## Institutional Diversity in Higher Education: Factors, Benefits and Challenges

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## Abstract

Democratization and higher education (HE) massification, nations' desire to cope up with the global knowledge-based economy, accompanied by the position of powerful global neoliberal forces and regional organizations have made HE institutional diversity a growing common phenomenon across the world. This paper tries to elaborate the various notions related to and the rationale for as well as the driving and inhibiting factors, and the impacts of HE institutional diversity based on the pertinent literature. The discussion shows that, although the driving and inhibiting factors vary from country to country, there are some communalities. Also, it demonstrates that, though HE institutional diversity has several benefits such as increasing access and promoting excellence, it can pose challenges such as reinforcing socio-economic inequality, fostering institutional isomorphism and fragmentation of coordination in the sector unless properly managed. The paper concludes by raising some important issues that deserve attention by policy makers and researchers alike.

**Keywords:** Higher education, Horizontal diversity, Institutional diversity, Vertical diversity

## **Background**

With the emergency of democracy after World War-II, and "the shift globally from industrial to knowledge economies" (de Wit &Reisberg, 2017, p.192) accompanied by the support of global neo-liberal forces (like the World Bank) and regional organizations (like the EU), HE became more open to non-elites. This led to unprecedented increase in demand, calling for rapid expansion in the sector. Rapid expansion and enrolment massification served as a catalyst for diversification because it required countries to establish alternatives for the university. For example, short-cycled institutions such as community colleges in the US and Canada, polytechnics in the UK and New Zealand, and college of advanced education and technical and further education in Australia were established. Consequently, a binary Higher Education System (HES) emerged in many countries. In the 1960s and 1970s, many countries, particularly in the developed world, diversified their HES. Generally, over the recent decades, governments have shown a strong desire to "promote diversity and differentiation amongst their higher education institutions" (Codling & Meek, 2006, p.3). Following this, the concept of HE diversity came to be an important policy issue and has been one of the major thematic areas in research on HE (Huisman, Lepori, Seeber, Frølich, & Scordato, 2015).

In the context of HE, the concept of "diversity" has been approached from different perspectives. In some studies (particularly in the USA), it is used to investigate how inclusive are higher education institutions (HEIs), for example, in terms of gender and/or race, taking into account students, staff and faculty profiles (Harris, 2009; Reichert, 2012). In most studies, however, it is used to investigate the level of diversity between HEIs termed as "institutional" "systemic "or "external" diversity and within HEIs known as "programmatic" or "internal" diversity (Huisman, 1995; Van Vught, 2009). By focusing on external or institutional diversity, we aim to reexamine the related concepts, the rationale, driving and inhibiting factors of HE institutional diversity, by reviewing pertinent literature. Three major factors stand out for taking this task.

First, although the concept of higher education institutional diversification (HEID) has become a dominant policy issue and a popular theme in HE research (see Huisman et al., 2015), there is a lack of common understanding on the concepts and terms related to it (Harris, 2009). Second, so far, the rationale for and the driving and inhibiting factors of HEID have not been comprehensively identified. Third, several previous studies do not sufficiently address the benefits and challenges of HEID or they focus more on the benefits (argue in favor) of HEID (see for example, Huisman, 1995; van Vught, 2009; van Vught, Kaiser, File, Gaethgens, Peter & Westerheijden, 2010). Thus, in reviewing the literature, we set out the following objectives:

- a) Elucidation of concepts and terms related to HEID;
- b) Identification of the rationale for and the factors that drive and inhibit HEID;
- c) Analyzing the benefits and challenges of HEID; and
- d) Identifying HEID related issues that may need further investigation.

The next section presents the definition and the various notions related to HEID. Section three summarizes the rationale why countries opt for HEID. Section four and five identifies and elaborates the driving and inhibiting factors and methods of HEID. Section six deals with the way HEID is measured. The final two sections discus the benefits and challenges of HEID in some detail. The paper winds up by raising some HEID related important issues that deserve an attention by policy makers and researchers alike.

## **Institutional Diversity**

So far, there is no universally accepted definition about the concept of HEID. This is so particularly because HEID occurs as result of either horizontal or vertical differentiation of HEIs or both, in which each type of differentiation has more or less different purpose (see Marginson, 2017; Saint, 2000 as cited in Association for the Development of Education in Africa, 2015). Trow's (1995) definition seems capable of capturing HEID that may arise because of both types of differentiation. Thus, in this paper, HEID is understood as

[HEIs] that have different and distinctive missions, educate and train for different lives and careers, have different styles of instruction, are organized and funded differently and operate under different laws and relationships to government" (Trow,1995 as cited in Meek, Goedegebuure & Huisman, 2000, p. 3).

Scholars have used one or more of the following terms when dealing with the concept of HEID: "classification", "convergence", "differentiation", "diversification", "diversity" "homogeneity", "homogeneity", "homogeneity", "horizontal diversity/ differentiation", "stratification" and "vertical diversity/differentiation". However, as Unangst (2017) rightly observed, there is no consensuses about the meaning of these terms. For example, for Rossi (2009), while "differentiation" is understood as a process that leads to inter-institutional variation, "diversification" leads to intra-institutional variety. Van Vught (2009) defines the term differentiation as a dynamic process whereby completely new entities emerge into the system and diversity as static indicator of variety of entities within a system ( see also Harris, 2009). On the other hand, Reichert (2012) uses both terms interchangeably.

It is imperative that concepts and terms are defined as distinctly as possible when they are employed to shape policy directions. Accordingly, we shall dwell on this and we start with two concepts, which are important for understanding HEID: diversification and homogenization. Diversification and homogenization (in my understanding) are policy goals (process outcomes) realized through the process of differentiation and convergence respectively. As policy goals, therefore, while "diversification" refers to having more divergent institutional types, "homogenization" refers to having institutions that are more similar. "Differentiation" is understood as a process or a technique that leads to having distinct types of HEIs in a given system or to the development of new entities in the system (Van Vught, 2009; Ng'ethe, Subotzky, & Afeti, 2008). Thus, differentiation is a precondition for having a diversified HES. On the other hand, "convergence" is a process that leads to

system homogenization due to structural or institutional isomorphism or both as well as due to ranking (be it national, regional or international); accreditation, mission creep and competitive funding (see section-5 and 4 below).

Differentiation can take place horizontally and vertically, within and between institutions (Unangst, 2017). At institutional level, "horizontal differentiation" refers to a process whereby institutions of similar status (the same category) but different in terms of function/ mission (teaching, research), orientation (vocational/applied, academic/theoretical), modes of delivery (traditional/residential, online/non-residential), forms of control (public, private), specialization (type of disciples they teach), etc, emerges in the HES. In the literature, this is usually referred to "horizontal diversity" (HD) (see Ziegele, 2013; Teichler, 2017; Guri-Rosenblit, Šebková, & Teichler, 2007; Teichler, 2015; Van Vught, 2008; Dakka, 2015). However, in this paper, HD is understood as a policy outcome, which stems from horizontal differentiation. On the other hand, "vertical differentiation" refers to a process in which HEIs are stratified either formally (by law) or informally (by degree of reputation). Many HE research scholars call this "vertical diversity" (VD) (see for example, Teichler, 2007 as cited in Ziegele, 2013). Again, it is understood as the outcome of vertical differentiation. While formal stratification may involve establishing a binary, trinary or multi-partite system, informal stratification (usually done on reputation/prestige) involves stratifying HEIs by ranking (especially international ranking), entry requirements, etc. Formal stratification stratifies HEIs by the level of programs offered (certificate, diploma, bachelor, master or doctorate) or by outlook (local, national, international). The latter involves establishing institutions of high quality and/or promoting existing institutions to the status of "World Class University", in order to compete with the global knowledge based economy. Thus, vertical differentiation involves not only the stratification of HEIs of different categories (levels) but also institutions of the same category (for example, universities) by degree of excellence (for example in terms of innovation, research productivity, etc) (Teichler, 2017).

While HD indicates the degree of variety of entities or institutional "divergence" (for example in terms of the subjects they teach) among HEIs of the same category, VD involves separating the best from the rest (Bleiklie, 2011). Generally, while VD is understood as the difference between HEIs in terms of prestige, reputation and performance, HD signifies in institutional variety in terms of mission, profile, etc (Van Vught et al., 2010). Accordingly, HD is a response to the growing students' demand for access, whereas VD is a retort to the labor market demand for high-level training and graduate skills (Ng'ethe et al., 2008; Altbach, Reisberg and de Wit, 2017; Saint, 2000 as cited in Association for the Development of Education in Africa, 2015). This implies that the rationale that drives the two forms of diversity is not exactly the same. Finally, concepts like "stratification" and "classification" are mechanisms used to differentiate HEIs vertically and horizontally, respectively, and both are expected to promote HEID. To sum up, HEID emerges because of either horizontal or vertical differentiation or a combination of the two. "Diversity" and "homogeneity" are variables (called static explicators by Van Vught, 2009; Harris, 2009), which indicate the degree of diversification and homogenization, respectively. Thus, while diversity refers to the

availability of institutional variety, homogeneity implies the presence of similar institutions in given system.

#### The rationale for institutional diversification

Higher education diversity has considerable benefits. However, the following are some of the common goals why countries strive for HEID:

- The need to address a growing demand for access to HE with more diverse needs and with "enormous variation in prior preparation, cultural orientation, and economic resources" (Altbach, Reisberg& de Wit, 2017, p.192), which cannot be met by traditional universities;
- The need to focus on research and the production of new knowledge and PhD graduates (Unangst, 2017; Codling & Meek, 2006) as a means to cope up with knowledge based global economy;
- The desire to develop world class universities (particularly, after the emergence of global ranking)( Teichler, 2015); and
- The desire to promote efficiency and effectiveness (Morphew, 2009).

## The driving and inhibiting factors of institutional diversification

The literature identifies various driving and inhibiting causes of institutional diversification. For example, democratization, the emergence of the global knowledge based economy and the demand for new skills and knowledge, the expansion of secondary education and HE massification, as well as specialization regarding research and teaching (research-teaching divide), are considered as some of the driving elements (Carpentier, 2018). Further, government regulation and market mechanism (competition) are seen as limiting and driving factors of institutional diversification respectively (Fumasoli&Huisman, 2013). However, some empirical research contradicts this view. For example, Huisman, Meek, & Wood (2007) and Dakka, (2015) found that the state driven binary systems are more diverse than non-binary systems since they limit isomorphic tendencies through rigid regulation.

Intuitively, the "market" is seen as a force of differentiation, but empirical research found that it could also be a force of convergence because unregulated competition could lead to institutional isomorphism (Dakka, 2015). Others attribute the process of differentiation to HEIs themselves. For example, Kogan (1997) sees institutional "specialization" as the basis of differentiation. Finally, in some cases, the repositioning of HEIs to respond to external pressures has led to differentiation. Nevertheless, study shows that the various strategies or initiatives designed at institutional level do not automatically lead to an increase in HEID (Kogan, 1997). Overall, however, there is less consensus on what causes than what promotes differentiation (Dakka, 2015). For example, is HE massification the cause or the result of HE diversification? Be that as it may, different authors have been able to identify different driving and inhibiting factors, which vary from country to country and may emanate from the society, government, market and HEIs or a combination of them (see for example, Codling &

Meek, 2006; Reichert, 2009). However, there are some common driving and inhibiting factors.

# **Driving factors**

What drives HE diversification? Different authors have identified different factors, depending on history and the specific context of each HES (Reichert, 2012). Generally, the literature identifies the following as some of the common driving forces.

## Regulatory framework and policy initiatives

Regulatory frameworks, which define the function and objectives (typology) of institutions are the common and essential means of differentiation. The presence of unitary, binary or trinary systems, which officially differentiates the types of HEIs that exist in the system are attributed to regulatory frameworks. Similarly, policy initiatives are the other major government driven factors that contribute towards HE differentiation. For example, over the last few decades, "excellence initiatives in Germany, France, Japan, Russia, and China have created additional national system differentiation by separating a new elite sector of world-class universities from other more nationally and regionally-oriented research universities" (Altbach, de Wit, & Rumbley, 2017, p.xiv). This is also partly a response to the global knowledge based economic competitiveness and the international ranking of HEIs, which the latter itself has been a catalyst for differentiation.

Similarly, Goedegebuure, Schubert & Bentley (2017) argue that government policies designed to allow citizens to enroll according to their need and capacity have been one of the major factors behind differentiation. Policy initiatives, which introduced less costly non-university HEIs to meet the demands of students and the labor market, research and teaching oriented institutions, institutional stratification and a funding system that favors selected HEIs, have been the driving forces for differentiation. Here, it is noteworthy that the latter two also contribute to *convergence* since they "reinforce conformity to the norms, values and practices of the leading traditional institutions" (Dakka, 2015, p. 326). Ranking, accreditation and differentiated funding are policy tools used to promote diversity, mainly VD (see below).

#### *Reforms and institutional autonomy*

Following the adoption of the new public management paradigm in the HE sector (see Broucker& De Wit, 2015; Broucker, De Wit, &Verhoeven, 2017a and Broucker, De Wit, &Verhoeven, 2017b), several reforms have been introduced. Reforms that introduced more autonomy (through power decentralization to institutional level), performance-based and differentiated funding, and customer-oriented service provision, the idea of income generation and efficiency or in short, the "corporatization" of HEIs has contributed towards differentiation. In this regard, HE differentiation is perceived to have been promoted by actors of neoliberalism, such as the World Bank (Ng'ethe et al., 2008; Reichert, 2012), which

have been calling for more efficiency and competitiveness, thereby pressurizing HEIs to find a niche to survive.

Although empirical study shows that the connection is less linear (Reichert, 2012), autonomy is assumed to allow institutions to flexibly adapt to students' and societal needs as well as to respond to local, national, regional and international trends and challenges. This way, they can find a niche that would enable them to get a distinct position in the system. In connection to this, Altbach, de Wit, and Rumbley (2017, p. xiv) argue that "a trend towards greater autonomy nearly everywhere has allowed for significant differentiation within the sector [HE]". However, by allowing HEIs to promote or focus on their self-interest, autonomy can also cause mission creep, which usually leads to convergence.

## Democratization and Massification

Democratization has contributed towards reducing gender; race or class based discrimination and thereby increased participation for HE, which in return resulted in massification and diversification of HE. However, the fact that authoritarian regimes like China and Russia are diversifying their HES (see Wang, 2017; Yudkevich, 2017) implies that democratization is not a necessary condition for HE differentiation. Another related factor is the increase in the participation and variety of the students' body. Following HE expansion, the socio-economic and educational backgrounds of students become more diversified and the type of disciplines, programs levels and modes of deliveries they want to attend have also been increasingly diverging, demanding HEIs to adjust their position accordingly.

## Scientific and Industrial development

Scientific development involves the growth and development of new disciplines (Reichert, 2012) thereby leading to the emergence of new HEI or new academic units within the existing HEI. The development of new disciplines or research thematic areas could be attributed to the role that HEIs are increasingly assuming, that is, aiding economic development or could be a response to the demand that emerged following industrial development. Industrial development is one of the potential drivers of diversity because "as the industries become more sophisticated, so will their demand for more differentiated skills" (Ng'ethe et al., 2008, p. xx) and knowledge.

#### Accreditation

Accreditation is a process of recognition and places institutions at a certain status. National agencies and relevant international associations usually do this task. Accreditation implies status in which institutions are required to fulfill certain conditions to reach the level. For example, the requirements that should be fulfilled (such as the level of academic degrees offered, profile of academic staff, etc.) to get the status of "university" will not be the same for a "college". Thus, if colleges want to join the status of university, they must fulfill the

requirements set by accrediting agencies. If an international association makes the accreditation, the institution or the program seeking accreditation needs to fulfill certain requirements to get the recognition it is seeking. Those, which failed to fulfill the requirements, will not get it but those that are eligible will be placed at a higher status (at least informally). Thus, in both cases, accreditation leads to (vertical) differentiation (Bleiklie, 2011). However, accreditation can also be a cause for convergence. For example, Reichert (2012) states, "Accreditation often imposes particular standards of institutional structures, size, staff profiles and even curricular content and, thus, is likely to result in more convergence" (p. 824)

#### Ranking

Ranking by organizations such as *Shanghai* and the *Times Higher Education* is a tool that orders institutions in a hierarchy to identify the best from the rest. Although the goals and methodologies may vary (and remain controversial), ranking is being made both by national and international actors and is becoming increasingly pervasive. Both national and international rankings usually lead to VD. As pointed out earlier, however, ranking also triggers institutional isomorphism.

#### **Funding**

Funding is one of the most effective tools used to promote diversity, particularly VD. Although it is not a new phenomenon, many countries (mostly in the developed world) have recently been mobilizing huge resources towards selected HEIs in order to compete in the global knowledge - based economy. The recent initiatives for "excellence" observed in Germany, Russia, Japan, China and France are typical examples. The Norwegian Research Council and the European Research Council also represent similar initiatives at national and regional levels (Bleiklie, 2011; Altbach, de Wit, &Rumbley, 2017). Currently, "excellence initiatives" that seek for stratified HESs are a common phenomenon across Europe (Hackl, 2012). Similarly, "a steep vertical hierarchy of quality and reputation of higher education institutions has a long tradition in [the USA], Japan, China and some other Asian countries" (Teichler, 2015, p.15). Generally, differentiated funding is an important policy tool for promoting ID (particularly VD).

## **Inhibiting factors**

Clarke et al., (1998) claim that ID could be undermined if: (a) the HE funding system does not encourage competition and innovation among HEIs, (b) HEIs are not allowed to develop their own unique mission, (c) the performance of HEIs is evaluated based on uniform criteria, which do not take local conditions and issues into account, and when the assessment criteria are not linked to the institution's mission and goals, (d) the quality management body is constrained by traditional views and prejudices as well as (e) HEIs compete based on league table which promotes a hierarchy of institutions, all trying to emulate a single model. The

following are some of the common factors that constrain ID (see van Vught, 2008; Hannan& Freeman, 1989; Ng'ethe et al., 2008; DiMaggio & Powell, 1983 and Unangst, 2017)

#### Resources constraints

Lack of resources (human, financial and material), particularly in developing countries, is one of the major constraints for differentiation (especially for internal diversity). Lack of resources usually hinder HEIs from opening new schools or programs and thereby limit internal diversity which intern inhibits ID (Ng'etheet al., 2008). On the other hand, competition for scarce resources can cause "structural isomorphism" as opposed to structural diversity. Hannan and Freeman (1989) argue that "...the competition for scarce resources causes competing organizations to become similar. The condition of competition leads to similar organizational responses and, moreover, to the elimination of the [dissimilar] weaker organizations. The result is an increase of homogeneity [structural isomorphism]" (p. 10). In other words, in competing for limited resources and responding to their stakeholders, values and norms, HEIs would "prioritize those dimensions that they feel will most easily provide access to resources and other rewards" (Reichert, 2012, p. 812), which quite often leads to an increase in homogeneity. Here, it is imperative to note that resource constraints could also be a driving factor for differentiation. With the massification of HE, governments could not provide sufficient budget and infrastructure. The option they have is to allow the expansion of private for profit providers or to develop more non-university entities; both lead to the emergence of new types of HEIs.

## Structural and institutional of isomorphism

Isomorphism is a process that results in institutional "convergence". It is "the gradual adoption of a single set of institutional characteristics" (Ng'ethe et al., 2008, p. 35). There are two forms of isomorphism: structural and institutional. As pointed out above, in the context of HE, the former emerges due to competition (for funding, staff and students) among HEIs and it is, mainly, the result of similar institutional response to external environment. The latter occurs because of "mimetic", "coercive" and "normative" pressures (van Vught, 2008).

Mimetic behavior is a tendency in which "lower-tier" HEIs emulate elite institutions (perceived as high status or prestigious) (Reichert, 2012), believing that it is beneficiary, particularly during situations of uncertainty. national and international ranking, classifications and regional initiative (like the Bologna Process) are among the factors, which trigger mimetic behavior. Kosar & Scott (2018, p.1) observe that in the US "many universities designated as R2 [research university-2] have created institutional goals and research plans that include achieving an R1 [research university-1] rank in 5 or 10 years". Similarly, Reichert (2012) finds that "internationally oriented research [is] exerting a homogenizing effect on institutional profiles" (p. 819). Citing other researchers, Reichert (2012) also confirms the effect of regional initiative towards institutional convergence, taking the Bologna process as an example. Mimetic behavior could also involve "academic drift" (see

below) and could emerge due to inter-institutional employee migration and the adoption of reform programs designed by the same consulting firms. Undifferentiated governance and funding structure also usually lead to mimetic behavior (Ng'ethe et al., 2008).

Coercive isomorphism occurs when government regulatory and accountability mechanisms tacitly or explicitly coerce institutions to follow similar procedures, structures, rules and standards. Whereas, normative isomorphism arises from subscribing to what Reichert, (2012) calls "academic norms and values" (p. 824), or to certain legitimized professional practice, in which institutions, academic units, or individual members within them conform to similar norms or standards. Normative pressures emanate from professional networks, formal education, training and development, socialization on the job, professional association that provide accreditation, etc (see Rostan&Vaira, 2011; Van Vught, 2008; Paladino, 2006; DiMaggio & Powell, 1983). Similarly, inter-institutional cooperation (both at national and international levels), which involves exchange of staff, students and experience sharing, may lead to normative isomorphism. However, it is noteworthy that the effect of normative isomorphism in undermining differentiation is not significant. Based on a case study on HE diversity in Europe, Reichert (2012) concluded that an academic value (normative isomorphism) "is not a decisive impairment to diversification" (p.828)

# Mission creep/drift

There are two types of mission creep/drift: academic and vocational. "Academic drift" arises when non-universities aspire to gain a university status, by engaging into the more traditional roles of a university. Whereas, "vocational drift" occurs when universities offer vocational courses, to seize market opportunities and maximize their funding (Ng'ethe et al., 2008; Dakka, 2015; Codling & Meek, 2006) and focus on applied research to respond to their new role in the knowledge - based economy, which demands them to prove their practical relevance (Dakka, 2015). Altbach (2017) claims that "[community colleges in the US], universities of applied sciences in Germany, the Netherlands, Scandinavia, and elsewhere, are taking on increasingly academic roles" (p.5). Although mission drift may occur due to policy initiative, it is mainly a response to real or perceived competition (Unangst, 2017). Both types of drifts undermine the binary system by blurring the boundaries of university and non-university HEIs (Huisman, Meek, & Wood, 2007; Ng'ethe et al., 2008).

#### Lack of research and dissemination

In many countries, particularly in the developing world, policy articulation about HE differentiation is less researched and debated and if there is one, it is not widely disseminated among the public at large. Thus, lack of policy debate and knowledge about the merits of diversity as well as the difficulty to reach an agreed level of diversity is one of the inhibiting factors (Ng'ethe et al., 2008; Unangst, 2017; Association for the Development of Education in Africa, 2015).

#### **Methods of differentiation**

According to the pertinent literature (Teichler, 2017; Reichert, 2012), there are two broad methods of differentiation: formal and informal. The formal method focuses on the role state plays in differentiating HE. Accordingly, the tools/mechanism used in the formal method include: regulatory framework and policy initiatives, funding instruments, accreditation and quality assurance criteria, classification and ranking (if they are officially employed by the state) and reform programs introduced by the state. The informal method, which is increasingly becoming more pervasive, focuses on reputation - based differentiation. International ranking, institutional entry requirements, reputation of the professorates and success of alumni, innovation, etc are among the tools informally used to differentiate HEIs. This later is often associated with the market-based competition and competition for scarce resources, whereby institutions have to seek for their niche that would ensure their survival. The literature remains divided on which method, formal or informal, would ensure the development of HEID more efficiently (Reichert, 2012). Moreover, there is no conclusive answer about the relative success of formally induced differentiated HESs and informally driven differentiated systems. Finally, as Reichert (2012) rightly argues that the presence of diversified incentives and values are the most essential instruments for differentiating a given HES and sustaining HEID.

## Measuring institutional diversity

There are only a few publications, which deal with measuring the HEID. Particularly, empirical based comparative study on this issue is a rare scenario (Huisman et al., 2015; Widiputeraet al., 2017). Thus, so far, the literature focuses on conceptual generic dimensions and uses the number of formal variety of types of institutions as a proxy to measure the level of HEID. Even this one is challenged by lack of consensus on the external boundary of the system (i.e. which institutions are included in and excluded from the list of HEIs) and on the meaning of HEID itself. However, although not yet well developed, some scholars have tried to measure HEID empirically and comparatively (see for example, Huisman, Meek, & Wood, 2007; Huisman, et al., 2015). The comparative study conducted by Huisman et al. (2015) is particularly useful because it developed not only indicators of HEID mainly linked to the mission of HEIs but also to governance and internationalization. These include educational profile (measured by degree structure and subject diversity), research involvement, (ratio of PhD students from the total intake) international orientation (ratio of foreign students), knowledge exchange (ratio of third party funding-used to measure the involvement of HEIs in "community services") and structural features (type of control of HEIs; size of staff and students). Using data from the EUMIDA, they have tried to determine the level of HEID of 27 European states.

Other scholars measure HEID simply by dividing the number of existing types of HEIs to the total number of HEIs (Birnbaum, 1983 as cited in Marginson, 2017). Other authors argue that HES are more diverse if: (a) they include a greater type of institutional types, (b) the distribution of HEIs between the main institutional is more evenly weighted, and/or (c) there

is a greater distance in kind between the institutional types (Wang &Zha, 2015 as cited Marginson, 2017).

Generally, measuring HEID remains a challenge for it lacks conceptual and methodological clarity (Codling & Meek, 2006). For example, "the way one sets the perimeter for the system affects the level of diversity, ... for each system... has its own definitions and regulations to set the perimeters of the system" (Huisman et al., 2015, p. 370). Nevertheless, based on the formal variety of types, HESs can be classified as "unitary" (one-tier), "binary" (two-tier); trinary (three-tier) and multi-tier. Trow (1974) used enrolment rate as an indirect means of measuring HE diversity and developed the following classification: "elitist" (less than 15%) "mass" (15%-50%) and "universalist" (above 50%) type. In this regard, HESs with universal enrolment rate are assumed to be more diversified than mass and the latter than elitist. However, in the pertinent literature, there is no consensus on what the desired level and type of HEID should be.

Higher education institutional diversity can be measured using empirical and conceptual approaches. Generally, the conceptual approach measures the degree of diversity in a given HE system, by developing institutional typology, which "is usually government-driven, prescriptive and often defined by law. The best example is the binary systems that exist in many European countries that group higher education institutions into categories" (Van Vught et al., 2010, p. 14). Using conceptual generic dimensions, HEIs are classified "according to one or more specific institutional characteristics, at a certain point in time" (Rossi, 2009, p. 395). They include: size (number of staff, students and volume of funding/revenue), mission orientation (research oriented, teaching oriented, community service oriented), scope (comprehensive, intermediate, specialized), and program orientation (academic/theoretical, applied/technical), modes of delivery (face to face, distance, online), outlook (local, national, regional or international) and type of control ( public, private), student clienteles (school leavers, mature students, professional part-timer learners) target communities/stakeholders ( industry, business, civil society, public service, students, alumni) ( Widiputera et al., 2017; Reichert, 2012).

Using such dimensions, policy makers and researchers use classification as a means of measuring diversity. Classification is a way of grouping entities (in our case, HEIs) based on similarities and differences between entities and tries "to describe and visualize the diversity of institutional profiles" (van Vught et al. 2010, p.20). Hence, it is "a way of systematizing information on institutional diversity" (Santelices &Salmi, 2013, p.63). At the international arena, there are two well-known classification experiences: the American Carnegie Classification and the European U-Map classification (for details, see The Carnegie Foundation for the Advancement of Teaching, 2001; van Vught et al., 2010; Ziegele, 2013).

# Classification/typology of HE Systems and Institutions

| System level classification        |                      |                |                |                   |                      |               |                          |                   |
|------------------------------------|----------------------|----------------|----------------|-------------------|----------------------|---------------|--------------------------|-------------------|
| By level of stratification         |                      |                |                | By enrolment rate |                      |               |                          |                   |
| Unitary                            | Binary               | Trinary        | Multi<br>-type | Elitist           | Mass                 | Universal     |                          |                   |
| Institutional level classification |                      |                |                |                   |                      |               |                          |                   |
| By mission orientation             |                      |                | By             | program           | By modes of delivery |               |                          |                   |
|                                    |                      |                | orientat       | tion              |                      |               |                          |                   |
| Teaching oriented                  | Research<br>oriented | Compreh ensive | Theor etical   | Applied           | Face-<br>to-face     | Distance      | A combination of the two |                   |
| By forms of control                |                      |                | By outlook     |                   |                      | Program level |                          |                   |
| Public                             | Private              | Others         | Local          | National          | Regional             | International | Under-<br>graduate       | Post-<br>graduate |

Source: compiled by the author

We understand that the above classifications do not show the substantive differences that exist between each category. For example, the public-private divide does not tell whether there is a difference on the type of specialization, or the level of programs offered. Thus, in most cases, this type of category is nominal, not substantive.

# The benefits and challenges of institutional diversity

## Benefits

Higher education institutional diversity has been stated to be of importance to addressing multiple social, economic and political expectations. Differentiation enables reducing unnecessary duplication by assigning each HEIs a distinct strategic mandate, research profiles and academic programs. HEID is presumed as instrumental "in serving the increasing variety of students and in assuring a high quality of research in select[ed] sectors of higher education" (Teichler, 2015, P.15). Empirical evidence also shows that diversified HESs are more "cost-effective" than less or (un)diversified one (Morphew, 2009). This is so because diversity allows HEIs to focus on a specific mission, it has the potential to increase their level of effectiveness. The emergence of diversity in HE challenges the "traditional education systems by introducing more competition and innovative programs and delivery methods" (Guri-Rosenblitet al., 2007,p.7). In the USA, which has a significant number of World Class HEIs, for example, HEID is considered "... as an influential foundation of the system's historical success" (Trow, 1997 cited in Harris, 2009).

Higher education institutional diversity is instrumental in expanding access and specialization to meet the various demands and abilities of students and responding to the labor market. Diversified HESs are more competitive in the global knowledge-based economy, and they are

assumed to be more efficient and effective (see Altbach, Reisberg, Liz & de Wit, 2017; van Vught et al., 2010). Contrariwise, it is stated that a homogenous HE system would be less able to respond to diverse societal needs and the labor market. The more homogenous HE systems are the less innovative and effective they are assumed to be (Department of Higher Education and Training, 2014; Van Vught, 2007).

Marginson (2007) argues that HEID "is frequently positioned as an innate good based on a set of related assumptions about student choice, functional specialization and the engagement of higher education with society" (p.7). Thus, the argument in favor of diversity also comes from a realistic point of view. Following the phenomenon of massification of HE, enrolling the huge number of students in the extremely expensive research universities become impossible and thus the need for diversified HEIs aroused (Trow, 1974). Diversity "permits the crucial combination of elite and mass higher education" (Van Vught, 2007, p. 5). HEID increases access for students with different academic backgrounds and creates an educational environment where the chances for success are realistic. This is so because in diversified HE systems, "each student is offered an opportunity to work and compete with students of similar background" (Van Vught, 2007,p. 5), provided that the system allows doing so. From a societal point of view, diversity better promotes the needs of different groups in a society, including providing the opportunity for upward and downward social mobility. Further, a diversified HES makes it hard for the state to use HE as an instrument of indoctrination for the young generation. It is also perceived as a "democratic goal" because it enables, HE to be accessible to anyone who wishes to attend, regardless of his/her social, economic or academic background or gender. Diversity also brings positive impacts in terms of diversifying modes of delivery and increasing enrolment rates owing to the presence of various providers.

Generally, there are various justifications for having a diversified HE system (see for example, Huisman,1995; Birnbaum, 1983 as cited in Van Vught et al., 2010; Van Vught, 2007). The South African Department of Higher Education and Training (2014) succinctly summarizes the benefits of diversity in HE as follows:

[diversity]improve access for [citizens] to various forms of educational opportunities; improve participation and success rates in all higher education programs; enable all institutions to find niche areas that respond to the range of national development needs; provide different kinds of modes of learning, content of learning programs, methods of teaching and assessment across the system for diverse student bodies; support both flexibility and innovation in the system; allow an effective and focused way of distributing public funds; and improve the overall quality of the system(p.5).

In short, we can conclude the following in relation to the benefits of HEID. First, more diverse HESs are better equipped to stimulate social mobility through different access points and progression pathways. Second, they are more responsive to the labor market that increasingly requires different types of training and graduates. Third, they allow for more cost-effective delivery of both education and research, through specialization (The Scan, 15 May 2017).

Finally, it is hard to find an empirical study on how the level of HEID (high, intermediate or low) affects system performance. The literature lacks sufficient answers for this question. Moreover, one may ask which form of diversity (vertical or horizontal) better promotes performance. Do countries with a more vertically differentiated system perform better than countries known for having a horizontally diversified system? Here, it is important to note that VD and HD have different goals and purposes. VD, unlike HD, is a push towards excellence (Bleiklie, 2011). This means that vertically stratified systems are expected to perform better than a non-stratified one in terms innovation, research productivity and quality of graduates. For example, a study shows that the USA and Europe have approximately the same number of HEIs. However, USA's HEIs have been more competitive globally and this is attributed to the existence of a stratified system in the country. Cognizant of this, the European Commission has been calling for European states to stratify their HES(Hackl, 2012). Similarly, China and Russia have also implemented various initiatives to develop "World Class Universities", an initiative in favor of VD (Unangst, 2017).

#### Challenges related to institutional diversity

Overtime, scholars have started to question the conventional wisdom that connects HEID to positive attributes. For example, some scholars have started to inquire whether HEID reinforces or ameliorates socio-economic inequality. Similarly, scholars are also exploring whether more HEID leads to difficulties in ensuring quality and coordination of HE. As pointed out earlier, HEID enables HE to be accessible to anyone who wishes to attend, regardless of his/her social, economic or academic background or gender. Nevertheless, it is important to note that this "does not take on board differences in equity of access to those different institutions as well as the real or perceived differences in quality that may be explained by differential resources" (Carpentier, 2018, p.9). For example, in the UK the binary system (which emerged following the establishment of polytechnics) was introduced to provide "access to a different form of higher education and to offer it to different kinds of students" (Ross, 2003, p. 49 as cited in Carpentier, 2018, p.30). This calls for one critical question: what type of HEIs are accessed by which kind of students and for what kind of outcomes?

One possible answer is that the probability of joining low quality HEIs is higher for students from low economic background than their counterparts. This would reinforce inequality. To avoid this problem, some scholars have called for an *egalitarian* system with horizontal differentiation marked by "even prestige and quality across the system" (McCowan, 2016, p. 659). From the socio-economic point of view, HE differentiation is perceived as a democratic goal since it allows all segments of society to have access to HE. Nevertheless, experiences (for example, in Bolivia, Venezuela, the US and New Zealand) show that in differentiated HES, there are possibility where students from high-income families could be overrepresented in tuition free public HEIs, and students from low-income families could be overrepresented in private fee-paying HEIs (Unangst, 2017). Altbach, Reisberg and de Wit,

(2017) also warn that HEID can "ameliorate or exaggerate socio-economic status stratification" (p. xiii).

A study, which focuses on the link between differentiation and educational inequality in 15 countries, also arrived at a similar conclusion. They find that participation rates in more diversified HES are higher than in less diversified ones. Nonetheless, highly stratified HES are accompanied by greater social selectivity in student enrolment than less diversified ones (Shavitetal, 2007 as cited in Reimer & Jacob, 2011). Bowl (2018) succinctly summarizes that the challenges of HE differentiation as:

while students with the greatest holdings of social, cultural and economic capital are able utilize it to locate themselves in institutions offering the best resources and symbolic rewards, those who have experienced structured inequalities based on ethnicity and socio-economic status are likely to be ruled out, or may rule themselves out, of higher status educational opportunities on the basis of the subtle messages of differentiation which universities transmit (p.686).

The other challenge related to diversification is ensuring *quality*. Rapid expansion, which emerged because of huge and various demands led to proving HE by various actors, including private for-profit and not for-profit entities. This resulted in having more ID and to a situation whereby ensuring quality and equity becomes difficult (Unangst, 2017). Finally, the presence of more HEID is considered as a liability because it leads to fragmentation, which threatens "institutional coherence, integrity and efficiency" (Reichert, 2009, p. 8).

## Conclusion and issues for further investigation

To sum up, the paper tries to provide a clear picture of the various notions related to the concept of HEID. It also summarizes the rationale why countries opt for HE diversification. Further, it identifies and elaborates the driving and inhibiting factors and the methods of HE diversification. Most importantly, the benefits and challenges of HEID are discussed in some detail. Based on the discussion, it is possible to conclude that, although the driving and inhibiting factors vary from country to country, there are some communalities. Further, HEID is a double-edge concept where, steered appropriately, enhances access and promots excellence; yet, when it is not properly managed, it poses challenges such as reinforcing socio-economic inequality, fostering institutional isomorphism and fragmentation of coordination in the sector. Critical examination of the country's socioeconomic environment is a precursor to HEID. Those who aspire to develop diversified HES are advised to understand that the presence of diversified incentives and values are the most essential instruments in developing the desired level and form of HEID. Policy makers also need to understand that vertical and horizontal types of diversifications have different goals. If they wish to increase access (enrolment) and train students in different types of disciplines, they should plan for horizontal diversity. However, if they aspire to compete in the global knowledge-based economy that demands high-level innovation, research productivity and highly skilled professionals and researchers, emphasis to vertical diversity seems to be

imperative. However, it essential to note the shortcomings that may occur because of either or both types of diversification.

Generally, from the literature review, the following issues deserve attention by policy makers and researchers alike. Given that vertical and horizontal differentiation have different goals, could they be introduced simultaneously? If not, which should come first and why? Which form of diversity is more effective and efficient? Do more vertically differentiated systems perform better than more horizontally differentiated systems or vice versa? Are the desires for "equal opportunity" or "equal access" for HE and VD compatible?

The pertinent literature remains divided on which method of differentiation, formal or informal, would ensure the development of ID more efficiently (Reichert, 2012) and which leads to a more desired level of diversity. Likewise, so far, there is no conclusive remark about the relative success of formally induced differentiated HESs and informally driven differentiated systems.

It is known that different countries pursue different models of HE governance (for example, "state controlled", "market oriented" "academic self-governance", etc). However, the literature does not say much about the relationship between governance models adopted and level of ID. For example, do some governance models promote ID better than others? Do governance models dictate the tools and methods to be used in differentiating HE or which tools and methods of diffraction are more successful in which type of governance models?

We know that both inter-institutional and intra-institutional variation contribute to diversity. However, there could be tensions between the two forms of diversity. For example, internal differentiation may undermine external differentiations or vice versa. If so, which form of diversity should be promoted/ prioritized? Which form of diversity is more effective and efficient? What is the desired level of institutional and programmatic diversity? Finally, the literature lacks enough empirical research on the connection between innovation/excellence and system diversity as well as between excellence and forms of ID.

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