is not common. The government assumed power through forceful actions. Of these three forms of state in Ethiopia, none of them has come to power through an election. While the military junta (Derg) assumed power by overthrowing the 40-year-long ruling state by force, the leading government took power through an armed struggle and has assumed power for the last 29 years. The period from 1991 to the present is marked by a capitalism-oriented government whose economic model is different from a neoliberal approach. It advocated what

the government called *revolutionary democracy* until 2019; it was later modified as an eclectic model that promotes a free market and government intervention. Furthermore, the current political system of Ethiopia is ethnic federalism, which advocates ethnicity and language in the establishments of regions. University leaders, especially presidents and vice presidents often assigned based on their ethnic, and language background of the region where they are situated, except some universities such as Addis Ababa University, and Adama science and technology university (ASTU), whose president assignment was not based on Ethnicity. For instance, until very recently ASTU presidents were foreigners.

Unlike its predecessors, the current Ethiopian government initiated the policy that advocate decentralisation. As an illustration, it developed an education and training policy in 1994 (FDRE, 1994). This policy promoted autonomy, which left the coordination and leadership roles to educaational institutions and their stakeholders. As noted in the policy, students have been made responsible for the cost of their learning at higher education institutions.

As a regulatory framework, the first higher education proclamation was formulated in 2003 and modified in 2009, with minor modifications in 2014 and substantive modifications in 2019. According to these higher education proclamations, HEIs have been made responsible for promoting the country's holistic development and transformation (FDRE, 2003, 2009, 2019). It is also a policy framework that defines the formal autonomy of higher education in Ethiopia. To this end, proclamations (FDRE, 2003, 2009, 2019) were initiated to pursue varying purposes. First, it aims to transform universities to be able to secure the expectations and aspirations of the Ethiopian people and to benefit the country in the context of globalisation. Second, it plans to establish peace, democracy and development in the country. Third, it intends to empower universities with equivalent accountability schemes and work within the framework of the Ethiopian constitution (Befekadu & Bultossa, 2018). In relative terms, these proclamations are viewed as promoting substantive university autonomy (Saint, 2004).

There also are numerous legal documents that are binding and frame the decision-making practices of universities. These legal documents emphasise the decision on procedural autonomy (financial autonomy and staff autonomy) of universities. These documents are not specific to higher education sector governance. Rather, they belong to all public sectors in the country. Some of these regulatory frameworks are the Ethiopian Federal Government Procurement and Property Administration Proclamation N<u>o</u>. 649/2009 and the Public Procurement and Property Disposal Service Establishment Council of Minister's Regulation

No.184/2010. Both of these define what is obligated and prohibited in the process of conducting procurement supposed to be made by government sectors, including higher education institutions. The other regulatory framework is the Federal Government of Ethiopia Financial Administration Proclamation No. 648/2009. This proclamation specifies every rule and regulation that guides the decision-making processes of government sectors, such as universities. While the three proclamations presented above concern financial autonomy, the Ethiopian Federal Government Workers Proclamation 1064/2010 specifies the decision-making process concerning staff autonomy.

Though the regulatory frameworks seem to provide substantive formal autonomy, like the previous military government, the era from 1991 to date was also criticised for its aggression in interfering in universities' internal affairs. As an illustration, one can consider the Ethiopian government's harsh and reckless measures against 42 university professors in 1993. Like its predecessor, the current Ethiopian state has been attacking university teachers and students until very recently. This is evidenced by the new prime minister's declaration that realised the reinstatement of dismissed university teachers (Befekadu & Bultossa, 2018).

The period from 1991 to date is also characterised by flourishing, numerous universities. Before 1991, the country had only two public universities and no private ones. However, after the downfall of the military regime, large numbers of public and private universities have been growing. For instance, while the number of public universities grew from two to 45, four private universities were established. As far as the governance relationship is concerned, several sectorial ministries have been made responsible for the governance of universities in Ethiopia. While the then-civil service minister and defence minister owned the university, the Ministry of Education was responsible for the remaining universities. Nonetheless, since 2011, MoST was made responsible for governing two technology universities: ASTU (renovated) and Addis Ababa Science and Technology University (newly established). While this study is in progress, except for the defence ministry, all other sectors were denied responsibility, and the Ministry of Science and Higher Education was established to shoulder the responsibility of governing the higher education system in the country. Though the governing sector ministries are different, the legal framework remains the same.

The other policy issue introduced during this period was making students responsible for some portion of the cost of their learning in the form of a cost-sharing approach. Until 2004, there was no student involvement in the cost of their learning; the government was fully covering the cost. From 2004 onward, the

government introduced a cost-sharing scheme whereby students contributed 15% of their learning costs with fees payable as a graduate tax. In Ethiopia, where graduate unemployment is high, this small share of costs by a student has hardly been paid back. Universities in Ethiopia have no right to collect this 15% student share, and they are only allowed to collect tuition fees for private applicants that are relatively small. This implies that universities lack diversified income and are, hence, highly dependent on state funds.

Currently, the Ethiopian government has commissioned a new education policy that is supposed to substitute for the 1994 policy discussed thus far. This policy is called the Education Road Map, which has not yet been finalised. Thus, it is too early to deal with the kind of HE policy and autonomy it will bring. However, this policy study identified shortcomings of the higher education governance system, such as the poor function of the board, poor alignment of the research conducted by HEIs concerning the country's problem, poor attachment of HEIs to industries and poor utilisation of resources, all of which are governance-related (Befekadu & Bultossa, 2018).

Until very recently, in Ethiopia, the provision of higher education was the government's responsibility. Specifically, during the Derg regime, from 1974 to 1991, there was no single higher education institution provided by private firms. After 1994, the change in government and its respective education and training policy allowed both the government and private to provide education service. Even though the Ethiopian government has been willing to allow private firms to provide HE services since 1991, their involvement is quite insignificant. For instance, compared to some Asian countries such as Indonesia and Malaysia, whose public share for HE provision is 3% and 20%, respectively, in Ethiopia, the public share remains as high as 99%. Hence, the higher education system in Ethiopia is state-dominated.

In general, institutional autonomy in the history of higher education in Ethiopia has been through different forms of governance. During 1950−1974, formal institutional autonomy was limited, but de facto autonomy saw beyond what was legally prescribed. The second phase, 1974−1991, was characterised by strict government control. Since 1991, the government has been trying to provide substantive institutional autonomy, at least on paper. This implies that the dynamics of higher education governance in Ethiopia show that institutional autonomy seems to be the function of the state's ideology making.

4.4 Current formal autonomy in the Ethiopian context

Two government policy documents, higher education proclamations No. 650/2009; and No. 1152/2019, were taken as a source document to explain the current formal autonomy of universities in Ethiopia. Two policies were analysed because the later proclamation was enacted while this study was in progress. This means that some of the decisions were made with the guidance of the prior policy, No. 650/2009. Besides, financial administration, staff management policies and university legislation were also taken as a source of formal university autonomy in Ethiopia. Based on these assumptions, the formal autonomy of universities in the Ethiopian context is presented in terms of four dimensions.

4.4.1 Organisational autonomy

The Ethiopian higher education proclamation indicates that the university president should be publicly advertised by a body designated by the board of the university (FDRE, 2009). In addition, the responsibility for producing lists of candidates for the presidency is given to the board, as the case may be, and submitted to Ministry for approval or by the head of the appropriate state organ (FDRE, 2009). Furthermore, the merit- and competition-based assignment of any leader is part of university autonomy (FDRE, 2009, 2019). The appointment of the president is the responsibility of the sector ministry responsible for governing the university and/or the 'appropriate state organ' such as regional states (Higher Education Proclamation, 2009, p. 5015)(Higher Education Proclamation, 2009, p. 5015)(Higher Education Proclamation, 2009, p. 5015). This implies that universities have been given a limited role in the process of nominating and appointing presidents.

The policy framework has shown that, while the nomination of the vice president is the responsibility of universities, the appointment is for the university board (FDRE, 2009). This means the sector ministry supposed to govern universities has no role in the nomination and appointment of vice presidents in Ethiopia. Formally, it is articulated in the higher education policy that universities in Ethiopia are required to report to both the state and the board (FDRE, 2019). These bodies are authorised to scrutinise all university functions, including academic-related matters. For instance, the responsibility of the board is stated as:

To ensure whether preparation and delivery of curricula are in line with the country's demand and requirement or not; ensure the implementation of the national policy and strategy on higher education; ensure whether student placement and admission are fair and just following what is proclaimed or not; and ensure the implementation of strategic plans of public institutions. (Higher Education Proclamation, 2019, pp. 11514–11515)

The university president is given an enormous responsibility and is accountable for almost all university functions. In addition, the bodies responsible for evaluating the president are not limited to only the board and sector ministry responsible for governing a given university (FDRE, 2019). It is also stated that an autonomous internal audit unit accountable to the Ministry of Finance shall be established in any public institution. The internal audit unit shall conduct performance, financial and property audits of the institution and report its findings. The account of a public institution shall be audited as appropriate by a federal auditor general or state auditor general (FDRE, 2019).

The board shall be composed of seven voting members, including the chairperson. The ministry shall select and appoint a board chairperson and three additional voting members directly and the remaining three in consultation with the university (FDRE, 2019, p. 11435). However, there is no criterion that precisely guides the nomination and appointment of the board chairperson. Nonetheless, the Ethiopian higher education proclamation sets criteria upon which university board members (not the chair) shall be nominated. This entails that both the universities and the state have been given the role of nomination and appointment. The members shall be the past or present holders of responsible positions and notable personalities especially in teaching or research and in integrity or be representatives of the customers of the products and services of the institution and whose exceptional knowledge, experience and commitment enable them to contribute to the attainment of the mission of the institution and the objectives of higher education (FDRE, 2019).

Concerning university board sessions in Ethiopia, higher education proclamations indicate that the board shall have at least four regular sessions a year, besides the possibility of conducting extraordinary sessions (Befekadu & Bultossa, 2018). Moreover, the Ethiopian higher education proclamation empowers universities to: '… Prepare and implement … organisational structures and submit performance reports …' (FDRE, 2009, p. 4982; FDRE, 2019, p. 11452). Yet, one of the areas of university autonomy is to: 'set up its organisational structure and enact and implement its internal rules and procedures' (Higher Education Proclamation, 2009, p. 4986). Likewise, the same policy states that all

provisions shall be enacted without prejudice to the provisions of the higher education proclamation (Higher Education Proclamation, 2009).

4.4.2   Financial autonomy

Four policy documents can be taken as the source of the formal financial autonomy of higher education in Ethiopia. These are the Ethiopian Higher Education Proclamation, The Ethiopian Federal Government Procurement and Property Administration Proclamation No. 649/2009, Public Procurement and Property Disposal Service Establishment Council of Minister's Regulation No.184/2010 and Federal Government of Ethiopia Financial Administration Proclamation No. 648/2009. One way or another, these documents define what is obligated, prohibited and restricted in making finance-related decisions.

The higher education proclamation indicated that public universities 'shall be funded by the federal government through a block grant system' (Higher Education Proclamation, 2019, p. 11498). In addition, it is underscored in the policy that 'every public institution (universities) may start operating under a block-grant system' from 2010 onward (FDRE, 2009, p. 5023). The duration during which the appropriate budget is supposed to be utilised is within the framework of the fiscal year[1]. The same proclamation also reveals that all public bodies, the recipient public sectors, shall be notified of the approved budget by 'Hamle7[th]' (15 July).

One of the approaches addressed in the policy is transferring a budget from one budget code to another (Federal Government of Ethiopia Financial Administration Proclamation, 2009)[2]. It dictates that budget transfers shall be allowed from a recurrent budget to a capital budget, but not allowed otherwise. More specifically, it is proclaimed that the transfer of funds with recurrent budget expenditure items and from one capital budget to another is allowed within a public body (Federal Government of Ethiopia Financial Administration Proclamation, 2009). This implies that universities in Ethiopia have been given the autonomy to flexibly use their budget of any source and type.

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[1] The Federal Government of Ethiopia Financial Administration defined the fiscal year as the 'period beginning from 'HamleI[st]' (8 July) and ending 'Sene 30th' (7 July)' (Federal Government of Ethiopia Financial Administration Proclamation, 2009, p. 299).

[2]A *budget transfer* is defined as 'the authorized movement of funds in an approved budget from one public body, head, subhead, project or item to another' (Federal Government of Ethiopia Financial Administration Proclamation, 2009, p. 4709).

Concerning procurement, the Ethiopian Federal Government Procurement and Property Administration Proclamation No. 649/2009 is aimed at achieving better transparency, efficiency, fairness and impartiality in public procurement[3] and at enabling the utilisation of public money spent so that it ensures greater economy and efficiency (The Ethiopian Federal Government Procurement and Property Administration Proclamation, 2009). This procurement framework is intended 'to enable the government device maximum benefit therefrom and modernise the administration thereof' (The Ethiopian Federal Government Procurement and Property Administration Proclamation, 2009, p. 4858). In addition to the purpose of this proclamation, it underscores accountability for decisions and measures to be taken. The policy, No.649/2009, has demonstrated that the head of the public body (in this case, the ASTU president) handles establishing an adequately staffed unit, setting up a procurement endorsing an ad-hoc committee to ensure the availability of a procurement plan and whether the plan complies with procurement principles (The Ethiopian Federal Government Procurement and Property Administration Proclamation, 2009).

To guide procurement in the country, a government institution called 'the Public Procurement and Property Disposal Service' has been legally established. The objectives for which this institution was established are: enabling the timely supply of goods and services for public bodies and assisting public bodies, such as universities, in the procurement of goods and services (Public Procurement and Property Disposal Service Establishment, 2010). Higher education policy permits every public institution to mobilise income from legally permitted sources (Higher Education Proclamation, 2009; Higher Education Proclamation, 2019). Concerning the utilisation of income, the same policy dictates that it shall follow its budgetary appropriations. Furthermore, the higher education proclamation No. 1152/2019 indicated that the audit unit placed in universities is supposed to report to MoFED.

4.4.3   Academic autonomy

Setting admittance standards, determining the number of students to be admitted, selecting students and admitting them to the university are assumed to be part of

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[3]*Procurement* is defined as 'obtaining goods, works, consultancy or other services through purchasing, hiring or obtaining by any other contractual means' (The Ethiopian Federal Government Procurement and Property Administration Proclamation, 2009, p. 4859).

university autonomy. In Ethiopia, the admittance requirement does not belong to universities. For instance, the policy indicated that 'the ministry shall determine the admittance requirements for universities' (FDRE, 2019, p. 11476). The autonomy of universities is limited to admitting those who satisfy the requirements set by the state for undergraduate studies (FDRE, 2019). Thus, universities in Ethiopia have not formally been given the right to determine undergraduate student-related decisions.

One of the characteristics of an autonomous university is the freedom to design and deliver curricula without the prescription of externals. In Ethiopia, the higher education proclamation No. 1152/2019 has given universities the freedom to design and develop curricula and to determine the framework upon which the curriculum is supposed to be designed and implemented. Concerning the responsibility for guiding curriculum development given to universities, the policy stated:

> Without prejudice to national interests and relevance, every institution shall enjoy the liberty of developing curricula for all of its academic programmes, including concerning programmes for which nationally applicable curricula may be developed through joint efforts of institutions, and it shall be research-based. (Higher Education Proclamation, 2019, p. 11459)

Specific to applied science and technology universities in Ethiopia, the policy gives them the opportunity to develop curricula that can jointly be offered with industries and may offer dual degrees (FDRE, 2019). The same legal framework indicated that the closing and opening of education programmes are among the autonomy of universities, as 'the autonomy of public institutions shall include creating new or close existing programmes' (FDRE, 2019, p. 11456). This reveals that universities in Ethiopia have formally been given the right to determine their curricula.

Promoting and enhancing research that focuses on knowledge and technology transfer and ensuring that research promotes a freedom of expression that is based on reason are among the objectives for which universities are established in Ethiopia (Higher Education Proclamation, 2019). Consequently, universities have been given the right to develop and implement research programmes, undertake and encourage relevant research and disseminate the findings as may be appropriate (FDRE, 2019). In addition, Ethiopian universities are free to have an institutionalised system, conduct planned research and participate in joint research projects with different bodies. Likewise, the responsibility for determining the organisation, management and procedures

required to conduct research is given to universities (Higher Education Proclamation, 2019).

4.4.4   Staff autonomy

Three legal frameworks are in place to guide the academic staff management of universities: Federal Government Workers Proclamation No. 1064/2010, Higher Education Proclamation No. 1152/2019 and ASTU's senate legislation of 2017. According to these policies, determining the number and quality of staff to recruit (academic profile) and applicant selection have formally been made the responsibility of universities. The academic staffs have also been given the right to be promoted and assume new academic rank based on merit (FDRE, 2019).

As far as university staff promotion is concerned, two types of academic staff promotion are promoted by the policy: horizontal (without making a change in rank, but the salary increment) and vertical (which changes the rank of academic staff   (Senate Legislation of Adama Science and Technology University, 2017). Nonetheless, determining salaries is not part of university autonomy in Ethiopia. Moreover, the policy empowers universities to institute rules, procedures and criteria that guide the promotion of academic staff (Senate Legislation of Adama Science and Technology University, 2017; Higher Education Proclamation, 2009; Higher Education Proclamation, 2019). Furthermore, the dismissal of academic staff is the responsibility of universities with clear guidelines. These data show that universities in Ethiopia have been given the right to determine recruitment, selection, promotion and dismissal.

As far as academic autonomy is concerned, the Ethiopian higher education proclamation has given an authority to the governing sector ministry to determine about bachelor's students, but not the university. However, determining the curriculum and educational programmes to consider a research theme and conducting demand-driven community service are formally indicated as university autonomy.

4.5   Institutional autonomy at ASTU

Adama science and technology university (ASTU) is one of the two technology universities in Ethiopia. Since its renovation as technical university, ASTU has

been led by presidents deployed from America, Germany, and Korea, except the leading president who is Ethiopian. ASTU is subject to function within the legal frameworks of the country such as constitution and other complementary rules and regulations, and guidelines, proclamations, as other government owned institutions do. Besides, ASTU is a highly regulated sub-servant of the political agenda of the government, which is a common practice of all universities in Ethiopia. This implies that whatever formal autonomy is provided its de facto autonomy could be limited by these legal and political impositions from the state.

ASTU was first found as the Nazareth Technical College in 1993, which belongs to the third era (1991 to present) in the practice of institutional autonomy in Ethiopia. ASTU has been through different steps to grow into its current position. It was established as a technical college in 1993 and subsequently grew into a normal university, which handles running different disciplines, in 2006. Finally, the university was renovated as a technical university, responsible only for teaching applied science and technology fields. ASTU's mission is preparing ethical and competent graduates in applied sciences and technology through quality education, demand-driven research and community service. It also 'aspires to be the first choice in Ethiopia and the premier centre of excellence in applied science and technology in Africa by 2025' (Senate Legislation of Adama Science and Technology University, 2017, p. 5).

The university is currently internally organised under six offices (the presidential office and five vice-presidents' offices), five schools (School of Applied Science; Civil Engineering and Architecture; Mechanical, Chemical and Material Engineering; Electrical Engineering and Computing; and the Humanities and Social Sciences), and one division for the freshman programme. The university has 742 students (689 male and 53 female), of which 71 (10%) are expatriates. ASTU has experienced a governance relationship with three government-sector ministries since it was upgraded to the university level. First, it was under the governance of the Ministry of Education (MoE) from 2006 to 2011. Second, it was under the scrutiny of the Ministry of Science and Technology (MoST) from 2011 to 2019. Currently, it is working under the governance of the Ministry of Science and Higher Education (MoSHE), which started in 2019. Although different sector ministries have been responsible for governing ASTU at different times, the policy that defines the roles of the sector ministry and university (formal autonomy) remains the same for all universities in the country. In Ethiopia, ASTU is the only university that has experienced governance relationships with three government sectors.

Although the university is made to focus only on technology and the applied sciences, there is no separate policy that defines formal autonomy, which specifies the decision-making space of the university. Hence, it has been governed by a higher education policy defined in the Ethiopian higher education proclamation like other universities in the country. The formal autonomy of ASTU is primarily defined by the Ethiopian higher education proclamation; the latest was issued in 2019. Since ASTU is a public institution, other laws, proclamations such as financial administration, procurement and property administration and government workers' proclamations are also applicable and considered when it makes decisions. As indicated in Chapter 2, *university autonomy* can be defined in terms of four dimensions (organisational, financial, academic and staff autonomy).

V. METHODOLOGY AND DATA

This chapter presents the three elements of the research methodology framework – philosophical assumptions, research strategies and research methods and designs (Creswell, 2009) – employed to undertake this study. It provides an overview of the research, how it was approached methodologically and the likely rationales behind it.

5.1 Methodological choice

Scholars have been engaging in a prolonged debate on how to make methodological choices between research philosophies such as positivism, interpretivism, subjectivism and objectivism. This debate is not and will not be reconciled. Consequently, quantitative and qualitative research methods have quite often been perceived as parallel and then belonging to different research philosophical paradigms (Sounders et al., 2009). While qualitative research approaches belong to epistemological interpretivism, the quantitative research approach is part of the positivist paradigm (Sounders et al., 2009). In the history of research undertakings, initially, positivism was considered the only scientific approach, and thereby, it was emphasised. Recently, especially in social science research, interpretivism has been given due consideration. Despite the prolonged debate about positivism and interpretivism thus far, researchers have collected both quantitative and qualitative data in a single study (Creswell, 2012).

Hence, in the contemporary world, positivism and interpretivism are perceived as two extremes on a single continuum. The argument behind this perception is that research rarely falls neatly into only one philosophical domain (Sounders et al., 2009). This implies that positivism and interpretivism could be mixed to a varying degree. Consequently, a mixed-method research approach was developed, and after extended challenges, it is becoming a research design per se (Creswell, 2012).

Philosophically, a mixed-method design is located in the realm of pragmatism, which is at the middle of the two extremes of positivism and interpretivism on a continuum (Cai, 2018, p. 32). It has sometimes been observed that pragmatism is attributed to a mixed method, but in its strictest sense, it is essentially not. Because the notion of pragmatism, be it quantitative, qualitative or mixed method, it should be chosen based on the purpose of the enquiry and its research questions. Besides, it is unrealistic to choose between positivism and interpretivism. Rather, understanding a problem and its research questions matters more than sticking to a research philosophy (Cai, 2018; Johnson & Onwuegbuzie, 2004).

Hence, the methodological choice, pragmatists argued, should be dictated by the research questions that researchers are seeking to answer because different questions in a single study could be answered through different approaches (Sounders et al., 2009). This implies that, if research questions demand distinct kinds of approaches, it requires flexibility in selecting the better approaches, rather than confining the research to a single philosophical assumption.

Concerning logical approaches in reasoning processes, while deductive has been attributed to positivism, inductive belongs to interpretivism. This kind of labelling adds no value and is misleading (Sounders et al., 2009). It is not a matter of choice; rather, it is assumed that either approach would have yielded valuable data about a given problem at disparate stages. Sounders et al. (2009, p. 21) argued that combining the two reasoning processes is 'perfectly possible within the same piece of research, and at the same time, it is advantageous to do so'. This study has two phases, the first of which is based on deducing information from theories (multiple dimensions of university autonomy). The second phase relies on inducing the data to be generated from the field. Thus, it is sound to combine deductive and inductive reasoning in this study.

5.2   Research strategy

The research strategy identified to undertake this research is a mixed method case study. A case study has often been attributed to exploratory research purposes by many social scientists. In addition, the hierarchical view attributes a case study with only an exploratory design, which emanates from the concept that a case study is only a preliminary strategy and cannot be used to describe or test propositions. But case study is a commonly used method across all disciplines in gathering scientific

data through either qualitative or quantitative approach or even combination of them (Mills et al., 2010). Besides, scholars believe that the appropriate view is tgat case study is "inclusive and pluralistic one" (Yin, 2003, p. 3). As a result case study become a method that has been commonly used by different disciplines such as business, education, health, psychology, and others(Mills et al., 2010). This implies that case study can use different approaches to solicit data from multiple sources (Mills et al., 2010). The point of argument in this case is that a case study is defined by the purpose of an individual case, not the method of enquiry used, and is not essentially qualitative (Stake, 2005, p. 443). For instance, Yin (2003) indicated that a case study is not a strategy restricted to only exploratory research purposes. Indeed, one of the best and most famous case studies is both explanatory and descriptive (Yin, 2003, p. 3). Thus, "a case study can be based on any mix of quantitative and qualitative evidence" (Yin, 2003, p. 15).

Likewise, since its birth, a mixed-method research design has empirically shown several reasons for being important, which scholars defined in terms of 'particularistic' and 'universal' discourses (Cai, 2018, p. 38). *Particularistic discourse* concerns the guiding nature of research questions in determining a research method and design. However, *universal discourse* refers to the better outcome that a mixed method is supposed to bring (Cai, 2018). For instance, it is suggested that mixing qualitative and quantitative research designs is helpful to minimise the weaknesses of an exclusively qualitative or quantitative research approach (Andrew & Halcomb, 2009; Creswell, 2012; Johnson & Onwuegbuzie, 2004; Mills et al., 2010). Hence, mixed methods research works well for case study research. The very reason is that mixed method research allows the possibility to take the rich empirical data (Mills et al., 2010).

Therefore, to choose among the research strategies, Yin (2003) identified three conditions. The first is the type of research question posed in the study. The common forms of research questions are 'who', 'where', 'why', 'how' and 'what'. These forms of research questions are supposed to provide a clue regarding the most relevant research strategy to be used (Yin, 2003, p. 22). For instance, 'how' and 'why' forms of research questions are assumed appropriate for case studies (Yin, 2003). Second, the extent of control over behavioural events is considered a relevant research situation. For instance, for events that are not virtually accessible to the researcher, a historical research strategy might fit better than a case study.

Third is the degree to which the study focuses on contemporary events. It is suggested that a case study is one of the preferred strategies for investigating contemporary events (Yin, 2003).

You should be able to identify some situations in which all research strategies might be relevant and other situations in which two strategies might be considered equally attractive. You can also use multiple strategies in any given study (e.g. a survey within a case study or a case study within a survey). To this extent, the various strategies are not mutually exclusive. (Yin, 2003, p. 9)

Likewise, Bryman (2006) identified five reasons for mixing surveys and qualitative design in a case study. First, it promotes a more comprehensive account of the relationships of the phenomenon under study. Second, it flexibly includes research questions that demand both quantitative and qualitative approaches in a single study. Third, it enables a description of the full picture of the phenomena under study. Fourth, it integrates evidence and findings (credibility). Fifth, it includes diversified views (researcher's and participants' views). Furthermore, case studies have numerous advantages that make them attractive for conducting educational research. First, a case study can penetrate situations, help the researcher to understand ideas more clearly and help to probe the dynamic and unfolding interactions of events (Cohen et al., 2000, p. 182). Second, it can facilitate rich, vivid and blended descriptions and understandings of perceptions of events relevant to a case (Cohen et al., 2000, p. 181). Third, it optimises understanding and credibility through the triangulation of the description (Stake, 2005).

Therefore, the distinctive need for a mixed-method case study arises from different reasons. First, it emanated from the desire to understand complex social phenomena (university autonomy) and to retain the holistic and meaningful characteristics of organisational events. Second, the development purpose, where the first research method (quantitative phase) is used to develop the research instrument for the next research method (qualitative phase) (Mills et al., 2010). Third, It help to optimise the credibility of the research. Finally, the potential unexpected results obtained during the survey phase of this study might be understood during the second phase.

5.3　Research design

From the 1990s to date,　mixed method design become popular in social science studies and, more importantly, in education research (Andrew & Halcomb, 2009; Creswell, 2012; Gay et al., 2012; Mills et al., 2010). Likewise, a mixed-method design advances pieces of evidence to be collected to understand the phenomena under study with the extra time and effort it requires to intertwine the two

(Andrew & Halcomb, 2009; Creswell, 2012; Gay et al., 2012; Johnson & Onwuegbuzie, 2004).

Cognisant of the likely importance it bears and the nature of the research questions this study is aiming to use (sequential mixed-method case study) mixed method design is identified as a design. Its collection and operation of data included both quantitative and qualitative tools, and its data analysis protocol was both numeric and qualitative. According to Creswell (2012), research problems and questions play a primary role in the process of crafting a mixed-methods research design. Sharing this assumption, the type of mixed method design employed is similar to explanatory sequential mixed-method. The intended design in this research use the first phase (quantitative) in the way it inform and guide the second phase (qualitative) while developing the tool for data collection. This implies that the weight of quantitative phase is less than qualitative one, which has some deviations from Creswell's explanatory research design. Thus, it is not the copy of Creswell's explanatory research design

Research design is a logical undertaking that could describe the link between the research question, the data to be collected and the conclusion to come (Yin, 2003). A research design defines what the research is, sources of data, the context, the time and resources it requires and the technical procedures to be followed (Mligo, 2016). According to Creswell (2003), it refers to those procedures that the research undertaking is expected to incorporate, such as data collection, analysis, interpretation and reporting. In this case, it is considered a blueprint that could help to deal with at least four problems: the question to be addressed through the study, the relevant data required, the data to be collected and the 'how' of data analysis (Yin, 2003). A research design is assumed helpful in avoiding the possible mismatch between the evidence to be collected and the initial research question. To this end, the following components must be included: units of analysis, determining the case, data collection, data analysis, the interpretation and the finding (Yin, 2003), each of which is presented in the following section.

To start with the numbers of cases and units of analyses, a case study can be categorised into four types (see Table 5, below).

Table 5. Basic Types of Design for the Case Study

	Single-case design	Multiple-case design
Holistic (single unit of analysis)	Type 1	Type 3
Embedded (multiple units of analysis	Type 2	Type 4

Source: Adapted from Yin (2003, p. 40)

As indicated in Table 5, above, there are four possible types of case studies. While types 1 and 2 are single case study types with different units of analysis, types 3 and 4 are multiple case studies with varying units of analysis. This shows that a combination of several cases and possible units of analysis can determine the type of case study to be employed.

Units of analysis: this is the entity being studied, which could be a single or multiple entities. Though there are no precise criteria for discerning between holistic cases and embedded/multiple cases, it is better determined by the purpose of the study and research question(s) (Yin, 2003). In addition, the nature of the case to be studied defines the most appropriate design to be employed. In this case, an embedded case study, which considers multiple units of analysis, was employed based on the nature of the phenomena under study, institutional autonomy. Specifically, the unit of analysis consists of four dimensions of institutional autonomy and mechanisms that determine de facto autonomy that is based on perspectives of the staffs of ASTU. This implies that there is more than one entity to be analysed. Thus, an embedded/multiple unit of analysis is the type, which this study is in focus.

5.3.1   Case selection

Case selection in a case study research design is an essential step (Mills et al., 2010). The primary decision in case study design is to distinguish between single and multiple case study designs. A multiple case study is a more compelling strategy than a single case study when there is sufficient time and money available to conduct a study. The time and money available to conduct this study are among the factors that force the researcher to enquire about a single case. The selection of case and appropriateness of a single case study is a function of several circumstances that must be considered. According to Mills et al.(2010) relevance of the case for the objective to be achieved through case study research is vital. To this end, five strategies are found worthy of justifying a single case study (see Table 6, below).

Table 6. Strategies for Determining the Number of Cases

Strategies	Rationale
Critical case	Testing well-formulated theory
Extremely unique case	Understanding unique issues such as disorders (mental and behavioural)
Representative typical case	Capturing circumstances representing others
Revelatory case	Analysing what was previously inaccessible to scientific investigation
Longitudinal case	Investigating how certain conditions change over time

Adapted from Yin (2003, pp. 40–42)

The case, among other things, can be bounded by organisational or institutional arrangements and the specific nature and experiences of institutions (Cohen et al., 2000). In this study, the case is bounded around university arrangements and the specific nature of governance. As indicated in Table 6 above, the strategies that favour a single case study are critical, extreme/unique, typical/representative and revelatory and longitudinal. Their respective rationales are presented in the same table. Two of these rationales are typical, which is among the reasons that helped to determine the single case study and the case institution in this study.

As far as the typical case selection strategy is concerned, it is possible to categorise Ethiopian public universities into two segments based on their governance relationship with government sectors. The assumption is that the university that has experience working under the governance of multiple sector ministries might bear better insight into institutional autonomy. To this end, the two categories are universities that are supposed to report to and those governed by one sector's ministry (such as the MoE, Ministry of Defence, Ministry of Public Service) and universities governed by two or more sector ministries at a different time (such as the MoE and MoST). This implies that the university, which belongs to two or more governing-sector ministries, is a typical case in terms of the university−state governance relationship (institutional autonomy). Thus, the only university that belongs to the second category is ASTU to be selected as a case university. This selection illuminated the characteristics of the typical case indicated in Table 6.

Therefore, based on this specific institutional feature and using the principle of convenience (Yin, 2003), ASTU was selected as a case to catch the close-up reality and make a thick description of the practice of exercising formal autonomy. Besides, based on the specific institutional feature and using the principle of convenience (Yin, 2003), ASTU is selected as a case institution. As far as the combination in Table 5, above, is concerned, based on the descriptions made thus far, this study is an embedded single-case study (Type 2). Thus, the

combination of single case and embedded case study, which we can call a *single embedded case study design* (Yin, 2003, p. 39) *type*, is the design employed in this study.

Figure 4. Research Methodology
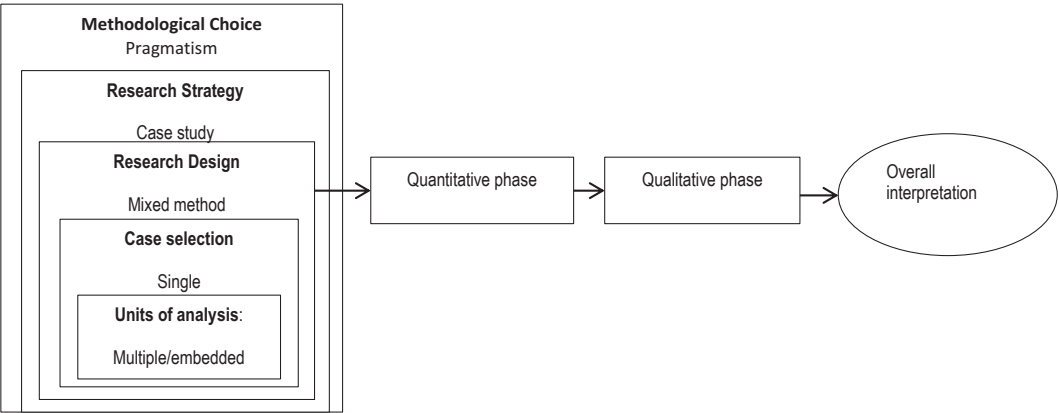
As summarised in Figure 4 above, the methodological choice of this study resembles pragmatism, and the research strategy is a case study with a mixed-method design. A single case with multiple/embedded units of analysis defined the case study type employed in this study. The mixed-method research design is sequential; meaning the quantitative phase of the study is conducted first, followed by the qualitative phase, and finally, the overall interpretation comes (see the same figure). Figure 4 also demonstrates that these components of the research methodology are not mutually exclusive.

5.4   Quantitative approach

5.4.1   Quantitative data collection

In a quantitative research approach, a questionnaire is often employed. Whenever researchers adopt a standard questionnaire or develop a new one, it demands testing for validity and reliability. In practice, it is not that simple to avoid the validity and reliability problems of a given tool; rather, it is possible to minimise the potential invalidity and unreliability (Cohen et al., 2007). To this end, validity and reliability test procedures were performed before the administration of the survey tool prepared for the actual research context.

Validity: The goal of developing a tool for data collection is to achieve the purpose that the research is intended to realise. For a measurement tool to help us achieve this purpose, it should be tested for its validity. *Validity* refers to 'the degree to which a given procedure for transforming a concept into a variables to operationalise the concept that it is intended to' (Corbetta, 2003, p. 81). Consequently, whenever the measurement tool can pull the intended information, it facilitates an appropriate interpretation of scores. Accordingly, validity is considered a fundamental procedure in developing and evaluating instruments for data collection (Gay et al., 2012). Validity tests rely on systemic error, which is vital and often not that simple in educational research, as it reappears consistently in all recordings (Cohen et al., 2007; Corbetta, 2003). Hence, it is best expressed in terms of degree, such as highly valid, moderately valid and generally invalid (Gay et al., 2012).

Validity has different forms that are not exclusively dissimilar. For instance, Corbetta (2003) categorised it into content and criterion validity. *Criterion validity*, for Corbetta, refers to the correlation of results over time and requires comparing results obtained at different times. *Content validity* is concerned with 'indicators selected to reveal a certain concept that covers the entire domain of meaning of that concept' (Corbetta, 2003, p. 82). Content validity also regards item and sampling validity (Gay et al., 2012). While item validity is concerned with checking the relevance of test items in measuring the intended content, sampling validity helps to measure how well the test items represent the total content area and can help to maximise the appropriateness of items (DeVellis, 2003; Gay et al., 2012).

Others define *validity* in terms of four forms, two of which are similar to what Corbetta defined. The additional concepts included in what Corbetta identified are construct validity and consequential validity. *Construct validity* measures the extent to which a tool reflects the concepts it is intended to measure (Gay et al., 2012). It is assumed that construct validity is helpful in checking whether test items are measuring the intended construct. It helps exclude test items that measure unanticipated intervening variables. Conducting construct validity involves gathering many pieces of evidence, and no single validation study can establish the construct validity of a test. Nonetheless, it is possible to test it during the pilot study using principal component analysis (PCA).

PCA is a statistical procedure, like factor analysis, that helps to refine some of the variables to a manageable size. It is assumed helpful in testing whether the construct to be measured 'loads' onto all or just some of the variables to check the sufficient representation of the construct by the variables (Pallant, 2007).

According to the assumptions of PCA, the multiple variables that should be measured must be continuous, like the Likert scale. There should be a linear relationship among variables. It requires sampling adequacy that at least has a sample size of 150, suitability for data reduction, and the inexistence of significant outliers. There is a consensus that, in real-world data, commonly, one or two of these assumptions might not meet (Pallant, 2007).

Consequential validity measures 'the extent to which test items create harmful consequences on participants' (Gay et al., 2012, p. 161). Consequential validity concerns the protection of participants (DeVellis, 2003; Gay et al., 2012). It helps to be conscious of and ferret out the likely harms that the research instrument may create for participants. Out of the typology of validity indicated above, this study conducted content, construct and consequential validity tests. However, due to the technical impossibility of doing so with the newness of the instrument, criterion validity was not piloted. This is because it requires the examination of the relationships between results obtained in different times and contexts.

Reliability refers to 'the degree to which a test consistently measures whatever it is supposed to measure' (Gay et al., 2012, p. 165). Specific to a quantitative approach, it is defined as 'dependability, consistency and explicability over time, over instruments and groups of respondents' (Cohen et al., 2007, p. 146). The assumption is that a reliable research tool is supposed to bring a similar result when administered to a similar group of respondents and a similar context (Cohen et al., 2007).

Two reliability tests were conducted in this study. One of the main considerations is the internal consistency of the test items included in the questionnaire. The internal consistency test refers to the extent to which the items included in the survey tool measure the same underlying construct. To this end, one of the most frequently used indicators of internal consistency is Cronbach's alpha coefficient (Pallant, 2007). The other reliability test conducted was the test of the stability of the scores over time. To test the stability of scores over time, the test−retest procedure is required for administration to the same sample within a reasonable time interval (Gay et al., 2012). The length of time between two tests (test and retest) administrations cannot be too short or too long. The amount of time feasible for testing stability often depends on the context of the research question. Most researchers use between one and six weeks (Pallant, 2007). In this study, the test–retest interval was three weeks. The Pearson correlation coefficient is the statistical procedure identified to conduct the test−retest reliability for continuous data and the Spearman−Brown formula for categorical data (Gay et al.,

2012). Thus, in this pilot procedure, the Pearson r correlation coefficient was employed to conduct a test–retest to check the stability of scores over time.

Item development procedures: It is argued that theories help to guide the development of items that help to measure the variables that inadvertently drift into unintended domains. In addition, using a theoretical framework and specifying the variables to be measured might help to gear items of the instrument towards the purpose for which the measurement is required (DeVellis, 2003). To substantiate the identification of variables and the development of items, focus group discussions were conducted with peers. This discussion was useful in providing an idea of how to articulate items and the variables that might help with the development of items.

Finally, with the purpose of the survey in mind and employing the comments made by peers, a large pool of items was identified that was a candidate for eventual inclusion in the questionnaire. To make the length of the questionnaire manageable, it was discussed with this author's supervisor based on criteria such as clarity, better representation, questionable relevance or undesirable similarity to other items. Finally, the 5-point Likert-type questionnaire items that corresponded to four dimensions of university autonomy (academic, organisational, financial and staff) were prepared and piloted.

Pilot study is assumed helpful to make tools better in pulling information with minimised deficiencies and obtaining suggestions for improvement (Gay et al., 2012). To make the interpretations of the data worthwhile, the instruments employed in pulling the data must be checked for both validity and reliability. To this end, the survey tool developed during the first phase was piloted to check and improve its likely validity and reliability and to gain a better insight into the construct and context. The summary of the procedure and the results obtained and actions taken are presented in Table 5.3, below. To this end, seven scholars (four from Ethiopia, two from Finland and one from Uganda) were given a questionnaire that enclosed a brief description of the title, purpose, research questions and operational definitions of major terms (*organisational autonomy*, *academic autonomy*, *financial autonomy* and *staff autonomy*).

The contents that participants were focused on while testing content and consequential validity were test directions, the inclusion of the intended domains, vagueness, vocabulary, sentence structures and consistency in using terms, appropriateness, length and anonymity. These factors are assumed to affect the likely validity of test items negatively. The inclusion of these factors realised the extent of representation of the major domains covered (sampling validity),

appropriateness of the items (item validity) and consideration of ethical research issues (consequential validity) in the questionnaire. Construct validity is a slightly more complex procedure and relates to the theoretical knowledge of the concepts we want to measure. Using the data collected for piloting reliability, PCA was computed using Statistical Package for the Social Sciences (SPSS) to refine and reduce the number of items, form smaller and more coherent items and restate items. Because this study and its measurement tool are at an early stage, exploratory PCA was employed to explore the interrelationships among a set of variables.

To determine the reliability of the test procedures, Addis Ababa University was deliberately selected, based on accessibility to the researcher, as a sample case institution for the pilot study. A total of 30 department heads and teachers were selected from different schools. The questionnaire was administered twice, at an interval of three weeks.

Table 7. Summary of the Validity and Reliability Measures, Results and Actions

Test type	What it measures	Pilot & its mechanism	Result	Action
I. Validity	It tests the tool's appropriateness to measure what it is intended to measure.		• Survey tools are found a bit wider than the purpose of the study. • Some sentences required restructuring.	• Some items were revisited to make the language simpler and clearer. • Some items were excluded. • A few sentences were restructured, and the form of items was changed.
1. Content Validity • Item validity • Sampling validity	Measures test items' appropriateness	Tested by experts' judgment	• Some information is lacking. • Some items are made complicated and lack clarity and consistency. • The vagueness of some phrases	• 14 items were rejected, and nine items were revisited • Explanation was included.
	Measures test tool's inclusiveness		• Some items were found inappropriate for administration to the sample population.	• Three items were restructured. One checklist with 28 items was developed.
2. Construct validity	Measure test items' appropriateness for the construct it is intended to measure	Tested using exploratory PCA	• Eight items were found to measure the significantly different construct. • Two items were found to measure the intended construct.	• The identified items were rephrased. • Two items were excluded.
3. Consequential validity	Measure whether the test tool harms participants	Tested by experts' judgment	• The tool has no harm on participants of the study	The tool is found anonymous.
II. Reliability	Measures test tool's consistency			
1.Internal consistency	Measure items' interrelation in measuring the intended concept	Tested using Cronbach's alpha coefficient	Cronbach's alpha coefficient = 0.768	The tool is found internally consistent.
2.External consistency	Measure the stability of scores over time	Test-retest Pearson correlation coefficient	Pearson correlation coefficient = 0.85	No action and the tool is externally consistent.

The results obtained through the piloted study (see Table 7 above) indicated that the survey tool is found wider than the purpose of the practice of formal autonomy, the four dimensions of university autonomy are well represented, the questionnaire is extensive and demands revision so participants do not lose focus and become bored, some items are made complicated or lack clarity and consistency, some items have insignificantly measured the extent of formal autonomy, some items measure significantly different constructs and are required to restate them, and the instrument might be free of components that might hurt participants and is anonymous. In addition, Cronbach's alpha coefficient is 0.768, and the Pearson r correlation coefficient is 0.85, which shows that the survey tool is internally consistent and its stability over time is good. The details of the results of the pilot study are revealed in Appendix 4.

The major suggestions indicated above revealed that the survey tool is found largely valid in terms of content, construct and consequential validity. To make the tool more valid, the researcher tried to consider them all. Correspondingly, some items were revisited to make the language simpler and clearer, some items were excluded without compromising the likely inclusion of the domain required, and some arrangement of question items was made to restructure and change the form of questions (see Table 7, above). Thus, due to this finding, the tool proved to be valid and reliable. Finally, the final questionnaire was developed comprising 38 items, all of which are Likert-type items, with four open-ended questions. In addition, one checklist specific to financial autonomy was developed with 28 items.

5.4.2   Population and sampling

The population of the study is ASTU academic staff and leaders at the department level. The sampling frame deliberately excluded middle-level managers at the college dean level and above because their numbers are very small. It seems more appropriate if they participate in the qualitative phase of the study.

Sample and sampling techniques: The academic staffs of ASTU numbers 742, out of which 71 were foreigners, and 98 were on study leave. To determine the size of the study population, foreigners were deliberately excluded, assuming that they might lack knowledge about the politics of higher education governance in Ethiopia. Thus, the population of the study was 573. *Sampling* is the process of picking a limited number out of the population based on the resources available

and the number of researchers in place (Corbetta, 2003). To this end, the sampling process requires scientific rigour that allows a systematic approach to maintain fairness and representation through the notion of choice and randomisation (Corbetta, 2003).

A random choice made without precise criteria does not allow probabilistic chance. Hence, sampling theory suggested different statistical procedures to determine the sample size using the confidence level, such as $\alpha = 0.05$; 0.02; and 0.01 (Corbetta, 2003). The sample size for this study was determined with the 'reference to evaluate the parameters of several variables,' but with a 'univariate statistical approach' (Corbetta, 2003, p. 216). Based on this assumption and employing finite population correlation for the sample size formula, the sample size was calculated. Thus, the estimated sample size for the population of 573 was 230. However, the researcher added 10% (23) of the sample size and increased it to 253 to at least minimise the sampling error and avoid unexpected technical complications, if any.

It is suggested that accuracy and sample size are directly proportional and a decrease in sample size likely decreases accuracy. However, an increase in distribution variability decreases accuracy (Corbetta, 2003). The population size of academic staff at ASTU (573) is distributed across four colleges and 18 departments with varying proportions. Thus, stratified sampling is employed to minimise the likely decreased inaccuracy that may emanate from distribution variability or to secure the representation of academic staff. The population of academic staff is divided into four sub-populations (four colleges; see Table 8, below).

Table 8. ASTU Colleges and Departments' Population and Sample

N	Colleges	Number of departments/ units	Number of staff non-expatriate and on duty	Proportion in %	Estimated no. of samples
1	Applied natural science	5 departments	131	23	58
2	Civil engineering and architecture	6 departments	130	23	58
3	Electrical engineering and computing	3 departments	119	21	53
4	Mechanical, chemical and material engineering	4 departments	121	21	53
5	Behavioural and social sciences	4 units	72	12	30
		Total	Total population 573	100	Sample size 253

In addition, to draw the sample size of a stratum proportionally, 'optimum allocation stratified sampling' was employed (Corbetta, 2003, p. 82). Finally, a

systematic sampling technique was used to select samples from each department. To ease the selection of the sample, a sampling interval was utilised to systematically pick samples randomly. For sampling in this survey, lists of academic staff at ASTU were used. For instance, the sampling interval for the School of Applied Science is 58 (sample size)/131 (population size) = 2.3. This interval fluctuates between two and three. The starting number was identified using a simple random sampling lottery method.

Strategy for data collection: The questionnaire was published as a hand out and distributed to 253 participants. Two volunteers participated in distributing and collecting the questionnaire. The researcher also remained at the university for more than one month to encourage informants to complete it. This helped reduce the number of unreturned questionnaires to only less than 6%.

5.4.3 Quantitative data analysis

The analysis of quantitative data obtained with the questionnaire underwent different steps, such as preparing and organising the data for analysis, analysing data and writing a report for the results to be obtained. To prepare and organise the data analysis for this study, Statistical Package for the Social Sciences (SPSS) software Version 24 was employed. Two statistical procedures were conducted (descriptive and inferential statistics) to give meaning to the data collected. First, descriptive statistics (frequency, percentage, mean and standard deviation) were used to analyse the characteristics of respondents and the extent to which ASTU has been exercising its formal autonomy. The mean scores obtained through SPSS were categorised into three (mean < 2.5 as low; mean ≥ 2.5 and 3.5 as medium; mean ≥ 3.5 as high). Likewise, the standard deviation was employed to discern the extent to which participants' responses deviated from the mean scores.

Second, inferential statistics tested whether there were significant differences between groups of participants' mean scores on the dependent variables (Pallant, 2007). To this end, a one-way ANOVA was employed. Though there is a post hoc statistical analysis procedure that helps to further find where the difference lies (Pallant, 2007), conducting this test is beyond the scope of this study.

The groups in this study consist of subjects with varying years of work experience at ASTU, levels of education, academic ranks and colleges. Subsequently, the interpretation of the data was conducted using previous literature

and theories (Creswell, 2012) as a benchmark to lay the groundwork and develop an idea for the second phase of the study, which served as a springboard for qualitative data collection.

5.5   Qualitative approach

5.5.1   Qualitative data collection

The qualitative data collected was based on two approaches: document analysis and semi-structured interviews. While document analysis was conducted to provide evidence to define the formal autonomy of ASTU, the interview provided evidence on de facto autonomy.

Document as a source of data: A document can be used as a source of secondary data to better understand the phenomena under study. Public documents, which are the focus of this study, have a variety of forms: 'Official records, newspapers, newsletters, magazines, reports, tax records, legal documents and others' (Hays & Singh, 2012, p. 287). The documents used to provide evidence for a given research might be produced independently of the action of the researcher. Documents are useful for tracing a culture and providing information for research. A document can be 'analysed from the qualitative standpoint, by interpreting it in its totality and examining its meanings' (Corbetta, 2003, p. 297). Documents that may be used to provide evidence as part of a study take disparate forms; this study is concerned with official/legal documents. The sources of these documents are the federal government and ASTU. Seven documents were identified based on the purposes of the study. The intention behind the analysis of these documents is to provide evidences pertaining to formal institutional autonomy of ASTU in defining the formal relationship between the state and ASTU.

1. Ethiopian higher education proclamations: No. 650/2009 and No. 1152/2019 (two documents)
2. The Ethiopian Federal Government Procurement and Property Administration Proclamation No. 649/2009
3. Public procurement and property disposal service establishment council of minister's regulation No.184/2010

4. Federal Government of Ethiopia Financial Administration Proclamation No. 648/2009
5. የፌዴራልመንግሥትሠራተኞችአዋጅ 1064/2010 translated as Federal government workers' proclamation 1064/2010)
6. Senate Legislation of Adama Science and Technology University (ASTU) of 2017

The higher education proclamations No. 650/2009 and No. 1152/2019 specify the responsibility of both the state and universities and their respective autonomy. The three proclamations indicated as Nos. 2, 3 and 4 above are all formal financial autonomy-related legal frameworks. One proclamation, No. 5, is about formal staff autonomy, while the senate legislation indicated in No. 6 concerns the university's internal policy. These documents were systematically reviewed and incorporated into the analysis of qualitative data. The data extracted from the document are organised into major themes and analysed concurrently with interview data.

Interview: The collection of interview data specific to this study was based on the results of the quantitative data obtained and processed during the first phase. To this end, the description of the practices of exercising formal autonomy obtained from the quantitative phase helped the researcher determine and develop a data collection protocol. Interviews, which are a data collection tool, promote the interaction of participants (the interviewer and interviewee) to discuss the interpretation and to express their perspectives about the topic of the study (Cohen et al., 2000, 2007).

The interview is one of the most important data collection tools for a case study (Yin, 2003). It is impossible to channel interviews rigidly. Rather, it is a flexible approach that might be guided by the interactions between the participants because of the likely spontaneity of the exchange (Cohen et al., 2007). The collection of case study evidence requires a quick and conscious review of why pieces of evidence appear the way they do (Yin, 2003). Conducting a good interview is a function of the researcher's understanding of the policies and dimensions of the topic to be studied in conducting a focused interview (Cohen et al., 2007; Yin, 2003). Thus, the preparation of the quantitative data collection tool and the description made based on these data helped the researcher to understand the policies and practices in a university–state governance relationship.

According to Gay et al. (2012), an interview can be characterised by a degree of formality and structure. If an interview is conducted in a planned fashion (the informant, time and place), it could be taken as formal. This study was planned

by the participants and had a schedule made with their involvement in fixing the time and place. This implies that the interviews conducted in this study were formal. Besides, an interview could be structured (using specific questions), unstructured (sets of questions prompted by the flow of the interview) and semi-structured (that combine structured and unstructured). The literature indicates that conducting semi-structured interviews gives the interviewer and the respondent freedom, and it is helpful to deal with all relevant themes and to collect necessary information (Corbetta, 2003). Furthermore, it gives the freedom to develop any themes arising while the interview is in progress when the interviewer finds it important for a fuller understanding of phenomena. With this importance in mind, the researcher decided to conduct a semi-structured interview.

To conduct and increase the likely success of interviews in data collection, a precise protocol is required that includes the instrument, procedure and general rules to be followed (Yin, 2003). To this end, the interview protocol was designed based on the results of quantitative data and a general principle of qualitative data collection procedures and refined after it was piloted. An interview guide is helpful to list the questions that can ensure the same basic lines of enquiry with each person interviewed. It also frees the interviewer to build a conversation in a predetermined subject area (Patton, 2002). An interview guide as a framework helps to guide the interviewer to utilise his/her time properly by keeping the interaction focused. Its development, as indicated in Patton (2002), details the extent to which the issue requires specifying important issues in advance.

As far as participants are concerned, a total of 18 participants were identified who included ASTU's president and vice presidents (five), deans (four), department heads (two), directors of directorates (five) and academic staff (two). These informants were selected purposively using two criteria: the position and the experiences they might hold. As informed by a pilot study, ASTU top-level leaders were focused. Other participants were selected based on the assumption that the more experienced the ASTU staff, the better they might hold information about the practice of exercising formal autonomy.

To enable participants' reflections of their personal experiences and opinions on why and how de facto autonomy appears different from formal autonomy, an average time frame was one hour. Interviews were tape-recorded, transcribed and translated into English. Before data collection, contacts were made with ASTU leadership. The researcher identified participants to get their permission and facilitate data collection through interviews. Confidentiality was explained to create a trusting environment that made subjects feel secure,

promoting a free conversation, the purpose of the study and the commitment of the researcher in keeping the sources of data confidential.

5.5.2   Qualitative data analysis

Qualitative data analysis, according to Bogdan and Biklen, is 'the process of systematically searching and arranging the interview transcripts, field notes and other materials that are accumulated and inform the findings' (Bogdan & Biklen, 2007, p. 159). It is a process through which data can be transformed into findings. Though there is no universally agreed-upon process for qualitative analysis, content analysis is often exploited to analyse documents. Inductive analysis is a common analytical approach in case study research (Patton, 2002). It also is assumed that policy documents, themselves, have the power to affect decision-making competencies, as they cannot prescribe action in every single detail (de Boer & Enders, 2017).

Thus, content analysis was employed to analyse the contents of policy documents because it was assumed helpful to identifying major consistencies and meanings relevant to the purpose of the study (Patton, 2002). In addition, inductive analysis is used to discover themes and categories that could facilitate the emergence of findings from interview data (Patton, 2002). Thus, this study employed content and inductive analysis to make sense of the data obtained from the policy documents and the interview and its transcription.

The data analysis procedure partially began concurrently with data collection after a few data were collected. Finally, after the fieldwork was over, the taped conversation with participants was transcribed and then translated into the English language so it provides a thick description for the analysis. The transcript was organised and coded thematically to support and illustrate points manually. The document analysis was conducted based on the frame of the isomorphic mechanisms and the major themes of the transcripts were organised, which informed the researcher on how to sense data.

Regarding techniques employed in conducting analysis: A matrix of categories was developed, and pieces of evidence from the transcripts were placed in the matrix to which they belong. To identify sub-codes within major codes, text highlight colours were employed. Finally, the data were presented using the screened data through the matrix and text highlight colours in line with theoretical propositions. Thus, the evidence for the second phase of this case study came from

documents and interviews. Subsequently, the interpretation explained and framed ideas in terms of other scholarship, action and the likely importance (Bogdan & Biklen, 2007).

Figure 5. Qualitative Evidence and Isomorphic Pressure
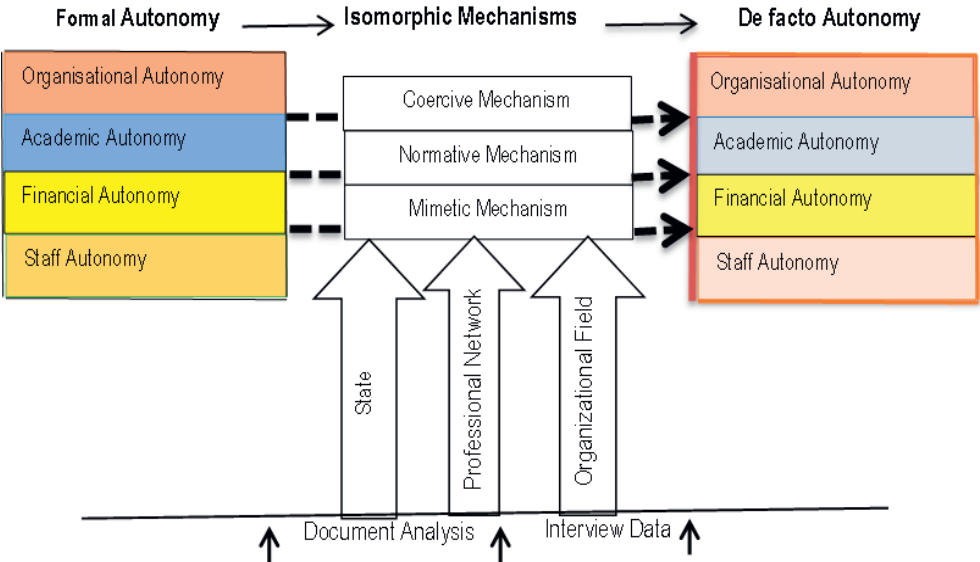
As indicated in Chapter 3, the summary of how isomorphic pressure could shape de facto autonomy to appear different from formal autonomy is represented in Figure 4. In addition, Figure 4 illustrates the sources of empirical evidence for the qualitative phase of the study and its connection to isomorphic pressure as a conceptual framework.

   Trustworthiness: Judging the quality of any research design is subject to the approach employed to undertake the research (Yin, 2003). For instance, determining the validity of qualitative research is not equivocally applicable, as in the quantitative approach, and it is the most debatable topic in educational research (Hays & Singh, 2012). In a positivist paradigm, the quality of research can be tested through validity and reliability test approaches. Though the effort to translate the concepts of validity and reliability is often used in quantitative research approaches, in qualitative research, many researchers equate validity with trustworthiness. Trustworthiness is the truthfulness of qualitative research findings and conclusions that bears a participant view in a context where the research is conducted. It is also

assumed to serve both the strengths and limitations of given research (Hays & Singh, 2012). Trustworthiness has been given several components by different scholars. Nonetheless, the following four components are found dominant in determining the quality of qualitative rigour: 'credibility, transferability, dependability and conformability' (Hays & Singh, 2012, p. 194).

Table 9. Components of Trustworthiness and Strategies

Trustworthiness	The Intent	Strategies
Credibility	The believability of a study	• Field notes and memos
		• Member checking
Transferability	Generalisability of the research findings	• Prolonged engagement
		• Persistent observation
Dependability	The consistency of study results over time and across researchers	• Triangulation
		• Peer debriefing
Conformability	The degree to which the findings of a study are genuine reflections of the participants	• Thick description

As is indicated in Table 9 above, *credibility* is one of the major criteria that qualitative researchers use to determine whether the conclusions of a qualitative study make sense. It depends on the judgment and belief of the readers regarding the conclusions made. The second component of trustworthiness is dependability, which refers to the consistency of the result of qualitative enquiry. It is the attempt made by scholars to test whether the qualitative study is as reliable as it was in the quantitative study. This might be ideal because qualitative data collection is flexible, and it can be shaped to adjust to the actual situation. The third component of trustworthiness is *conformability*, which 'refers to the degree to which findings of a study are genuine reflections of the participants investigated' (Hays & Singh, 2012, p. 201). This is all about the objectivity of qualitative research.

The nature of qualitative research gives a chance for a researcher to take part in the research process. Researchers' personal biases are inevitable during the interaction between the researcher and participant and during the interpretation of the perspectives of the participant. This implies that conformability is a methodological criterion. Conformability also bears the concept of authenticity, which deals with conceptual criteria (Hays & Singh, 2012).

The fourth component of trustworthiness is *transferability*, which is a qualitative copy of external validity in quantitative research. Qualitative researchers aim for insight and deeper understanding to illustrate a phenomenon fully, rather than for generalisability to a larger sample (Hays & Singh, 2012, p. 8). This attempt is called *transferability*; the equivalent term for the quantitative approach is

generalisability. The application of qualitative research is not determined by the researcher because the context in which the research is conducted is not representative as it is explained in quantitative studies.

Strategies: It is argued that there are no precise and exclusive strategies that separate components of trustworthiness criteria (see Table 9 above). This means that, in one way or another, each potential strategy could contribute to improving and maintaining trustworthiness. To this end, it seems worthwhile to consider the possible strategies to augment the trustworthiness of a given qualitative research. Determining the quality of qualitative research is not limited to the validity and reliability of the tools. Rather, the entire research process that the researcher could employ is part of the judgment of trustworthiness. Thus, it is believed that examining the research design, data analysis and interpretations, as well as research reports, are helpful to judge qualitative research's trustworthiness.

More specifically, the components of a research design are the focus of trustworthiness testing. For instance, establishing the goal of the research, such as determining the units of analysis, research purpose and types of data sought, are among the factors that determine the quality of qualitative research (Hays & Singh, 2012). As part of the research design, a conceptual framework is expected to bring the prior concepts, theories and/or models utilised, and are supposed to run the research according to a defined rigour. In addition, the way the research question(s) are aligned with the purpose statement (its coherence and structure) is an area that helps to judge trustworthiness. In qualitative research, the researcher is never excluded, and the researcher's role is intense. For instance, the researcher's relationship with participants and the way he/she understands the perspectives of the participant and interpretation imply the trustworthiness of qualitative research. The method through which the data is to be collected, analysed and interpreted determines the trustworthiness of the qualitative research (Hays & Singh, 2012). Thus, the judgment of the trustworthiness of qualitative research covers the entire research process.

As indicated in Table 9, above, some of the potential strategies identified to enhance the trustworthiness of qualitative research are utilising field notes and memos, member checking, prolonged engagement, persistent observation, triangulation, peer debriefing and thick description (Hays & Singh, 2012, pp. 207–211). These strategies are defined in Table 10, below.

Table 10. Trustworthiness Strategies and Actions in This Study

Trustworthiness strategies	The essence	Action taken
Field notes & memos	Data collection methods and records	Multiple methods (interview and document analysis were conducted)
Member checklist	Ongoing consultation with participants	Participants were consulted to check whether the data analysis represents their experience
Prolonged engagement	Staying in the field to build a sustainable relationship with participants	The researcher stayed at ASTU for more than two months
Persistent observation	Engaging in many data collection episodes with subjects	In-depth interviews were conducted persistently
Triangulation	Using many sources of evidence	Phase one provided evidence using a checklist and questionnaire with few open-ended questions, and interview and document analysis were employed during the second phase that provided evidence for the case study
Peer debriefing	Consulting peers/colleague	Experts were consulted to pilot the interview guide. Colleagues were also consulted to judge the data analysis process
Thick description	Detailed account of research process and outcome	Aspects of the research context, the data interpretation and report were presented in the details

Table 10, above, reveals that all strategies are not ameliorate trustworthiness. No strategy belongs to a given component of trustworthiness; rather, all components of trustworthiness are addressed through each strategy. Although the judgment of trustworthiness in qualitative research is the responsibility of a reader, attempts were made to apply trustworthiness strategies to this study (see Table 10). This study originated to contribute to the gap identified (see Chapter 1) in studying de facto autonomy. Empirical data from related literature were reviewed, and appropriate conceptual frameworks and models were identified to guide the study. Moreover, similar research from the ocean of literature was reviewed to understand how other contexts of institutional autonomy have been functioning.

Furthermore, peers helped transcribe the data, and the originality of the transcription was confirmed. In addition, while analysis was in progress, one colleague was consulted to check the process. Participants also were consulted to check whether the analytic process represented what they experienced in ASTU. The interview guide was piloted for its appropriateness in serving the purpose of the study. To this end, two individuals who have had experience in university leadership and teaching participated in the pilot study. The interview took 110 minutes on average. Finally, it was identified that all staff members are familiar with how organisational and financial autonomy-related decisions have been made, and treating this issue was recommended to top leaders and respective directorates.

This study sought that the nature of the mixed-method case study employed is helpful in better understanding the context and the participants of this study. During the first phase of this study, the researcher visited the president and vice presidents, all college deans and heads of departments, and the majority of teachers participating in quantitative research. Simultaneously, filling out the checklist also opened the door for the researcher to communicate with the finance head of the university. In addition, the researcher stayed for more than a month to collect the quantitative data (the first phase), and finally, when the data collection of the qualitative phase of the study started, the researcher was familiar with most target participants. This helped the researcher build trust among the participants of this study. In summary, the description of the background for context and phenomena studied, methodological rigour, conceptual framework and theoretical models guiding this study, the involvement of participants and colleagues, piloting the interview guide and prolonged engagement in research are assumed to improve the trustworthiness of this research.

VI. QUANTITATIVE DATA ANALYSIS

This chapter comprises the presentation, analysis and interpretation of quantitative data obtained through questionnaires and a checklist. The analysis is organised into two major parts. The first part (6.1.) deals with the characteristics of respondents in terms of their college, work experience, level of education and academic rank. The second part (6.2) is about the extent of the practice of formal autonomy at ASTU in terms of four dimensions of university autonomy, as operationalised in Chapter 2. Primarily, the characteristics of respondents are approached using descriptive statistics, such as frequency and percentage. Second, participants' perception of the extent to which ASTU is free to exercise its formal autonomy (organisational, academic, financial and staff) is presented, analysed and interpreted using mean rating and descriptive statistics (mean and standard deviation).

Furthermore, the variability of scores between groups of respondents believed due to independent variables was approached using between-groups ANOVA, which is used when different subjects in each of the groups are available. A significance level (α) less than and equal to 0.05 indicates a significant distinction between groups. If the significance level is greater than 0.05, there is no significant difference among the mean scores on the dependent variable for the groups. Four groups of participants (groups of participants with varying years of service, levels of education, academic ranks and colleges) were identified, and the scores between each group were compared in this study. The checklist collected data on the financial dimension of institutional autonomy. The data obtained were descriptive, tabulated (see Appendix 1) and discussed accordingly.

6.1   Background characteristics of respondents

Figure 6. College Distribution of Participants in Percentages
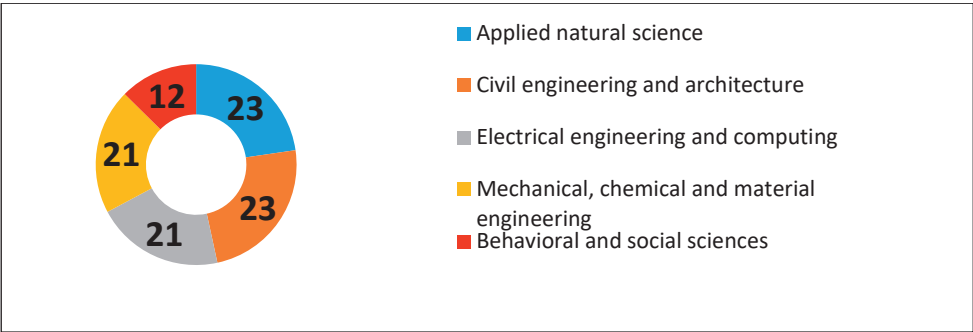
Figure 6 reveals that all colleges at ASTU are equivalently represented in this study. All schools except behavioural and social sciences are represented with a percentage of participants that ranges from 21–23%. The participation of informants from the behavioural and social sciences is proportional to its size and fairly represented (see Chapter 5).

Figure 7. Distribution of Participants by Work Experience in Percentages
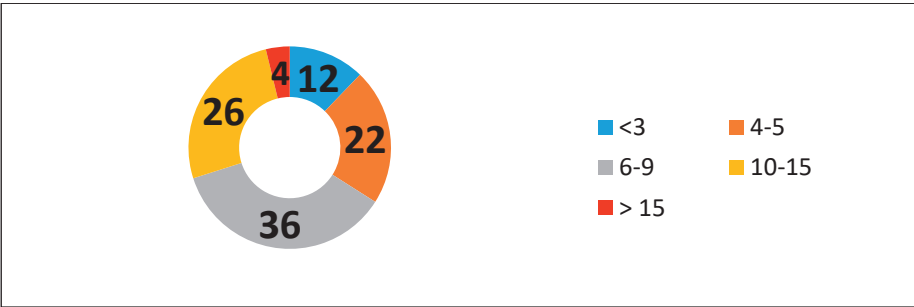
Figure 7 has revealed that most respondents, 62% (36%+26%), have work experience that ranges from six to 15 years. This might entail that most respondents seem familiar with what has been practised in exercising formal autonomy.

Figure 8. Education Level and Academic Rank Distribution of Respondents (in Percentages)
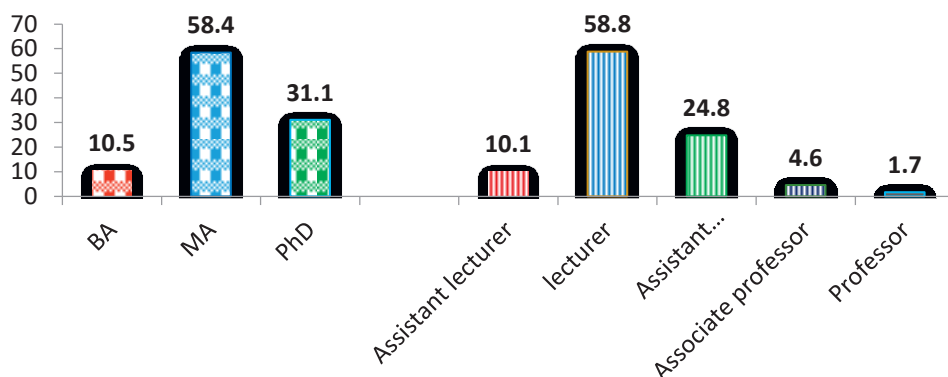
Figure 8, above, demonstrates that most subjects (83.6%, 58.8+24.8) are lecturers and assistant professors in their academic rank. Similarly, participants with a master's and doctorate account for 89.5% (58.4 + 31.1), which is a very high proportion. This entails that the individuals in this study have better educational preparation that have implications for conceiving information for the study.

6.2   Extent of de facto autonomy

6.2.1   Organisational autonomy

Organisational autonomy refers to universities' freedom to 'set conditions for status and role of executive heads and external members determining universities'' internal organisational structure and the possibility that universities can determine the goals and expectations that they are required to meet (Estermann et al., 2011). Based on this assumption and the formal autonomy provided to ASTU, the perceptions of university instructors and department heads are presented in Table 11, below.

Table 11 demonstrates that participants' perception of the extent of ASTU's freedom to exercise its formal autonomy in nominating its president, conducting public advertisements to nominate a president, replacing vice presidents upon the expiry of their terms of office and nominating voting board members are perceived low. The mean ranges from 1.46 to 2.47 (see Table 11, items 1, 2, 5 and 6, respectively). In addition, the same table portrays little deviation

from the respective mean value among the perceptions of informants for these items. (See SD values, which are about 0.74.) This implies that participants view the exercise of autonomy in this regard as low, without much deviation from the mean score.

Table 11. Mean Distribution of Responses and Compared Mean on Organisational Autonomy

N	Items	Mean	Standard Deviation	Compared Mean Between Groups							
				Service Year		Level of edu.		Acad. rank		college	
				F	Sig	F	Sig	F	Sig	F	Sig
1	Nominating ASTU president	2.13	0.67	1.11	0.35	0.84	0.92	0.11	0.98	0.57	0.69
2	Conducting public advertisements to nominate a president	1.99	0.50	1.68	0.15	5.75	**0.00**	1.95	0.10	3.08	**0.01**
3	Nominating ASTU vice presidents	2.96	0.56	1.73	0.14	6.43	**0.00**	3.95	**0.00**	3.11	0.16
4	Appointing vice presidents	3.00	0.50	1.54	0.10	0.88	0.42	1.14	0.34	1.44	0.22
5	Replacing vice presidents upon the expiry of their terms of offices	2.47	0.74	1.60	0.18	0.53	0.59	1.79	0.13	4.79	**0.00**
6	Nominating voting university board members	1.63	0.65	0.27	0.90	2.84	0.06	1.72	0.15	3.01	**0.02**
	Degree of freedom			4		2		4		4	

Nb: Mean < 2.5= low; mean ≥2.5 and <3.5 = medium; and mean ≥3.5 = high; N = 238.

Similarly, as depicted in Table 11 above, the response rates between all groups of participants do not vary significantly on the practice of nominating university presidents (α>0.05; see the result of one-way ANOVA, Item 1). This entails that all participants agree that ASTU's role in its presidential nomination is minimal. Conversely, the response rate for the freedom of ASTU in publicly advertising vacant positions for presidents varies significantly between the two groups of participants (α<0.05), that is between groups with disparate levels of education and from distinct colleges, but does not vary between groups of participants with diverse years of service and academic ranks (α>0.05; see Item 2). This implies that some participants do not agree that the role of ASTU is low.

Likewise, Table 11 displays the compared mean between all groups, except the group of the participants with different colleges, which do not vary significantly in their response score of replacing vice presidents and nominating voting ASTU board members (α > 0.05). This again tells us that, except for a few respondents coming from a different college, all participants perceived that ASTU might poorly determine the replacement of vice presidents and voting members among ASTU board members.

The response rate on issues related to the freedom of ASTU in undertaking the nomination and appointments of its vice presidents is viewed as average, with a mean ranging from 2.95 to 3 (see Table 11, items 3 and 4). The deviations of the scores of responses from their mean are less than one. Similarly, the result of one-way ANOVA has shown that the response rates of groups of respondents on the appointment of vice presidents display no significant variation. However, there is significant variation among some groups of respondents (with different levels of education and academic rank) in the nomination of vice presidents. This demonstrates that, without significant variation, various groups of respondents viewed ASTU's role in determining the appointment of its vice presidents as medium, but with some variation for the nomination of vice presidents.

The responses obtained from open-ended question items in the questionnaire depict that the nomination of the ASTU president was made by the state and political membership as the major criterion. They noted that the President of ASTU is a political appointee and every nomination decision takes place based on the decisions and recommendations of the political party at the federal level. Similarly, participants in their response to open-ended questions indicated that the nomination and appointment of ASTU's vice presidents have been based on political party membership.

Table 11 also demonstrates that ASTU has relatively better freedom in appointing academic leaders, such as deans (mean = 4.29), and appointing senate members (mean = 3.96) without significant differences among mean scores of groups of respondents ($\alpha > 0.05$), except between groups of respondents from a different college (see items 7 and 8 in Table 11). This entails that ASTU seems free to determine the nomination and appointments of its middle-level leadership, such as deans and senate members.

Besides the fact that ASTU is given legally an authority to nominate its president and vice presidents and appoint its vice presidents (FDRE, 2009), in practice, the extent to which ASTU exercise it, is perceived low. In this case, the data obtained through the questionnaire (closed and open-ended questions) have shown that ASTU has not been exercising its freedom to nominate its president and voting board members and to advertise vacant positions for vice-president positions, as well as remove vice presidents upon the expiry of their term of office, without significant variations among groups of participants. Hence, de facto autonomy seems less than formal autonomy as far as organisational autonomy is concerned, except some elements (appointments of dean and senate members).

The results of this finding corroborate de Boer and Enders (2017) in that de facto autonomy is low for some components, medium for others, and high for other components of organisational autonomy across different countries compared to their respective formal autonomy. Thus, de facto autonomy is not often the copy of formal autonomy, as organisational autonomy is concerned.

6.2.2 Academic autonomy

Academic autonomy refers to the freedom of the university to determine all matters related to its core missions. Specifically, this study is about ASTU's freedom in determining student-related decisions (determining admittance standards and several students, selecting students), curriculum, and research and community service. Based on these variables, the extent to which ASTU has been exercising its given autonomy is presented, analysed and interpreted based on responses obtained through the questionnaire, as indicated in Tables 12, 13 and 14 below.

Table 12. Mean Distribution of Responses and Compared Mean on Academic Autonomy

N	Items	Mean	Standard Deviation	The Compared Mean Between Groups							
				Service Year		Level of edu.		Acad. rank		college	
				F	Sig	F	Sig	F	Sig	F	Sig
1	Establishing admittance standards for new undergraduate students	3.7	0.62	1.39	0.25	2.56	0.79	1.51	0.2	2.38	**0.05**
2	Establishing admittance standards for new master's students	4.0	0.52	1.78	0.13	4.98	**0.01**	3.01	**0.02**	1.81	0.13
3	Establishing admittance standards for new PhD students	4.1	0.53	0.60	0.66	0.73	0.48	0.89	0.47	2.74	**0.03**
4	Determining the number of new undergraduate students to be enrolled	3.9	0.61	1.35	0.25	0.52	0.60	0.83	0.51	2.15	0.08
5	Determining the number of new master's students to be enrolled	4.3	0.55	2.10	0.08	0.79	0.46	1.06	0.38	2.41	**0.05**
6	Determining the number of new PhD students to be enrolled	4.3	0.57	1.75	0.14	0.22	0.81	0.73	0.58	1.69	0.15
	Degree of freedom			4		2		4		4	

Nb. Mean < 2.5= low; mean ≥2.5 and <3.5=medium; and mean ≥3.5 = high; N = 238.

Table 12 above demonstrates ASTU's practice in exercising formal autonomy to establish admittance standards at all levels of education and determine the number of new students to enrol is perceived as high (mean ranges from 3.91–4.37 respectively; see items 1 to 6). The distribution of scores of all participants from their respective mean value is less than one degree (SD ranges from 0.52 to 0.62;

see column 4), which implies that their perception seems similar. Likewise, as the output of one-way ANOVA has shown, there are no significant differences (α>0.05; see items 4 and 6 in Table 12) in the response rates of all groups of various participants in determining the number of new bachelor's and PhD students at ASTU.

As the results of between-groups ANOVA has shown, regarding the responses of participants on establishing admittance standards for bachelor's and PhD students and determining the number of new master's students, the response rates of three groups of respondents (with different years of service, levels of education and academic ranks) do not significantly vary (α > 0.05). However, the response rate of the group of respondents who participated from different colleges varies significantly (α = 0.05; α =0.03; α =0.05, respectively; see Table 12, items 1, 3 and 5). Similarly, as indicated by the between-groups ANOVA, the two groups of respondents (groups of respondents with different levels of education and academic ranks) significantly vary (α = 0.01, and α = 0.02, respectively; see Item 2 in Table 12) in their response rate on the issue of determining the number of master's students. This implies that ASTU seems to exercise relatively better freedom in determining student-related issues, with few deviations in scores among the responses of some groups.

Table 13. Mean Distribution of Responses and Compared Mean on Academic Autonomy

No	Items	Mean	Standard Deviation	The Compared Mean Between Groups							
				Service Year		Level of edu.		Acad. rank		college	
				F	Sig	F	Sig	F	Sig	F	Sig
1	Selecting undergraduate students	3.86	0.52	5.25	**0.00**	3.47	**0.03**	1.83	0.12	0.08	0.99
2	Selecting master's students	4.23	0.55	2.07	0.09	1.40	0.25	0.45	0.77	3.33	**0.01**
3	Selecting PhD students	4.24	0.56	1.97	0.10	0.33	0.72	0.43	0.78	3.12	**0.02**
4	Developing research agendas	3.99	0.68	0.53	0.72	1.00	0.37	2.13	0.08	0.68	0.61
5	Offering education through diverse programmes	2.01	0.88	0.81	0.52	2.21	0.11	2.60	**0.04**	4.20	**0.00**
	Degree of freedom			4		2		4		4	

NB: Mean < 2.5= low; mean ≥2.5 and <3.5=medium, and mean ≥3.5 = high; N = 238.

Table 13 shows that ASTU's competency in selecting students at all levels of education is viewed by respondents as high (mean ranging from 3.86 to 4.24). Likewise, the extent to which ASTU can develop its research agenda is perceived by participants as high (mean=3.99; see Table 13, Item 4). The distribution of

scores for items 1 to 4 does not seem to deviate much from their respective mean value (SD ranging from 0.52 to 0.68). Similarly, as the result of the one-way ANOVA has shown, the response rate between all groups of participants does not significantly vary in ASTU's ability to determine its research agenda ($\alpha > 0.05$; see Item 4).

Nevertheless, while the response rate of participants' perceptions of the freedom of ASTU in selecting undergraduate students significantly varies ($\alpha < 0.05$; see Table 13, Item 1) among groups of respondents with different levels of education and academic ranks, there are significant differences among the response rate of groups of participants with different years of service and those who participated from colleges ($\alpha > 0.05$). However, the results of one-way ANOVA have revealed that the views of respondents do not significantly vary as far as selecting both MSC and PhD students is concerned, except for the group of respondents from colleges ($\alpha < 0.05$; see Table 13, items 2 and 3). This entails that, although the extent to which ASTU has been selecting its students is high, respondents from different groups seem to view it differently. However, all groups of participants perceived that the extent to which ASTU determines its research agenda is high without significant variation in responses.

Table 13 also indicates that ASTU's practice in exercising its given decision-making space pertaining to offering education through diverse programmes is perceived as low (mean = 2.01) without much deviation of scores from the respective mean value (SD = 0.88). The results of the between-groups ANOVA showed that, while there were significant differences among the groups of respondents from different colleges and with different academic ranks ($\alpha=0.00$ and $\alpha=0.04$, respectively), there was no significant difference ($\alpha>0.05$) between groups of respondents from different years of service and levels of education at ASTU. This implies that ASTU's practice in exercising its autonomy in terms of deciding the kind of programmes through which it wishes to offer educational programmes seems less than what is obligated

The higher education proclamation stipulates that determining university entrance requirements and placing students for an undergraduate education programme is the responsibility of the ministry; the role of ASTU is limited to only consulting the ministry (Higher Education Proclamation, 2019). However, the data presented above (both in tables 12 and 13) have shown that ASTU has been enjoying the freedom to determine entrance requirements and student placement without significant variation of scores among groups of participants. This implies that ASTU seems to exercise autonomy beyond what is formally provided. Thus, as

far as determining student selection criteria and placement is concerned, de facto autonomy is greater than formal autonomy at ASTU.

Table 14 shows that the freedom of ASTU in starting new academic programmes for undergraduate and postgraduate education is perceived by participants as medium (mean 2.94, 3.28, 3.30; see items 1–3), with a significant difference in the rate of responses of groups of participants. As an illustration, the results of between-groups ANOVA have shown that the perception of all groups of participants on the freedom of ASTU in opening new undergraduate educational programmes varies significantly (α <0.05), except for groups of respondents from different colleges (α>0.05). However, between-group ANOVA shows that participants' views concerning the freedom of opening a new academic programme at the postgraduate level do not vary significantly among each group of participants (α>0.05), except between groups of the participants with different years of service in the university. This may entail that different groups of participants may not bear equal information as far as determining the education programme is concerned.

Table 14. Mean Distribution of Responses and Compared Mean on Academic Autonomy

	Items	Mean	Standard Deviation	The Compared Mean Between Groups							
				Service Year		Level of edu.		Acad. rank		college	
				F	Sig	F	Sig	F	Sig	F	Sig
1	Starting new undergraduate academic programmes	2.94	0.65	3.87	**0.00**	4.79	**0.01**	3.62	**0.01**	2.22	0.07
2	Starting new master's academic programmes	3.28	0.69	4.21	**0.00**	1.24	0.29	0.37	0.83	1.76	0.14
3	Starting new PhD academic programmes	3.30	0.71	4.50	**0.00**	1.54	0.22	0.52	0.72	1.04	0.39
4	Terminating undergraduate academic programmes	2.74	0.79	1.69	0.15	6.71	**0.00**	2.62	**0.04**	0.51	0.73
5	Terminating master's academic programmes	2.79	0.84	2.08	0.08	11.6	**0.00**	4.66	**0.00**	1.12	0.35
6	Terminating PhD academic programmes	2.79	0.85	2.59	**0.04**	11.6	**0.00**	4.69	**0.00**	1.61	0.17
7	Developing a new curriculum at any level	3.41	0.65	1.52	0.20	1.19	0.31	2.60	0.04	4.63	**0.00**
	Degree of freedom			4		2		4		4	

Nb: Mean < 2.5 = low; mean ≥2.5 and <3.5=medium; and mean ≥3.5 = high; N=238

Similarly, Table 14 above shows that participants' view of the freedom of ASTU to terminate academic programmes at all levels (undergraduate and postgraduate

programmes) is perceived as medium (mean 2.74−2.79; see items 4−6). The results of between-groups ANOVA have also shown that, while the response rates of groups of respondents from different levels of education and academic rank significantly vary on the freedom to terminate the bachelor's and master's programmes ($\alpha < 0.05$), the response rates between participants from different colleges and with different years of service at ASTU display no significant distinction ($\alpha > 0.05$). Concerning the freedom to terminate academic programmes at the PhD level except between groups of participants from different colleges ($\alpha > 0.05$), the response rates between all groups of participants vary significantly ($\alpha < 0.05$; see Item 6). This also implies that ASTU may not determine the termination of a given academic programme but with significantly varying responses of some participants.

Table 14 also shows that ASTU's freedom to determine the curriculum both at undergraduate and postgraduate programmes' perceived medium (mean = 3.4) with low variation of scores from the mean (SD = 0.65; see Item_7) implies that the participants' view of ASTU's freedom to determine its curriculum seems similar. Likewise, between groups, ANOVA has shown that the response rates between all groups of respondents, except between participants with different academic ranks ($\alpha = 0.04$), do not vary significantly ($\alpha > 0.05$). This implies that most respondents unanimously agree that there exists some sort of intrusion in decisions made on a curriculum. Conversely, Ethiopian higher education policy clearly articulated that universities have the liberty to develop curricula for all academic programmes (FDRE, 2009, 2019). Despite this provision, the practice in ASTU, as indicated in Table 14, in exercising its autonomy in this regard seems not to be maximal. Thus, de facto autonomy regarding academic programmes and curriculum-related decisions is less than formal autonomy.

The result of this study is consistent with the finding of Yesilkagit and van Thiel (2008, p. 151), who indicated that the 'level of formal autonomy is not a straightforward indicator of the level of de facto autonomy'. Thus, de facto autonomy can vary from low to high and sometimes extend beyond formal autonomy.

6.2.3   Financial autonomy

Universities are among the sectors with labour-intensive work and expensive expenditures, which demand vast financial resources. In universities such as ASTU,

where 99% of its annual budget comes from government appropriation, finance is one of the areas that escalate tension between the government and university in governance relationships. Thus, with this tense relationship, the extent to which ASTU has been exercising its decision-making space is presented, analysed and interpreted based on the response rate of informants. Similarly, the data obtained through the checklist were also analysed and interpreted.

Table 15, below, shows that the sources of funds for ASTU are government appropriation, tuition fees, income from services (registration, certification), income from auxiliaries (renting its buildings), training and consultancy (using laboratories) and endowments (donors' fund). According to the official who provided information to this checklist, out of these sources of funds, government appropriation accounts for 99% of ASTU's annual budget. The other sources of funds, tuition fees from non-government-sponsored students (extension programmes), rank second on the amount of budget it covers. According to the same table, the sources of funds for ASTU's capital budget are the Ethiopian government and funds generated by the university. The procedures that ASTU should follow to receive a capital budget (budget required for different kinds of construction, maintenance and the procurement of machinery and equipment used over the long term) are different from the procedure for a recurrent budget.

Table 15. ASTU's Source of Funding in Rank Order

No.	Sources of funding	Rank sources in terms of the amount of budget during 2019/20	
		Recurrent	Capital
1	Government appropriation	1st	1st
2	Training and consultancy	4th	
3	Tuition fees	2nd	2nd
4	Revenues from services (registration, certificate etc.)	5th	
5	Aids	6th	
6	Income from auxiliary enterprises such as housing and bookstores	3rd	3rd

ASTU official indicated while filling out the checklist that ASTU is required to prepare a detailed project plan and submit it to the state. Following the evaluation of different project proposals submitted by ASTU, the state allocates a budget that should provide financing in an earmarked fashion. The projects that the government approves for financing are given a budget code, and the university is

expected to utilise it in line with these codes. This budget code has the power to restrict ASTU from utilising the budget flexibly for another purpose. This implies that ASTU has a limited role in managing its capital budget.

The data obtained from the checklist have shown that the budget appropriation mechanism exercised by ASTU is not a block grant. Though the higher education proclamation is given the block grant budgeting mechanism, in practice, the state funding mechanism is the revised version of block grant appropriation. To follow what the government designed, ASTU is forced to prepare its budget plan based on the agreed-upon strategic plan with the state. After checking whether the budget plan is aligned with the strategic plan, the government decides on budget sealing for both recurrent and capital budgets.

The same checklist indicated that the sealing set by the state is the amount of budget that ASTU can use only for one budget year. After getting the sealing of its budget, ASTU has the freedom to assign the budget to different expenditure titles/budget codes using the template developed by the Ministry of Finance and Economic Development (MoFED), the sector responsible for managing the government finance system. The expenditure plan prepared by ASTU, which is based on the sealing set by the state, is later submitted to the same sector for approval. The state might use the approval process as a framework to control the appropriateness of the expenditure during budget utilisation. Though the decision to distribute the budget appropriated to the university helps the university to flexibly address its priorities, especially for recurrent expenditures, it could not hold unspent money beyond a given budget year.

The data obtained through the checklist also indicated that budget templates with budget codes or budget heads have not been decided by ASTU, and there is no room for ASTU either to modify or change the template. This implies that out of the expenditure autonomy (the discretion to decide on what amount, when, how and where to spend money), ASTU is free only to decide on the amount for budget heads. The same checklist indicated restrictions on when to spend for two reasons. First, ASTU is free only to use the appropriate money for one budget year. Second, there is a restriction on when to conduct expenditures, especially for procurement. Likewise, the mechanism of expenditures has been determined by the government's financial rules and regulations. Thus, the university seems to have very limited expenditure autonomy.

According to data obtained from the checklist, ASTU can determine the tuition fee for non-government-sponsored students (private applicants) and is free to change the amount of tuition fee on its own. Similarly, Table 16, below, has

shown that the decision-making competency of ASTU in determining the amount of tuition fee for non-government-sponsored students is perceived as high (mean = 4.15). Nonetheless, there was a significant difference between the response rate of the two groups of respondents − between different years of service (α=0.05) and between groups of participants with different academic ranks (α=0.01) − and without significant variations among the two groups of participants (between participants with different levels of education and between respondents from different colleges; α>0.05).

Conversely, the checklist portrays that ASTU cannot borrow money from a financial institution. Likewise, there is no such earmarking mechanism for the amount to be distributed among different budget codes/heads. These data are similar to those obtained from responses obtained through the questionnaire. For instance, see Table 16, below.

Table 16. Mean Distribution of Responses and Compared Mean on Financial Autonomy

No.	Items	Mean	St.D	The Compared Mean Between Groups							
				Service Year		Level of edu.		Acad. rank		college	
				F	Sig	F	Sig	F	Sig	F	Sig
1	Determining the amount of tuition fee for private applicants	4.15	0.6	2.46	**0.05**	2.88	0.06	3.18	**0.01**	**0.04**	1.00
2	Mobilising additional income	3.37	0.7	4.16	**0.00**	1.85	0.16	1.26	0.29	6.21	**0.00**
3	Internally disbursing the amount it generated	2.08	0.7	2.62	**0.04**	2.32	0.10	1.82	0.13	5.46	**0.00**
4	Assigning the amount required for the research fund	3.87	0.5	1.22	0.30	0.69	0.50	2.97	0.02	1.23	0.30
5	Undertaking procurement activities of its own	2.27	0.7	0.83	0.51	2.65	0.07	1.29	0.28	2.67	**0.03**
	Degree of freedom			4		2		4		4	

Nb: Mean < 2.5= low; mean ≥2.5 and <3.5=medium; and mean ≥3.5= high; N=238

Table 16, above, has shown that ASTU's freedom to assign money for research funds is perceived as high (mean = 3.87; see Item 4) without significant differences between groups of respondents (α>0.05), except between groups of subjects with different academic ranks (α=0.02; see Table 16). This implies that deciding on the amount of budget to be assigned for teaching and learning, research and community service seems delegated to the university unless it is beyond the sealing.

Table 16 shows that the extent to which ASTU can internally disburse the amount it generated is perceived as low (mean = 2.08), with significant variations of response rate among some groups of respondents. For instance, between-group

ANOVA shows that, while response rates between groups of respondents with different years of service (mean = 0.04) and between groups of participants from different colleges vary significantly (α=0.00), the response rates between groups of informants with different levels of education and with different ranks do not ($\alpha > 0.05$). This implies that ASTU might be subject to the budget template developed by the government, and thereby, it might not be able to distribute it as it may wish.

The data obtained through the checklist have shown that the ability of ASTU to mobilise additional financial income from different sources was viewed as medium (mean = 3.37), with variations between some groups of respondents. For example, the result of one-way ANOVA shows that, while the response rates between groups of respondents with different years of service and between groups of participants from different colleges vary significantly (α=0.00, for both), the response rates between groups of the participants with different levels of education and with different ranks do not ($\alpha > 0.05$). In addition, the data obtained from the checklist show that one of the sources of funds for ASTU's annual budget is the money obtained from income generations in the form of registration and certification fees, renting its buildings, training and consultancy using laboratories (see Table 15).

As the official who filled out the checklist commented[4], although ASTU could generate money, the university is required to prepare a plan and be able to distribute the budget with the knowledge and permission of the government, as it did for government-appropriated funds. It is also indicated on the checklist that ASTU could not use money it generated if it became beyond what was planned. It is also show that ASTU cannot transfer a budget from one budget head to another on its own. Besides, ASTU cannot determine the amount of compensation for extra work (overload and overtime) and payable allowances. This means the university might pay these compensations based on the rate of payment determined by the government.

According to the checklist data, ASTU is not that free to carry over unspent financial resources from one year to the next for every budget (government appropriated or self-generated), except budget obtained from development partners. The same checklist data have shown that ASTU has not been given full freedom to determine expenditure for all sources of funds and is not responsible for undertaking all procurement activities.

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[4]*Universitiin kun galii keessaa qaba, garuu hanga itti fayyadama isaa karoorsee,mootummaan hayyamuu isaa hin mirkaneessinitti ittifayyadamuu hindanda'u. Bulchiinsa isaa ilaalchise madda isaatu gargari malee haaluma bajeta mootummaatiin hogganama.*

From the checklist, it is observed that ASTU has the freedom to undertake the procurement process on its own for those items permitted by the government (procurement procedures that include planning, making bid announcements, evaluating both technical and financial requirements and buying the items). For common user items that could be used across universities, the procurement procedures have been conducted by the state agency, which includes making bid announcements, evaluating both technical and financial requirements and identifying the eligible bidder(s). After the suppliers have been identified regarding the quality and price of items, the agency informs ASTU of the price of items and the eligible bidder. In this regard, ASTU has the freedom only to decide the number of items to be procured. Otherwise, it makes payments and collects the amount it wants from the recommended suppliers. If any supplier returns later with a price less than what is identified, or if ASTU gets a lesser price from another firm for the same kind and quality of items, it is not allowed by the state to do so.

However, although the government allocates money to buy a vehicle(s), it is forbidden for ASTU to procure vehicles at all. Universities can make a request for vehicle procurement when the state is convinced to buy, It make with its programmes and procedures. The university cannot decide on the mark of the car or its quality. This implies that ASTU has been imposed with an extended restriction on procurement. The data obtained through the questionnaire support the discussion above. For instance, Table 16, Item 5 has shown that ASTU's freedom to undertake procurement activities on its own is perceived by participants as low (mean = 2.27), without significant difference between groups of respondents ($\alpha>0.05$), except between groups of respondents from colleges ($\alpha=0.03$). This implies that most respondents believed that ASTU does not always undertake procurements on its own.

As Ziderman and Albrecht (1995) in Bain (2003) indicated, the amount of funds appropriated by the government is directly related to the competencies of the focal organisation (fund-receiving organisation; Bain, 2003). In addition, it is indicated that universities that earn most of their funds from the government lack confidence in exercising their autonomy and are very much concerned with responding to governmental expectations of higher education (Bain, 2003).

Higher education policy has articulated that public universities, like ASTU, have been given autonomy to manage their funds and property, including the responsibility to prepare and implement funds and conduct income-generating activities (Higher Education Proclamation, 2019). Despite this provision, the data obtained through a questionnaire and checklists have shown that ASTU's practice

in exercising its autonomy seems low. This finding agrees with de Boer and Enders (2017), who confirmed that there is no linear relationship between de facto autonomy and formal autonomy. Thus, it is possible to suggest that the prescription of formal autonomy does not guarantee de facto autonomy; rather, the relationship between the environment and university context matters.

6.2.4   Staff autonomy

As defined in Chapter 2 of this study, the focus of staff autonomy is delimited to line staff. This study is based on the assumption that autonomous institutions are characterised by the freedom to determine their profile and criteria in the recruitment, promotion and firing of their staff. Based on the formal autonomy provided by the government, the data on academic staff-related decisions are presented, analysed and interpreted in the following section.

Table 17. Mean Distribution and Comparison of the Mean of Responses on Staff Autonomy

No.	Items	Mean	St. deviation	The Compared Mean Between Groups							
				Service Year		Level of edu.		Acad. rank		college	
				F	Sig	F	Sig	F	Sig	F	Sig
1	Instituting rules and procedures on the recruitment of academic staff	2.88	0.56	2.41	**0.05**	2.14	0.12	2.56	**0.04**	0.42	0.80
2	Determining the number of academic positions	4.07	0.61	1.03	0.39	0.04	0.96	0.26	0.90	3.39	**0.01**
3	Determining procedures for individual academic staff performance evaluation	3.37	0.74	0.49	0.74	2.71	0.07	2.62	**0.04**	1.47	0.21
4	Set criteria for academic staff promotion	3.13	0.78	1.68	0.16	2.96	**0.05**	1.05	0.38	0.67	0.61
5	Promoting academic staff	3.05	0.84	1.83	0.12	0.51	0.60	0.58	0.67	1.28	0.28
6	Dismissing senior academic staff	1.95	0.81	2.21	0.07	0.65	0.52	1.08	0.37	1.89	0.11
7	Determining the workload	4.32	0.72	3.31	**0.01**	0.17	0.84	1.47	0.21	1.62	0.17
	Degree of freedom			4		2		4		4	

Nb: Mean < 2.5= low; mean ≥2.5 and <3.5=medium, and mean ≥3.5= high; N=238

Table 17, above, indicates that ASTU's freedom in developing rules and procedures that might guide the recruitment of academic staff, determining the assessment procedures for academic staff, setting criteria and deciding the promotion of academic staff are perceived by participants as medium (mean =

2.88, 3.37, 3.13 and 3.05, respectively; see items 1, 3, 4 and 5) with some variation among response rates of groups of respondents. For instance, in determining staff recruitment rules and procedures, the result of between-group ANOVA shows that the mean scores of all groups of respondents vary significantly except between groups of respondents with different levels of education ($\alpha > 0.05$). This implies that the rules and procedures might lack clarity or consistency while the recruitment was conducted. Regarding the determination of staff evaluation criteria, the mean scores of all groups do not vary significantly ($\alpha > 0.05$), except for respondents from colleges ($\alpha = 0.04$). In addition, all groups of respondents, except the group of respondents with different levels of education ($\alpha = 0.05$), do not vary significantly in their mean score of setting criteria for academic staff promotion. However, all groups of respondents agreed in their response that ASTU's freedom to promote its staff is medium.

As can be seen from Table 17 above, items 2 and 7 have shown that ASTU's freedom in determining the number of academic positions and workload is high as perceived by respondents (mean=4.07 and 4.32, respectively), without significant variation in the response rates between groups of respondents, except between groups of respondents from different colleges ($\alpha = .01$) and between groups of participants with different years of service for the freedom to determine workloads ($\alpha = 0.01$). Finally, the same table depicts that the freedom of ASTU in firing academic staff members for a different reason is perceived as low (mean = 1.95), and it is without significant variation between groups of respondents, except between groups of respondents with different years of service ($\alpha = 0.01$).

In addition, the data obtained from open-ended questions included in the questionnaire have shown that ASTU is free to recruit its staff with the defined profile predetermined as a requirement by MoST. However, the promotion of ASTU academic staff has been complicated by the criteria adapted from Korea. The actual situation at ASTU seems poor in providing required facilities that could encourage staff to commit their maximum effort and get promoted. Conversely, there seems to be no intrusion in determining workloads. In this regard, the higher education proclamation gives the responsibility of recruiting and administering university staff to universities. In addition, the same legal framework has given Ethiopian universities the following:

> select, … academic and other staff to be employed by the institution and designate or determine their responsibilities based on institutional requirements and expectations concerning performance and quality of work,

and administer its personnel (Higher Education Proclamation, 2019, p. 11456).

In addition, ASTU's senate legislation depicts that determining the requirements for academic staff promotion is the responsibility of ASTU. Despite these legal provisions, there seems to be some sort of interference by the government in defining the required academic profile for potential applicants to be recruited by ASTU and setting general criteria that frame the promotion of academic staff at ASTU. This implies, though ASTU seems free to recruit and promote its staff based on the required criteria, the state has placed a systematic controlling mechanism in defining a framework upon which the recruitment and promotion of staff can be accomplished.

This finding is consistent with de Boer and Enders (2017), who stated that states use different mechanisms in the form of interventional autonomy, such as reporting, approval and setting a general framework that could guide and limit the extent of de facto autonomy. ASTU's de facto autonomy seems susceptible to systemic government influence and thereby appears less than formal autonomy.

6.3   Summary

As indicated in Table 18 below, in most cases, the extent of de facto autonomy ranges from low to medium across the four dimensions of university autonomy (organisational, academic, financial and staff). This implies, as discussed in the same table, that ASTU cannot maximise its benefit from its given autonomy. Thus, de facto autonomy, except for a few areas of decision making, was found to be less than formal autonomy at ASTU. However, these data did not inform whether there exists a practice of exercising freedom of decision making beyond what is legally prescribed. In addition, why and how ASTU fails to exercise its formal autonomy to the extent that it is prescribed is not explained in this phase of the study. The qualitative phase of this study, presented in Chapter 7, was primarily intended to explore why and how ASTU's de facto autonomy is shaped to appear different from formal autonomy. Simultaneously, it provided evidence that help to triangulate the findings identified in this chapter.

Table 18. Summary of Major Findings and Their Implications (Quantitative Phase)

Major findings	Implications
Organizational autonomy The extent to which ASTU has been exercising its autonomy in nominating and appointing top level leaders (president, vice presidents and voting board members ranges from low to medium. But the practice of ASTU to nominate and appoint middle level leaders (deans and senate)is perceived as high	ASTU has been denied some of its autonomy and thereby de facto autonomy appears less than de facto autonomy.
Academic Autonomy The practice of ASTU in determining student related issues is perceived as 'high'. But it seems that its role in deciding about its curriculum and academic programs (opening new and closing old) is limited (medium).	Regardless of the formal autonomy given to ASTU, it managed to enjoy freedom in determining student related issues. But perceived medium for other academic dimensions. This means de facto autonomy can sometimes exceed what is legally provided.
Financial Autonomy ASTU is highly dependent on state purse (99% of its fund comes from state). It cannot: determine the template for internal disbursement, carry over unspent balance to the next year, transfer budget from one head to another without permission. The role of ASTU in determining its procurement is also perceived as 'low'. However, ASTU seems able to determine the amount of budget for research undertakings, and the amount of tuition fee for none government sponsored students.	Excessive ASTU dependence on state fund insisted state to limit the extent of authoritative action that the University is supposed to take on its budget. This entails that de facto autonomy in this regard appear less than formal autonomy.
Staff Autonomy The practice of ASTU in determining the dismissal of its staff is perceived as low. The extent to which ASTU exercises its autonomy in determining staff recruitment, and promotion, and performance evaluation criteria are perceived medium. However, ASTU's practice in determining the workload and number of academic position to be recruited are perceived as high.	The state systematically controlled ASTU's staff autonomy and there by de facto autonomy appears less than formal autonomy

VII.   QUALITATIVE DATA ANALYSIS

Based on the qualitative data, this chapter presents the second part of the empirical perspectives obtained through semi-structured interviews and document analysis. The data obtained from interviews served two purposes. First, although it was not originally planned to triangulate the quantitative phase of the study, some themes emerged, and they are found important in supplementing the quantitative phase of this study. To this end, the perceived practice of ASTU in exercising its autonomy is included using the four dimensions of university autonomy employed to frame the quantitative phase of the study (see Chapter 2). Second, it explores why and how de facto autonomy and formal autonomy appear different at ASTU.

Table 19. Number of Documents Analysed and Participants

No.	Sources of data	No	Remark
1	Documents analysed	7	See the details in chapters 4 and 5
2	Interviewee		
2.1	Top leaders	5	Average time is 1:20, total 6 hours
2.2	Medium-level leaders	8	40mn average (total 3:20hrs)
2.3	Line managers	2	Average 30mn (total 1hr)
2.4	Teachers	2	Average 30mn (total 1hr)
	Total participants	17	Total time taken 11:20

As indicated in Table 19 above, seven documents were sampled and analysed to define the policy mechanisms that constrain ASTU's capacity in exploiting the available and given options, desires, as well as its capacity to exercise those choices. Similarly the same table illustrated that 17 informants participated in the second phase of the study. Though it was planned to work with 14 informants (five top-level leaders, five middle-level leaders, two line managers, two teachers), some of the interview questions were redirected to different directorates of the university. To specifically address these questions, three directorates (ASTU's internal administrative structure) were included using a snowball sampling mechanism

(audit, procurement and human resource directorates). These three informants participated only in the financial and staff dimension of ASTU autonomy.

The documents are policies issued to guide higher education governance directly and other policies found to have guiding implications for ASTU's decision-making competencies. In addition, the perceptions of ASTU staff as an entity are analysed under the governance relationship between the larger environments, which include state, non-state and organisational fields and ASTU (see Chapter 3). It seems that the existence of differences between de facto autonomy and formal autonomy is agreed on by almost all participants for divergent reasons. Thus, this study has given attention to why and how different mechanisms shape and reshape ASTU's de facto autonomy in such a way that it appears different from formal autonomy as perceived by ASTU staff.

Thus, in connection with institutional isomorphism, the framework of this study (see Chapter 3), some major themes emerged from the interviews and the documents. Then, the analysis was made accordingly based on their relevance to the study. These themes are: the practice of de facto autonomy, isomorphic pressures and the subthemes: policy mechanisms, administrative and regulatory pressures, political pressures, context as pressures, social pressures and cultural pressures. These themes are the perceived reasons and mechanisms that made ASTU's de facto autonomy appear different from formal autonomy. To this end, the questions (both main and probing) used in this chapter characterise some of the views from the perspective of ASTU leaders (top, medium, line-level leaders) and teachers labelled from informant ASTU1 to 14 and ASTU16 to18.

7.1   Extent of de facto autonomy

As described in the first phase of this study, the extent of de facto autonomy across different dimensions of the university varies from low to high. Scholars have defined the combination of formal and de facto autonomy in terms of four possible relationships (see Chapter 2). For instance, Ender (2017) described the combination of formal and de facto autonomy as 'Low−Low', 'Low−High'; 'High−Low' and 'High−High'. Nonetheless, based on the purpose of this study and the interview data obtained during the second phase of this study, it can be categorised into two major relationships. Assuming that formal autonomy remains constant, de facto autonomy could be either lower or higher than what is legally provided. *Lower* refers to the practice of de facto autonomy below formal

autonomy, but ranges from low to high (see Chapter 6). However, *higher* represents the practice of autonomy exercised beyond what is formally determined. With these assumptions in mind, the data obtained through interviews are presented based on the four dimensions of university autonomy.

First, concerning organisational autonomy, the policy dictates that the nomination of ASTU's president; the nomination and appointments of vice presidents and nominations of the three voting ASTU board members have formally been determined to be the university's autonomy (see Chapter 4.4; FDRE, 2009). In practice, as is perceived by informants, ASTU has been totally denied the autonomy to nominate the three voting board members and is rarely involved in nominating its president and vice presidents.

However, the policy dictated that establishing a new structure or closing an existing structure is subject to approval and permission from the state. This administrative requirement is intended to control the university in this regard. As a general principle, all university policies, regulations and procedures are subordinate to a higher education proclamation (FDRE, 2019). However, ASTU introduced the tandem approach of university structure, which was not given legal grounds, at least through policy, on university legislation. Informants ASTU4 and ASTU3 elaborated:

> The late Korean presidents of ASTU deployed many professors from their respective countries and were assigned as a tandem dean. At that time, the number of colleges was numerous, and he assigned two deans for all colleges, one from abroad and the other from Ethiopia. (ASTU4)

Recently, since the leading president was assigned, the tandem dean and department head structures were discarded.

> We managed to set a new structure and open offices that could support vice presidents. It was possible to open these offices with the approval of the board. For those staff required to support these offices, ASTU reported to the Civil Service Commission with justification. For whatever decision it may make, ASTU is required to report to the sector ministry. (ASTU3)

These data indicate that while determining either the nomination or assignment of ASTU leadership is found limited, it has been enjoying its freedom to determine its structure beyond what is obligated by law. This implies that de facto autonomy is found low for some and higher for other areas in the organisational dimension of its autonomy.

Second, in the case of ASTU's financial autonomy, the interview data show that the extent of exercising a formally determined decision-making space is found to be low. This means that there is no practice that exceeds the formally determined discretion of the university. Though the university has been given the right to get its budget through a block grant mechanism since 2010 (FDRE, 2009), ASTU has not exercised this privilege yet. In this regard, informant ASTU3 argued:

> Budget appropriation has been made by the government based on budget heads or subheads, which you could say is a line-item budgeting mechanism. They call it a programme budgeting mechanism, which is not. For instance, if 1.5 billion Ethiopian birrs [Ethiopian currency] is assigned to ASTU, the university is required to disburse this amount to different budget heads and sub heads based only on the template that the state provided. Thus, the budget allocation mechanism is not through a block grant. (ASTU3)

The Ethiopian higher education proclamation bestowed the freedom to use the unutilised portion of allocated grants as a budget subsidy for the capital budget (Higher Education Proclamation, 2009). In practice, as noted by informants ASTU3, ASTU4 and ASTU16, ASTU has never held the unspent balance of its budget for the upcoming years. Rather, it is required to return the unspent balance to the state treasury. In addition, the policy allows the university to use its budget flexibly from one budget head to another (Higher Education Proclamation, 2009). In practice, it is very difficult, if not impossible, for ASTU to transfer the budget from one head to another. Informant ASTU3 noted that once ASTU has budgeted with a given budget code/head, it cannot shift that budget when the need might arise.

As discussed in financial administration policy, the aim of procurement is ensuring greater economy and efficiency and facilitating a better supply framework. Though procurement planning and determining the budget to secure the procurement is the responsibility of ASTU, undertaking the procurement activity is not limited only to ASTU. Informants ASTU3, ASTU4 and ASTU16 indicated that the federal procurement and property disposal agency has been given the right to conduct procurement for common users' items on behalf of ASTU. Simultaneously, there is a restriction by the state imposed on some items to be procured by ASTU.

Overall, these data indicated that ASTU's finance-related autonomy seems deteriorated by uniform, rigid rules and regulations, the budget appropriation mechanism, a template developed by the state to internally disburse its budget and the inflexible nature of the financial administration policy. This also realises that

this finding is unanimous with the first phase of this study. Thus, though the degree varies, the practice of exercising formally determined financial autonomy is found to be low compared to formal autonomy.

Third, like the organisational autonomy dimension discussed thus far, the practice of academic autonomy is found to be lower and higher for different components of academic formal autonomy. Though ASTU has been given the right to determine its curriculum on its own (FDRE, 2019), in practice, it does not. As an illustration, informant ASTU2 indicated that ASTU was informed by the state to copy the Korean technology university curriculum. More elaborately, informant ASTU1 argued:

> Normally, the university is supposed to conduct a need assessment or research, and based on the gap identified, the university can initiate a new curriculum. But what was done at ASTU is something different. The initiative to renovate ASTU's curriculum comes from the state, and there was no study conducted that differentiated the gap. Simultaneously, ASTU was not given the chance to choose the university as a benchmark to copy. Rather, ASTU was informed to copy the curriculum of Korean KAIST and POSTECH universities. (ASTU1)

Similarly, the higher education proclamation has given the autonomy to open new and close old educational programmes at universities. Informant ASTU12 underscored that, in practice, there is the possibility of opening a new programme, but within the area predetermined by the government. More precisely, informants ASTU2 and ASTU9 noted:

> Since we are living in a dynamic world, ASTU needs to be alert enough in adjusting itself to the reality in the context in opening new programmes and closing the old one. But ASTU is not that free to open new educational programmes, especially undergraduate programmes. (ASTU2)

> ASTU can open only 14 departments, and thereby, we [ASTU] could not open the very important departments that ASTU wishes to have. MoST restricts us [ASTU] not to open beyond 14 programmes. As a result, ASTU was forced to close those technology-related academic programmes, which were different from these 14 education programmes. (ASTU9)

As far as the closing of educational programmes is concerned, informant ASTU1 noted that ASTU has been denied its right neither to retain, nor to close the old educational programmes. Conversely, though student-related decisions have formally been the sole responsibility of the state (FDRE, 2019), ASTU has been enjoying the freedom. In this regard, informant ASTU7 commented:

Previously, the selection of students had been made by the government, but recently, ASTU has been given full freedom to select students of any kind (BSC, MSC or PhD) and to determine their number. Thus, since 2017, decisions related to selection and determining the number of students have been the responsibility of ASTU. (ASTU7)

Similarly, ASTU5 indicated:

Determining the criteria and number of students to be admitted and selecting students are among the discretions of ASTU. When ASTU was renovated, it was expected to bring transformation in science and technology. To this end, the selection of the best students and teachers became the responsibility of ASTU. (ASTU5)

Fourth, as far as staff autonomy is concerned, the policy has empowered ASTU to manage its academic staff, including setting the profile of its potential academic staff, determining the criteria to recruit and promote its staff and dismissing its academic staff. In practice, as viewed by respondents, there is state intrusion. Informant ASTU8 perceived that the staff selection criteria and the required staff profile were determined by the state. Informant ASTU8 suggested, 'The criteria that the state identified is not bad, but it did not rely on the actual situation in the country. If you want to recruit academic staff using these criteria, you might not find applicants who satisfy it from the local market'. Similarly, the criteria for staff promotion have been determined by the state. In addition, despite the legal provision that empowers the disciplinary committee, the vice president's office for academic affairs and the president to undertake the dismissal of academic staff as a disciplinary measure, respondents commented that sometimes there is board involvement in the process.

These data show that, while ASTU has been enjoying a freedom beyond what is obligated in determining student admission criteria, number of students to be admitted, the selection and placement of its students its autonomy in determining its curriculum and academic programmes and the criteria to recruit, promote and undertake the dismissal of its staff. This implies that there is a possibility of exercising formal autonomy at ASTU.

7.2 Perceived reasons and mechanisms for the difference between de facto and formal autonomy

The quantitative phase of this study and the interview data presented as triangulation provided evidence that de facto and formal autonomy are not similar at ASTU. However, the reason and mechanism that cause the difference between the two faces of the same coin have not yet been identified. To this end, based on the assumption that the institutional environment shapes the practices and processes of an institution, the institutional isomorphism concept is employed to frame and make sense of interview data (Kessler & Tuckman, 2013). Consequently, three major themes (coercive influences and mechanisms, social mechanisms and cultural/normative mechanisms) were employed in this study.

7.2.1 Coercive influences and mechanisms

Coercive influences can be manifested in the form of formal and informal environmental pressures in which the organisation cannot protect itself for different reasons (Kessler & Tuckman, 2013). Based on this assumption, coercive mechanisms as a major theme were identified to refer to loopholes of policy, and regulatory and administrative mechanisms, which are formal and informal binding requirements, which the state has been imposing to steer at ASTU.

In addition, the themes that emerged from the transcribed data were: politics, which is often informal and seldom formal state intervention in university affairs; abjuration, a formal and informal mechanism made by the state to retain the obligated autonomy of ASTU; and performance evaluation as an instrument to strictly steer ASTU. While the aforementioned coercive mechanisms belong to the state, the non-state mechanism such as contextual mechanisms refer to market-related pressures are also identified as a theme. The capacity of the sectorial ministries responsible for ruling ASTU emerged as an informal, forceful mechanism that affects the likely success of ASTU in decision making. On top of these state and non-state environmental factors, university-related forces such as knowledge factors, lifespan of the university and dependency are also identified. Therefore, the following discussions are made through narrations of the perceptions and views of participants.

Regulatory and administrative requirements as a coercive mechanism

Regulatory and administrative requirements have the power to shape the practices and processes of an organisation forcefully. ASTU, as a public university, can be considered state machinery that is subject to state policies, rules and regulations, politics, administrative requirements and performance evaluations. Besides, the university is expected to have a multi-faceted relationship that can be defined in terms of power relationships. This relationship can be regulatory or administrative, which emerged as a sub-theme and was found to be the major reason for the differences observed between de facto and formal autonomy in this study.

Gaps in policy as a coercive mechanism

As a tool that guides the actions and functions of a focal organisation, policy sometimes cannot precisely define every principle in detail and leaves gaps that challenge decision makers to understand them. Besides the fact that policy defines what is obligated, prohibited and restricted, it sometimes has a loophole that might end up constraining the decision-making competencies of universities. Thereby, de facto and formal autonomy appear different. Ender (2017, p. 62) indicated that there is a possibility that formal policies, rules and regulations leave spaces for the decisions to be made at a local level, 'as they cannot prescribe action in every single detail'. The gaps in the policy might deteriorate the confidence of the organisation in decision making. Hence, the following discussion is based on policy document analysis to explain why de facto and formal autonomy appear different.

Concerning formal autonomy, the Ethiopian higher education proclamation indicated that 'the terms of office of the president of a public institution shall be six years and of the vice president four years; provided, however, that they may be repeatedly reappointed' (Higher Education Proclamation, 2009, p. 5015). How many terms can they be reappointed? This is a question for which the policy does not give an answer. Though this legal framework sets the minimum number of years a president and vice president could occupy offices, it does not limit the number of terms to be at the office. This entails that the policy does not precisely articulate the number of terms that the university president shall occupy offices. Thereby, this may informally make leaders compromise ASTU's rights in favour of assuming more terms at office.

As far as the nomination procedure is concerned, the policy indicates that the board issues directives regarding the qualification requirements, nomination

procedures and the appointment of vice presidents (FDRE, 2009). However, the criteria are not precisely defined, which may open the door for subjectivity. Thus, this type of gap in the policy may confuse the decision to be made. As indicated in the higher education policy (see Chapter 4), university presidents have an enormous responsibility. Besides, the policy indicated that university presidents are monitored and evaluated by the board and the sector ministry responsible for governing the university. It also urges the university to report to the 'appropriate government organ'. This is a vague concept, included in the policy that could put the decisions to be made in a quandary.

Regarding the nomination and appointment of the university board chairman and members, the policy does not specify the competencies that the board chairperson is supposed to hold, and there is no officially defined criterion upon which the board chairman is supposed to be nominated and appointed. This formal approach might give the state a chance to manipulate the university board and thereby indirectly steer ASTU.

The other observed mechanism that might affect the exercise of university autonomy is the contradictory elements of different policies. For instance, while the Ethiopian higher education proclamation gave the freedom to use an unutilised portion of allocated grants as a budget subsidy only for the capital budget (FDRE, 2009), the Financial Administration policy totally denies it. It also clearly articulated that 'the unspent balance of an appropriation granted for a fiscal year shall lapse and shall be credited to the treasury account of the Ministry' (Federal Government of Ethiopia Financial Administration Proclamation, 2009, p. 4814). This means ASTU's action can be limited because of these contradictory elements of the policies.

Conversely, though the state formally empowers government sectors, such as ASTU, it sometimes retains some of the delegated power formally. For instance, Ethiopian universities have formally been given the autonomy to determine their curricula, but the policy places a condition upon which the public institutions can participate. Similarly, in financial autonomy, though public sectors have been authorised with expenditure autonomy, the state's procurement and property disposal agency has been given the right to procure goods and services falling within the list of common user items on behalf of public bodies such as ASTU (FDRE, 2010b). In addition, academic staff members have been given 'the right to be promoted and assume new academic rank based on merit that is subject to rules drawn by ruling sector ministry and internal rules and regulations' (FDRE, 2019, p.11467). Likewise, the policy indicated that the sector ministry has been given the

right to issue a minimum academic staff profile concerning educational qualifications and professional ranks, which shall be complied by every institution. This means the policy left a room through which the state can intervene in ASTU's decision.

These data show that the Policies that guide the decision to be made by ASTU lack clear articulation, and precision in setting some criteria on some of the issues. Besides, there exist role overlapping on some areas of decision making, and vague concepts are utilized. Moreover, the above data has shown that there exist contradictory elements among policies in which the decision-making space allowed by one of the policies is prohibited by another policy. It is also found that the types of competencies that given positions, such as board chair and members, hold are not clearly defined. This implies that the policies have a loophole that could challenge ASTU's decision-making competencies. Thus, policy can be a mechanism that shape and reshape ASTU's de facto autonomy in such a way that it appears different from formal autonomy.

Rules and regulations

The state, as a powerful political institution, has the power to institute rules and regulations. All participants underscored that the rules and regulations and administrative requirements are the major causes that could make a difference between de facto and formal autonomy at ASTU. The lack of a university-specific financial policy, as indicated by informants, is among the conditions that could limit ASTU's decision-making competency. Informants believe the financial system in the country is a challenging one. Regardless of the peculiar characteristics built in their nature, all sectors, including universities, are governed with one uniform set of rules and regulations that can be considered one size fits all (ASTU4). It is also noted: '… for me, the characteristic of the university is unique, and the financial system could not often let some activities be supplied with some items whenever required' (ASTU16). More specifically, informant ASTU10 noted:

> The regulatory framework did not consider the special functions that the university has been undertaking. You can take research and student accommodation as an illustration. ASTU is a boarding institution, and thereby, several uncertainties require unforeseen expenses in providing accommodation services for students. But the financial policy does not consider these expenditures, and thereby, we could not utilise our budget as the situation demands. (ASTU10)

The existing uniform financial policy fails to compensate for the efforts made by both students and teachers if they design some project that promotes community services (ASTU4). ASTU5 also indicated that having a similar financial and procurement system that fits all sectors might be ideal. In addition, emphasising how uniform rules and regulations have been affecting ASTU, informant ASTU3 noted:

> … [T]he existing rules and regulations should consider the institution's specific realities and facilitate better expenditure processes. Ruling a university whose working time is 24 hours a day and whose environment is highly volatile uniformly with a small sector whose task can be done within 8 hours a day does not work. Look, university security, the librarian, health centre, transportation, student cafés and other offices work 24 hours. Likewise, food and dormitory service provisions demand a special consideration in policy. (ASTU3)

As presented above, a uniform financial system, by implication, is associated with the inflexibility to fit the actual situation at ASTU. Consequently, as is indicated by informants, some projects at ASTU were unsuccessful and terminated, a huge amount of the budget had been returned to the government treasury, the interest in conducting research had deteriorated, community service was not compensated, and some practical learning had not been taken place.

In this regard, informant ASTU3 commented that having money at hand and the required professionals and facilities at ASTU does not guarantee success. Rather, the utilisation of these resources matters in executing its mission. Emphasising how the utilisation of the budget is difficult at ASTU, informants stated, 'ASTU has money, which it can't utilise as it wishes' (ASTU3); 'ASTU is not challenged with insufficiency of the amount of budget' (ASTU10); '…You have the money at hand, but you fail to use it effectively' (ASTU12); 'The budget that ASTU has been provided might be enough to run the activities' (ASTU13); 'Assigning money for the research project is not a problem...' (ASTU14); 'The problem is not the scarcity of money...' (ASTU15); and '…You have money at your disposal, but you can't supply what is required…' (ASTU16).

According to ASTU3, one of the conditions that affect the efficient utilisation of funds is the mismatch between the required time to execute ASTU's functions and the lifespan of a budget (fiscal year). While ASTU's functions, such as research, are demanding over a relatively extended time (more than one year),

which is dependent on the research project, the fiscal year is limited, in a real sense, to less than one year[5]. Here are informants ASTU3's and ASTU5's observations:

--- ASTU's work is often related to research and technology transfer, which could take a longer time that exceeds one year [the Ethiopian fiscal year]. Simultaneously, these kinds of jobs are continuous. It is impossible to break when the fiscal year is over. For instance, the internship is supposed to be conducted starting from July, when the ASTU budget is expired and the new budget is not yet approved. (ASTU3)

The activities conducted in a university often take more than one year. For instance, a given research project might take a minimum of three years, and the procurement process might take more than a year or two. Conversely, the budget's lifetime is one year. This means that we cannot perform some activities within a fiscal year and thereby fail to use that money. (ASTU5)

Similarly, informant ASTU8 indicated that the mismatch between the budget's liquidity time and lifespan of activities in the university affects the likely budget utilisation capacity of ASTU. Besides, informants have considered the administrative requirements built into the procurement process a bottleneck.

Informant ASTU3 indicated that ASTU had not totally denied its decision-making space in procurement. ASTU has been conducting procurement within the framework of procurement procedures designed by the government, which includes planning, bidding and procuring the required goods and services. The financial administration policy articulated that the preferred method of bidding by the Ethiopian government is open bidding. In practice, informant ASTU9 commented that the requirements of the bidding procedure are tedious and have the power to limit ASTU's ability to utilise its budget.

--- [I]f you request a supply for what has already been planned; you could not get it on time because the bidding process is very long. Sometimes, you are forced to repeat the long bidding process, and you might stop the bidding process for different reasons, or it requires additional time that might exceed the fiscal year. (ASTU9)

ASTU5 also elaborated specifically on the process of open tendering:

Our procurement rule dictates that the bid announcement should be open for one month. If more than three suppliers are not competing, ASTU shall cancel and

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[5]In Ethiopia, the fiscal year starts in July, but budget disbursements are often made after September. This means for the first three months, ASTU functions without a well-defined budget (ASTU8).

engage in rebidding. On the other hand, if the bidder missed some of the requirements in their sealed envelope, ASTU is forced to reject and announce rebidding. You can't break this process, and sometimes, it takes more than a year. If you missed one of the steps in the bidding process, you are liable for that. Thus, the procurement process has been made highly complicated. (ASTU5)

Informant ASTU9 also indicated that the implication of the complicated procurement procedures on ASTU's functions is visible in that some activities often get trapped in the teaching-learning process and research. Linking procurement challenges with his experience, ASTU2 also noted that the procurement of chemicals took a very long time because there was no local manufacturer, and the supplies needed to be imported. Sometimes, the procurement department could not provide all the required supplies, which could interrupt the process. The other problem indicated in the procurement process is that buying a service in developing a prototype of a given model is impossible within this procurement process.

Other participants, ASTU6 and ASTU10, perceived that the procurement procedures and preferred bidding method (open bidding) affect ASTU's decision making. They argued that ASTU has not been maximising much benefit out of its budget. Besides these long and tedious procurement processes, the policy formally dictates the approval requirement for both planning the procurement and the awarding for the supplier. ASTU16 noted: 'After the bid process is finalised, we are required to submit the document to MoFED for approval, and finally, when we are permitted, we could give an award and sign an agreement with suppliers' (ASTU16).

The other administrative process that challenged ASTU was the management of the unspent balance of the ASTU budget. As is indicated under Section 7.2.1 above, the Ethiopian higher education proclamation gave the freedom to use an unutilised portion of allocated grants as a budget subsidy for its capital budget (Higher Education Proclamation, 2009), but the country's financial policy does not (FDRE, 2009a). Actual practices have shown that holding the unspent allocated grants at ASTU's disposal is impossible. ASTU4 indicated that regardless of the sources of funds (generated by ASTU and government appropriated), an unspent balance of the budget is required to be returned to the government's treasury (ASTU4). Similarly, the data obtained during the first phase of this study through the checklist showed that ASTU has no right to carry over unspent money for both recurrent and capital budgets from any sources to the next budget year.

As the financial policy discussed under Chapter 4.4 above indicated, ASTU has been given the freedom to transfer its budget from one code to another with some restrictions included. In practice, informant ASTU3, among the members of ASTU's top-level leaders, elaborated on the administrative complications behind the budget transfer. ASTU3 noted that, once ASTU has assigned a given budgetary code/head, it cannot shift that budget when the need arises. ASTU4 also elaborated using the following example:

> For instance, a fixed budget is allotted for student feeding. If that money could not cover expenses related to student food for a different reason, ASTU could not decide to use the available money from some other codes. The only solution you might get is requesting a code amendment and getting official permission to move the budget from one head or subhead to another. Asking permission is good, but it has its own fixed time to transfer money from one item to another. However, the uncertainty is not time-specific. Besides, the transfer of the budget from projects to recurrent budgetary items is forbidden. This limits the likely efficient and flexible utilisation of ASTU's budget. (ASTU4)

ASTU3 commented that, despite the restrictions on budget transfers, the hectic procedures of obtaining permission from MoFED in transferring one project budget to another is 'disgusting'. This implies that ASTU has not flexibly been utilised its budget, which could limit the execution of its mission.

As far as budget disbursements are concerned, the state sets the schedule for the disbursement to be made. However, in practice, the disbursement might be delayed for more than two months. For instance, informants considered a delay in disbursement as one problem that affects ASTU's decision-making competencies. ASTU8 suggested that the problems start with a delay in budget disbursement. ASTU4 also indicated that delays in budget disbursement are one of the factors that limit budget utilisation. As an illustration, ASTU4 noted: 'If the researcher wants to get supplies in September, the third month in the fiscal year, it is often not possible to get money'. Informant ASTU3 also suggested:

> The shortest fiscal year is getting shorter by the delay in the disbursement to only nine months. I mean, the disbursement had taken a minimum of two months and a maximum of three months, and by implication, the fiscal year is about nine months. This, in turn, complicates the management and utilisation of ASTU finance. (ASTU3)

Administrative requirements have not been limited to financial autonomy; they also affect the academic autonomy of ASTU. For instance, informant ASTU14 indicated that the state limited educational programmes to be delivered at ASTU to

only 14 at the BSC level. It is also noted that ASTU cannot open beyond this limit without permission from the state. ASTU5 also indicated this similarly, but placed more emphasis on the government approval requirements and permissions to open new academic programmes. ASTU5 argued that the proposal to open a new educational programme should be communicated to the governing sector ministry for approval. In this regard, informant ASTU7 commented that ASTU has often been through needs assessment and identified an area that demands curriculum development scientifically. However, it did not get permission to introduce a new curriculum.

Likewise, as noted by informant ASTU3, ASTU designed a project called Botanic Garden as one component of community service. Nonetheless, it has not yet materialised because MoFED has not permitted or assigned a budget to the project. It is also noted by informants that community service is not given a budget code in the template developed by MoFED for the professionals engaged in the provision of the service. Magnifying this problem, informant ASTU2 noted:

> In the Ethiopian finance system, there is no room to pay a fee for professionals. Unless you compensate for the efforts made by professionals from the university, community service is unattainable. I believe that whenever professionals engage in extra jobs like community service, they must be compensated. But the financial system in Ethiopia has no room for this kind of activity. (ASTU2)

Financial rules and regulations have not only been impacting the funds assigned by the state, but also the income generated by ASTU. Income generation is one of the sources of ASTU's budget and includes tuition fees, services (registration and certification) and auxiliaries such as renting its building and training and consultancy. However, as noted by informant ASTU1, it has not covered a significant amount of the ASTU budget. As far as management is concerned, informant ASTU16 noted that the budget generated by ASTU is subject to the rules and regulations, just like state-provided funds.

Echoing similar views, ASTU6 commented: 'In Ethiopia, whether you generate or are funded by some other organisation; ASTU has no power to utilise the money flexibly. Look, if ASTU generates more income than it had already planned, it could not utilise it'. Elaborating on the process, informant ASTU16 described:

> Look, first, ASTU should plan the amount of money it might generate during the upcoming fiscal year. For that matter, ASTU might generate either less than or sometimes a bit greater than what is planned. Then the government allows ASTU to distribute the planned and potential fund to be generated alongside the budget

heading identified by MoFED, using the budget template developed by MoFED. Finally, ASTU requests approval for the budget it generated from MoFED. Once it is approved, ASTU could not use the money beyond what is planned. Otherwise, you must ask permission reasonably to move an unutilised budget from one head or subhead to another.

Similarly, informant ASTU10 indicated that financial rules and regulations restrict the utilisation of the budget at ASTU. As an illustrator, ASTU10 indicated that a huge amount of money has always been returned to the government treasury. Likewise, ASTU12 associates the underutilisation of the budget at ASTU with the termination of the research project: 'The final fate of many research projects in this university is termination, and the already allotted budget often is returned to the government treasury. Look, you have the money at hand, but you fail to make authoritative action in utilising it' (ASTU12).

Similarly, informant ASTU2 attributed ASTU's lack of success in executing its expectations for research to a poor supply of research inputs, such as infrastructure, and poor supply from the local market. As discussed thus far, informants ASTU10 and ASTU4 attributed the poor research practices at ASTU to the financial rules and regulations and procurement procedures. As an illustration, ASTU4 takes the unutilised portion of the budget, which is often from the budget assigned for research. Informant ASTU3 commented in a more elaborate fashion:

> ASTU's jobs are continuous; it is impossible to break when the fiscal year is over. The financial rules and regulations are in the state of discouraging university teachers and letting them rely on teaching and learning activity only. The researchers commit their maximum time to settle the processes of procurement, and finally, they might end up quitting it. Look, I was a research vice president for five years. At that time, the number of research projects proposed and competing for the fund is about 60 per year. Gradually, the number of the research proposals submitted has been declining, and currently, ASTU has 13 research projects approved, because of the country's financial rules and regulations. (ASTU3)

> A research project has its own lifespan. Imagine what would happen if the supplies for laboratory equipment were delayed, meaning you could not run your research project according to your plan, which is disgusting. Sometimes, you find some part of the laboratory equipment missing, without which you could not proceed. For example, I remember the supply of one part of a machine delayed for three years. Conducting research is difficult in ASTU. Though the required money is available, the financial rules, regulations and procedures did not allow you to do so. (ASTU7)

Other participants had a similar perception, except for their wording. Thus, some phrases and sentences are extracted from their transcripts to show how finance and procurement rules affect research practices at ASTU. 'The procurement process is

very long and complicated, and … research practice had been trapped' (ASTU9). 'Oftentimes, the suppliers for research equipment and laboratory facilities are found outside the country. Thus, it is not easy to supply within the existing procurement process' (ASTU10). 'Assigning money for the research project is not a problem in this university; it has been assigned in the millions. However, utilising the assigned money for research is complicated' (ASTU14). 'The challenge in conducting research at ASTU is the lack of the required supplies. Researchers have often wasted their time working with financial issues, which distracts from their concentration' (ASTU13).

While informants were talking about financial rules and regulations, the term *hudha*, whose equivalent English term is *bottleneck*, appeared many times (all participants except ASTU17 and ASTU18). Similarly, the term *rakkisa*, whose equivalent meaning is *challenging*, appeared a great many times (ASTU1−ASTU14). Both terms hold similar meanings, and they magnify how financial rules and regulations limit ASTU's competency to make finance-related decisions. This implies that the uniformity, inflexibility, complicatedness, emphasis and tedious procedures of financial rules and regulations are the constraints that limit the likely benefits of ASTU from its formally determined autonomy. The financial rules and regulations are not limited only to restricting the exercise of financial autonomy; they also spoil the success of ASTU in maximising its de facto academic autonomy, such as research, teaching learning and community service. Therefore, ASTU is coercively affected by financial rules and regulations, and de facto autonomy shaped to appear less than formal autonomy.

Furthermore, the financial controlling mechanism, as noted by informants ASTU1, ASTU2, ASTU3, ASTU4 and ASTU 5, affects the productivity of ASTU in utilising its budget. These participants argued that financial control is important to the extent that it does not hamper the link between the expenditures and the success of the university in executing its mission. They believe that the existing mechanisms of control are not productive. As an illustration, they took the focus of the government in control, which is more input- and process-oriented and without much emphasis on the output. Informant ASTU3 noted:

> Look, the financial rules and procedures have often focused on input and process, but not output. For instance, if ASTU is good at following rules and regulations in processing its finances, nobody cares about the likely output to come. Practically, in our university, researchers were given money for their research project, and they did their research. When their research was evaluated, it was realised that the output, such as technology transferred and innovations identified, is tangible, and ASTU is convinced that the researcher did a good job. Though the job is done, the money

that the researchers used is not liquidated yet, because the expenditure process was not maintained. For me, ASTU should monitor how research is progressing and its output, instead of controlling each financial routine. (ASTU3)

Likewise, ASTU2 suggests that, without considering output effectiveness, having an effective financial process does not make sense. Likewise, informant ASTU1 commented that the financial rules, regulations and procurement procedures are focused on the process, not the output. 'While one attends to every process, the fiscal year often finishes up' (ASTU1). Besides, ASTU10 indicated that the focus of the financial rules and regulations is more bureaucratic, and thereby, they are susceptible to corruption.

In addition, audits are often considered a controlling mechanism. In this regard, higher education proclamation No. 1152/2019, as discussed in Chapter 4.4, detached the governance of the internal audit unit from universities. The recruitment, promotion and compensation of the ASTU internal audit had been made by the university, itself. Now, it is the responsibility of the MoFED. The shift was made to facilitate the auditing function free of pressure, such as job insecurity. Indirectly, it promotes strict control over ASTU's financial autonomy.

> The major tasks that the audit directorate is expected to perform are realising whether the budget appropriated by the government and generated by the university is utilised as per the financial rules and regulations or not. The audit unit has been working to execute its mission as well as create an additional asset for the university. The focus of the audit unit is on how the fund is utilised. This department is responsible for realising and checking whether any expenditure made in the university is in line with the financial rules and regulations or not. (ASTU18)

If some steps are missing, ASTU18 argued:

> We (audit unit) comment on them and report to the president and MoFED as per the rules and regulations. We believe that the government's financial policies must be implemented when anybody makes expenditure. We have been here to check the proper implementation of the policy, as our name 'auditor' indicates. We are not external; we are internal auditors. We used to support them on how to implement the financial policy daily and control the system. (ASTU18)

Overall, these data reveal that uniform and inflexible rules and regulations with the shortest fiscal year, delayed budget disbursements, complicated procurement rules and procedures, restrictions on holding the unspent balances of a budget, highly bureaucratic transfers of the budget from one budget head to another, approval requirements, placing externals as an internal audit and the focus of financial control that ignores outputs are the factors that challenged decision making

competencies of ASTU. Correspondingly, ASTU has poorly been utilising its budget, and consequently, the teaching, research and community services conducted by ASTU have been challenged. This implies that these mechanisms have coercively been deteriorating ASTU's de facto autonomy and the likely benefit that ASTU might gain from its funds. Therefore, de facto autonomy could be shaped and reshaped by the regulatory and administrative power of the state and appear different from formal autonomy.

Political influence as a coercive mechanism

A government is a political institution that has the power to issue orders, rules and policies through which it realises its survival and legitimacy. In this study, political power emerged as a coercive mechanism that could shape practices at ASTU. As perceived by informants, the interests of the state to realize its presence at ASTU through top-level leadership nomination and appointment mechanisms has been considered the real limits of de facto autonomy. Ordorika (2003) argues that state political interest can be secured through a university's top leadership nomination and appointment process. Referring to the nomination and assignment of the leading ASTU president, informant ASTU1 commented:

> Over the last 27 years[6], Ethiopian universities' leadership positioning including the presidents, vice presidents and boards, has been a political assignment[7]. Though the board nominated the leading ASTU president, the ruling political party, especially the high-level officials' interest has informally been considered. Look, even if we [ASTU] nominate a highly professional and dedicated nominee, he/she will never occupy the position without the willingness of high-level political elites. (ASTU1)

> When ASTU was established, there was no board assigned to run ASTU. Thus, the nomination of the vice president was made by the ruling political party in Oromia [the region where ASTU is situated]. Then, based upon the recommendation of this party, the final decision of appointment was made by the MoE [the sector that was responsible for governing ASTU]. (ASTU12)

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[6]*The last 27 years* refers to the period from 2001 to 2018. This was when the Ethiopian People Revolutionary Democratic Front (EPRDF) led the country before the 2018 reformation.
[7]Since the current government was established in 1991, the tradition in Ethiopia has been for top leadership positions to be assigned by political party, often from members of the ruling political party.

Elaborating on the view presented above, informant ASTU13 suggested that the nomination of ASTU's vice presidents was made by a political party and reported to MoE for the appointment. 'Those vice presidents were proposed by the ruling political party in the region. I am telling you this because I was close to those vice presidents at that time. The final appointment letter was then issued by the MoE. (ASTU13)

In addition, informant ASTU13 indicated that political elites had an indirect role in influencing the board during nomination. As indicated by informant ASTU1, there was no public announcement made to recruit the leading ASTU president. Nevertheless, the board conducted an interview with the then-vice presidents and identified nominees without predetermined criteria. Besides, ASTU1 indicated that other staff members did not get the chance to be candidates. Similarly, ASTU8 also noted: 'If you search for documents, you may find only the letter of appointment copied for the university; otherwise, you can't find the role that ASTU has been playing in nominating its president'.

Similarly, informants ASTU1, ASTU8, ASTU9 and ASTU10 viewed that potential nominees for vice presidential positions, political membership or at least neutral political positions have been serving as a hidden criterion for both nominations and appointments. Sharing a similar view with these informants, informant ASTU 12 noted that the applicants for vice presidential positions have been checked for their affiliation to the ruling political party, which informally overshadows the process of nominating and appointing the university vice president. Similarly, the data obtained during the first phase of this study have depicted that politics is the binding criterion in the nominations and appointments of vice presidents[8]. Conversely, some informants (ASTU7 and ASTU11) view the situation a bit differently. They view it as if the president picks whom he believes is appropriate for a vice presidential position. This means that the criteria for the nomination of vice president are determined by the president. In this case, these data demonstrate that state interest has played a dominating role in the process of nominating and assigning ASTU leadership.

Likewise, as noted by ASTU1, ASTU2 and ASTU3, the nomination and appointment process of board members at ASTU ignored the autonomy of the

[8]Although their wording is different, six informants similarly noted: 'Vice presidents are handpicked by the president. … To assume any position at ASTU membership for the ruling party is a common requirement' (extract from data collected during the first phase of this study through open-ended questions in the questionnaire).

university to nominate three voting board members. Instead, as these informants indicated, the state did all the processes itself. The policy articulates that individual members' professional competency (exceptional knowledge, experience and commitment) and the involvement of potential customers of ASTU are the criteria identified to nominate and appoint board members. As illustrated by respondents, the practice of assigning board members at ASTU happens otherwise. The following informants' comments are revealing:

> The existing assumption is that board members are supposed to be appointed based on their profession that might have a relationship with what ASTU is responsible for [science and technology]. Or those who are leading institutions related to science and technology. The intention is to have individuals who could provide support for ASTU. But in practice, the assignment of professionals has not yet materialised. For example, ASTU board members are chief executive officers of government organisations such as the Ethiopian telecommunication authority, Ethiopian industrial park, Oromia industrial park, a representative from the Ministry of Foreign Affairs and the Institute of Technology of Addis Ababa University. As you can see, these individuals are heads of offices, and most of them are state representatives and are political appointees at their respective offices. (ASTU3)

> Most of the board members are not assigned based on their expertise. Almost all of them belong to a defined government sector. They are heads of their respective offices, and it is not the individual who is assigned as a board member, but the office. The office assignment, on the other hand, is political. (ASTU11)

Furthermore, it is indicated in this study that the state's powerful intrusion has been causing individuals at the university to become frustrated and submissive. As is suggested by ASTU3, whatever decisions the state may make, ASTU and its board have no power and competency to defend their autonomy.

> Look, it's not as simple as we say for ASTU to reject the instruction that might come from political elites as well as the sector ministry. You know, this university was renovated as an applied science and technology university with a desire to advance in science and technology. Thus, they are much more concerned with having a leadership that shares their intent. (ASTU3)

Similarly, informant ASTU1 indicated:

> You know, the state's political interest is high, and the things in developing countries are often the reflection of the political situation in the country. Universities are not an exception. ASTU and other universities' presidents are political appointees. The state might be threatened by political oppositions that had been emerging from universities. That is why the state is very much concerned about the nomination and appointments of top leadership. (ASTU1)

These data reveal that the state has formally and informally taken the lions' share of the nomination and appointments of university leaders. Though it is hidden, the state has imposed political membership as nomination and appointment criteria. Assigning political leaders as a board member and chair are found to be the mechanism through which the state secures its presence at ASTU. In addition, the maturity level of ASTU, during the formative stage, opens doors for the state's extra involvement in the nomination and appointment of ASTU's top leadership. This implies that the state's interest in making ASTU leadership its representative seems higher, which gradually deteriorates the confidence of ASTU. Thus, this state's heightened political intervention could be the coercive cause for de facto autonomy to appear less than what is legally obligated.

Abjuration as coercive mechanism

Sometimes, states hold the autonomy that they formally obligate to be exercised by focal organisations. In this study, abjuration emerged as a sub-theme in the interview's transcription. As articulated in the higher education proclamation, the nomination and appointment of the vice president and nomination of the three voting board members are the formally determined autonomy of universities in Ethiopia. However, in practice, as viewed by the informants, ASTU was not significantly involved in the process. In this regard, informants ASTU8 and ASTU14 argued that the 'how' of nominating expatriate ASTU presidents is unknown. Besides, ASTU7 noted that 'expatriate presidents from America, Germany and Korea had been assigned as president at ASTU at different times, but ASTU had no information on how they were nominated and assigned'. Though informants ASTU1, ASTU2, ASTU9 and ASTU13 share similar views with what is indicated above, informants ASTU3 and ASTU12 noted that the nomination of the late ASTU president from Korea was delegated to a given organisation called DAAD [Deutscher Akademischer Austausch Dienst, translated as German Academic Exchange Service].

As far as the academic dimension of university autonomy is concerned, opening a new academic programme and closing the old one are determined to comprise universities' autonomy. In practice, the interview data have shown that since its renovation in 2011, all social science academic programmes were closed. Hence, ASTU had been running only science- and technology-related academic programmes. As noted by informant ASTU6, the state took direct action and cancelled the social science courses, and ASTU had no role in the process.

Informant ASTU1 also indicated that though there was an interest from the university and, ASTU1 argued, the Ethiopian government had wanted to dedicate ASTU to only science and technology fields of study. However, ASTU wants to retain social science courses, but it could not protect them from closing Informant ASTU3 also noted:

> The decision to close social science academic programmes was made with the direct instruction of the government, and ASTU has no power to challenge and retain educational programmes as it wishes. Look, the closing of social science and some technology courses was a sudden action by the government, and the decision about curriculum and academic programmes had been made top-down. ASTU had no choice.

Furthermore, though undertaking demand-driven community service is made the responsibility of ASTU by law, the practice is otherwise. As noted by ASTU1, it is the state that often defines the focus area of the community service that ASTU is supposed to provide. Informant ASTU1 indicated: 'We have been told to establish an enterprise that only works on technology transfer, but ASTU wants to include the use of technology as well. However, it could not bypass the instruction'.

Similarly, the transcribed interview data have demonstrated that ASTU has formally been denied its expenditure autonomy. As is discussed in Chapter 4.4, procurement planning and determining the amount of budget to secure the procurement is the responsibility of ASTU. In practice, the procurement activity is not limited only to the university. Informant ASTU16 indicated that there is a state agency that is made responsible for handling the procurement process for ASTU. One of the responsibilities of the Federal Procurement and Property Disposal Service Agency, as indicated in the policy (184/2010), is conducting the procurement of goods and services. According to participants ASTU1, 2, 3 and 16, the role of government in this procurement process is bidding and making an agreement with suppliers for three years. For items, the procurement agency and suppliers made an agreement; ASTU has no right to procure from other suppliers, even with a lesser price (ASTU1). Including the restrictions made, informant ASTU16 elaborated:

> Items with engines such as vehicles and motorbikes are not allowed to be procured by ASTU. Simultaneously, common users' items procurement process has been made the responsibility of the state procurement and property disposal service. These kinds of items are not allowed for ASTU to conduct procurement. The price of the suppliers identified by the agency is often found to be unfair. Getting items with the required quality and quantity is another headache, but ASTU could not reject the decision. (ASTU16)

For his part, ASTU1 impugned the practices of bulk purchasing by the procurement and property disposal service agency for common user items:

> … [I]t is common to observe the wrong deeds and sins committed in the agency. Besides, our requests to purchase some common users' items, which ASTU could not make by itself, had not been supplied on time with the required quality and quantity. (ASTU1)

In the staff dimension of ASTU autonomy, as indicated by informants, the state retained some of the determined ASTU autonomy. Though the recruitment criteria are the responsibility of ASTU, informant ASTU1 suggested that ASTU is limited to recruiting and selecting applicants based on criteria predetermined by the state. These criteria did not consider the local labour market. 'If ASTU had been allowed to participate, we could have included our opinions and concerns in the academic staff recruitment guidelines' (ASTU1). Referring to the human resource management guidelines, ASTU6 indicated that the guidelines for hiring, promoting and dismissing academic staff have been made the role of the state.

> The guiding document for the management of academic staff is senate legislation. However, whether the practice is up to the legislation or not is questionable. When you ask why that happens, you might come across different reasons. For me, the state has unlimited power to manage ASTU, and the university lacks the confidence to protect its territory. The criteria that the state identified are not bad, but they did not rely on the actual situation in the country. If you want to recruit academic staff using these criteria, you might not find applicants that satisfy it from the local market.' (ASTU8)

So long as ASTU uses the profile and criteria to select staff by the state, it has the freedom to undertake the recruitment of its staff without intervention from the state. Similarly, ASTU1 indicated:

> … [D]ifferent criteria for staff promotion such as number of research publications and the value of publication in teachers' promotion has directly been made by the sector ministry responsible for governing ASTU. As an illustration, you can take the effort that ASTU has been making to improve the criteria, which was not successful. Even ASTU was not consulted while the criteria were identified. (ASTU6)

Elaborating on the inappropriateness of the criteria, ASTU9 noted:

> …. For example, you can take the criteria that give a 15% credit for assuming a given position in the university. Look, the number of staff members is large so you can't get the chance to assume a position. What happens then? It is not that sound to have such criteria. (ASTU6)

As indicated during the interview, the state's intrusion in determining the staff promotion criteria is still there. Lately, informants have commented that MoSHE will determine the academic staff promotion criteria, repeating previous practices. The remark that they made is indicative of governmental concern regarding academic staff promotion. According to some of my informants, ASTU2, ASTU7, ASTU12 and ASTU14, MoSHE is progressing to develop uniform academic staff promotion, regardless of potential distinctions among universities. Informant ASTU12 indicated, 'MoSHE is planning to have a one-size-fits-all-kind of teacher promotion across all universities in the country'. Informant ASTU 10 also commented: 'The promotion criteria for university teachers have been made the responsibility of the state, repudiating what is formally determined by the policy'.

Otherwise, conducting the promotion of academic staff has been made by ASTU, and the state has not been managing beyond determining the criteria. So long as the university promotes teachers using the criteria made by the state, ASTU6 said: 'There is no such problem'. Similarly, ASTU7 suggested, 'Based on the criteria made by MoST, ASTU could promote academic staff without approval from anybody else'.

However, despite the legal provision that empowers the disciplinary committee, vice president's office for academic affairs and the president to undertake the dismissal of academic staff, respondents commented that sometimes there exists board involvement. The remarks made by some of the informants are revealing.

> The dismissal of ASTU academic staff is based on Senate legislation. If academic staffs commit a serious breach of duty and/or violation of disciplinary regulations, it shall be judged according to the issues defined in the legislation. But sometimes, you can observe while externals such as the board chairman undertake the dismissal of academic staff. (ASTU9)

> Sometimes, some individuals abuse their power. One of the chairmen for the board was highly powerful in his political position, like, I do not want to mention his name. As I said, when the Board chairperson is powerful, they make some decisions without considering the rules and the procedures stipulated by law. The board chairperson was politically powerful and made decisions of dismissing academic staff on his own. (ASTU17)

These data prove that the university has been denied its autonomy on the nomination and appointment of vice presidents and nomination of three voting boards, including its discretion to determine the criteria to recruit, promote and dismiss staff through direct state intervention. It is also depicted that ASTU's expenditure autonomy is partly taken to be the responsibility of the state, and it is

deprived of the right to determine the quality of goods and the ability to deal with the price of the items to be procured. In addition, these data highlight that ASTU has lost its autonomy in terms of determining education programmes. The university lacks competency, and thereby, its dedication has been determined by the state. This implies that the state has been abjuring some of the discretion of ASTU in decision making and owned the responsibility by itself. Thus, ASTU's de facto autonomy has coercively been obstructed and appears lower than what is determined by law (formal autonomy).

Performance evaluation as a coercive mechanism

As indicated in the policy, university presidents are required to report to the board and the sector ministry (FDRE, 2009). In practice, as indicated by informants, the ASTU president is used to report to different government sectors, and the evaluators are numerous. Some of my informants noted that the ASTU president handles all activities performed at the university and is required to report to numerous government sectors such as the ruling sector ministry, ASTU board, parliament, MoFED, general auditor and federal sectors such as the civil service commission, anti-corruption commission, ombudsman, construction authority, police and procurement agencies (ASTU2, ASTU3, ASTU 4). It is also noted that the ASTU president's responsibility is not limited to the officially designated missions.

> The ASTU president's evaluation has been conducted not just for his performance in executing those missions for which ASTU is established. Yet, simultaneously, the ASTU president has political responsibility, for which he has been evaluated for his performance in political activities. (ASTU9)

Similarly, ASTU 11 commented:

> Our president commits the maximum of his time and energy to manage political activities. He is always busy in conducting political meetings inside and outside the campus, both at a regional level and at a federal level. For me, the president's competence in efficiently performing politics matters more in securing his position. (ASTU11)

Moreover, the irregularity of the performance evaluation process, as noted by the top leaders, themselves, is challenging. Except for the sector ministry responsible for governing ASTU, the board and MoFED, other government sectors, those

defined above, have no regular time to conduct the performance of ASTU president. It is suggested: 'Much of our time has been occupied meeting with these numerous evaluating bodies. Consequently, it is difficult to engage in predetermined planned activities' (ASTU3). The bombardment of performance evaluations by numerous evaluators and their irregularity can also be considered challenges that affect the decision-making competencies of ASTU (ASTU1, ASTU2, ASTU4, ASTU5).

These data illustrate that the performance evaluation system, extended responsibility and lack of specified time to conduct performance evaluations affect the ASTU president's time supposed to be focussed on tasks at the university. Thus, ASTU could not devote the maximal effort to its mission. Hence, performance evaluation can be one of the reasons that makes de facto autonomy appears less than formal autonomy.

Contexts of markets and stakeholders as a coercive mechanism

Universities are not always affected by the pressure imposed by the government, but other environmental factors such as market and stakeholders' expectations could shape processes and practices. In this regard, besides the heavy government intrusion mechanisms, some of which are discussed in the previous section, participants indicated that there are informal environmental pressures that challenge ASTU's competency in decision making. Based on informants ASTU1, ASTU2, ASTU3, ASTU4 and ASTU16's suggestions, environmental pressures could be categorised into three: the scarcity of hard currency, which is related to the inability of the local market to supply the required items; the tradition of business in the local market (the existence of a corrupt mentality); and the lack of coordination between the ruling sector ministries MoSHE and MoFED. As these informants noted, the financial status of the country imposes its own challenges on ASTU's budget utilisation. It is also indicated that Ethiopia lacks local supplies for laboratories, pieces of machinery and equipment and hard currencies to conduct procurement. Consequently, ASTU is required to import facilities such as chemicals for both research and teaching.

Emphasising the shortage of hard currency, ASTU16 illustrated that the procurement process initiated by ASTU in 2017 is not yet finalised because of a shortage of hard currency. In Ethiopia, as indicated by informant ASTU3, the fair business-making mentality and free-market philosophy are not mature enough. ASTU 10 also argued that the corrupt local business and corrupt mentality of some

businesspeople is a challenging bottleneck that limits the decision-making competencies of ASTU.

The other challenge is maximising ASTU's benefit from its financial autonomy, as informant ASTU3 related to businesspeople and experts working in the procurement department. Informant ASTU3 noted: 'The businessmen and procurement experts in our country often do not have a developed mentality of rectitude. These might insist the state strictly manage ASTU and hold some of our responsibility' (ASTU3). Furthermore, poor coordination among the sectoral ministries MoSHE and MoFED, as indicated by informant ASTU13, affects ASTU's decision-making competencies. At ASTU, while MoFED is made responsible to handles ASTU's funds and expenditures, MoSHE handles the nonfinancial functions of ASTU. In this regard, one of my informants commented that MoFED and MoSHE lack integration in administering ASTU.

> Look, sometimes, the instructions that MoFED and MoSHE issued contradicted. While MoSHE or other sectors that were governing ASTU were concerned by large on non-financial affairs, MoFED focuses only on finance. Look, ASTU is trapped between these two governors with different interests at ASTU. (ASTU1)

In addition, it is noted by informants ASTU2 and ASTU10 that the university's autonomy is subject to the pressure imposed from its environment. This includes the incorrect perception of the community service that ASTU is supposed to provide. Informant ASTU2 indicated that Adama City administration and others want to be provided with resources in kind (computers and vehicles) and cash. This is not the community service to which ASTU is aspiring. ASTU1 also noted: 'Different sectors and industries are not willing to cooperate with the university, especially during practical learning' because of a lack of trust in trainees' expertise.

These data show that market environments observed in the form of lack of hard currency, local market inability to supply the required input, and corrupted business processes in the country are among the reasons and mechanisms that made de facto autonomy different from formal autonomy at ASTU. In addition, these data reveal that the two ministries (MoFED and ruling sector Ministry) have separate responsibility on the governance of a single institution, which could confuse the university in decision making. This implies that other non-state environmental factors, and wrong perception of the community towards the service that the university is supposed to provide have a power in restricting the likely success that ASTU is expected to secure. By implication, therefore, ASTU could not maximize its benefit from maximum of its determined autonomy and thereby de facto autonomy appears less than formal autonomy.

Ruling sectors' capacity as a coercive mechanism

As indicated in Chapter 4 (4.5), ASTU has been under the governance of varying sector ministries. Does shifting the governing bodies have implications for ASTU's practices in exercising its given autonomy? From the transcript of interview data, it is found that, although there were some additional tasks assigned, ASTU's mission has remained the same while working under distinct sector ministries (ASTU1, ASTU2, ASTU3). As far as institutional autonomy is concerned, being under various sector ministries and guided by the same legal framework does not guarantee uniformity in governance. As noted by informants ASTU1 and ASTU5, the number of universities the sector ministry handles and the university governing experiences of the sector ministry responsible for managing ASTU are the challenges that have been constraining ASTU's decision-making competencies.

Table 20. Sector Ministries Involved in Governing ASTU

No.	Sector ministries	Year	No university to be governed	remark
1	MoE	Before 2011	>35	
2	MoST	From 2011-2019	2	Including ASTU
3	MoSHE	From 2019 to date	>40	

As indicated in Table 20, above, three sector ministries have governed ASTU. While ASTU was governed under the MoE, there were more than 35 universities under the same governance. MoST was responsible for managing only two universities, including ASTU. However, currently, MoSHE handles all higher education institutions, including ASTU. The practices, according to informants ASTU1, 2, 3, 4 and 5, demonstrated that ASTU experienced extended control during its governance under MoST. The reason, as indicated by these informants, is that MoST has relatively more time to supervise ASTU than MoE and MoSHE do. This means that the extent to which the sector ministries either control or support a university is a function of the number of universities for which they are responsible. Thus, the greater the number of universities a given sector ministry rules, the less strict control might be in place. Alternatively, ASTU might have more space in decision making under MoE/MoSHE.

In addition, informant ASTU3 indicated that being under the governance of a sector ministry that lacks experience in managing universities such as MoST and MoSHE is a challenge unto itself. Informant ASTU3 also mentioned:

MoST lacked experts who could either control or support the university. MoST's experts were used to consider ASTU like other non-educational government sectors and burdened the university with frequent routine questions and requests for reports and conducted repeated meetings. (ASTU3)

Experience in the environment also has an indirect influence on ASTU's decision making. Similarly, informant ASTU4 noted that, in Ethiopia, the training offered by the training institutions, including universities has been criticised for being dominated by theory. Accordingly, there is a belief that graduates lack this skill. ASTU is a technical university that is supposed to provide practical learning in collaboration with industries. Nevertheless, the industries lack confidence to engage students assigned as interns.

Look, the role of industries in cooperating with ASTU to jointly work and improve productivity is minimal. For instance, industries are unwilling to allow practical learning for ASTU students. They lack trust in the competencies of ASTU graduates, and thereby, they have been unwilling to recruit them for an internship. Thus, they often assign students to non-professional tasks in the industry. (ASTU2)

These data reveal that the management capacity of the governing sectors is a function of their respective time for supervision and knowledge and experience in governing universities. These imply that the sector ministry, which has more time for supervision (fewer universities to govern) and has less experience in governing universities, is more susceptible to imposing extended direction. Thus, ASTU was exposed to extended control while under the governance of ASTU. Thereby, its de facto autonomy has been shaped and reshaped so it appears different from formal autonomy.

Lifespan as a coercive mechanism

In addition, tracing the erstwhile practice, informants ASTU2, ASTU9 and ASTU10 noted that, during its formative stage (from 2006 to 2007), ASTU was without a formally delegated board. Consequently, the assignment of vice president was made by the state, itself. ASTU 3 also noted:

Look, I have been here since this university was renovated as ASTU as a leader. From my observation, compared to its formative stage, this university is exercising more freedom currently. The reason is clear. It lacked some structure that is supposed to make decisions. For instance, during 2006, ASTU had no board at all, and the leaders were lacking the experience and confidence to break some boundaries. (ASTU3)

Similarly, ASTU4 indicated that currently ASTU is better at making decisions within its discretion compared to previous years. Here is what ASTU4 observed:

> For me, the immaturity of ASTU has given a chance for the state to freely intervene because the leaders were new and came from non-university sectors and could not protect the university. Though the leaders are still submissive currently, during its establishment, the intervention of state was higher. (ASTU4)

This shows that the maturity level of ASTU can be taken as the reason that de facto and formal autonomy vary at ASTU.

Knowledge power as a coercive mechanism

As noted earlier, the very purpose of the renovation of ASTU is to enhance its science and technology capacity, using it as an instrument. As ASTU 1 noted:

> ASTU has been privileged to claim some freedom, such as determining its student admittance standards and their number. Look, what ASTU has been exercising is exceptional, which other universities could not claim. Let me tell you the argument. ASTU said, 'If bringing better graduates in science and technology is my responsibility, I must determine the students to be recruited'. It also claims the tandem deanship and was allowed. (ASTU1)

Informants ASTU3, 4, 7 and 8 perceived that ASTU's privilege to exercise more autonomy than what is prescribed by law is the state's dependence on the knowledge and expertise of ASTU. ASTU9 also elaborated that 'the salary and other benefits of ASTU staff have been made different from other universities'. This shows that whenever the state is dependent on universities, it compromises its responsibilities for what it intends to gain. Thus, the knowledge factor can make a difference between what is obligated and what is executed.

Dependencies as a coercive mechanism

As discussed thus far, the quantitative phase of this study demonstrates that ASTU is highly dependent on the state for its funds. In addition, university top leaders are political subordinates of the state. In this regard, informant ASTU3 noted: 'It is difficult to think about autonomy in a situation like our university is in, because all the money we have been using comes from the state'. Similarly, informant ASTU5 argued:

Look, the source of our budget is the state, and the appointment of top leaders is by the goodwill of the state. In such a situation, it is difficult for the leaders to say no whenever informal intrusion comes. For me, the state intervention is appropriate because it is responsible for the money it is investing at universities. Thus, for me, seeking and exercising autonomy must come whenever the university handles its funds; otherwise, it may be an illusion. (ASTU5)

Sharing similar convictions but using disparate expressions, informants ASTU7, ASTU8 and ASTU10 emphasised that the university is lacking confidence to exercise its given freedom. Whether it is legal or not, ASTU never confronts whatever decision or instruction the state might make. Magnifying ASTU's dependence, informant ASTU12 associates the relationship between the state and ASTU with lord and servant: 'Do you think the servant claims rights? For me, the answer is no, because the consequence is worse than what you could imagine. For instance, I do not know a time when the university refused to give instructions coming from the state' (ASTU12).

These data show that ASTU's dependence could be the cause of the distinctions observed between formal and de facto autonomy.

7.2.2   Social mechanism

While organisations used to conform to powerful environmental intrusion for the sake of legitimacy, they were also shaped by the pressures from organisational fields without legitimacy concerns. This means organisations could be interested in mimicking other organisations, which could shape their practices and functions. Similarly, social mechanisms emerged as a major theme from transcribed interview data and are discussed as in the following.

As noted in the previous section of this chapter, the state denied ASTU's right to nominate its president. Some informants have dissected why the recruitment of the ASTU president's nomination was not given to ASTU and its board.

For me [said ASTU1], the government might have a desire to bring technological transformation. Cognizant of this wish, the ministry contacted countries with better performance in technology and hired its presidents. The government's intention was bringing about the experiences of technologically advanced countries to Ethiopia in realising the enhancement of technological capacity. (ASTU1)

Informant ASTU4 also noted that 'the government's intention to bring presidents from expatriates is the desire to realise technological advancement through the deployment of professionals from universities that they believe are productive' (ASTU4).

Similarly, according to ASTU's formal autonomy, ASTU is given the freedom to determine its structure (EFDRE, 2009), except approval by the civil service commission for new positions created. In practice, ASTU3 mentioned that 'the tandem dean system that was introduced at ASTU was made by copying from Korean universities, because the state has been wishing to imitate them'. As a general principle, all university policies, regulations and procedures are subordinate to higher education proclamations. However, ASTU introduced the tandem approach to the university structure without considering the approval requirement. Informant ASTU1 also noted that the new structure was created by the influence of the former ASTU president deployed from Korea. Besides, informant ASTU4 commented:

> The late Korean president for ASTU deployed many professors from their respective countries who were assigned as a tandem dean. At that time, the numbers in the college were many, and he assigned two deans for all colleges and two heads for all departments: one from Korea, and the other, from Ethiopia. (ASTU4)

According to the Ethiopian higher education proclamation, the right to determine the curriculum and educational programmes has been given to ASTU. However, in practice, ASTU's freedom to develop curricula and educational programmes seems to have deteriorated. As noted by ASTU5 and ASTU6, the freedom to design the ASTU curriculum is restricted. It was copied from Korean Technology University without a detailed study. ASTU's current curriculum was revised in collaboration with senior Korean professors and experts. Though organisational leaning is natural, informant ASTU8 noted that the copying process lacked a detailed feasibility study. As noted by ASTU1, the selection of Korea and copying curricula was made by the government, and it minimised the role of ASTU. Informants also noted:

> Originally, our curriculum was adapted from two Korean technology universities [KAIST and POSTECH]. Based on the instruction of the Ethiopian government, the adapted curriculum was synthesised through Korean professors and the ASTU president deployed from Korea. The intention was to bring the experience of Korea in science and technology. (ASTU10)

> Koreans had the interest in bringing Korean practices to Ethiopia while the late ASTU president from Korea was working here. During that time, they only focused

on applied sciences and technology-related programmes, and they failed to investigate available alternatives upon which programmes could run in the universities without harming the intended focus. For me, Korean professors seem influenced by the culture of their university at home and influenced practices at ASTU. (ASTU12)

Similarly, informant ASTU1 underscored that ASTU's curriculum is dominated by Koreans. Conversely, other informants highlighted that ASTU has not copied only the curriculum but also the way the curriculum is to be implemented. For instance, ASTU introduced the 'fast track' and 'double degree' modes of delivery, copying Korean technology universities, which is not common in Ethiopian universities. As noted by informants ASTU1, ASTU2, ASTU3 and many others, though the tandem dean approach has been cancelled, the fast truck and double degree approaches exist.

Though determining the opening and closing of academic programmes has been given to ASTU, in practice, the freedom of the university is highly limited. In this regard, informant ASTU12 emphasised that, in practice, there is the possibility of opening a new programme, but within the area predetermined by the government. As indicated by ASTU8, the academic programme lacks dynamicity, and the type of academic programme that ASTU is expected to run was determined by the state. More precisely, informant ASTU2 stated:

Since we are living in a dynamic world, ASTU needs to be alert enough to adjust itself to the reality of its context in opening new programmes and closing the old ones. But ASTU is not that free to open new educational programmes, especially undergraduate programmes. Limiting academic programme-related issues and keeping ASTU to work within a given limit might affect the likely contributions that ASTU could bring to the country. For me, the state has been influenced by Korean science and technology practices and thereby influenced ASTU in this manner. (ASTU2)

In addition, informant ASTU3 indicated that two types of approaches have been experienced at ASTU: limiting the applied science and technology education programmes, especially for undergraduate studies, and removing social science-related disciplines. Moreover, ASTU6 indicated that within the framework of applied natural sciences and technology for which ASTU was established, it is not possible to open additional programmes. Informant ASTU 9 commented:

ASTU can open only 14 departments, so we [ASTU] can't open the very important departments that ASTU wishes to have. MoST forced us not to open beyond 14 programmes. As a result, ASTU was required to close those technology-related academic programmes, which was different from the 14 education programmes assigned. For instance, ASTU closed existing technology-related programmes such

as software engineering, surveying engineering, urban planning and construction management. (ASTU9)

Similarly, the staff selection and promotion criteria were copied from Korea. In this regard, informant ASTU8 indicated: 'The criteria copied from Korea might lack adaptation. It lacks feasibility and sustainability in the local market. Look, Ethiopia can't develop as Korea did within one night.' Informant ASTU8 also asserted that though the criteria did not match the local labour market, ASTU cannot refuse the government decision.

Sharing informant ASTU7's view but in a more detailed manner, ASTU7 suggested that the context from which the promotion criteria were copied and the actual situation are completely different. In addition, ASTU7 underscored that the promotion criteria must be customised to the situation and debated by ASTU's academic staff.

> The late ASTU president, who was from Korea, lacked knowledge of the real context in Ethiopia. Thus, he was trying to institute his country's experiences. It is good to aspire to develop our university status to the level that South Korean universities have achieved, but we have to consider the actual situation we're in. (ASTU7)

As informants ASTU1, ASTU2, ASTU3 and ASTU5 requested to reason out the cause, they indicated three concepts, all of which are social mechanisms. First, the state desires to change and transform the country in science and technology. Second, the Ethiopian state desires to take the experience of Korean technology advancement as a role model. Third, the dominance of the concept of a 'technical university' emerging in the global higher education landscape has been imposed.

These data have proven that ASTU has been copying the Korean experience in terms of structure, curriculum and educational programmes. In addition, the impact of globalisation imposed in the form of a technical university forced ASTU to conform to international practices. This implies that, being influenced by the global work culture and the desire to institute Korean expertise, ASTU is forced to introduce a new structure comprising Korean curriculum and educational programmes. Therefore, de facto autonomy appears higher in a few areas of discretion, and less in some determined decision-making spaces, both of which can be the reason why ASTU's de facto autonomy appears distinct from formal autonomy.

7.2.3   Cultural /normative mechanism

Organisations usually interact through their professional networking. This can open the door to sharing their culture that could shape the practices and processes of one another (Kessler & Tuckman, 2013). The transcription of the interviews in this study also demonstrated a common practice at ASTU, and it is taken as a major theme. Thus, the following discussion was made under this major theme, as in the following.

As discussed in the previous section of this chapter, the higher education proclamation did not specify the possible number of terms in which both the president and vice president may occupy the office. As indicated by informants ASTU1, ASTU2, ASTU3 and ASTU4, the political, cultural and social context awareness and state expectations are the reason why the former ASTU presidents removed from office.

> The president tried to introduce the 'Aychile framework' [the president's own framework], which was accepted by the state without question. However, this framework was not in line with the government strategy, and it was against the rules and principles of the country. In addition, he has fired both academic and supportive staffs who were not working up to his expectations. This practice was fired him back. Finally, he gets disappointed and leaves the university without producing any clearance. (ASTU4)

> The late ASTU presidents from Germany and Korea were removed because they had not been working up to the expectations of the government. Simultaneously, they could not accustom themselves to the policy, the working culture, the actual situation in ASTU, such as understanding the mind-set and psychology of ASTU staff, the financial system in the country, logistics and bureaucratic systems. (ASTU11)

Although a higher education proclamation did not give ASTU the autonomy to make student-related decisions, in practice, it has been enjoying its freedom. Compared to formal autonomy in this regard, de facto autonomy in student-related decisions is higher. In this regard, informants indicated that ASTU had been through two trends in making student-related decisions: the extended role of government and the extended role of ASTU in student-related decisions. For instance, the following commented:

> Besides, as it is commented by informants ASTU6 and ASTU14, the ASTU senate can decide the cut point for potential applicants based on the results of the university entrance exam administered by the government. Then, the entrance exam to join ASTU has been prepared and administered by ASTU. Finally, those students who scored a pass mark could join ASTU's two schools (engineering and applied

sciences) while ASTU was under the governance of the Ministry of Education. ---
[T]he selection of students had been made by the government, but recently, since
our governing sector ministry became MoST, ASTU has full freedom to select
students of any kind (BSC, MSC or PhD) and to determine their number. Thus,
since 2017, decisions related to selecting and determining the numbers of students
have been the responsibility of ASTU. The reason is the influence of the Korean
ASTU president and ASTU staff from Korea and the government's wishes to
promote science and technology. (ASTU7)

Determining the criteria and number of students to be admitted and selecting
students are at the discretion of ASTU. Before 2007, when ASTU was under the
governance of the MoE, it was the government that decided everything. Look, this
has its own historical background. When ASTU was renovated, it was not simply
the name change. It was decided to have a separate curriculum and infrastructures
that could match the intended transformation ASTU is expected to bring in science
and technology. To this end, the selection of the best students and teachers became
the responsibility of ASTU. The practice was enforced by expatriates from Korean
technology universities (KAIST and POSTECH). (ASTU5)

Besides, numbers of students for each school were decided based on the space
these schools had. This experience was instituted at ASTU by the late ASTU
president from Korea (ASTU1, ASTU2, ASTU3, ASTU4, ASTU5 and ASTU10).

These data reveal that the professionals deployed from Korea brought the
experience of their prior institution and tried to institute it at ASTU. These
professionals were successful in shifting the responsibility of determining student-
related decisions from the state to ASTU. This practice allows ASTU to exercise its
determined autonomy beyond what is obligated. Conversely, the mismatch among
the culture of the expatriate ASTU presidents, Ethiopian universities and the
country's governance system affected the likely benefit that ASTU is supposed to
gain. This implies that professional networking has both positive and negative
implications for the decision-making competencies of ASTU. Thus, de facto
autonomy is shaped to be both high and low compared to formal autonomy.

7.3   Summary

Though the second phase of this study was not aimed at triangulating the
quantitative phase, the themes that emerged during qualitative data analysis are
found worthwhile in triangulating and strengthening the quantitative results. While
the result of the quantitative phase of this study describes the extent to which
ASTU has been exercising de facto autonomy as 'low', 'medium' and 'high', the

qualitative phase realised that there is a possibility of having 'higher' de facto autonomy.

Based on the data obtained during the quantitative phase (see Chapter 6), organisational autonomy at ASTU in determining its internal structure is perceived as high. However, actual practice has demonstrated that the administrative requirements (approval and permission) in determining the case are eliminated and there by the de facto autonomy is viewed as higher than what is obligated. This means that whatever the level of formal autonomy may be, de facto autonomy varies from low to high and in rare cases higher than formal autonomy. Similarly, the practice of academic de facto autonomy is higher for student-related decisions, because determinations regarding students have formally been given to the state. Conversely, determining ASTU's curriculum and education programmes is perceived as medium. However, based on the evidence obtained in this study, both financial and staff-related de facto autonomy could be described as lower than formal autonomy. In this case, both quantitative and qualitative phases of this study revealed that de facto and formal autonomy are different for the four dimensions of ASTU autonomy.

As indicated in Table 21 below, the major reasons and mechanisms that have been shaping and reshaping de facto autonomy to appear different from formal autonomy are coercive, mimetic and normative by nature. The types of coercive reasons and mechanisms identified can be categorised two ways: environmental and university-related factors (see Table 21). The identified environmental factors are policy, regulatory and administrative mechanisms, political influence, rules and regulations, abjuration, performance evaluation and context and capacity. Conversely, university-related factors such as the lifespan of the university, its knowledge power and dependency are identified as the reason and mechanism that create differences between de facto and formal autonomy. The mimetic mechanism, as a reason and factor, is also identified as the desire for change emanated from the global pressure originating within the organisational field. Finally, as a normative pressure, professional networking has taken place in the form of deployed university professors and those involved in ASTU leadership positions.

As indicated in Table 21, policies that guide universities in Ethiopia included some vague concepts and overlapping roles. Some of the components of the policy contradict one another and lack precision in guiding action. As an implication, these gaps in the policies could confuse the decision-making process, deteriorate confidence and make it difficult to determine some of the issues.

Therefore, the policy gap can be considered a reason for the disparities identified between de facto autonomy and formal autonomy.

Table 21, below, also depicts that regulatory and administrative mechanisms such as political influences, rules and regulation, abjuration and performance evaluation, are found to cause the variations identified between formal and de facto autonomy. These factors are the causes of the state-dominated assignment of ASTU's top leadership, the placement of external auditors permanently in the university and the state manipulation of some of the criteria supposed to be made by the university. This state interruption could cause ASTU to compromise its rights, to become frustrated and to restrict its decision making, which affects the practices of de facto autonomy. Besides, financial rules and regulations are uniform, inflexible, restricted, complicated and focused only on input and processes. The shortest fiscal year, delays in disbursement and approval requirements, which may end up in a poorly utilised budget, present a mismatch between the actual situations at ASTU and overlook the value added by the budget as an output. These mechanisms can challenge ASTU's practices of exercising autonomy and limit de facto autonomy.

As is indicated in Table 21, below, the performance evaluation system of ASTU made the president accountable for every decision at the university. Besides, there are numerous evaluators that conduct the performance evaluation without having a defined schedule, which could frustrate the president and limit the time he may use to focus on a task.

Table 21. Summary of Reasons and Mechanisms for the Discrepancy between De Facto and Formal Autonomy

Mechanism	Types	Results	Implication	Consequences
Coercive	Policy	• Vague; lacks precision • Role overlapping, contradictory	Confusion in decision making Difficult to determine	De facto < formal autonomy
	Regulative and administrative factors • Political factor abjuration	• State-dominated assignment of top leadership • Placing external auditors permanently • Manipulation of criteria and profiles	Compromised ASTU's interests Frustration and restriction Interruption	De facto < formal autonomy
	• Financial rules	• Uniform, complicated, inflexible • Restrictions • Short fiscal year, approval requirement • Delay in budget disbursement • Input and process	Does not perfectly fit the situation Poorly utilised budget Output is poorly focused	De facto < formal autonomy
	• Performance evaluation	• President's extended accountability • Numerous evaluators • Lack of a defined schedule	Frustration Limited time to focus on tasks	De facto < formal autonomy
	Context and capacity	• Local market lacks supplies • Scarcity of hard currency • Lack of allegiance mentality • Two sector ministries govern ASTU at a time • Governing sector's lack of expertise • Availability of time for supervision	Failure to utilise the maximum of the budget Strict rules and procedures Lack of alignment in decision making Differences in controlling among sector ministries	De facto < formal autonomy
	Lifespan	• Unfulfilled structure • Lack of experience	Excessive state intervention	De facto < formal autonomy
	Knowledge factor	• Increased negotiation power	Claim more autonomy	De facto > formal autonomy
	Dependence	• Lack of confidence	Compromising right	De facto < formal autonomy
Mimetic	Organisational field	• The desire for change	ASTU lost some of its discretion	De facto < formal autonomy
Normative	Professional networking	• Learned experience	Claim for more freedom	De facto > formal autonomy
		• Challenges in cultural differences	Poor performance	De facto < formal autonomy

The reasons and mechanisms summarised thus far are state-related environmental factors. As none state environmental factors, context and capacity are also identified as a coercive mechanism. These factors include the inability of the local market to supply the required input for university functions, the scarcity of hard currency and the lack of an allegiance mentality. In addition, the practice of assigning two sector ministries to govern ASTU, ruling sector ministries' expertise capacity and the available time for supervision are factors that affect the practices of ASTU in exercising its given autonomy. These factors imply that ASTU could not utilise its budget maximally, because the supply from the local market is constrained by the inability of the local market to supply the required input and the scarcity of hard currency limits international procurement. Lack of allegiance mentality is found susceptible to strict rules and regulations that complicate decision-making processes. Moreover, a lack of alignment between two sector ministries and divergences in capacity across the sector ministries governing ASTU are also found to be factors that limit ASTU's de facto autonomy. Consequently, de facto autonomy became less than formal autonomy.

The other coercive reasons and mechanisms identified, such as lifespan, knowledge factor and dependence, are university related (see Table 21, above). While ASTU's lifespan is attributed to an unfulfilled structure and a lack of experience, the knowledge power of the university concerns a subordination of the state that could favour de facto autonomy. Conversely, university dependence is the factor that deteriorated the confidence of ASTU in determining its own affairs. As an implication, while the maturity level of ASTU and its dependence on the state purse shaped de facto autonomy to appear less than formal autonomy, ASTU's knowledge power resulted in a de facto autonomy that exceeds formal autonomy. In this case, the discrepancy between formal and de facto autonomy is created.

One of the non-coercive factors identified is a mimetic reason and mechanism (see Table 21, above). Global pressure from the organisational field and universities elsewhere made the Ethiopian state to engage in changing its technological capacity. This desire insists the state copy technologies from universities it believes productive. Consequently, ASTU's practice in exercising its autonomy is impacted while it emulates others. This cognitive mechanism, then, made de facto autonomy appear less than formal autonomy, especially in the academic dimension of university autonomy.

Finally, organisational networking is identified as a normative reason and mechanism that impacts de facto autonomy. It is observed in this study in two

forms: learned experience and challenges in cultural distinctions. While ASTU benefits from the experiences of its expatriate staff, the cultural differences, especially between the expatriate ASTU leaders and the whole governance system in the country, is found to be challenging. Learning from its expatriate experience, ASTU has been able to claim more freedom, but the cultural distinctions, which could deteriorate harmonious relationships among parties, affected the performance of ASTU. Therefore, this practice resulted in exercising de facto autonomy beyond what is obligated and less for other areas of autonomy. Both illustrate differences (see Table 21, above).

In summary, as is indicated in Table 21 above, coercive, mimetic and normative influences and approaches are found to be the reasons and mechanisms that bring differences between de facto and formal autonomy by shaping the practices and behaviour of ASTU in responding to the institutional environment, which could impact the operation of the university, both positively and negatively. This implies that de facto autonomy diverges from formal autonomy by institutional isomorphic pressures and mechanisms.

VIII. DISCUSSION AND CONCLUSION

Organisations of any kind are in charge of pursuing their responsibilities, defined as their mission to remain legitimate and secure their survival. Then, for organisations to pursue their mission, they must have some kind of discretion within which they can make decisions, which is assumed equivalent to their responsibility. Accordingly, institutional autonomy, a governance relationship that defines the scope of the freedom of an institution became a common practice. Institutional autonomy is considered an instrument that enhances organisational efficiency in decision-making and the ability of universities to respond effectively and innovatively to environmental demands. Cognizant of this assumption, providing substantive formal autonomy (autonomy equivalent to responsibility) for universities is becoming a management fad worldwide. Despite the provision of autonomy to universities through regulatory frameworks, in reality, universities may not practice their authority to the extent of what they are provided. Correspondingly, a discrepancy between de facto autonomy and formal autonomy has been observed (de Boer & Enders, 2017). Nevertheless, why universities fail to maximise their benefits out of their formal autonomy has been addressed poorly, and de facto autonomy has hardly been researched thus far (Badran, 2017).

Therefore, this study aimed to describe the extent to which ASTU has been exercising its formal autonomy and explain why and how ASTU fails to maximise its benefits out of its given autonomy. Furthermore, it is intended to provide the practical and theoretical implications of the findings. Methodologically, the inquiry process was made through a single mixed-method case study that includes both quantitative (survey and checklist) and qualitative (document analysis and semi-structured interviews) approach (see Chapter 5). This mixed-method case study was conducted at ASTU in a sequential fashion that was guided by three basic research questions:

1. What are the practices of exercising formal autonomy at ASTU?
2. Why does ASTU's de facto autonomy diverge from formal autonomy?
3. How do assorted mechanisms make de facto autonomy diverge from formal autonomy at ASTU?

The distinction between formal autonomy and de facto autonomy is central to understanding the gap between promises and practices. To this end, in answering the first research question, the combined version of the European University Association's (EUA) university autonomy scorecard and Berdahl's two-dimensional concept of autonomy was employed to identify the variables for the study (see Chapter 2). Thus, this conceptual model has guided the extraction of variables from Ethiopian higher education proclamations No. 650/2009 and No. 1152/2019, which defined Ethiopian universities' formal autonomy. Besides, the quantitative phase of the case study underwent all steps that a survey study requires (see Chapter 5). Moreover, though the intent of the second phase of this study is not triangulation, data that supplement the findings in the first phase also emerged during the qualitative phase (see Chapter 7). A summary of the findings obtained through both approaches is presented under Section 8.1.1, below.

In answering the second and third research questions, the strand of institutional theory, institutional isomorphism, was employed to conceptualise the reasons and mechanisms that create a divergence between de facto and formal autonomy (see Chapter 3). The assumption behind is that organisational characteristics can be shaped and reshaped by the pressure from diverse environments, such as social (mimetic), cultural (normative), and political (coercive) processes (Scott, 2004). In addition, institutional isomorphism as a process (see Chapter 3) predicts why and how rules, norms, procedures, and policies are established and adapted or declined. Moreover, it is helpful to examine the environmental effect on organisational forms (Scott, 2004) and the capacity of an organisation to protect its predetermined boundaries in decision-making. Based on these theoretical assumptions, the qualitative phase of the case study was conducted to answer the 'why' and 'how' of the questions, which are addressed by the results presented in Section 8.1.2. Finally, the prior empirical data from the literature in combination with the findings of this study define the theoretical and practical implications and contributions.

8.1   Summary of the major findings

This section summarises the findings from chapters 6 and 7 and presents both quantitative and qualitative results. The findings of the quantitative phase describe the extent to which ASTU has been exercising formal autonomy in line with the four dimensions of institutional autonomy. The qualitative findings also provided

two results: data that triangulate the quantitative phase and the data that help to explain why and how de facto and formal autonomy appear different.

8.1.1   Practices in exercising formal autonomy

Empirically, it is noted that formal autonomy, which determines the power and competencies of an organisation, does not guarantee de facto autonomy (Verhoest et al., 2004). Organisations are susceptible to a different venue of influences brought through relationships with others (de Boer & Enders, 2017). Similarly, as indicated in Chapter 6, the extent to which ASTU has been exercising its formal autonomy is perceived as 'low', 'medium', and 'high' for various areas of discretion across the four dimensions of university autonomy (Organisational, Academic, Financial and Staff).

The study indicates that the extent of exercising formal autonomy in terms of nominating its president, conducting public advisement for the nomination of president, replacing its vice president upon the expiry of the terms of office, and nominating voting board members are perceived as 'low' at ASTU (see Table 11). Similarly, diversifying its delivery modality (academic autonomy); holding an unspent portion of its budget (financial autonomy), and dismissing academic staff when required (staff autonomy) are perceived as 'low' without much variation in the distribution of scores of all participants from their respective mean value (see tables 13, 16 and 17). This implies that de facto autonomy is not exercised to the extent it is provided and thereby different from formal autonomy.

This study has also shown that the extent to which ASTU is exercising its autonomy is perceived as a 'medium' for some areas of its discretion. As indicated in Chapter 6, determining the nomination and appointments of vice presidents (organisational autonomy); determining curriculum and educational programmes (academic autonomy); mobilising additional financial income (financial autonomy); developing rules and procedures for recruitment, determining the assessment procedures and setting the promotion criteria of academic staff are perceived as 'medium' without significant variation of scores among some groups of participants (see Tables 11, 14, 16 and 17). These perceived practices of autonomy at ASTU as low and medium imply de facto autonomy is less than what is obligated, and it varies from formal autonomy.

However, the study has demonstrated that the extent to which ASTU has been exercising its given autonomy is better in some areas of its discretion than

what has been discussed thus far. ASTU's ability to determine the appointment of deans and senate members (organisational autonomy); student admittance standards at all levels of education (undergraduate and postgraduate); the number of new students to enrol; selecting students and determining the research theme (academic autonomy) are perceived as 'high' (see tables 11, 12 and 13). In specifying this result, the qualitative data revealed that ASTU is exceptionally free to determine its students (setting admittance standards, selecting and placing its students), and free to determine its structure regardless of what is obligated. Thus, ASTU sometimes manages to exercise autonomy beyond its discretion.

In financial and staff autonomy, the university's ability to assign money for research and the freedom to determine the size of tuition for non-government-sponsored students, the number of academic positions, and workload are also viewed as 'high' (see tables 16 and 17). Though a high level of exercising formal autonomy seems better than 'low and medium', it is difficult to determine how high it is. In this case, ASTU's de facto autonomy and formal autonomy diverge.

Data obtained through checklists have also illuminated that ASTU earns the largest portion of its annual budget from the Ethiopian government (more than 99%). In addition, transferring money from one budget head to another, utilising the budget that ASTU generated without permission from the government, and borrowing money from financial institutions are not allowed. Similarly, ASTU cannot determine the compensation for extra work (overload and overtime) and payable allowances. These entail that practice in exercising given autonomy is limited at ASTU. However, the logical questions that follow are why and how de facto and formal autonomy appears different, which is addressed in the upcoming section.

8.1.2   Mechanisms of institutional autonomy

According to neo-institutional theory, organisations are entities established to pursue a given mission, and they are always battling environmental expectations and beliefs to secure their survival and legitimacy (Meyer & Rowan, 2006). In addition, in the governance relationship, several factors imposed by an environment could affect the practices and operations of a university. For instance, de facto autonomy is affected by the interest of a government in controlling the decisions and behaviour of a university through varying mechanisms (Christensen, 2011; Verhoest et al., 2004). These mechanisms are summarised as institutional

isomorphism in this study (see Chapter 3), which explains the influences and possible pressures imposed by the environment. They gradually shape policies, positions, practices, culture, and other phenomena (Mizruchi & Fein, 1999). Thus, the perceptions and opinions of ASTU staff in answering the research questions 'why' and 'how' de facto autonomy at ASTU appears different from formal autonomy and can be better understood concerning the three major components of institutional isomorphism (coercive, mimetic and normative) as an institutional environment (Kessler & Tuckman, 2013).

Table 22. Causes of Differences between De facto and Formal Autonomy

Isomorphic influences		
Coercive	Mimetic	Normative

Environmental factors
• Regulative and administrative factors
  ○ Policy factors
  ○ Political factors
  ○ Financial rules
  ○ Performance evaluation
• Context and capacity factors
University-related factors
• Lifespan
• Knowledge factors
• Dependence
	• Global influence and the desire for change	• Professional networking
		• Cultural factors

As indicated in Table 22 above, the reasons and mechanisms that made de facto autonomy diverge from formal autonomy at ASTU are categorised into three elements of isomorphism (coercive, mimetic, and normative). Coercive pressure again can be categorised into two environmental mechanisms: available constraints and impositions from the powerful environment and the capacity of a university to use available options and choices. As Table 22 specifies, the aspect of the environment through which institutional influence operates includes policies, state regulatory power, rules and regulations, performance evaluations, context and capacity, and the desire to look like others (Hatch, 1997, p. 84). Conversely, the university-related aspects of coercive mechanisms include knowledge power, the maturity level of an institution, and its dependence. The normative pressures in the form of professional networking and global influence as mimetic pressure have been affecting de facto autonomy, whose findings are summarised in the following.

8.1.2.1   Coercive mechanism

Coercive institutional isomorphism is largely political and results from formal and informal impositions by powerful organisations and expectations from the larger society where the focal organisation operates (DiMaggio & Powell, 1983; Kessler & Tuckman, 2013). When pressure comes from government rules and regulations to shape the behaviour of an organisation in the practice of exercising a formally determined decision-making space (formal autonomy), a coercive mechanism is at work (Hatch, 1997). Coercive mechanisms are powerful in limiting the practices and actions of a given organisation and determining 'how things are done' (Kessler & Tuckman, 2013, p. 506). They dominate the focal organisation's policies and positions (structure) through policies imposed by the state (DiMaggio & Powell, 1983; Meyer & Rowan, 1977).

Similarly, this study has shown that one of the reasons and mechanisms that shaped de facto autonomy to appear different from formal autonomy is the regulatory framework (policy). As data obtained through document analysis revealed, higher education policy frameworks lack a clear articulation of some discretion and do not provide a precise definition for some criteria, and it overlaps roles in some areas of discretion. It has also been identified that disparate policy frameworks that are supposed to guide decisions at ASTU are found contradictory on some issues. Unanimously, scholars argued that policies, themselves, 'as they cannot prescribe action in every single detail' seldom obstruct the powers and competencies to take decisions (de Boer & Enders, 2017). This signifies that the gaps in higher education and miscellaneous policies are among the coercive reasons for the discrepancy observed between what is obligated and what is executed.

The state has been prescribing universities' detailed behaviours through directives, an authoritative set of rules and regulations imposed and promulgated in a top-down fashion. As noted by Donina et al. (2015), placing complicated rules and regulations enforced in various ways is considered a systematic steering mechanism to achieve the desire to control universities. Besides, Bain (2003) indicates that rules and regulations might provide leeway for the decisions that subordinate organisations could make, or it restricts their decision even within their discretion. Unanimously, this study has also shown that the rules and regulations are uniform regardless of the peculiar characteristics of different organization in the country. They are inflexible and complicated with distracting requirements and prolonged processes, which all result in inefficient utilization of fund that is assigned to ASTU. For instance, procurement procedures are tedious, transfer of

budget from one head to another is unattainable, and what is stated in higher education proclamation contradicts financial regulations, which ends in a huge unutilized fund. This implies that ASTU may not execute its mission properly because it could not invest its budget maximally. Thus, de facto autonomy can be limited by rules and regulations to appear different from formal autonomy.

Furthermore, the study shows that, while controlling the finances of ASTU, the Ethiopian state has been focusing a great deal on the input and the routine processes of expenditure. The output, the value added by the expended money, has not been given emphasis. Consequently, it is shown that ASTU has been worried about the routine steps that expenditure underwent instead of the expected results. This entails that the area upon which the state has been focusing while controlling the financial system can make the university loosely focus on its result, which consequently causes disparities between de facto and formal autonomy.

Universities are considered national political instruments, and the state often seeks to steer them to realise its political presence (Olsen, 2009). One of the areas where the state has consistently intervened and limited university autonomy has been the assignment of university leadership (Ordorika, 2003; Verhoest et al., 2004). Research on university governance in Africa has highlighted that there is a relative improvement in place, but governments have continued to wield disproportionate power through the assignment of leaders (Habib et al., 2008). Bladh (2007) and Verhoest et al. (2004) have noted that if the appointment of most board members is made by the state and the number of members representing university staff is a minority, state control is at play. In the same vein, this study has indicated that the state has been taking the lion's share in nominating and appointing process of ASTU's top leaders such as presidents and board chair, and members. The nomination criteria and appointments of university presidents are not based purely on merit. The presidents, board chair, and members of ASTU are political appointees. One of the hidden criteria in the nomination and appointment of university top leadership, which is public knowledge, is political membership in the ruling political party. For instance, it is found that the top ASTU leaderships (president and board chair, and members) are members of the ruling political party. This entails that the state has been strictly controlling ASTU through its political appointees placed at the university who may favour the interest of the state and compromise the autonomy of the university, which could seriously limit de facto autonomy.

This study proves that although formal autonomy empowers ASTU to nominate its three voting board members, it was never involved in the practice. Besides, the state has been manipulating staff recruitment, promotion, and dismissal criteria. Even though ASTU is formally authorized to manage its expenditures, the state has monopolised the procurement of some items and assumes some procurement processes as well. Similarly, this study has revealed that ASTU cannot open more than 14 new undergraduate degree programmes, which is a practice that stands against what is proclaimed in HE policy. The practice at ASTU is evident that the state had taken the responsibility of closing academic programmes (all social science and a few technology programmes), which are supposed to be made by the university. This implies that nothing can stop the state from abjuring the vested autonomy either totally, and or partially, which directly affects the de facto autonomy at ASTU.

Furthermore, researchers have considered performance evaluation as a new state steering mechanism. For instance, it is indicated that performance evaluation 'influences universities' choice and control achievements', and it systematically deteriorates decision-making competencies (Reale & Marini, 2017, p. 110). Similarly, this study indicated that the president of ASTU has been made responsible for every action of the university. Though they are not formally authorised to evaluate ASTU, numerous evaluating bodies (more than 11) have been taking part, including the ruling political party. These evaluators have been employing different evaluation criteria, without a defined schedule to undertake the evaluation. In addition, it is found that the state placed an external auditor permanently at ASTU who is expected to scrutinise the university's transactions daily. This work has also proven that the evaluation processes and external auditor assigned at ASTU have been challenging in deteriorating the confidence and likely time of the president to focus on its task. These entail that performance evaluations and the permanent placement of external auditors at ASTU could be the reason and mechanism for the discrepancy between de facto and formal autonomy.

Furthermore, this study has shown that ASTU has been subordinated to different sector ministries at different times. It was governed by MoST and MoSHE, and currently, it is governed by MoE. While this study is in progress, MoE is the third to be assigned as the sector that handles governing ASTU. From the very outset putting under sector ministries itself is the mechanism to systematically control university function. On top of that, it is found that these sector ministries are different in their expertise capacity and available time for

supervision. The government sectors that have more time for supervision have been doing so frequently and relatively impose more pressure. Those government sectors that lacked expertise in higher education governance have been calling frequent meetings, and often focusing on routines rather than the strategic issues for which the university is established. In addition, parallel to these sector ministries, MoFED has been made responsible for governing the finances of ASTU. Sometimes, it is found that the instructions of these two sector ministries contradict one another, and ASTU is trapped in between. These entail that assigning universities under sector ministries, and their expertise and time for supervision, turnover, and the assignment of two separate sectors at a time to govern ASTU challenged the practice of ASTU in executing its functions, which implies limited de facto autonomy.

Understanding the culture of the general environment could either reward or coerce the effectiveness and efficiency of an organisation. 'Universities have been challenged to become more responsive to the need of the market, and dependence on the market has become a fact of life' (Salmi, 2007, p. 223). It is also suggested that out of the 'general environment', the economic sector, which relies on the market (labour market, financial market, and markets for goods and services), could impose constraints and demand adaptation as the price of survival (Hatch, 1997, p. 63). In the same vein, this study proves that the incapability of the local market to provide supplies, the scarcity of hard currency, and unreliable business traditions are the factors that impact ASTU's decision-making competencies. Likewise, the perception of the community towards the kinds of services that the university is supposed to provide is a challenge in itself. Industries, as potential stakeholders, often lack trust in the skills of the students assigned to the firm for practical learning from ASTU. As a result, they often are not willing to allow them to do actual work. This implies that both the market situation and the community perception can affect the proper functioning of ASTU in terms of supplying the required inputs, and community service, which could limit de facto autonomy.

It is argued that power in the state-university relationship need not necessarily be unilateral. Sometimes, the subordinate overwhelms the principal (Dant & Gundlach, 1999). For universities, knowledge has been considered as a power, and universities perceive themselves as monopolies of knowledge (Buckley, 2012, p. 333). Simultaneously, when the state considers knowledge the competitive edge and takes the university as the only alternative, it becomes dependent. Empirically, it is shown that universities can use their knowledge power to

maximise their benefits (de Boer & Enders, 2017) and promote the likely role that the universities are supposed to play in society (Maassen et al., 2017).

Similarly, this study proves the Ethiopian government has the desire to enhance its science and technology capabilities as a means of maintaining sustainable development. To realise this ambition, the former Adama University was renovated to be a technology university. This has given ASTU the chance to claim autonomy to determine student-related issues (admittance standard, selection, and placement), which are not part of its formal autonomy. Although it is not within its discretion, ASTU manages to determine its structure and has a tandem dean and department in the university's structure. This implies that the knowledge power of the university created a chance to exercise autonomy beyond what is prescribed, which still creates a discrepancy between de facto and formal autonomy.

It is argued that organisations evolve over time and gradually increase their likely competencies to make authoritative decisions in determining their destiny. It is evidenced that older organisations enjoy more de facto independence than younger ones (Fumasoli & Gornitzka, 2014). In agreement with this proposition, this study reveals that the extent to which ASTU has been exercising its given autonomy improves occasionally. It has depicted that ASTU lacks a supervisory board at its formative stage, and thereby, the state has directly played the role of the board. Likewise, during its establishment, ASTU relatively lacked experience and competency in decision-making than it currently does. Accordingly, the state intrusion in university affairs was intense and gradually decreased somehow. This implies that the lifespan of the university could be one of the reasons for the discrepancy observed between de facto and formal autonomy at ASTU.

Organisations can be coercively constrained by those on whom they depend for a resource (Mizruchi & Fein, 1999). It is empirically evidenced that the amount of government budget appropriation is inversely related to the extent of de facto autonomy (Kehm, 2014; Oba, 2014; Stensaker, 2014). Moreover, de Boer and Enders (2017) argued that dependence on public funding is one reason for universities to fail to maximise their benefit from formally determined autonomy. Similarly, this study indicated that more than 99% of ASTU's funding comes from the state treasury, and it generates an insignificant portion of its funding (less than 1%). Although there is a cost-sharing mechanism in which the learners are partially responsible for their learning, ASTU is allowed only to collect tuition fees from non-state-sponsored students whose number is very small. This means that ASTU

has been excessively dependent on state funding, which could deteriorate its ability to take authoritative action on its affairs within its discretion.

8.1.2.2   Social reasons and mechanisms

Empirically, it is shown that when universities are pressured by larger environmental expectations and new methods and technologies that are evolving, they try to copy those that are perceived as productive and more experienced (Mejía et al., 2020; Zoljargal, 2020). Besides, change in an organisational field insists universities emulate others being driven by the uncertainties in its function (Shattock, 2014). The interest in learning from others, arguably from more productive organisations is a common practice (Mejía et al., 2020). In this regard, previous research has established that when the government seeks to effect change in the university, it is a manifestation of intervention in university decisions (Ordorika, 2003).

In the same vein, this study demonstrates that the Ethiopian government was influenced by swift technological advancements in the world and wished to bring these phenomena home. To this end, the study reveals that the state urged ASTU to copy the Korean technology universities' curricula and educational programmes, the profile of teachers to be recruited, and the delivery modalities (fast track and double degree) from Korea. Consequently, ASTU lost its freedom to determine its curriculum and educational programmes. This means the required change was insisted by the state and implies that ASTU cannot operate autonomously, because the sector ministry is telling what the university should do. Thus, the desire to bring change is the social reason and mechanism that could affect de facto autonomy.

8.1.2.3   Normative factors

As conceptualised in institutional theory, changes in educational organisations are seen as a process of growing isomorphism brought into 'conformity with norms and values institutionalised by the state and professions' (Meyer & Rowan, 2006, p. 3). Professional networking in the form of consultancy, employment, and transfer of workforce could lead to the diffusion of practices and methods of work between organisations. In addition, it fosters professional behaviour patterns that a university wishes to accept (Mejía et al., 2020).

Correspondingly, this study has shown that professionals deployed from Korean technology universities brought their institutional culture and norms to a governance relationship and other functions of ASTU. Two forms of normative mechanisms were identified in this study. First, the staff deployed from different countries has been diffusing their respective counties' norms and cultures and shaped ASTU's decision-making. Second, the cultural variations between the late Korean ASTU president and the-then Ethiopian staff challenged the proper functioning of ASTU. This study has depicted the former ASTU Korean president who failed to adapt to: the work culture, bureaucratic system, policy, and the governance relationship between sector ministries and the university. This implies that professionals deployed from different countries and assigned to different positions at ASTU can challenge the proper function to take place.

8.2   Conclusion

Section 8.1.1 and section 8.1.2 above summarized the findings of this study. Being guided by these major findings, the following conclusions, and implications are drawn.

8.2.1   Practice in exercising formal autonomy

This study has shown that the extent to which ASTU has been exercising its formal autonomy ranges from low to higher than what be obligated for the four dimensions of university autonomy (organisational, academic, financial, and staff). Though describing how 'low' and how 'high' the practice of exercising formal autonomy is not that simple, it is possible to infer that there are variations between de facto and formal autonomy at ASTU. As this study illustrates, de facto autonomy seems high for some areas of discretion. This does not prove whether de facto autonomy is equivalent to formal autonomy. Besides, in a few areas of ASTU's discretion, de facto autonomy exceeds formal autonomy. These imply that de facto and formal autonomy seem fairly dissimilar. Therefore, with few exceptions, such as when de facto autonomy exceeds formal autonomy, it is possible to assume that ASTU has not been maximising its benefit out of its formal autonomy.

8.2.2   Perceived reasons and mechanisms

As indicated in this study, de facto autonomy diverges from formal autonomy for two major reasons: the available constraints, which are impositions from the powerful environment, and the capacity of a university to use available options and choices. The aspects of the environment through which institutional influence operates can be coercive, mimetic, and normative by their very nature, as presented in the following section.

8.2.2.1   Coercive reasons and mechanisms

Coercive reasons and mechanisms that made discrepancies between formal and de facto autonomy are regulatory framework (formal), the market and stakeholder-related environment, and university-related. As a coercive regulatory framework, assorted policies have been developed to guide actions and practices in Ethiopian universities. These policies are expected to facilitate and guide decisions and define what is obligated, exempted, and prohibited. However, this study indicated that some elements of these policies seem ambiguous, imprecise, and contradictory, with overlapping roles. These kinds of gaps in policy might confuse, create fear and erode the confidence of the implementers, as there is accountability for any decision. Consequently, ASTU might refrain from making authoritative action within its discretion, which might make the execution of its mission difficult. Thus, the gaps in Ethiopian policies, supposed to guide actions at ASTU, are the coercive reasons and mechanisms for the distinctions observed between de facto and formal autonomy. As the way forward, then, to make ASTU, and all universities in the country that share similar policies enjoy the importance that institutional autonomy implies, the state should revisit policies with caution and in collaboration with stakeholders. Otherwise, it remains a bottleneck even in the absence of impositions from elsewhere.

ASTU is one of the public universities in Ethiopia founded by the state. Accordingly, the state has overwhelming power over ASTU. This study indicated that the state has a political interest in ASTU. To realise its presence at ASTU, the study illustrates that the state seems to employ two political mechanisms. First, the state monopolises the nomination and appointments of ASTU top leaders, including board leaders and members. Correspondingly, top university officials are often treated as appendages of the existing political system and serve as state political pawns. Second, the state has been enforcing political conformity and

creating political allegiance at ASTU, which urges the university to converge to state political orders. This can force top officials to compromise the interests of ASTU in favour of their leadership positions. Therefore, state political influences could be one of the coercive reasons and mechanisms for the discrepancy observed between de facto and formal autonomy. However, as a way forward, to promote ASTU's efficient and innovative responses to the environmental expectations defined in its mission, it is suggested to promote secularism and place a purely merit-based approach in the assignment of ASTU leaders.

This study proves the state retains some of ASTU's vested authority. The state sometimes denies either totally or partially what is formally obligated, such as the nomination of the three voting board members, determining curriculum and educational programs, and criteria for diverse actions. So long as the state intervenes in ASTU's affairs regardless of what is obligated, the formal autonomy is nominal. Thus, state excessive manipulation and abjuring the vested autonomy are the reasons and mechanisms for the observed disparity between de facto and formal autonomy at ASTU. As the way forward, then, it is suggested that state steering needs to be limited to what is defined by law (formal autonomy). Otherwise, the formal autonomy should be restated and officially exclude those areas of discretion that the government wishes to retain from ASTU's autonomy to at least minimize the confusion in decision-making.

Generally, performance evaluations are meant for identifying gaps in an organisational function and developing a strategy on how to improve them. Nevertheless, in this study, performance evaluations have been constraining the decision-making competencies of ASTU in two ways. First, the performance evaluation of the ASTU president has been made by sectors that have not formally been made responsible, without a pre-determined schedule. Second, the criteria for the evaluation might not be derived from the agreed-upon plan (the criteria of performance evaluation diverge for disparate evaluators). Hence, the president might lack confidence. This entails that the ASTU president seems unable to discern when and who will conduct the evaluation. Consequently, the president may get frustrated; and refrain from undertaking authoritative action. Therefore, a performance evaluation at ASTU is among the coercive reasons and mechanisms for the difference between de facto and formal autonomy. However, as the way forward, it is suggested that ASTU's performance evaluators must be limited to what is prescribed in formal autonomy to maximise the likely benefits expected from the university.

The study has revealed that financial rules and regulations have poorly fitted the peculiar characteristics of ASTU. It lacks flexibility and is complicated by administrative procedures and requirements, such as approval. Alongside the binding nature of rules and regulation, it does not seem to fit the actual situation at ASTU. The study also illuminates that, while managing ASTU's finances, the state has been focusing on whether expenditures are made based on the procedure, which has given less emphasis to results obtained by the investment. Therefore, it is safe to conclude that rules and regulations are formal coercive reasons and mechanisms that shaped de facto autonomy to appear less than formal autonomy at ASTU. As the way forward, however, for ASTU to flexibly respond to the ever-changing demands of its environment, the financial rules and regulations should be reinstituted through policy evaluation in such a way that it enables ASTU to execute its responsibility with balanced accountability in place.

This study also illuminates that, in the state–university governance relationship, the sectors responsible for governing ASTU have been changing frequently. This might affect the likely expertise and experiences in governing the university. Hence, the expected contributions of the sector in supporting the university might be diminished. Besides, there are two sector ministries whose focus varies while governing ASTU. Sometimes, instructions from these two state sectors were contradictory. This implies that ASTU seems trapped between the two commands, which sometimes contradict one another, mainly while making authoritative decisions. Therefore, protecting frequent turnover through a well-established plan is suggested, so that the sector ministry supposed to govern the university can emerge through an experience that could enable it to provide the required supervision and support.

The study shows that there is a shortage of supplies in the local market. Correspondingly, the next option for ASTU could be the international market, which is also deficient because of the lack of hard currency in Ethiopia. Accordingly, ASTU has poorly utilised its budget, and other universities in the country are not exceptional. This implies that ASTU and other universities in the country have not been supplying their teaching, research, and community service with the required inputs. Hence, the local market context is among the coercive reasons and mechanisms for the difference observed between de facto and formal autonomy.

Likewise, while ASTU is planning to provide its professional expertise, the perception of the community on the kind of service that ASTU is supposed to provide contradicts the assumptions of community service. Simultaneously, the

industries, which are supposed to provide skill training for students at ASTU, lack trust and have poorly been working with ASTU. Therefore, the community's understanding and the trust of stakeholders in the university's function are found powerful in limiting the practices of ASTU. As a way forward, then, it is suggested that ASTU should work hard in building trust and creating awareness with its stakeholders and community at large through persistent communication.

This study has demonstrated that ASTU was established to be an instrument that enhances the applied sciences and technological capacity of the country. Using this opportunity, ASTU manages to claim and assume more autonomy in areas that are not part of its discretion, which is literally beyond what has been formally obligated. Accordingly, professional power can be considered as a mechanism that impacts de facto autonomy positively at ASTU. Therefore, to maximise the benefit of its autonomy, ASTU, and other universities should capitalise on their expertise and increase their relevance in society.

Conversely, the study depicts that ASTU has been excessively dependent on the government's purse, which insists on excessive government steering. Therefore, being excessively dependent on the state for a resource can be the reason for ASTU to compromise its given autonomy. However, as a way forward, as state investments come from taxpayers, it is impossible to decline state steering. Thus it is suggested that ASTU should strive to decrease its likely dependence on the state by generating its funds, and the state should gradually decrease its investment in the university.

Furthermore, state steering at ASTU seems gradually declining since its establishment for two reasons. First, at the formative stage, ASTU was not supplied with all required structures, which may decrease decision-making competencies. Second, during its establishment, ASTU may not have had rich experiences that might help it exercise its autonomy. As a result, the state has been involved very much in the university's decision, which implies limited de facto autonomy. This means that de facto autonomy seems to depend on the maturity level of the institution. Therefore, the lifespan of the university can be the coercive reason for the distinction observed between de facto and formal autonomy.

8.2.2.2   Mimetic reasons and mechanisms

The Ethiopian state has been striving to enhance its technological capabilities to realise sustainable economic development in the country. To this end, the state had re-innovated Adama University to become ASTU as an instrument that

materialises its ambition. To this end, the state urged ASTU to copy experiences in favour of the changes it wished to bring. Copying is one of the cognitive practices that help the university to cope with uncertainties and improve its method of executing its mission. But making by the state instruction is the manifestation of state control. As depicted in this study, ASTU was forced by the state to emulate Korean technology universities without considering the actual context in Ethiopia and ASTU. Consequently, ASTU has been challenged in determining its curriculum as the context demands and recruiting its staff, which limits its functions. Therefore, the mimetic mechanism insisted on by externals is one reason for de facto autonomy to appear distinct from formal autonomy. However, so long as organisational dynamics are persistent, learning from one another is inevitable. Cognizant of differences in the context (economic, cultural, legal, and political), hence, empowering the university to determine what to learn, what not to learn, and from where to learn, and adapting rather than adapting are suggested.

8.2.2.3 Normative reasons and mechanisms

As indicated in Chapter 4, the country had been deploying expatriates from all over the world. As indicated in the case study data, expatriates were assigned to leadership positions that ranged from teacheing to department, and university president. This inevitably led to sharing experiences while working together, which could gradually change practices at ASTU. This creates an opportunity to learn from one another that might help the university promote its importance to the country. However, it does not always demonstrate a positive contribution. This study demonstrated that while these professionals have been working together, inter- and intra-organisational communication barriers (cultural conflict) have been observed at ASTU. In addition, the cultural differences in the governance relationship between Ethiopian and Korean leaders had been a bottleneck for the proper functioning of ASTU. Consequently, the university has been challenged to execute its mission to the extent it is expected. This entails that the communication barrier in professional networking and the cultural difference in governance relationships as a normative pressure are the reasons and mechanisms for the observed difference between de facto and formal autonomy. However, it is suggested that the university should continuously work on communicating the values, norms, and culture of the country in general and the university in particular.

8.3   Implications

In the Ethiopian higher education system, the policies that define what is obligated, restricted, and prohibited are the same for all universities, except for private universities. They also share numerous contexts in common in their governance relationships such as political and resource dependence, and market. But this does not guarantee similarity in exercising their formal autonomy. As it is shown in this study, de facto autonomy at ASTU is different from formal autonomy that is resulted from numerous pressures from the environment. Even though the statistical generalisation of the findings of case study to the universe is not methodologically sound, it is possible to infer its practical and theoretical implications. Thus, the following implications for universities and non-university organization are inferred.

8.3.1   Practical implications

Universities are organised to execute various kinds of missions in society and are responsible to pursue those missions and beyond. One of the ingredients that enable the universities to execute their mission is autonomy, which is equivalent to their responsibilities. Otherwise, universities could not make innovative and timely responses to environmental expectations, which deteriorate their relevance in society. This entails that if universities fail to maximise their benefit out of their given autonomy, they cannot perform well (Iwinska & Matei, 2014).

In addition, new public management reform indicated that steering at a distance is not efficient, effective, and economical (Braun, 1999). This means empowering universities, is assumed to realize the purpose for which the university was established. Therefore, studying the extent of the practice of formal autonomy and explaining why and how differences could appear with de facto autonomy can help us to understand and identify the possible and potential mechanisms that maximise the benefits of both the state and the university in their governance relationship.

Though their contents may not be the same, policies, rules, and regulations that guide universities of any kind are common. This study has shown that in the absence of state interruptions in university affairs, which is ideal, the policies, rules, and regulations can limit de facto autonomy, as they cannot prescribe action in every single detail, and have gaps of their own. de Boer & Enders (22017) also confirmed that policies can obstruct the powers and competencies to take

decisions. In addition, market and perception of the community, especially in Ethiopia where the local market could not supply the required input and shortage of foreign currency is common, maximizing financial de facto autonomy could be a challenge. Thus, even if state steering is minimal, practically policies, rules, and regulations, the market and perception of the community can limit de facto autonomy.

The empirical pieces of evidence have shown that fund providers (state or none state) impose coercive pressure on subordinate organizations (Mizruchi & Fein, 1999). The extent to which organizations are dependent is inversely related to the extent of de facto autonomy (Kehm, 2014; Oba, 2014; Stensaker, 2014). It is also indicated that resource dependence is one of the reasons that limit de facto autonomy (de Boer and Enders, 2017). Similarly, this study indicated that a university's excessive resource dependence can deteriorate de facto autonomy. Therefore, two policy-level interventions are suggested. First, to reduce the extent of resource dependence, universities should be made responsible for their funds. Second, transferring the cost of learning to students and empowering universities to collect and use tuition fees is suggested in a country like Ethiopia.

It is empirically evidenced that the state often seeks to steer universities to realise its political presence (Olsen, 2009), through the nomination and appointments of top university leadership such as university presidents and board leaders and members (Habib et al., 2008; Ordorika, 2003; Verhoest et al., 2004). This study has also shown that state political influence in a university affair deteriorates de facto autonomy. Thus, relieving universities from political subordination by making the selection and appointments of university's higher officials purely merit-based, and promoting secularism are suggested in a country like Ethiopia. Otherwise, it seems difficult for the universities to execute their mission up to the expectation of the environment.

8.3.2   Theoretical implications

Institutional autonomy has two faces: the provision (formal), and the actual (de facto)(see chapter two) faces. Some of the research conducted so far to investigate the states of institutional autonomy in universities employed formal autonomy as the source of their data. The result of this type of data is not often aligned with the actual practice in the university. For instance, just looking from the provision side Saint (2004) judged that the university autonomy in Ethiopia is substantive, but in

practice universities in Ethiopia have been under strong government control. This study also indicated that de facto autonomy is found often less than formal autonomy. Moreover, institutional autonomy is susceptible to macro-environmental pressures and the capacity of a focal organization that could shape and reshape de facto autonomy to appear different from formal autonomy. This signifies that focusing on the de facto side can better explain the state of institutional autonomy of universities. Therefore, De facto autonomy and formal autonomy have often appeared different and autonomy could not be absolute.

8.4 Contribution of this study

8.4.1   Institutional autonomy research

Institutional autonomy in higher education is becoming crucial and plays a significant role in enabling universities to execute their mission. To unpack the importance that institutional autonomy bears, a large and growing body of recent literature place much emphasis on states of formal institutional autonomy, the level of formal university autonomy, and external influence on institutional autonomy. Nevertheless, the relationship between formal autonomy and de facto autonomy has not been traced much in higher education. Thus, this study tried to describe the practice of de facto autonomy and explain why and how this dyad (de facto and formal autonomy) appears different in the contested relationship between what is given and what is exercised through the lens of neo-institutional theory.

This mixed-method case study shows that the provision of substantive formal autonomy does not guarantee actual practice. Empirical evidence has shown that excessive and congested control from a distance is not economical, efficient, and effective (Braun, 1999). The interest to impose excessive control, as this study identified, is rooted in the government type and its ideology, the extent of universities' political and economic dependence, and the environment within which universities function in general. Understanding the reason and mechanisms could inform both the state and the university to be aware and critically think the way out. Therefore, this study could awaken both states and universities to think otherwise. This in turn could increase the extent of the practice of de facto autonomy and helps universities increase their importance in realising the establishment of great universities that every nation aspiring for.

Thus, focussing on the two sides of institutional autonomy can better explain the autonomy of institutions rather than sticking to the provision side. Besides, this study contributes to filling the gap in understanding the discrepancy between what is instituted as a policy and the actual practice of implementing it. It is also helpful to inform the state and the university on how to create a favourable regulatory environment that could enhance de facto autonomy, which by implication promotes innovation and the efficient response of the university to the institutional environment. This study also enlightens readers on how the relationship between powerful authority and focal authority affects the practice regardless of the legal provision..

8.4.2   Conceptual models and theories

As indicated in chapters two and three, two concepts were employed to frame this study. First, the four dimensions of the EUA autonomy scorecard, in combination with Berdahl's two dimensions of the university, guided the identification of variables in the first phase of the study. Second, institutional isomorphism was employed to frame the explanation of why and how de facto autonomy is shaped and reshaped to appear different from formal autonomy.

The European University Association's university autonomy scorecard (EUA) has defined university autonomy in terms of four dimensions (organisational, financial, staff, and academic) based on EUA's Lisbon declaration in 2009 (Estermann, 2009). Despite numerous challenges faced in studying the state of institutional autonomy in 34 European countries, it provided basic elements for the four dimensions of university autonomy (Estermann, 2009). Methodologically, it starts with the exploratory type in 2009. Later, in 2011, it made the EUA autonomy scorecard, and in 2017, it included both the scorecard and exploratory in the study of university autonomy, based on the shortcomings observed. Regardless of its observed gaps, the EUA autonomy scorecard has contributed to many national dialogues in Europe, and it has served as a reference in studying institutional autonomy in Europe and beyond (Pruvot & Estermann, 2017).

This study also indicated that the EUA autonomy scorecard, in combination with Berdahl's multidimensional model, can be used to specify the concept of university autonomy and to simplify the identification of the variables.

The practice of scoring and weighing indicators in the EUA's university autonomy scorecard has no value in a study of de facto autonomy like this one because it is not yet standardised and has been used to compare formal autonomy across countries' university autonomy. Hence, using the '*University Autonomy Multi-Dimensional Model*' could help describe the extent to which universities are exercising their given autonomy. The variables for formal autonomy are a function of the regulatory framework of countries. Hence, it is impossible to have ideal variables that work everywhere. Nevertheless, this model can help identify variables based on the existing policy framework. Therefore, the descriptions and variables indicated in Table 3 in Chapter 2 could serve as a reference for the study of de facto autonomy and the state of university autonomy.

Even though universities' formal autonomy is a function of countries' legal frameworks, the elements of university autonomy have no fundamental differences. The rationale behind this is that higher education institutions are the most institutionalised entities. As an illustration, regardless of the disparity between the context of European universities and Ethiopian universities such as ASTU, the distinctions between the variables of the two are not that significant. Thus, the EUA autonomy scorecard, with some modifications, is helpful to frame studies about autonomy in Africa and everywhere.

Institutional isomorphism: The elements of institutional isomorphism have not been given specific variables except for making a general category coercive, mimetic, and normative. This work employed institutional isomorphism as a conceptual framework to manage the understanding of the reasons that could create variations and how they could be created between de facto and formal autonomy. Meanwhile, specific variables emerged during this study, especially for coercive mechanisms. As illustrated in figure 9 below, coercive mechanisms could be non-university-related (environmental) factors and university-related factors, which are further split into policy, regulatory and administrative, political, rules and regulations, context, and capacity-related factors. University-related coercive factors

Figure 9. Elements of Institutional Isomorphism
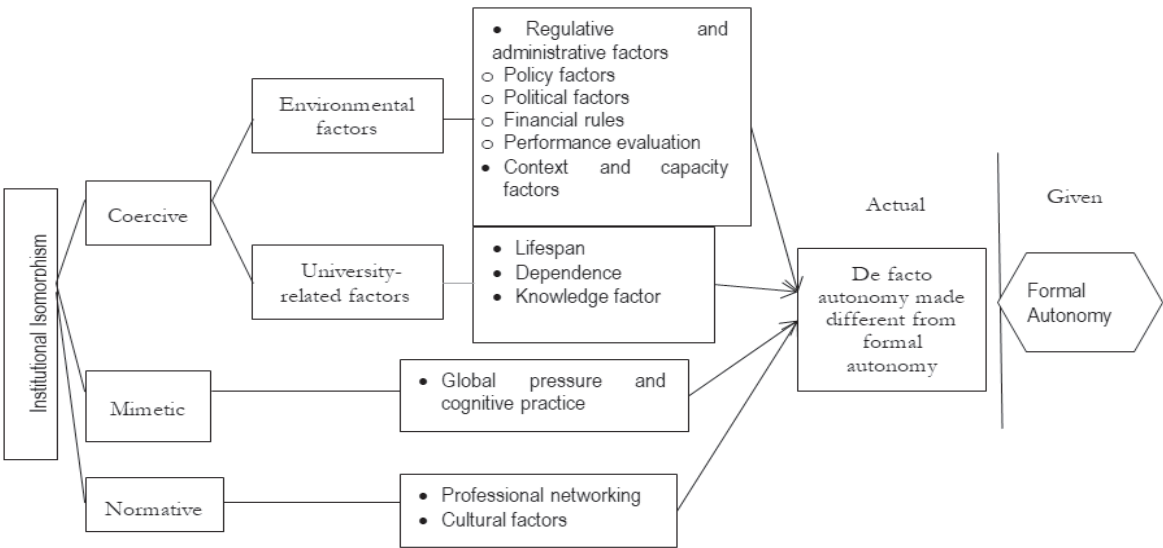
The interaction between an environment and organisation is unstoppable, and they always influence one another. In this interaction, environmental factors could be conceptualised as institutional isomorphism, which is helpful to understand how the practices, behaviour, and structure of an organisation could be shaped to grow similar. The other phase of the isomorphism concept is differentiation. Therefore, it is helpful to explore the discrepancy between policy and implementation, theory and practice, work given, and executed by shaping practices, as it did in this study, which explored why and how formal and de facto autonomy appear different.

8.5   Limitations of the study

The first limitation of this study was the inability to refine the data obtained qualitatively. After the transcription of the data, it was relevant to contact a few respondents again. However, the outbreak of COVID-19 in Ethiopia followed by travel restrictions, frustration with attempts to make contact, and poor access to telephone and internet resulting from the political turmoil in the country restricted

the researcher from contacting all the required participants. Had it been possible to access additional few informants again, it would have been possible to provide more evidence for the claims made in this study. The conceptual model used to frame this study is from Europe, whose socio-economic, cultural, and political contexts are different from Ethiopia. Thus, this limitation forced the researcher to reject some items. In addition, the conceptual framework employed to frame this study, institutional isomorphism, emphasises how pressure from the environment shapes organisations to become similar. This study only analysed how environmental pressures could shape the practices and behaviour of ASTU so it has its current form of de facto autonomy. Hence, it bears limitations that could limit some of the claims made in this study.

8.6   Delimitations of the study

Institutional autonomy is a relational concept that encloses the state of autonomy, which requires examining formal autonomy (high or low), the relationship between formal autonomy and de facto autonomy, the extent of formal autonomy and its relationship with the productivity of the university, and others. Provided that autonomy is formally obligated, this study made a specific focus on de facto autonomy, regardless of the state of formal autonomy. Moreover, the units of analysis of institutional autonomy could be external and internal, but this study is limited to the relationship between external environment and ASTU. Staff autonomy as a dimension of institutional autonomy is all about the staff, regardless of the kind of service they might deliver at ASTU. However, this study focuses only on the academic staff, whose responsibility is directly related to academics. The intention behind delimiting the scope is to make the study concise and manageable.

8.7   Propositions for future research

To unpack the likely importance that institutional autonomy as an instrument bears, a focus on de facto autonomy is required. So long as a source of formal autonomy is a legal framework specific to every country, the variables could vary from country to country. In addition, the context (political, social, economic, cultural, and technological) wherein each university is situated may not be the same

within the country and across universities worldwide. However, this study is based on a case institution, and it does not consider inter-university perspectives. Thus, comparative studies that consider the policy, context, and nature of universities in explaining de facto autonomy will help to expand the knowledge in the field. Moreover, the implication of the practice of lesser de facto autonomy on the performance of universities or the relationship between university performance and de facto autonomy is an area that merits the further focus of researchers.

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APPENDICES

Appendix 1: Questionnaire

ADDIS ABABA UNIVERSITY AND TAMPERE UNIVERSITY JOINT
DOCTORAL PROGRAMME IN HIGHER EDUCATION LEADERSHIP
AND MANAGEMENT

Questionnaire to be filled out by department heads and academic staff

Dear colleagues,

On top of vested traditional missions (teaching, research and community engagement), public universities in Ethiopia have been given huge responsibilities in transforming the socio-economic and political landscape of the country. For universities to discharge their responsibilities, university autonomy plays a relevant role in promoting innovative, up-to-date and context-specific decision-making behaviours. This, in turn, is the function of the extent of formal autonomy (the decision-making space is given through higher education proclamation) and the practice of universities in exercising the given autonomy. Thus, this survey aims to describe the extent to which Adama Science and Technology University is exercising formal autonomy, which will serve as the preliminary source for conducting the qualitative study later. To achieve this purpose, your genuine responses play inreplaceable role. Therefore, you are kindly requested to voluntarily participate and provide answers genuinely. Furthermore, the researcher confirms that your responses will be strictly anonymous and will be used only for academic research purposes. To this end, you are not required to write your name.

Nb: You can communicate with the researcher about any concerns related to this research using the following alternative addresses. Thank you for your time and kind cooperation.

Bultossa Hirko
Email: bultosahirko@yahoo.com
lebetabultossa1974@gmail.com
Mobile phone: 251 962 331 601; 251 910 476 946

Instructions

This questionnaire includes Likert scales and limited open-ended question items with their respective instructions. Thus, you are kindly requested to tick (x) for the Likert-scale question items that appear appropriate for you.

Section I. General information about respondents

Instructions: Please tick 'x' in the appropriate boxes, and write your answer in the blank spaces.

1. Years of service working in the university _____
2. Your level of education: Bachelor's ☐   Master's ☐   PhD ☐
   If other specify_____
3. Your academic rank: Assistant lecturer ☐   Lecturer ☐
   Assistant professor ☐ Associate professor ☐ Professor ☐
4. Your college _____
5. Your department _____

Section II. Issues Related to the Practice of University Autonomy

This section includes four subsections of university autonomy (organisational, academic, financial and staff). Thus, you are kindly requested to respond according to the current state of autonomy exercised by ASTU for the following questions.

2.1 Organisational autonomy (*Freedom to make decisions on issues related to the nomination, selection and appointment of university leadership and structures*)

I. Please indicate the extent to which your university is exercising its freedom to make decisions concerning the following issues regarding organisational autonomy. Indicate your responses using the following scales:

1 = free to a small extent, **2** = free to some extent, **3** = free to a moderate extent, **4** = free to a great extent, **5** = free to a very great extent

	To what extent is ASTU free to:					
	Nominate its president?					
	Conduct public advertisements to nominate its president?					
	Select vice presidents?					
	Appoint vice presidents?					
	Replace vice presidents upon the expiry of terms of offices?					
	Nominate voting university board members?					

	(Nb. Three voting board members are nominated by the university according to the Higher Education Proclamation, 2009)					
	Appoint academic leaders (deans, department heads etc.)?					
	Appoint senate members?					

9. Is there any point(s) you want to add concerning your university's freedom to make decisions related to organisational autonomy (e.g. the freedom to make decisions on issues related to the nomination of the president, as well as the selection and appointment of the vice president and academic structures)?

_____

_____

2.2 Academic autonomy (determining the student number, selecting the student, developing a curriculum, conducting research etc.)

I. Please indicate the extent to which your university is exercising its freedom to make decisions related to academic issues, using the following scale by ticking 'x': 0 = not at all free   1 = free to a small extent   2 = free to some extent   3 = free to a moderate extent   4 = free to a great extent   5 = free to a very great extent

No	*To what extent is ASTU free to:*	1	2	3	4	5
1	Establish admittance standards (criteria) for new students at the bachelor's level?					
2	Master's?					
3	PhD?					
4	Determine the number of new students to enrol at the bachelor's level?					
5	Master's?					
6	PhD?					
7	Select students at the bachelor's level?					
8	Master's?					
9	PhD?					
10	Start new academic programmes at the bachelor's level?					
11	Master's?					
12	PhD?					
13	Terminate programmes at the bachelor's level?					
14	Master's?					
15	PhD?					
	Develop a new curriculum at any level?					

6							
7	Develop a research agenda?						
8	Offer education through diverse programmes (such as distance, weekend and evening)?						

24. Is there any point(s) you may want to make concerning your university's freedom to decide issues relating to academic affairs (e.g. determining student numbers, selecting students, curriculum development, conducting research)? Please indicate your point(s) here _____

2.3 Financial autonomy

III. Please indicate the extent to which your university is exercising its freedom to make decisions related to financial issues, using the following scale, by ticking 'x':

0 = not at all free   1 = free to a small extent   2 = free to some extent

3 = free to a moderate extent   4 = free to a great extent

5 = free to a very great extent

o	*To what extent is ASTU free to:*						
	Determine the amount of tuition for private applicants at the bachelor's level? *Example: Private applicants are those students not sponsored by the state.*						
	Mobilise additional financial income?						
	Internally disburse the amount generated? *That is, concerns the freedom of the university to assign money it generates for any expenditure without permission from anybody else.*						
	Assign the amount required for a research fund? *For instance, criteria that dictate the university to determine the amount, such as X% for research, Y% for …, limit freedom.*						
	Undertake procurement activities on its own? *That is, workers' and leaders' decisions to conduct procurement of any kind.*						

IX. Is there any point(s) you want to make concerning your university's exercising of financial autonomy (budgeting, expenditures etc.)? Please write here _____

2.4 Staff autonomy

III. Please indicate the extent to which your university is exercising its freedom to make decisions concerning staffing issues, using the following scale, by ticking 'x'.

1 = free to a small extent   2 = free to some extent   3 = free to a
moderate extent   4 = free to a great extent   5 = free to a very great extent

o	To what extent is ASTU free to:					
	Institute rules and procedures to recruit academic staff? *(Example: Determining the requirements and academic profiles of recruitments)*					
	Determine the number of academic positions? *(Number of academic staff to be employed)?*					
	Determine procedures for individual academic staff assessments?					
	Set criteria for academic staff promotions? *(Example: Set institution-specific academic staff promotion criteria)*					
	Decide on the promotion of academic staff?					
	Dismiss senior academic staff?					
	Determine workloads? *(Teaching and research)*					

8. Do you have additional points you want to make about staff autonomy (i.e. the freedom to make decisions concerning staff such as recruitment, selection, assignment, compensation etc.)? Please write them below. _____

I am grateful for all your input
Please write any further comments you might have about how ASTU is exercising its autonomy in the space provided. _____

Appendix 2: Checklist and Its Data

o.	Item	Yes	No	To some extent
	Block grant budget appropriation mechanism			
	Development of budget template by ASTU			
	If 'no', the room to change the template near the university			
	Earmarking mechanism regarding state budget appropriation			
	Determining the level of recovery cost (level of tuition fees)			
	Able to change tuition fees independently			

	Able to borrow money from financial institutions			
	Autonomous freedom to transfer a budget from one budget head to another			
	Freedom to use the money it generated without permission from the state			
0	Freedom to determine the amount of compensation for research			
1	Freedom to determine the amount of compensation for overtime and overload			
2	Freedom to determine the size of payable allowances			
3	Freedom to carry over unspent financial resources from one year to the next for:			
	☐ Capital budget appropriated by the government?			
	☐ Recurrent budget appropriated by the government?			
	☐ Budget generated by the university?			
	☐ Budget obtained from development partners (NGO, industry etc.)?			
14	ASTU's freedom to determine expenditures for:			
	❖ Capital budget appropriated by the government			
	❖ Recurrent budget appropriated by the government			
	❖ Budget generated by the university			
	❖ Budget obtained from development partners			
5	ASTU's freedom free to make procurements on its own			

Appendix 3: Interview Guide

This interview has four themes corresponding to the four dimensions of institutional autonomy. First, organisational autonomy focuses on the nomination and appointments of ASTU leadership (president, vice president and board); the performance evaluation of ASTU's president and determining ASTU's internal structure. Second, financial autonomy encompasses budgeting and its utilisation, financial rules and regulations. Third, academic autonomy concerns student-related decisions, curriculum and academic programme, research and community services. Finally, staff autonomy relies on academic staff recruitment, selection, assignment, promotion and dismissal issues. With these themes in mind, the following interview questions were developed as a guide.

I. Personal experience, level of education and academic rank

Please tell me about yourself.

(Probe: How long have you been working at ASTU? What is your level of education and academic rank?)

II. Organisational autonomy

1. Would you please tell me how ASTU's leadership is nominated and appointed?

(Probe: This question concerns the nomination and appointment of ASTU's president, vice presidents, board chairs and members.)

2. Would you please share with me how the university president's performance is evaluated?

(Probe: Who is responsible for conducting the performance evaluation? How often have performance evaluations of the president been taking place? What are the mechanisms employed to conduct performance evaluations of ASTU's president?)

3. Would you please explain how ASTU's internal organisational structures are determined?

(Probe: Who determines the internal structure of ASTU? What is the role of the board, sector ministry and ASTU in determining the internal structure?)

III. Financial Autonomy

3.1 Would you please tell me about the ASTU budget and its utilisation?

(Probe: What are the major sources of the budget? What mechanisms does the state employ to provide the budget for Suchow? Does ASTU utilise its budget? How have tuition fees been decided?)

3.2 From your perspective, please explain state financial rules and regulations and ASTU's functions.

(Probe: How does financing operate in ASTU? Would you tell me about the major requirements for utilising the budget? How does ASTU conduct procurement? How do recruitment procedures facilitate supplies for university functions?)

3.3 Would you please share with me your observations about the utilisation of funds generated by ASTU?

(Probe: How is the expenditure of funds generated by ASTU determined? What roles do the state and board play in the expenditure of self-generated funds, if any?)

IV. Academic autonomy

   4.1 Would you please explain to me how student-related decisions are made at ASTU?

(Probe: How are the number of students to be recruited and their selection criteria determined by ASTU? Who selects students for ASTU?)

   4.2 Would you please share with me how the curriculum and academic programmes are determined at ASTU?

(Probe: How is curriculum either developed or terminated at ASTU? How is the academic programme's opening or closing determined at ASTU? How have research and community services been conducted at ASTU?)

V. Staff autonomy

   5.1 Would you please tell me how academic staff are selected, compensated and promoted?

   5.2 From the perspective of your position, would you tell me about the relationship between the ruling sector ministry and ASTU?

Appendix 4: Informed Consent

Date: 08/10/2019

TO: Adama Science and Technology University

Bultosse Hirko is a PhD student in Department of Educational Planning and Management. He/she is currently Writing on the title:

Institutional Autonomy and Mechanisms of influence; Formal autonomy and autonomy in Use perspective The case of ASTU.

This is therefore, to kindly request your good office to offer him/her with the requested information. The department would like to thank your good office in advance for your cooperation. providing.

Thank you

Kenenisa Dabi, Chairman, Department of Educational Planning and Management

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Bultoss.

agement

PhD student in Dep

1. To: All VP's
Please support him in Providing all necessary document and information

Jemi Guta Enyadene.PhD
President

2. To: All schools
For your necessary support.

TeshomeAS
Teshome Abdo Segne,PhD
VIPresident for Academic Affairs

Appendix 5: Pilot Study Results

Based on scholars' suggestions, the questionnaire's items were refined by removing some items, restating others, adding explanations and rearranging the sequences of some items. The major points suggested and changes to the tool are briefly indicated in what follows.

Item validity: Clarity of terms/phrases

In the survey tool developed for this study, organisational autonomy, academic autonomy, financial autonomy and staff autonomy are included as different dimensions of autonomy. Participants on the validity test found that these concepts, themselves, were vague and required explanations so the potential informants understood the concept and could give appropriate responses. Based on this suggestion, a brief operational definition is included in the brackets of each. In addition, concepts such as recovery cost are replaced with the common phrase *tuition fee*. Similarly, different confusing and ambiguous items were revisited.

To clarify question items that might put respondents in a quandary, some suggested items were revisited. For instance, some items in parts 2.1 and 2.2 of the questionnaire (organisational autonomy and academic autonomy, respectively) were considered complicated. Consequently, nine items were revisited and clarified by specifying and splitting variables to ease an understanding of the items.

Sentence Structure

The participants identified some items that were double meaning. Some items were longer and lacked clarity. Based on the suggestions, the researcher tried to readdress them, clarify them and simultaneously separate double-barrelled items. In addition, some questions' forms were found to be inconsistent. Those questions that lacked consistency were revisited and rephrased. Similarly, in sections 2.1 and 2.4 (organisational and staff autonomy), three items that were originally 'yes' and 'no' questions were restructured and made into Likert scale-type items.

Appropriateness

Although some items, specifically those found under Section 2.3 (financial autonomy), are important, the target respondents, as suggested by validators, might not have enough information about the details under this variable. Based on this suggestion, the researcher recognised that this might lead to either no response or unrealistic data. Thus, the researcher, in consultation with experts in the field, decided to collect information using a checklist. Accordingly, one checklist with 28 items was developed. Thus, out of 39 originally developed items

for financial autonomy, only seven items were included in the survey tool. Other question items were found inappropriate for the purpose for which this survey tool was designed. One was: 'To what extent does the state control universities' finances?' This item does not show the extent of the exercise of formal autonomy. Thus, 14 items were excluded from parts 2.1 and 2.2 of the questionnaire (i.e. organisational autonomy and academic autonomy).

Component Loading

Some of the importance of principal component analysis, as discussed above, is refining and reducing items. The output of factor analysis, the **rotated component matrix**, shows that eight items are found to measure significantly different constructs. Thus, these items require refining and stating. To this end, the identified items were rephrased to reduce the likely overlapping of the construct to be measured. Besides, two items were found insignificant in measuring the intended construct. Thus, these two items were excluded from the item list. In addition, the **scree plot** below shows how the items are spread to measure about 14 constructs. To determine how many components meet the criteria, look at the eigenvalue for each component. The first 14 components recorded eigenvalues above one (i.e. 16.499, 8.926, 7.511, 7.049, 5.928, 5.341, 4.864, 4.355, 4.238, 3.338, 2.895, 2.394, 2.035 and 1.668) This also helps us to rethink and rephrase these items similarly by fixing several components into four. The fixing procedure in the factor analysis resulted in the rotated component matrix described above.
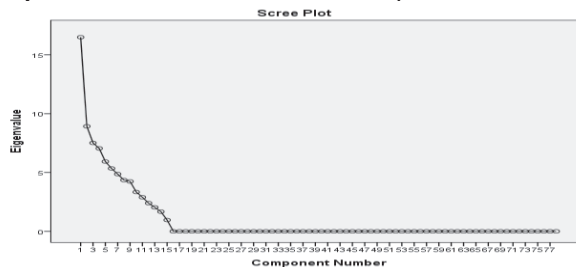
Scree Plot

Two reliability tests (internal consistency and the stability of scores) were conducted. To conduct these tests, 30 sample respondents selected from Addis Ababa University (five from the Special Needs Education Department, five from the Curriculum and Instruction Department, five from the Language Department, five from the Psychology Department, five from the Social Science Department and five from the Educational Planning and Management Department) returned the questionnaire.

The SPSS output of the internal consistency of Cronbach's alpha coefficient was 0.768. This implies that the items included in the survey questionnaire are internally consistent at an acceptable level.

Reliability statistics

Cronbach's Alpha	N0 of Items
.768	38

The second reliability test conducted was the test−retest reliability. The two data were collected at an interval of three weeks. The SPSS output for the Pearson correlation coefficient was 0.85. This implies that the reliability of the external consistency is good.

Qualitative phase pilot study results

Conducting this case study contributed to two major areas: the interview protocol and the construct under study, itself. To start, I learned that issues related to organisational autonomy are not familiar to all staff members. Although all staff members are not devoid of information related to organisational autonomy, those staff members who had worked and are working at the top level of leadership are better at providing the required data. For instance, informant P1 noted:

> … I am not sure how presidents, vice presidents and board members have exactly been nominated and appointed. Recently, our president was appointed based on the competition. The vacancy was announced publicly by an ad hoc committee and screened. Finally, the appointment was made by the Ministry of Education (MoE). I think it would be better if you asked those who are at the top management level or who had the position anytime earlier. (P1)

Similarly, informant P2 indicated that he had no idea how board members were nominated and appointed. In addition, both respondents referred to some questions related to finance to directorates that have been directly working on finance. Thus, based on the pilot study conducted, I included three directorates in the study that were not part of it before.

Furthermore, both participant suggested ignoring some questions that they perceived as routine and technical. Thus, the interview protocol was shaped and made concise, without compromising the purpose of the study. Conversely, although it was not aimed for, the interview had the power to triangulate the data obtained during the first phase of this study.