# The Credit System and Harmonisation of Higher Education in Ethiopia: Implementation Practices and Challenges

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### Abstract

This article analyses the implementation of a credit system and its contribution to the harmonisation of higher education in Ethiopia. Harmonisation has been used as a strategy to respond to the challenges of globalisation and internationalisation. A credit system is one of the tools to accomplish this objective. Harmonised academic policy, modularised curricula, and the introduction of the new credit system, the European Credit Accumulation and Transfer System are major initiatives that could contribute to the harmonisation of higher education in the country. The article identifies the factors that hinder this effort. The lack of clear policy directives on the use of the academic credit system negatively impacted implementation of the ECTS, calling for directives that clearly set out the details of a national academic credit system which should apply across higher education institutions, both public and private, and programmes at all levels.

**Key words**: European Credit Accumulation and Transfer System, Ethiopia, harmonisation, higher education

Cet article analyse la mise en place d'un système de crédits et sa contribution à l'harmonisation de l'enseignement supérieur en Ethiopie. L'harmonisation a été utilisée comme stratégie pour répondre aux défis de la mondialisation et de l'internationalisation. Un système de crédits représente un des outils pour accomplir cet objectif. Une politique universitaire harmonisée, des programmes divisés en modules, et l'introduction du nouveau système de crédits, le Système européen de transfert et

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d'accumulation de crédits (ECTS, de l'anglais « European Credit Accumulation and Transfer System ») sont des initiatives majeurs qui pourraient contribuer à l'harmonisation de l'Enseignement supérieur dans le pays. L'article identifie les facteurs majeurs qui entravent cet effort. Le manque de directives claires pour déterminer une politique quant à l'utilisation du système de crédits universitaires a eu un effet négatif sur la mise en place des ECTS, appelant à des directives qui établissement clairement les détails d'un système national de crédits universitaires qui devrait s'appliquer à toutes les institutions d'Enseignement supérieur, à la fois publiques et privées, et à tous les programmes à chaque niveau.

Mots-clés: Système européen de transfert et d'accumulation de crédits (ECTS), Éthiopie, harmonisation, Enseignement supérieur

### Introduction

The higher education (HE) sector across the world is facing many challenges resulting from globalisation and internationalisation of HE (Altbach, Reisberg and Rumbley, 2000). These challenges, as well as the quest for on-going improvement, and high levels of competition call for a joint effort among countries and their HE institutions (HEIs) to develop different strategies as individual efforts and responses are not sufficient.

Harmonisation of HE is one of the strategies that has been relied on by many countries as a response to globalisation and internationalisation. Among the multiple initiatives, the European response in the form of the Bologna Process is the best example (Chao, 2011; Knight, 2013; Lunt, 2005). It is considered as the most far-reaching HE reform in the past decades (Brandle, 2016; European Commission, 2018; Kehm, 2010), and one of the most advanced processes of harmonisation of HE in Europe (Adamu, 2012).

The Bologna Process aims to promote the European HE system by means of greater compatibility and comparability of degree structures, credit systems and quality assurance procedures (Bologna Declaration, 1999). It also aims to increase the attractiveness and international competitiveness of European HE by making Europe an attractive study destination for people from other parts of the world, and enhancing Europe's scientific capacity to confront contemporary challenges (Bologna Follow-up Group, 2009). One of the instruments to achieve these objectives is the establishment of a European HE Area (EHEA) which encourages and facilitates collaboration through establishing shared objectives and adopting reforms on the basis of common values, using common tools.

The Bologna Process includes the introduction of the three-cycle system, enhanced quality assurance, and the establishment of a credit system, the European Credit Accumulation and Transfer System (ECTS) (Eurydice, 2010). The ECTS was first developed and used as part of the Erasmus programme for transferring credits that students earned during their studies abroad into credits that counted towards their degree at their home institution (Salamonska and Kalantaryan, 2019). A decade later, it became a central tool in the EHEA and the Bologna Process and is considered as the main component of the harmonisation of HE in Europe.

The Bologna Process and its implementation tools attracted the attention of many countries that seek to reap the benefits linked to the harmonisation of HE at continental and national levels. Against this background, this article analyses the implementation of the credit system and its contribution to the harmonisation of HE in Ethiopia. It is principally based on an analysis of relevant continental and national policy and strategy documents, a critical literature review, and the author's experience as (i) a faculty member who actively participated in designing, developing and reviewing curriculum and academic programmes at Bachelor's, Master's and PhD levels in different universities; (ii) a member of the Academic Standard and Program Review Committee at a university which is responsible for, among others, reviewing new and revised curriculum and academic programmes, and (iii) the leader of the Higher Diploma Program which aims to enhance the quality of education through improving university teachers' pedagogical and professional skills.

The article comprises three sections. The first section discusses global trends in harmonisation of HE; section two focuses on the academic credit system and harmonisation of HE in Africa; and section three discusses harmonisation of HE and the implementation of the credit system in Ethiopia.

Based on the year of establishment, there are four generations of public universities in Ethiopia. However, there are no significant differences across these generations in terms of the implementation of a credit system. This is mainly because the rules and regulations on the credit system, study hours and student workloads adopted by their governing structures are very similar. Moreover, the rules adopted by first generation universities in general and Addis Ababa University (AAU) in particular, formed the basis for the development of subsequent generations. The study thus used first generation universities and the AAU to examine the implementation of a credit system at national and institutional level. The AAU is the oldest and largest university in Ethiopia and most public universities in the country follow its lead regarding curriculum, rules and regulations. Furthermore, most of their faculty graduated from the AAU.

### Global Trends in Harmonisation of HE

Higher education institutions vary across the world in terms of the period of study, degrees awarded and qualifications. To address this challenge, UNESCO adopted five regional conventions that promote harmonisation and international cooperation in HE (UNESCO, 2004; 2016). These cover recognition of studies, certificates, diplomas, degrees and other academic qualifications in HE. They include the convention in Latin America and the Caribbean - 1974 revised in 2019, the Arab States -1978 revised in 2018, Europe - 1979 revised in 2009, Africa - 1981 revised in 2014, and Asia and the Pacific - 1983 revised in 2011. The convention on recognition of HE qualifications in the European region, commonly referred to as the Lisbon Convention, takes the lead in facilitating recognition of qualifications and harmonisation of HE at regional level.

Building on these regional conventions, UNESCO recently developed the Global Convention on the Recognition of Qualifications concerning HE. This convention, which is the first UN treaty on HE with a global scope, aims to (i) strengthen inter-regional academic mobility; (ii) promote increased international cooperation in HE; (iii) promote democratisation of HE and lifelong learning opportunities for all; (iv) provide a framework of quality assurance for increasingly diverse HE providers; and (v) develop agreed principles for recognition of HE qualifications common to all regions (UNESCO, 2019). It was adopted by the UNESCO General Conference in its 40th session, and is in the process of ratification by interested national governments. Norway was the first country to ratify the convention.

UNESCO also promotes national, regional and continental qualifications frameworks that aim to make qualifications more readable and understandable across countries and systems, thereby enhancing harmonisation of HE across nations, regions and continents. A qualifications framework is "an instrument for the development and classification of qualifications according to a set of criteria for levels of learning achieved" (OECD, 2007, p. 22). Such frameworks play a significant role in the harmonisation of HE through increasing the cross-border transparency and recognition of qualifications, thereby facilitating mobility for learning and careers. The European Qualifications Framework (EQF) which was adopted in 2005 by the European Ministers Responsible for Higher Education is a good example. This reference framework is an important instrument in achieving comparability and transparency within the EHEA and facilitating mobility of students and teachers (Bergen Communique, 2005; London Communique, 2007). In addition to serving as a basis for national qualifications frameworks within Europe and beyond, the EQF influenced the adoption of the Association of Southeast Asian Nations qualifications reference, and the continental qualifications frameworks in Africa and the Caribbean and the Pacific (UNESCO, 2017).

An academic credit is generally defined as the amount of learning contained in a qualification or part of qualification, and a credit system has been

considered as an important aspect of national and continental qualifications frameworks (Adamu, 2015; Mohamedbhai, 2013; SAQA, 2014). Thus, "credit systems and qualifications frameworks are interwoven" (CEDEFOP, 2010, p. 1). In general, a credit system that allows students to accumulate and transfer credits plays a significant role in the harmonisation of HE through promoting and facilitating the implementation of qualifications frameworks, and recognition of HE qualifications. For example, the ECTS has promoted student mobility and is a supportive mechanism that makes study programmes easy to read and compare (European Commission, 2009), thus making a significant contribution to effective implementation of both the Lisbon Convention and the Bologna Process. It also served as a point of departure in building credit accumulation and transfer systems (CATS) in other regions, including the University Credit Transfer System for University Mobility in Asia and the Pacific (UCTS-UMAP), the Association of South-East Asian Nations (ASEAN) Credit Transfer System which was initiated by the ASEAN University Network (AUN), and the Latin American Reference Credit (CLAR) system and SICA Sistema de Creditos Academicos (System for Academic Credits) in Latin America.

## Academic Credit Systems and Harmonisation of Higher Education in Africa

The challenges facing African HE as a result of globalisation and internationalisation have been intensified by the different education systems that emerged from national, colonial and other legacies. The disparate educational system has resulted in lack of recognition of different forms of certification, limiting internationalisation and harmonisation of HE in Africa (Hoosen, Butcher, and Njenga, 2009; International Universities Association, 2009). These challenges could have been ameliorated through full and effective ratification and implementation of the Arusha Convention, one of UNESCO's regional conventions which was adopted in 1981 and was probably the first framework developed to facilitate harmonisation of HE on the continent. However, by 2014, when the Convention was revised, there were only about 20 signatories and implementation was unsatisfactory and lagged behind that of other regional conventions.

The challenges posed by globalisation and internationalisation call for close collaboration and cooperation among African countries and their HEIs. In line with this, the African Union (AU) developed the continental HE harmonisation strategy that aims, among other things, to facilitate the development and maintenance of a continental framework for HE qualifications, create minimum standards in targeted qualifications, and promote joint curriculum development and student mobility (African Union, 2007). The continental strategy also necessitated revision of the Arusha Convention. A meeting of African states in Addis Ababa on December 2014 agreed to develop a revised Convention, now called the Addis Ababa Convention. One of its aims is to contribute to the harmonisation of qualifications by addressing the limitations of the Arusha Convention and taking current global trends into account (UNESCO, 2014). Although the Convention was endorsed in December 2014, it only entered into force in December 2019, one month after the date that ten UNESCO member states belonging to the African Region expressed their consent. Despite several reminders from the AU and other HE stakeholders, there were only 12 signatories as at October 2020. This clearly indicates a lack of political commitment among most African countries to continental strategies for the harmonisation of HE.

Similar to its European counterpart, the AU also envisaged facilitating and accelerating the harmonisation of HE through, inter alia, establishing the African Higher Education and Research Space (AHERS) and the African Continental Qualifications Framework (ACQF). The AHERS would contribute to harmonisation of HE by promoting academic mobility, quality assurance, recognition of certificates, diplomas and degrees, and encouraging the creation of joint degree programmes at the regional level (UNESCO, 2009). It has been described "an African collective response to the challenges of globalization and the need for harmonization and partnership within the African higher education domain" (Association of African Universities, 2004 cited in Hoosen et al., 2009, p. 5). The ACQF would contribute to harmonisation of HE through enhancing the comparability and transparency of qualifications from all sub-sectors and levels of education and training, and facilitating recognition of diplomas and certificates (African Union, 2019).

However, aside from these measures, effective harmonisation of HE in Africa calls for political commitment, close cooperation among African countries, and the development and implementation of operative CATS at national, sub-continental and continental levels. There are different credit systems across African countries and efforts are required to harmonise these at sub-continental level. The Inter-University Council for East Africa has made significant strides in this regard.

Developing and implementing a continental credit system would connect African HE with the global HE system, reduce the challenges and risks of the internationalisation of HE on the continent (Adamu, 2012), and facilitate effective implementation of different continental level harmonisation initiatives (Teferra, 2018; Adamu, 2015). The need for a continental CATS has been highlighted by scholars and African HE stakeholders and development partners (Adamu, 2012; Association for the Development of Education in Africa, 2015; Teferra, 2018). Although the AU has initiated the development of an African Credit Accumulation and Transfer System

(ACTS) which is similar to the European CATS (Mohamedbhai, 2013), to date there is no functional continental credit system in Africa (Teferra, 2018; Woldegiorgis, 2017).

Among the CATS that are employed worldwide at national and regional levels, the ECTS is arguably the most successful continental CATS. It has served as a reference point for similar efforts elsewhere in the world including the UCTS-UMAP in Asia and the Pacific and SICA in Latin America. Different sub-continental credit systems in Africa such as the Credit Accumulation and Transfer in the East African Community (EACAT) and the Southern African Development Community Credit Accumulation and Transfer System (SADC-CATS) were also influenced by the aims, principles and features of the ECTS.

# Harmonisation of Higher Education and the Implementation of a Credit System in Ethiopia

The Ethiopian HE sector has undertaken different reforms in response to global and national challenges. The major reforms in the past two decades include the establishment of HE regulatory bodies (the Higher Education and Strategy Center and the Higher Education Relevance and Quality Agency), the establishment of private HEIs, considerable expansion of HEIs (from two to 45 public institutions and from none to about 130 private HEIs), the establishment of a University Board as the supreme governing body; the introduction of cost sharing and different management tools (e.g., business process reengineering, Balance Score Card, Kaizen and Deliver ology); the introduction of a quota system for undergraduate student placement - originally 30% social science and 70% natural science and engineering, and now 45% and 55%, respectively (Ministry of Education, 2008); national curriculum reform which resulted in a change in years of study for undergraduate programmes; the selection and appointment of leaders and managers in HEIs in Ethiopia, and academic promotion.

Harmonisation and internationalisation of HE is one of the priority areas for both the AU and the Association of African Universities. However, the government of Ethiopia and its HEIs have not focused on these issues, either as a strategy or a concept, and most HE reforms are not clearly associated with harmonisation. Accordingly, Ethiopia is not an actively participant in continental initiatives that aim to contribute to the harmonisation of HE in Africa. For example, it was not among the signatories of the Arusha Convention, and has not yet ratified the Addis Ababa Convention. There is no clear justification for such disinterest, but it is partly due to a lack of understanding of harmonisation of HE. Ethiopia is also not a member of the East African Community which promotes the development of HE through comparable, compatible, coherent and harmonised HE and

training systems (East African Community, 2016). Moreover, the country attracts few international students; it thus has less incentive to facilitate student mobility and recognition of study periods and qualifications.

However, recent trends such as the development of harmonised academic policy among public HEIs, modular competency-based curricula, and the introduction of the new credit system, the ECTS have contributed to harmonisation of HE in Ethiopia. The Ministry of Education called for the development of an Ethiopian National Qualifications Framework (ENQF) to address the need for a better educated, highly skilled and motivated workforce and to harmonise the education system and enhance its competitiveness. In 2007, the Higher Education Strategic Center (HESC) was mandated to facilitate the development and implementation of the ENOF in collaboration with the Ministry of Education and other national and international partners. Although significant progress was made, the process has stagnated since 2015, mainly because of top level leadership changes at both the Ministry and the HESC.

### Harmonised Academic Policy

The harmonised academic policy of Ethiopian public HEIs was developed by the Ministry of Education. The main rationale is "to have common, if not the same, academic policies; make smooth transfer of [academic and administrative staff and students; enhance quality of education in all HEIs; maintain uniformity in academic and technical support human resource management; [and] produce graduates with more or less similar standards" (Ministry of Education, 2013, p. 2). However, uniformity within the HE system is not in line with the overall principle of harmonisation which is a process of synchronisation and coordination of HE at different levels.

The harmonised academic policy framework focuses on major issues such as human resource policy, academic programme development and review, academic rules and regulations, and student assessment and evaluation. It also promotes the implementation of the ECTS to facilitate the harmonisation of programmes, rules, regulations, and standards across public HEIs.

### Modular Competency-Based Curricula

Modularisation of curricula was first introduced as part of the reengineering of the learning-teaching core process which was itself part of HE reform through the Business Process Reengineering. Convinced that modular competency-based curricula would enhance student mobility and produce competent graduates, and with the aim of creating a common framework, the Ministry of Education developed a guideline for modular

competency-based curricula in Ethiopian HEIs (hereafter the Guideline). The process was coordinated by the HESC and the Guideline was prepared by a consortium of six public universities. Teachers were consulted and given opportunities to comment on the draft Guideline. However, students were not part of the process.

The Ministry of Education also promoted the implementation of competency-based curricula in all public universities with the purpose of aligning graduates' skills, knowledge and attitudes with the needs of the labour market and society. Different HEIs came together to develop harmonised curricula across academic programmes. One of the main purposes was to promote curriculum flexibility and student mobility, and facilitate comparability and compatibility of qualifications (Ministry of Education, 2013; Gebremeskel, 2014). To achieve this, the Guideline also proposed the introduction of a new credit system, the ECTS.

Since 2015, all public universities have adopted harmonised modular competency-based curricula. Among other things, this has helped to address issues related to course equivalence and recognition of qualifications and study periods within and beyond a university. However, implementation has not been without challenges. As noted from academic staff's reflections during their participation in the Higher Diploma Program, their perceptions and experiences of the conceptualisation and implementation of modular competency-based curricula is far from what is proposed in the Guideline. The curriculum development practices across different academic programmes point to a lack of understanding of the main purpose and process of modularisation. Studies also indicate limitations in developing and effectively implementing the main features of harmonised modular curricula such as continuous assessment and student-centred learning (Logaw, 2015; Dejene and Chen, 2019). This suggests that strategies and initiatives that implementers were not involved in developing or that they lack awareness of will not be effectively implemented.

### The ECTS

The ECTS is based on the workload students need to achieve the expected learning outcomes - what a learner is expected to know, understand and be able to do after successful completion of a process of learning (European Commission, 2004). The student workload is an estimation of the time the learner needs to complete all the proposed learning activities. This includes contact hours (e.g., lectures and seminars), time spent on independent study (e.g., doing assignments and preparing for examinations) and workplace learning and training. The ECTS is superior to the Credit Hour (CH) system because it is learner-centred and offers a better way of quantifying learning achievements (Adamu, 2015).

Until the introduction and implementation of the Guideline, both public and private HEIs in Ethiopia used the CH system. This is basically defined as one contact hour per week taken over the span of a semester made up of 16 weeks. One of the main features of this system is that it is based on the teacher's workload, or the number of contact hours that a teacher requires to teach a course. It does not consider student workload for allocation of a credit for a course and other educational components. The ECTS was introduced by the Ministry of Education to address this problem and to facilitate the implementation of modular competency-based curricula, enhance the transparency and comparability of study programmes, study periods and qualifications, and facilitate student mobility within and across universities. Theoretically speaking, the principles and purpose of the new credit system in Ethiopia are based on and are similar to the credit system in Europe, but implementation varies both at system and institutional level. Although the Guideline proposed that the new system be named the Ethiopian Credit Accumulation and Transfer System (EtCTS), the harmonised academic policy, Senate Legislation of different universities and academia prefer to use the common, familiar name – ECTS.

As part of modularised curricula, the ECTS was initially implemented in the undergraduate programmes of all public universities that fall under the Ministry of Education. In collaboration with the HESC, the Ministry organised workshops to facilitate effective implementation of the Guideline. However, neither had a unit that was responsible to follow up on progress regarding implementation of the ECTS and the Guideline. Furthermore, similar workshops were not organised for universities that were either established after 2012 (fourth generation universities) or fall under the Ministry of Science and Technology that recently became answerable to the Ministry of Science and Higher Education (MoSHE), e.g., Adama Science and Technology University and Addis Ababa Science and Technology University.

The introduction of the ECTS was initially well accepted by college deans, heads of departments, academic staff, and registrars. However, some academic staff expressed discontent because the credit allocation requires more work than the previous system (e.g., considering the learning objectives and all efforts made by students to achieve them). Most academic staff were also unhappy with one of the grade points (i.e., Fx) associated with the introduction of the ECTS grading system (see the section on the grading system). College deans, heads of departments and registrars were also burdened with the problems associated with this grade point. Students were not involved in the development of the new credit system and most universities did not properly communicate the introduction and benefits of the ECTS. Hence, they often associate the ECTS with the new grading system rather than its features relating to student workload and learning objectives.

### **Factors Impeding the Implementation of the ECTS**

A number of challenges hinder harmonisation of HE through effective implementation of the ECTS. These include issues related to credits and semesters; credits and study hours; credit and degree programmes; credit allocation for educational components; credit conversion; the grading system; recognition of achievements; awareness; ignorance and resistance; and credit points in public and private universities.

### Credits and Semesters

In Ethiopia an academic year consists of two semesters of 16 weeks each and the ECTS credit point is based on a 32-week academic year. However, in practice, due to several internal and external factors, universities do not respect their academic calendar year in and year out. Among other factors, the reasons include meeting with government at the beginning of the academic year which has been the trend for a decade, late freshman student placement by the MoSHE, late student registration by universities, and class boycotts by students for different reasons including ethnic tension and conflict. This significantly affects the allocation of ECTS based on student workload in a semester. It also results in teachers' negative perceptions of the ECTS which in turn, leads to poor ECTS credit allocation and implementation.

### Credits and Study Hours

In Europe one ECTS is equivalent to 25-30 study hours (SH) - with the UK being an exception (I ECTS = 20 SH). The exact number of SH differs from country to country (e.g., I ECTS = 25 SH in Spain and Italy; 27 SH in Finland and Sweden; 28 SH in the Netherlands and Portugal, and 30 SH in Germany). A year of full-time study is also worth 60 ECTS credits, which is equal to 1500-1800 SH depending on the equivalence between ECTS and SH in each country. In Ethiopia, the Guideline indicates that one ECTS credit point is equivalent to 27 SH, and a year of full-time study amounts to a minimum of 1 600 SH which is equivalent to 60 ECTS. This is based on the assumption that students in Ethiopia study for 10 hours a day or 50 hours a week and there are 32 weeks in an academic year.

As noted above, while the equivalence of one ECTS credit in SH could differ from country to country, it is similar across HEIs within a country. However, this is not the case in Ethiopia. In most universities, I ECTS is equivalent to 27 SH, but according to the Addis Ababa University Senate Legislation, article 117, "One ECTS shall approximately be equivalent to 25

hours of student workload for theoretically inclined module and 30 hours of student workload for practically inclined module" (Addis Ababa University, 2019, p. 116). This contradicts one of the main features of the new credit system and challenges the process of harmonisation across HEIs within the country. Moreover, allocating SH based on the nature of a module (i.e., theory or practice inclined) indicates a lack of clear understanding of the relationship between credit points and SH. Practice inclined modules or courses may require more effort from the learner and this could be addressed by allocating more ECTS credit points to the module or the course, rather than changing the SH which are similar across the country's HE system.

### Credit and Degree Programmes

The harmonised academic policy sets the minimum credits required for undergraduate programmes based on years of study - 240 ECTS, 300 ECTS and 360 ECTS for four-, five- and six-year degree programmes, respectively. This implies 60 ECTS per academic year and 30 per semester. The policy offers universities the option of adding up to a maximum of 10 ECTS per academic programme depending on their specific situation (Ministry of Education, 2013). The total credits required for undergraduate degree programmes in most universities is in line with this provision. However, some such as Hawassa and Arba Minch Universities deviate from this provision. In these universities, the minimum and maximum credit points required for four-year degree programmes is 200 ECTS and 280 ECTS, and 300 ECTS and 420 ECTS for six-year programmes. This indicates that the minimum credit point requirement per academic year is 50 ECTS which is less than the national agreement. Such divergence potentially affects the harmonisation process and mobility of students as well as recognition of study periods. For instance, the minimum credit points required for a sixyear degree programme in Hawassa and Arba Minch Universities is equal to the minimum credit points required for five-year programmes in Addis Ababa and most other universities.

In Europe, the ECTS is implemented consistently across the three cycles of HE - Bachelor's, Master's and doctoral programmes. However, in Ethiopia, it is often associated with the Bachelor's programme. As discussed above, this is mainly because the implementation of the ECTS accompanied the introduction of modularised curricula which focused solely on undergraduate programmes. The harmonised academic policy also indicates the semester load in Master's and doctoral programmes only in terms of CH (12-15 CH for Master's and 9-12 CH for doctoral programmes, respectively) without referring to the total credit required for these programmes and justifying why the semester load in doctoral programmes is less than in the

Master's ones. Hence, as indicated in the Senate Legislation of most public universities, the total ECTS credits required for Master's and doctoral programmes are either not mentioned at all or allocated incorrectly. For example, the Senate Legislation at Mekelle University states that "a total of 6 Credit Hours or equivalent ECTS per semester shall be regarded as full load for full-time PhD student" (Mekelle University, 2017, p. 109). This implies that 48 CH or equivalent ECTS is considered as a full load for a fulltime PhD student which is far lower than what is expected of a PhD student in a four-year doctoral programme. At AAU, the Legislation indicates that the duration of a Master's degree in the regular programme is between one-and-a-half and two years with 30-35 ECTS per semester (Addis Ababa University, 2019). This implies that the minimum credit points required for a one-and-a-half and two-year Master's programme is 90 ECTS and 120 ECTS, respectively. The Legislation adds that, "The total number of ECTS for course/module work in Masters Programs shall be from 50.5 to 70 ECTS for programs requiring thesis work and from 89.5 to 100 ECTS for non-thesis programs" (Addis Ababa University, 2019, p. 116). It does not clearly describe the credit points attached to a thesis and the total credit points required for a Master's programme with thesis work, but it can be argued that for two-year (four semesters) Master's programmes, a thesis work requires a minimum 50 ECTS because the maximum credit point for a course work programme is 70 ECTS and the minimum credit points required for four semesters is 120 ECTS. However, in practice, most twoyear Master's programmes in the university have a maximum 30 ECTS for a thesis work and 100 ECTS for the whole programme which is below the minimum credit point required for two-year Master's programmes. Such complicated and unfounded credit point allocation creates confusion among academics who design and develop graduate programmes. It also results in inconsistent, arbitrary and unjustifiable credit allocation across semesters and for thesis work.

### Credit Allocation for Educational Components

Credits in the ECTS are allocated to degree programmes as a whole, and also to educational components of a study programme, such as modules, courses, theses/dissertations and placements (European Commission, 2015; Gonzalez and Wagenaar, 2006; Guruz, 2008). This is also clearly indicated in the Guideline, and some universities provided training on the use of the ECTS and students workload estimation. In Ethiopia, credit is allocated at department or chair level by academics who are responsible for designing and developing the curriculum. However, almost all universities do not allocate or clearly indicate the credits allocated to doctoral dissertation work. The few that do often apply such credits incorrectly. For example,

### Credit Conversion

Although it was assumed that the two credit systems (the ECTS and CH) would work in tandem for some time and that the new system would ultimately replace the old one, so far this has not been the case. The need to implement the two credit systems parallel to each other is also not clearly discussed in the HE policy and strategy documents. Although it is common practice, there is no profound argument to use a conversion between the two systems which are based on different principles and the workload of different target groups.

The Guideline notes that mere conversion between the ECTS and CH does not work during the allocation of credit points to different education components. For example, two courses with five ECTS each do not necessarily demand equal CH because one may require more or less involvement of the course instructor. Similarly, two different courses with three CH each do not necessarily require equal ECTS because one may require more or less student workload. However, as is evident in curriculum design and development across universities in Ethiopia, there is mere conversion between the two credit systems – often from CH to the ECTS. This is clearly indicated in Senate Legislation and some curricula where ECTS credits are expressed in fractions. In Europe, ECTS credits are generally expressed in whole numbers (European Commission, 2015), but in Ethiopia both the Guideline and the harmonised academic policy do not make reference to this issue. Generally, practice indicates that credits are mainly allocated based on CH and the 'equivalent' ECTS, which is based on incorrect assumptions and calculations are only used to meet the requirements set for curriculum approval.

### **Grading System**

One of the features that accompanied the implementation of the ECTS in Ethiopia is the introduction of a new grading system that resulted in a change from norm-referenced to criterion-referenced grading which is more transparent and comparable. The ECTS also introduced new grades - 'E' and 'Fx'. The harmonised academic policy and Senate Legislation of different universities indicate that a student who scores an 'E' grade will pass the course with the lowest pass mark, while one who scores an 'Fx' cannot claim any credit, but has the right to sit for re-examination within two weeks after the beginning of the next semester with little support (often tutorial) from the HEI. A student who scored an 'F' grade will repeat the course. Most students who believe that they are likely to score either the lowest grade or fail the course purposefully try to score an 'Fx' which provides them with an opportunity to improve their academic result without taking the whole course again (Hassen and Akmel, 2018).

A study that assessed the implementation of modularisation in three public universities in Ethiopia (Dejene and Chen, 2019) found that teachers are not happy with this particular scale which imposes an unnecessary work load on them - providing tutorials and preparing examinations. A study that assessed the 'Fx' grading system and modularised curriculum implementation in a public university in Ethiopia (Hassen and Akmel, 2018) also indicates that teachers believe that students are abusing the 'Fx' grading and the "privilege" attached to it. Accordingly, they call for 'Fx' to be discontinued as part of the grading system. On the other hand, students want the 'Fx' grade to be retained as it offers them an opportunity to improve their academic result without taking the whole course again. However, the time provided is not sufficient to receive the necessary support and prepare for re-examination (Hassen and Akmel, 2018; Dejene and Chen, 2019). What makes the situation worse is that most HEIs do not provide support for students who sit for re-examination. Moreover, on both sides (students and universities), the main focus is on improving the grade rather than enhancing the required competences.

The Senate Legislation of different universities also indicates that students can score a maximum of a 'C' grade even though they score a mark of 'B' or higher in the re-examination. This contradicts the relationship between grading and learning achievement, because in this particular case, the grade does not show the level of students' learning achievement. These issues were discussed in different national educational forums, conferences and institutional meetings and the MoSHE eventually decided to do away with the 'Fx' grade. This clearly indicates the problem of adapting a system or part of a system without critical inquiry of its ultimate relevance to the local context (Adamu, 2019).

### Recognition of Achievements

Accumulation and transfer of credits are the key features of the ECTS.

Students can accumulate credits awarded for achieving the learning outcomes of educational components. This will help them to meet the credits required to complete a study programme and receive a diploma, or to receive a certificate for completed educational components when for different reasons they are not able to continue their studies. Students can also transfer credits within and across universities provided that they have complied with the rules and regulations set by the respective units or universities. In this regard, AAU accepts students from different universities through transfer based on its rules and regulations. In the transfer process it acknowledges the study periods and credit points accumulated in other universities, but does not include the cumulative grade points of students from other universities. It also only considers what students achieved at AAU regarding the minimum cumulative grade point average required for graduation. This is mainly due to the assumption that there is grade inflation in other universities despite that fact that they are using the harmonised curriculum and ECTS grading system. It also indicates the university's lack of trust in what students achieved during their time at another university. This contradicts one of the main purposes of the ECTS which is facilitating easy recognition of achievements.

### Awareness, Ignorance and Resistance

Although some universities provide basic information about the ECTS, such as its purpose, features, and allocation (e.g., through their Higher Diploma Programme), most have no platform to create awareness among faculty. There are three main reasons for the poor implementation of the ECTS in Ethiopian HEIs with regard to teachers. Firstly, some teachers genuinely do not know about the ECTS and thus use a simple conversion of CH to ECTS as seen in the curriculum design and development process. Secondly, some teachers are aware of the ECTS but do not want to calculate credit points in terms of learning outcomes and student workload as this is time consuming. Finally, there are teachers who miss classes for different reasons but do not make up these classes. Thus far, no clear strategy has been adopted to address these issues although the university community and responsible units are aware of them.

# The Credit System in Public and Private Universities

The Higher Education Proclamation and other strategic documents do not clearly indicate the academic credit system to be used in Ethiopia and there is no clear direction from the Ministry and HE regulatory bodies. This allows HEIs to choose what they think is good or are comfortable with. Despite different limitations, most public HEIs in Ethiopia are implementing the ECTS parallel to the CH credit system. However, the two public

universities (Adama Science and Technology University and Addis Ababa Science and Technology University) that were under the Ministry of Science and Technology and recently became answerable to MoSHE are using only the CH credit system. Notably, the ECTS is also not practiced in all private HEIs (Gebremeskel, 2014). This is due to three reasons. Firstly, the two documents that discuss the ECTS - the Guideline and the harmonised academic policy – only focus on public universities. Secondly, there is no nationally agreed credit system to be used across the HE sector regardless of ownership. Finally, private HEIs are not aware of the outcomes of the ECTS. In principle, this potentially affects harmonisation of HE and easy mobility of students across private and public HEIs. This requires further investigation as student mobility between private and public universities is almost non-existent.

### Conclusion

This article analysed the implementation of the credit system and its contribution to the harmonisation of HE in Ethiopia. Although harmonisation of HE has not been accorded sufficient emphasis at policy and strategy level, current trends and practices point to the development of different initiatives that contribute to such harmonisation. The introduction of the new credit system is one of these initiatives.

The implementation of a new credit system that makes a significant contribution to the process of harmonisation is commendable. However, the analysis clearly indicated that the use of two different credit systems parallel to each other and across institutions in the country has no clear purpose and is a major source of confusion in the implementation of the ECTS. Using two credit systems has created more problems than solutions. There is also poor contextualisation in the process of adopting, and inconsistency in the implementation of the ECTS. Generally, the analysis of the implementation of the academic credit system in Ethiopian HE indicated that the main purposes, features and principles of the ECTS remain a mirage for most universities and their faculty, and this limits the system's contribution to the harmonisation of HE. Credit points are still allocated based on CH and wrong equivalent ECTS are allocated, mainly to meet requirements. This was more evident in doctoral programmes than Bachelor's and Master's programmes.

The lack of clear policy directives on the use of the academic credit system further hampered effective implementation of the ECTS in Ethiopia and there are no measures in place to address implementation challenges. This situation calls for stakeholders to revisit and highlight the importance of a national credit system as an important instrument to harmonise HE, and for policy directives that clearly set out the details of a national academic

credit system that will apply across HEIs irrespective of ownership (public vs private) and programmes.

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