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Equity, institutional diversity and regional development: a cross-country comparison

Rómulo Pinheiro[1] · **David Charles**[2] · **Glen A. Jones**[3]

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Abstract This paper investigates historical and current developments regarding governmental policies aimed at enhancing spatial equity (access) or decentralisation of higher education provision in three countries—Australia, Canada and Norway. We then shed light on the links or interrelations between policy objectives and initiatives and institutional diversity and regional development more broadly. We found evidence of convergence trends in Norway and Canada resulting in the rise of hybrid organisational forms, as well as the critical importance of policy frameworks in either maintaining or eroding the traditional binary divide. The cross-country data suggest a rather mixed or nuanced picture when it comes to regional development. Finally, the paper identifies a number of key challenges facing the systems, suggests possible ways of tackling them and sheds light on avenues for future research.

Keywords Higher education governance · Regionalisation of higher education · Access to higher education · Hybrid forms · Norway · Canada · Australia · Comparative analysis

Introduction

Higher education systems the world over have long struggled to find an adequate balance between access to higher education (HE) on the one hand, and institutional diversity on the other (Van Vught 2009), against the backdrop of national and regional socio-economic

✉ Rómulo Pinheiro
romulo.m.pinheiro@uia.no

[1] Department of Political Science and Management, Faculty of Social Sciences, University of Agder, Post Box 422, 4604 Kristiansand, Norway

[2] Lincoln Business School, University of Lincoln, Brayford Pool, Lincoln, Lincolnshire LN6 7TS, UK

[3] Department of Leadership, Higher and Adult Education, Ontario Institute for Studies in Education (OISE), University of Toronto, 252 Bloor Street West, Toronto, ON M5S 1V6, Canada

imperatives (Charles 2003). Yet, to date few comparative studies have investigated the complex interrelations between policy frameworks, system dynamics and equity-related dimensions such as decentralisation or regionalisation. Taking this as a point of departure, the paper sheds light on historical and contemporary developments across three mature, yet relatively distinct, national HE systems: Australia, Canada and Norway. In so doing, a focus is given to the interplay between government-led (federal or provincial) policies on access to HE in the context of spatial decentralisation (regional access) and institutional differentiation on the one hand and regional development on the other. The research problem driving our enquiry is: *What are the interrelations, if any, between government policy objectives and initiatives for enhancing geographic access to higher education and institutional differentiation on the one hand and regional development on the other?* By interrelations we refer to both the intended and unintended linkages between governmental efforts (e.g. in the form of articulated intentions or specific policy instruments) and the observed system-wide trends and dynamics. Our investigation is based on the historical analysis or "pattern tracing" (Thelen 1999) of major policy initiatives, critical junctures (Pierson and Skocpol 2002) as well as predominant policy logics and intentions (Maassen and Stensaker 2011). These, in turn, were consequently matched against the empirical evidence gathered via both primary (authors' own observations and enquiries) and selected secondary (official reports, governmental data and existing literature/previous studies) data sets.

The paper is organised as follows. Section 2 sketches the conceptual backdrop for the paper, briefly reviewing the literature on spatial access to HE, diversity and differentiation and hybrid organising. Section 3 provides a brief background on the three HE systems. This is followed by sections 4 and 5 which present and discuss the empirical findings, respectively. Finally, in the conclusion section we highlight the key findings and their implications as well as the paper's contribution to the field, and end by reviewing a number of key challenges facing the three systems whilst providing policy recommendations and suggesting an avenue for future research enquiries.

Conceptual backdrop

Spatial access and regional development

Regional socio-economic asymmetries have been a traditional concern for policy makers, with HE institutions thought to be critical actors in addressing regional disparities when it comes to access (OECD 2007). In addition to active regional engagement (Charles 2003; Pinheiro et al. 2012), one of the ways in which HE institutions are expected to contribute lies in providing the local population with the necessary skills and competencies for assisting local economic prosperity (Benneworth and Sanderson 2009; Charles 2006). In western Europe, policy efforts (80 and 90 s) aimed at decentralising—geographically speaking—HE were gradually replaced by a *policy of regionalisation* characterised by the establishment of new, relatively autonomous local educational providers (Kyvik 2009: 109). In countries where regional dimensions play an important role, such as in the Nordics, HE policy and regionalisation policy became increasingly intertwined (Pinheiro 2012b).

Diversity and differentiation

Traditionally, in most countries, regional provision of HE was the primary task of non-university providers like colleges, universities with a more regional character or applied

nature, and/or local branches of comprehensive universities located in more central locations (Codling and Meek 2006). In western Europe this has basically meant the rise of *dual* or *binary* HE systems (Kyvik 2009: 8–10). In the former case, universities and other postsecondary educational institutions are treated differently and are kept separate, whereas in the latter case institutions are subject to a common set of regulations. In addition to these two structural models, HE systems the world over can be characterised as university-dominated, unified and/or stratified systems (Kyvik 2009: 7–12). In the first model, universities and university-level specialised institutions are the only HE institutions, with vocational schools (offering short-cycle professional programmes) not included in this category. In the case of unified systems, the bulk of HE programs (academic and vocational) are offered at universities. Stratified systems (e.g. USA) are characterised by the absence of clearly defined sectors, and a hierarchical order or pyramid, with a small number of elite universities at the top and a large number of vocationally oriented institutions at the bottom.

According to Trow (1995, cited in Meek et al. 2000: 3), diversity refers to "the existence of distinct forms of postsecondary education, of institutions and groups of institutions within a state or nation that have different and distinctive missions, educate and train for different lives and careers, have different styles of instruction, are organised and funded and operate under different laws and relationships to government". Birnbaum (1983) describes seven distinct categories of diversity, including the important distinction between internal diversity (differences within institutions) and external diversity (differences between institutions). Others, like Van Vught (2007: 2), make a distinction between *diversity* and *differentiation*. Whereas the former denotes the variety of entities existing within a system, the latter pertains to the process in which new entities in a system emerge over time.

Studies on institutional diversity (from North America, Oceania and Europe) suggest that, within a given HE system, there is a natural tendency for *convergence*—i.e. adoption of similar forms and structures—amongst domestic providers (Kyvik 2009; Morphew and Huisman 2002). Codling and Meek (2006: 9) contend that "convergent tendencies predominate amongst HE institutions because policy and regulation are not strong enough to sustain differences between institutions". Five factors are thought to determine the degree of diversity/convergence within a given national system (Table 1).

Codling and Meek (2006) reflect upon the relationship between *drift* tendencies, in either direction, or the degree of *diversity/convergence* within the system (Fig. 1). There is

Table 1 Summary of the influence of different factors on systemic diversity

Factor	Diversity promoted by	Convergence promoted by
The environment	Environment heterogeneity	Environmental homogeneity
Policy intervention	High level of intervention to promote diversity	Deregulation
	Highly regulated binary systems	Unitary systems
Funding	Specific financial incentives to promote diversity	Financial incentives targeted to other outcomes
Competition and cooperation	Competition in periods of low demand and economic stringency	Competition in periods of high demand and economic prosperity Cooperation
Ranking		Mimetic isomorphism of lowly ranked institutions

Source Codling and Meek (2006: 19)

Fig. 1 The relationship between academic drift, vocational drift and university type. *Source* Codling and Meek (2006: 5)

evidence suggesting that, in the last two decades or so, HE institutions across the globe have been imitating each other's structures and programs, thus reinforcing the notion that system diversity is on the decline (Edwards and Miller 2008; Jaquette 2013).

Hybrid organising

There is a burgeoning interest in the public administration and organisation studies literature regarding the changing nature of public organisational forms towards that of *hybrids* (Pache and Santos 2013, Battilana and Lee 2014). Hybrid organising refers to "the activities, structures, processes and meanings by which organisations make sense of and combine aspects of multiple organisational forms" (Battilana and Lee 2014: 398). Increasing evidence suggests that, for a variety of reasons, e.g. the nature and scope of recent government-led reforms and the prevalence of stakeholder interests, HE institutions are increasingly adopting hybrid strategies, structures and cultural postures (Mouwen 2000; Berg and Pinheiro 2016). For example, whilst analysing historical shifts in the dissemination and use of new scientific findings at US research universities, Owen-Smith (2003: 1081) concluded that:

> From once separate systems with distinct stratification orders, commercial and academic standards for success have become integrated into a hybrid regime where achievement in one realm is dependent upon success in the other.

Similarly, studies on the entrepreneurial orientation of European universities reveal that they seem to blend or mix distinct institutional logics associated with *new* (managerialism) and *old* (collegiality) ways of organising core activities (Clark 2001; Pinheiro and Stensaker 2014). *Loose coupling (*Orton and Weick 1990), a distinctive feature of most HE institutions, particularly large comprehensive universities, is one of the many mechanisms facilitating the adoption of hybrid forms and postures. More often than not, this phenomenon is illustrated in attempts to combine key features associated with specific organisational models or archetypes (Greenwood and Higgins 1993). For example, a stronger vocational orientation more typical of non-university institutions (which are often more locally embedded) focusing on "local relevance" with an emphasis on the teaching-research nexus and basic research endeavours ("global excellence"), associated with the archetype of the classic, research-intensive university (cf. Pinheiro et al. 2012).

Case selection and methods

Three distinctive national systems have been selected for examination. In all three cases the combination of an expansive territory and small population has led to a significant policy focus on access to HE across large and difficult geographies, although with the advantages of being rich countries with mature HE systems. In 2012, tertiary full-time

enrolment rates (full-time students), Types A and B, were high: 83 % in Canada (2011 figures); 58 % in Australia; and 61 % in Norway (OECD 2014: 315). As for attainment rates (25- to 64-year-olds), Canada has surpassed 50 % with Norway and Australia around 40 % each (OECD 2013: 26). Per capita spending (USD) on tertiary education reached more than 18.000 in Norway, 15.000 in Australia and 20.932 in Canada (OECD 2013: 165). So, examining equity issues in these three countries gives an insight into some of the challenges faced in other large and sparsely populated countries yet with the benefits of being the countries best placed to meet those challenges.

The national case studies have been developed through a combination of documentary research (secondary datasets) and personal experience through interviews for previous research projects with senior HE staff, central government staff and regional/state/provincial officials. Each of the co-authors was responsible for collecting data for a country they currently or previously worked in, and each has previously published on equity and regional provision in that country. The comparisons made in this paper draw upon those previous works and experiences, with the intention that the paper presents a synthesis of three cases illustrating how the equity problems can be addressed, and the implications for institutional diversity in three systems with different sub-national governance systems.

It is worth underlying that it is not our objective to document and analyse the complex processes of HE policy development and implementation (cf. Gornitzka et al. 2005) in these three countries. Our focus is, instead, on the historical analysis of the linkages between government policy designed to increase geographic access to HE as a means of understanding the complex set of interrelationships between policy frameworks and logics on the one hand and system-wide dynamics (with foci on institutional diversity and regional development) on the other.

Background on the three national systems

Norway

The convergence between regionalisation and HE policy in Norway can be traced to the mid-1950s when policy steps were taken to enhance geographic access to HE. Partly as a result of fierce resistance to enrolment expansion by the established university providers, the primary instrument used was the creation of a regional college system, leading to the establishment of a *dual system* consisting of universities and district colleges. During the 1970s and 1980s, a large number of small professional schools dedicated to engineering, health education, teacher training, etc., were upgraded to HE institutions. In the mid-1970s, (17) regional boards with the responsibility for coordinating HE outside the university sector were established. By the mid-1990s, and as a means of leveraging system integration and tackling problems related to institutional fragmentation and financial inefficiencies, the regional college system was abandoned. A series of forced amalgamations or mergers amongst (98) local professional and vocational colleges, including some of the existing regional colleges, culminated in the creation of (26) publicly funded university colleges. This, in turn, led to the establishment of a de facto *binary system*, composed of universities and non-university institutions (colleges) under common regulation, with the latter possessing a strong regional development mandate especially in addressing the educational needs of local students.

By the late 1990s and early 2000s, reform efforts targeting the entire HE sector have allowed university colleges to attain full university status upon the successful fulfilment of agreed criteria. As a consequence, a number of former university colleges and specialised university institutions have changed their legal status to fully fledged universities. Mergers between regional providers have also been undertaken (Pinheiro et al. 2016). Today, the largely publicly run domestic HE landscape is composed of eight comprehensive universities, five specialised universities (music, sports, etc.), 20 university colleges and a range of private university colleges.

Canada

Responsibility for education was assigned to the provinces under the Canadian constitution in recognition of the importance of education to the cultural, religious and language differences within the federation. Whilst the post-WWII expansion of HE was largely initiated and initially funded by the Government of Canada, the desire to protect provincial interests led the provinces, especially Quebec and Ontario, to assert their constitutional authority over HE (Jones 1996a). Each province then took adequate steps for the creation of a mass provincial "system" of HE involving three components: (a) the expansion of university spaces, often by increasing the size of existing universities; (b) the creation of new universities and/or by granting autonomy to what had been regional campuses of existing institutions; and (c) the establishment of non-university institutions, often called colleges, designed to address the expanding needs for short-cycle adult and vocational education, and, given the size of most provinces, expanding geographic access to HE by locating institutions in under-serviced regions.

The approach to addressing these three components varied considerably by province (Dennison and Gallagher 1986). British Columbia, Alberta and Quebec created regional colleges that not only offered vocational programs, but also provided university transfer programs (the community colleges in British Columbia and Alberta) or pre-university programs (the Quebec CEGEPs) in order to expand geographic access to university-level programs to the regions. Ontario located both a university and a college of applied arts and technology in most major centres throughout the province. Given the division of authority within the Canadian constitution, the discussion of regionalisation within provincial HE policy contexts has largely focused on issues of geographic access to teaching programs (in-person, or via distance technologies) and been quite separated from the discussion of the role of universities in regional economic development, except for the human resource/skills development component. Today higher education in Canada includes approximately 97 universities and 130 colleges and institutes.

Australia

Australia is, like Canada, a federation in which states have primary responsibility for various policy areas including education. Education is a policy domain which is shared between states and the national Commonwealth Government, but where states retain primary legislative responsibility including the right to approve the establishment of universities and their regulation, although the Commonwealth has acquired responsibility for the funding of HE. Technical and further education (TAFE) is largely state governed and funded, but university education is funded nationally and the national government is therefore able to legislate through its funding powers.

At the state level, there are some minor differences in the legislative basis of universities, although these have the ability to operate across state boundaries. By contrast the TAFE sector is state-specific and generally kept quite distinct from the university sector. The state of Victoria is, however, an exception as some universities are dual sector, incorporating TAFE activities, although usually in organisationally distinct units. Universities are, however, part of a national system in funding terms and accept students from across Australia on an equitable basis, though university entrance qualifications differ slightly between state secondary education systems. The Commonwealth Government determines the number of student places, and for example the quota for any new campuses, although state governments would also be involved in decisions to establish new onshore campuses. Regional HE policy in Australia is therefore seen largely from a national perspective as being concerned with provision across the country outside of the main cities. Universities initially arose in the major cities before federation (initially one per state), and as the sector has expanded, there has been concern to ensure more equitable provision in smaller cities and towns, both through new universities and new branch campuses.

Initial expansion was facilitated through the creation in the 1960s of a series of non-university institutions. Technological institutes were established in the major cities to complement the universities, and a network of colleges of advanced education (CAEs) were established across the country, sometimes building on existing technical institutes and state teacher-training colleges. The CAEs were typically small institutions, distributed both through the suburbs of the major cities as well as in regional locations. By 1974 there were 82 colleges. The Commonwealth Government's aim to rationalise the sector and reduce costs resulted in the mergers of the CAEs, in some cases with existing universities, from the 1960s up to the late 1980s. The 1988 Dawkins White Paper from the Commonwealth Government promoted the expansion of HE with the conversion of CAEs into universities and the introduction of loans for tuition fees. Coupled with the earlier transformation of Institutes of Technology into technological universities, this led to a massive increase in the number of universities and a huge expansion in student numbers. From 13 universities in the early 1980s, the system has expanded to 40 today.

Decentralisation, diversity and regional development

In this section of the paper, we explore the relationships between policy efforts aimed at spatial decentralisation—regionalisation of HE—and institutional diversification on the one hand and regional development on the other. In so doing, our empirical material is presented on a country-by-country basis, with a cross-country analysis undertaken in the next section of the paper.

Norway

Equity has been at the forefront of the Norwegian HE policy agenda since the post-WWII period (Aamodt and Kyvik 2005). Two aspects have been central to this strategy: first, the establishment in the late 1940s of the state-run financial system (*lånekassen*), removing financial barriers for entering HE, and second, the creation (50s) of the regional college system, later the foundation for a binary HE system. As an organisational model, the regional/university colleges spread across Norway's administrative regions have traditionally differed from the established universities, due to their: emphasis on short term

(first-cycle), largely vocational educational programs such as nursery and social work; reliance on the recruitment of local students; weak institutional research capacity; and active engagement with regional actors (Kyvik 2009). A comprehensive university serving the northernmost parts of the country was established in the late 1960s, illustrative of the regionalisation of Norwegian HE (Pinheiro 2012a, b). More recently, governmental financial incentives were put in place to stimulate inter-institutional collaborations. This process encompassed regional alliances, strategic agreements and formal mergers.

One of the immediate consequences of the shift from university college into fully fledged university is that, largely due to historical trajectories, these newly established institutions are best characterised as *hybrid organisations* (Battilana and Dorado 2010) combining both traditional university structures and activities with those of the more vocationally oriented and locally embedded university colleges. Yet, as a phenomenon, *hybridisation* in Norwegian HE is not restricted to the new universities per se, but also includes more established players such as the "old" comprehensive, research-intensive universities like Oslo and Bergen, as these have gradually been adopting/adapting their internal structures and core activities to accommodate degree programs previously associated with the university colleges (Kuznetsova 2010), albeit with some resistance from traditional academic groups.

Earlier enquiries show that the decentralisation of HE provision in Norway has had a positive impact when it comes to fostering access to HE by regional students as well as underrepresented groups such as those from rural areas and/or low socio-economic family backgrounds (Aamodt and Kyvik 2005; Pinheiro 2012a). Yet, regional asymmetries with respect to enrolment and attainment rates, e.g. regarding long-term HE attainments, persist. Few studies have investigated the effects of the presence of HE institutions, particularly university colleges, on regional development in Norway, but evidence from selected regions suggests that the effect on aspects like local innovation or absorptive capacity has been rather negligible (Pinheiro 2012a; Sotarauta et al. 2006). Other enquiries revealed that regional policy considerations by HE institutions vary from region to region (OECD 2009) and that the dominant mode of innovation in a regional industry affects the universities' role in stimulating the development of that industry (Isaksen and Karlsen 2010) and, consequently, the *absorptive capacity* (Vang and Asheim 2006) of the locality as a whole.

Canada

The expansion in HE enrolments in the post-WWII period resulted in the emergence of a relatively homogeneous university sector, which led new universities to adopt the characteristics of the existing providers, whilst the creation of new non-university institutions increased the *systemic diversity* (Birnbaum 1983) of the new provincial "systems". Universities were relatively autonomous institutions that usually offered a comprehensive range of degree programs. Colleges, by contrast, were far more tightly regulated by government and were prevented from awarding degrees. Unavoidably, this resulted in the emergence of a clear *binary structure* within every Canadian province[1] (Jones 1996b).

In recent years, the blurring of this clear binary structure has been a function of the continuing interests on the part of provincial governments to increase equitable access to degree programs. Historically, non-university institutions have served a larger share of students from aboriginal, low socio-economic strata and other non-traditional backgrounds than the university sector. Expanding the capacity of these institutions to offer degrees was

[1] Each of the three northern territories has a single multi-campus college.

a mechanism for addressing the needs of these populations (Jones and Skolnik 2009), for creating new pathways to facilitate student mobility and for increasing geographic access to degree programs. Two mechanisms have been used by some provinces to address these objectives: (a) expanding the number of institutions with the authority to grant degrees; and (b) shifting the missions of existing institutions and/or supporting the creation of unique, hybrid institutional forms.

When the province of British Columbia noted that its university participation rates were lower than some other provinces, it decided to expand the number and types of institutions that had the legal authority to grant degrees. It also expanded the mission of a selected number of community colleges that became repositioned as "university colleges". These new institutional types would continue to offer a range of vocational, trade and university transfer programs, but they would also have the authority to grant university degrees. More recently, the government has repositioned these institutions as "teaching-intensive universities" (at one point termed "regional" universities), which now operate a distinct range of vocational programs in addition to traditional university programs. The province of Alberta extended degree-granting authority to its community colleges and technical institutes and, through the *Postsecondary Learning Act*, created a differentiated system of institutional types designed to address the diverse needs of the province. Two community colleges have recently become teaching-intensive universities. Including British Columbia and Alberta, six Canadian provinces (and the Yukon Territory) have now extended some form of degree-granting authority to institutions within the non-university sector, and several have created new hybrid institutions (such as the University College of the North in Manitoba, First Nations University in Saskatchewan) or facilitated new forms of institutional linkages (such as the University of Guelph at Humber College) designed to address the needs of specific populations and/or cross the traditional boundaries of these binary systems (Marshall 2008). Several provinces, including Alberta and Ontario, expanded degree-granting through the use of new degree structures, creating "applied degrees" that would be offered by non-university institutions in order to differentiate these credentials from traditional university degrees (Jones 2009).

These new institutions and institutional arrangements have clearly played a role in increasing access to postsecondary degree programs in these provinces, and there is evidence that some of these hybrid institutional types have become important mechanisms for addressing the needs of specific populations (such as the important role of First Nations University in addressing the needs of aboriginal populations in the region). There is some evidence of the positive role played by HE institutions in terms of regional development and innovation (Bramwell and Wolfe 2008), to a degree driven by provincial policies aimed at strengthening the relationship between university research and regional technological development (Sa 2010). Yet, as is the case elsewhere, studies from Canada have found a strong correlation between local innovative activities/regional absorptive capacity and an adequate regional research infrastructure, e.g. in the form of a research-intensive university (Doutriaux 1998), thus suggesting that some regions might be at a disadvantage.

Australia

In Australia, the expansion of the university system can be seen as a process of *convergence*. A vigorous process of imitation or *isomorphism* (DiMaggio and Powell 1983) ensued, which continues to play out at present, with universities seeking to enhance their research activities and attract international students. However, whilst there is some evidence of hybridisation within the enlarged university sector, it also remains diverse and

stratified, with a number of different groupings. "Regional" universities include those primarily based in smaller towns outside the main conurbations, often on multiple campuses, such as Charles Sturt University or Central Queensland University. Additionally some of the metropolitan universities, including some elite universities, merged with smaller institutions both in urban and rural areas, thus acquiring small satellite campuses, or were invited to establish new campuses in peri-urban or rural locations to meet rising demands, mainly within the same states. Thus, today's 40 universities have more than 200 campuses across Australia in total depending on how they are defined.[2] Also fierce competition amongst domestic providers for foreign students to generate additional revenue, has led both metropolitan and rural universities to establish satellite campuses in other metropolitan areas often across state boundaries. In short, the Australian HE landscape is characterised by a rather complex picture of a state and nationally framed system with a common funding system and with most universities having a mix of metropolitan and regional campuses. Everywhere except Victoria, and one recent example in Queensland, the TAFE sector and universities are kept apart, undertaking distinct roles and with different funding and regulatory frameworks (Bandias et al. 2011).

The non-metropolitan campuses are spread across some quite small settlements and offer a narrow range of degree programmes and disciplines. Whilst these campuses may take on a degree of responsibility for their regions, they often struggle to cover local needs and provision is highly variable: it could be a main campus for a regional university with a fairly broad provision; a small satellite campus with just a few programmes; or a small specialist campus for a research university. In most cases, regional universities and campuses offer the same basic degree programmes as in the cities, although with more limited choice. Some access programmes may only be for 1 or 2 years with an assumption that students will transfer to the main campus to complete the degree. There is also a general trend towards blended learning across all campuses with the same programmes being made available on campus and remotely via a varied mix of modes.[3]

There has been recognition that some of this provision carries additional costs. State governments may provide some subsidies for new campuses or for additional activities in regional locations. The Commonwealth Government has had a number of financial mechanisms to assist regional provision, notably through a regional loading on the teaching grant for regional universities, although this has been contentious as it only supports some campuses and there is no funding incentive for students from rural areas studying in the cities. Some research capacity-building funding was available to regional universities in the form of support for *collaborative research networks* with research-intensive universities. Finally, the recent removal of the cap on student places has led to an increase in the numbers of students from regional locations either on regional campuses or travelling to metropolitan campuses, thus continuing the upwards trend initiated in recent years.

There is an expectation that local HE providers will help to retain young people in regional communities, whereas those able to attend university often prefer to move to the cities. However, as elsewhere, in Australia graduation also facilitates mobility both within the country (from the periphery to the urban areas) as well as overseas (USA, Europe, etc.).

As in Norway, regionally based universities seek to work with and support local industry. The wider benefits to local communities from hosting universities or campuses

[2] Including distinct city campuses, rural campuses and in some cases TAFE provision. Precise numbers are difficult to provide as there is no consistent definition of a campus.

[3] Additionally, there is an Open University in Australia which provides online degree modules from a number of universities and aggregates them into programmes.

add to the benefits of local educational provision, although there is a general concern that all these benefits are often overstated and that regional universities are not effectively resourced to provide this regional role within a highly market-driven system.

Taking stock of the cross-country findings

The cases presented above provide an insightful picture of the distinctive features and characteristics of the three national systems. In Norway, the traditional *binary* system composed of universities and university colleges is moving towards a *unitary* system dominated by one organisational model, that of the university, albeit with variations when it comes to institutional profile (research-intensive vs. professional). Due to its federal structure, Canada is characterised by (10) relatively distinct and separated provincial systems, both structurally and geographically, organised around a *dual system* combining vocational and traditional HE. Finally, Australian tertiary education is best conceived as a *dual system* composed of two relatively distinct sub-sectors, a HE and a vocational sector. The Australian HE landscape is characterised by a rather complex picture of a state- and nationally framed system with a common funding system and with most universities having a mix of metropolitan and regional campuses.

In Norway, the main issue as far as institutional differentiation is concerned, has been framed around "what type of university" (institutional profile) and at "what cost" (economies of scale) rather than attempts at keeping the university and non-university sectors separated. Drift tendencies in both directions (Codling and Meek 2006) have dissipated the existing differences, resulting in the erosion of the binary divide and the rise of hybrid organisational forms (Battilana and Dorado 2010). Similarly, in Canada, the situation can also be characterised by the *blurring of boundaries* (Garrod and Macfarlane 2009) amongst previously distinct sub-sectors of HE. Yet, in contrast to Norway where access to both (university) degrees and (vocational) credentials have been greatly enhanced as a result of decentralisation or regionalisation, in Canada, the effects of recent reforms have primarily been felt around greater access to degrees from colleges or new hybrid institutions, perhaps because regional access to vocational credentials had already been a key component in the development of provincial systems in the 1960s.

In contrast to Norway and Canada, Australia does not show major signs of hybridisation between the university and vocational education sectors as of yet, with the university and the non-university sub-sectors still quite distinct from one another. Even in those circumstances where there are dual-sector institutions, this has not necessarily led to the rise of hybrid organisational forms. The main reason for this seems to be due to funding arrangements. As a result of strong neoliberal influences in the last two decades and despite the fact that HE is nationally funded, the Australian HE system is heavily marketised. Compared to Canada and Norway, Australian universities have become highly stratified in order to cope with the multiplicity of functions or missions modern universities are expected to undertake (Enders and Boer 2009). This, however, creates problems for institutions which try to operate across different roles, for example internationally oriented research universities with regional campuses.

One of the (many) critical issues to be raised lies in the effects accrued by the rise of hybrid organisational forms and the blurring of boundaries when it comes to: (a) access to HE; (b) local and regional development; (c) and the diversity of the HE system as a whole. On the one hand, *hybridisation*—e.g. manifested in the form of imitative behaviour or

mimetic isomorphism (DiMaggio and Powell 1983)—has a tendency for reducing rather than enhancing institutional differentiation as different types of providers copy key structural (and sometimes cultural) features from each another (Pinheiro and Kyvik 2009). One view is that this leads to a gradual convergence towards a common (hybridised) model, e.g. that of the *entrepreneurial university* combining local relevance with global excellence (Pinheiro 2012a). Yet, on the other hand, there is some validity to the argument suggesting that, as a result of significant contextual differences such as history/path dependencies, core capabilities, local environmental imperatives and the adoption/adaptation of specific features emanating from outside a given organisational field, e.g. the non-university sector (Kyvik 2009), hybridisation may result in unique combinations (programs, structures, activities, values and identities, etc.) or variations, hence enhancing rather than curtailing institutional diversity.

Like in Australia, the interplay between policy and differentiation is also recognised in Norway and Canada. In Canada, provincial efforts aimed at expanding the number of institutions with the authority to grant degrees have resulted in a decline in *horizontal diversity* at the program level. In contrast, policies directly aimed at shifting the core missions of existing institutions and/or supporting the creation of unique, hybrid institutional forms have led to an increase in *institutional diversity* (Birnbaum 1983). In Norway, changes in governance mechanisms (Network Norway, the adoption of a common regulative framework, output-based funding, etc.) combined with the introduction of a technical definition of what it entails to be a university, have helped dissipate an already eroding binary divide and created an "arms race" in the search for fully fledged university status as a means of surviving in an increasingly volatile regulative environment and competitive market place.

In short, the three cases presented here provide fresh evidence of the importance attributed to key factors such as the environment, policy, funding and competition/cooperation (Codling and Meek 2006) when it comes to institutional differentiation and systemic diversity. In addition, we found support for the notion that not only is there a natural tendency for *convergence* in HE (of forms and structures), but that policy does play a critical role either in mitigating (Australia) or stimulating (Norway and Canada) such a process. More often than not *convergence*—and the loss of institutional diversity associated with it—is an unintended consequence of policy efforts (see Pinheiro and Kyvik 2009). That being said, the adoption of hybrid forms at the institutional level may also be a reflection of the fact that policy frameworks and initiatives are based on a multiplicity of logics and approaches (Maassen and Stensaker 2011), e.g. combining traditional state control mechanisms with market-like instruments, thus (also) being "hybrid" in nature (Gornitzka and Maassen 2000).

As far as access- and regional development-related aspects are concerned, the three cases presented here suggest that critical dimensions, such as government policy, the endogenous characteristics of the region, regional actors, field-level competition and the nature of the local labour market, need to be taken into account whilst taking stock of the effects accrued to the local presence of HE. In Norway, regionally embedded HE institutions have substantially contributed to greater access to HE (both degrees and credentials), in addition to providing skills and competencies for the public sector, schools, hospitals, local government, etc. However, their regional impact (e.g. as far as regional innovation is concerned) is far from optimal. In Canada, decentralisation has led to quite different provincial government approaches to regional access, and provincial policies have tended to emphasise the educational role of postsecondary institutions in regional development and are somewhat disconnected from federal government initiatives related to

regional economic development and innovation (Jones and Young 2004). Policy approaches in some provinces have tended to emphasise increased access to degree programs, and this objective largely underscores the emergence of new institutional types and the blurring boundaries between the traditional sectors. Finally, in Australia, despite the expectation that HE will help retain young people in regional communities, there are substantial limitations partly due to the ways in which the (regional) labour market is organised. There is considerable interest in regional engagement by small campuses, yet regional universities/campuses are largely unable to meet local expectations.

Conclusion and implications

This paper examined the interrelations between a policy of spatial decentralisation (regionalisation) in the realm of HE and its links with institutional and system-wide diversity on the one hand and regional development on the other. Although the three national systems reviewed here possess distinct characteristics, they also face a number of similar trends and dynamics. In Norway and Canada, convergence is a prevalent issue, resulting in the blurring of boundaries between sub-sectors and the rise of hybrid organisational forms. This is, in part, due to the governmental policies themselves which, either by design or as a consequence of the complexity and ambiguity surrounding the policy making and implementation processes, have had a number of unintended consequences. Australia presents a somewhat different picture, largely as a result of policy measures aimed at reinforcing existing system-wide differences. Limitations and bottlenecks with respect to the role of HE institutions in regional development were also identified, largely arising from the complex interplay between national and federal/regional policy frameworks, institutional aspirations and capabilities and the endogenous characteristics of the region/locality. In this context, it is imperative to take into account a series of key challenges facing the three HE systems more broadly. In Norway, the main challenge facing HE institutions in the near future is demographic, in addition to developing a distinct institutional profile (*branding*) resulting from ongoing strategic collaborations and/or structural amalgamations (mergers) amongst regional providers. Key policy issues in Canada include how to find an adequate balance between degrees and other credentials and how to further expand access for under-represented populations. Furthermore, existing tensions between federal and provincial priorities in areas where there is overlap (e.g. international student recruitment, research policy) present a major dilemma. The biggest challenge for Australian HE institutions is to meet the needs of regional communities through the existing network of small campuses whilst operating within a demand-driven neoliberal (competitive) system. Universities have been enticed to establish new campuses by both state and central government, but many campuses are seen by their universities as a financial liability. There is a current shake-out taking place which might lead to a greater separation and specialisation between metropolitan and regional universities in Australia.

Our approach and empirical findings have a number of implications for current and future research enquiries. First, we provide fresh evidence of the rise of hybrid forms within HE worldwide and the caveat that this phenomenon is not occurring in an uniform manner across national jurisdictions and regional contexts. Second, in all of the three cases, the role of governmental agencies and initiatives—national and/or state levels—seem to have had a rather pervasive role when it comes to both access and diversity, although not always in accordance with the predefined plans and goals. This, in turn, suggests that more

careful attention should be paid to the interplay of multiple (sometimes conflicting) policy logics and instruments, in addition to the complexities associated with policy making and policy implementation, which are, to a degree, mitigated by the strategic responses of institutions. Third, the paper illuminates some of the distinctive challenges for the provision of regional access in "big, small" countries, that is, countries which are large in size but with low population densities.

If governments want effective regional provision delivering different forms of higher education and playing a different role in the community, then careful thought needs to be given to the funding needs of institutions. Greater effort also needs to be devoted to the management of university systems across jurisdictions, and effective collaboration across dual and binary system divides, rather than a competitive neoliberal approach which is best suited to urbanised areas. Recent policy changes in some Canadian provinces have increased institutional diversity, but it will be important for governments to ensure that institutional boundaries/categories are protected if academic drift is to be avoided and the advantages of these more diverse systems are to be sustained.

Finally, there is a need for comparative research on the evolution of the non-(traditional) university sector in order to understand the very different ways in which this sector is evolving in different national contexts (e.g. maintaining tight TAFE boundaries in Australia, versus the evolution of Canadian colleges, versus the rise of universities of applied sciences) and the complex relationships between these sectors and the traditional university sector. Are these institutions continuing to play a special role related to equity and access, or is this role changing as a function of the evolution of institutional categories, and or the changing role of "traditional" universities in the context of universal HE systems? More detailed research is also needed on the nature of provision in small rural campuses and the forms of support they are able to provide to their local communities. Expectations are often high for such campuses, yet there is little systematic evidence as to how much those expectations can be met, or what additional conditions or resources need to be in place to realise them.

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